

***The Potential of Ukraine in the Global IT
Offshore Outsourcing Market***



Executive Report

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Executive summary

Many western companies have already established or intend to make business contacts with offshore service providers in order to reduce IT costs and to gain access to scarce technology expertise. The emerging global offshore outsourcing market offers ever-growing opportunities in international IT services and software development work. These opportunities have been well exploited by countries like India, Ireland and Israel.

The Ukraine is preoccupied with the challenges of economic transition from the Soviet to the Western economy model and has not as yet fully entered into the Global IT offshore outsourcing market, although some progress has already been made.

This study is an empirical investigation of the potential of Ukraine in the offshore outsourcing market. All important aspects of the industry have been examined using the Gartner Group country evaluation criteria. The method employed consisted of surveying thirty Ukrainian software companies some with extensive experience in offshore development work.

The Ukrainian software companies identified a number of issues, which need to be addressed. These are the liabilities that need to be overcome and include unfavorable taxation/legislation systems, absolute lack of government support, weak industry associations and others.

On the positive side strength of the Ukrainian outsourcing were identified. Encouraging aspects are the great human resources potential, fast growth of the industry, enthusiasm and optimism within the providers' environment.

Ukrainian software exporters have the potential to compete successfully in the global market. With progressive government policies, improved foreign language skills and better competence in business culture, they truly have the capability to make Ukraine a world class, prosperous IT services destination.

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Introduction

Concept

Offshore IT outsourcing has been an area of growing interest for many companies [Lacity and Willcocks, 2001; Gupta, 2002]. Although it currently represents 2% of the \$400 billion global IT services market, it is playing an increasingly important role in the IT (information technology) strategies of major corporations [Lane, 2002b]. Present business pressures on company executives are pushing them increasingly in search of experienced staff that can provide innovative technology skills and ideas. To acquire these competencies IT managers can choose from two strategies: either employ specialists or outsource. More and more often managers choose the latter.

IT outsourcing is not a new concept and there are a lot of examples of it in the literature [Due, 1992; Mason, 1990; Lacity and Willcocks, 2001]. However, offshore IT outsourcing is a recent fast-growing phenomenon that became common practice for many multinational corporations such as Intel Corporation, General Electric, Ford and many others [Carmel, 2002]. The growing acceptance of offshore delivery has led enterprises to move beyond low-skill and labour intensive tasks. Nowadays, offshore providers can deliver complex custom applications and advanced Web-based solutions. It is estimated that approximately half of the US Fortune 500 engage in offshore outsourcing of IT work. Many others are planning to follow their steps and are waiting for market maturation.

Primarily, companies' decision for moving software development and maintenance offshore is based on two interrelated factors:

- Cost advantage
- Demand for specific labour skills

Labour costs in emerging economies are lower than in developed countries, and scarce skills are increasingly found in nations outside advanced economies. These factors have led the offshore market to fast and sustained growth.

More and more companies are considering outsourcing possibilities as managers and executives begin to realise the numerous advantages of this approach to business modelling. Ripping and Sayles [1999, p.5] state that '*a majority of American companies have outsourced or are planning to outsource everything from the maintenance of their mainframes and desktops to the design and development of new enterprise-wide information systems*'. Growing recognition of the strategic importance of outsourcing forces firms to consider offshore outsourcing possibilities strategically. A PwC Consulting report states "*For many North American and European firms, 'to offshore' or 'not to offshore', is no longer a question; rather it is 'when' and 'how to' offshore*" [Gupta, 2002, p. 2]. Planned outsourcing decisions aligned with clearly-defined business objectives are critical for success in business [Busher, 2002].

Industry analysts, academics and practitioners predict steady growth for IT outsourcing services, including offshore development and maintenance [Lacity and Willcocks, 2001; Lane, 2002; NASSCOM, 2002]. Aberdeen Group [Lane, 2002] estimated the worldwide IT services market is worth \$400 billion. Outsourcing is the biggest part of services with a share of 46 percent. Offshore outsourcing represents a small part of this share worth \$7.5 billion worldwide. However, having a compound annual growth rate of 26.4 percent, offshore outsourcing is one of the fastest-growing areas in IT. Business process outsourcing will be the focal point of growth [Lane 2002; LeClaire, 2002; Jansen, 2002]. As business functions are becoming technology enabled, companies will turn them over to third parties. Success

stories created by companies like Eastman Kodak Co., General Electric Corp. and others [Klepper and Jones, 1998] encourage businesses to adopt outsourcing practices.

Gartner analysts expect “*continued, accelerating, robust growth in the future*” for the offshore segment of the outsourcing sector [Terdiman, 2002a, p. 3]. They report that the advantages of taking IT activities abroad are becoming apparent to companies and widely known. Rising acceptance of offshore services will result in more new entrants – countries and companies. For clients, the major question that they will face will be “*when*” and “*how to*” go offshore, and not whether “*to go*” or “*not to go*” offshore [Gupta, 2002]. At the same time analysts see a trend in offshore outsourcing where offshore clients will pay more attention to offshore country infrastructure and stability when deciding which country to outsource [Terdiman and Berg, 2001; Gupta, 2002]. Vendor certification by independent bodies such as Software Engineering Institute (SEI) and International Standards Organisation (ISO) plays an important role in the selection of offshore provider and is a critical factor [Lane, 2002].

Market

Currently, global outsourcing market is led by Indian software companies. With approximately 80-95 percent of the total software export value India dominates and will be dominating the offshore market in the near future [NASSCOM, 2002; Terdiman and Berg, 2001]. However, a number of developing countries have entered the market and are planning to compete for offshore outsourcing market share. In India, the biggest provider of offshore software development, IT export has grown more than 55% a year for the past five years [NASSCOM, 2002]. During the development of offshore capabilities the Indian national and state governments have played an important, critical role for whole industry [McCaffrey, 1999]. Liberalised business policies, tax exemptions, world-class satellite telecommunications, incentives for ISO and SEI certification gave an enormous stimulation and help to the industry’s growth. Despite the fact that Indian Industry has a good reputation for product quality, industry specialists note that there is an industry challenge of being able to sustain its high quality level under industry’s 50% growth rate per year [McCaffrey, 1999].

Ireland is the second largest software exporter in the world [Terdiman and Berg, 2001]. Although Ireland does not compete with other countries on price, it has an excellent reputation on product quality and country stability. Ireland’s success is mainly based on well-educated workforce, active government support, private enterprise and geography. Multi-billion-dollar investment in modern telecom and industry infrastructure by the Irish government was the critical success initiative [Terdiman and Berg, 2001].

A major contenders for offshore services provision include countries: China, Russia, Pakistan, Ukraine, Central European countries and Baltic States. Although this group of countries are in the early stage of developing an outsourcing industry they have a massive potential to compete in the global market [Terdiman and Berg, 2001]. Ukraine, Central/Eastern European countries and Baltic States are also considered as serious contenders for market share. These countries ‘*have talented, innovative programmers, but the poor infrastructure discourages many prospective customers*’ [Terdiman and Berg, 2001, p. 15]. In spite of having skills and knowledge these countries have problems to promote themselves due to lack of marketing, onshore assistance expertise and western business practices [Gupta, 2002]. Knowledge of English is another weak point of the countries.

Countries such as India and Ireland have established themselves as market leaders. However, fast growth of the industry gives other countries like Ukraine, Russia, Baltic States and other not well-recognized players an opportunity to become popular offshore IT work destinations in the global offshore outsourcing market.

Ukraine is the second largest country in Europe, bordering the Black sea between Poland and Russia. There are many Ukrainian software companies that are playing or wish to play their role in the global IT economy. Its transitional economy gives them an advantage to compete on a cost basis, which is considerably lower than in Western European countries or US. So far an emerging Ukrainian software industry have not established itself as a well-known industry in the IT world. Only few multinational firms have invested in small R&D (Research and Development) centres [AmCham, 2002]. However the full industry potential is not known to the Western businesses.

Each day more and more IT companies, including Ukrainian, enter the offshore outsourcing arena. Competition between offshore companies is becoming more and more intense. Offshore outsourcing providers try to improve their services, time scales, and diversity of offers to compete successfully. However, all these efforts can be worthless due to poor country infrastructure in which the provider is located.

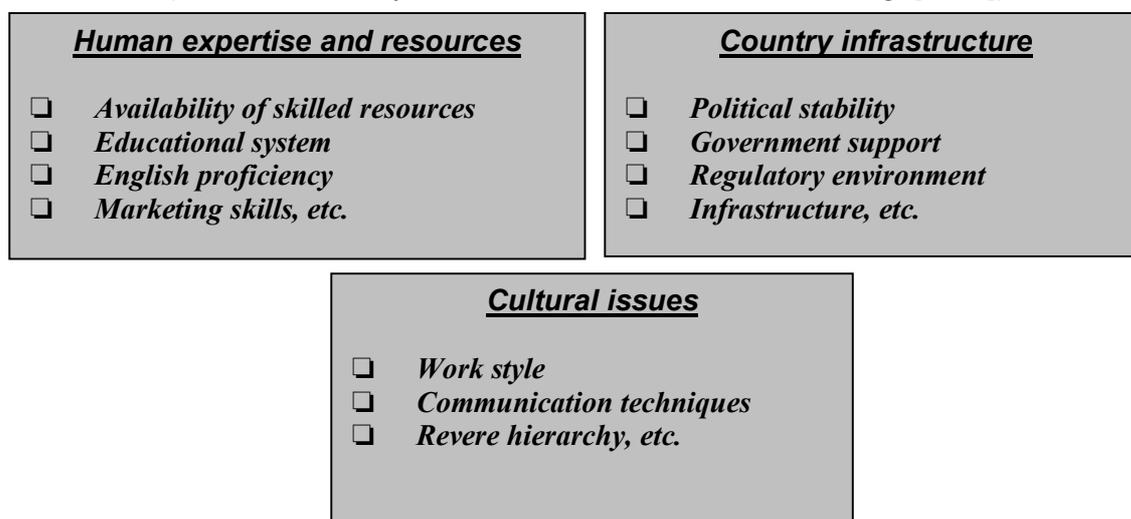
Model

Market research companies recognise the fact that country's factors are even more important than offshore outsourcing vendor's expertise. [Gupta, 2002; Terdiman, 2002a; Terdiman, 2002b; Terdiman and Berg, 2001]. "*Enterprises must consider country suitability for offshore projects before they consider individual vendors*" [Terdiman and Berg, 2001, p. 28]. Gartner Group's research report strongly advises customers to examine country related attributes when deciding where to outsource. Gartner's selection motto is '*country before company*' [Terdiman, 2002b].

Gupta [2002] acknowledges the difficulty of choosing an offshore supplier and increasing desire to mitigate risks through geographic diversification. Therefore, Gupta suggests careful considering of country related factors. The criteria include: geopolitical risk, government support, educational system and others.

For purposes of this paper Gartner Group's country selection criteria will be categorised in a single model containing three parts, as shown in Figure 1, and applied to the Ukrainian offshore outsourcing industry.

Figure 2.7 Country selection model
(Source of country selection criteria: Terdiman and Berg, [2001])



Methodology

This study is aimed at investigating the Ukrainian offshore outsourcing industry issues and concerns over its infrastructure, resources and culture. Arising from the aim of the investigation there were three overall broad study objectives:

- To investigate the Ukrainian offshore industry infrastructure
- To investigate resources
- To examine cultural issues

On-line questionnaire was used to elicit information from the respondents. The design of the questionnaire was based on Gartner's country evaluation criteria. In addition to these, a section with company background information was included. The purpose of the section was to estimate the size and experience of the respondents. The future development section was designed and added to the questionnaire to find out the respondents' perception of the industry future. A copy of the questionnaire can be found in the appendix.

In this research the expert judgement of UASWD (Ukrainian Association of Software Developers) Executive Director was used to select a study sample. UASWD is currently one of the leading organisations in Ukraine that was formed to support policies and conduct programmes that enhance software industry growth.

For the purpose of this study a group of Ukrainian software firms was the targeted research sample. This sample group consist of around 30 Ukrainian outsourcing providers. A total of sixteen fully answered responses were received. The overall response rate for the questionnaire was 53.3 percent

Results and Discussion

1 Respondents Profile

The range of the firms that took part in the research varied considerably. All investigated companies had experience in offshore projects with Western and American clients. Details of the companies in terms of annual turnover, number of employees and number of conducted offshore projects is presented below.

Orientation

Responding companies are software providers that export. The main sample selection main criterion was extensive experience in software development for export.

Figure 1.1 Market orientation

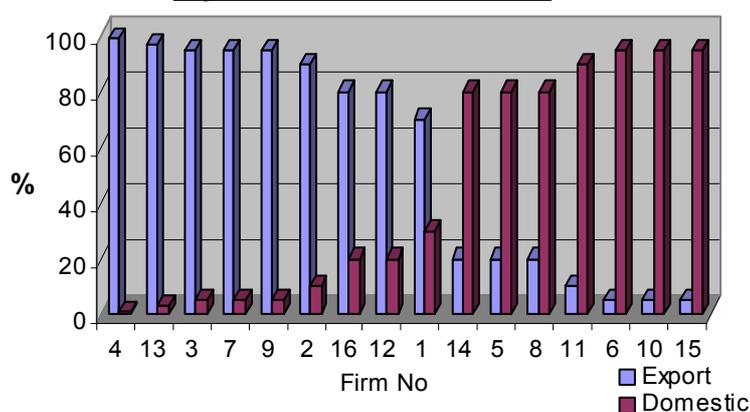


Figure 1.1 shows that all surveyed companies have offshore experience to various degrees. This percentage breakdown graphically describes specialisation of the firms, which took part in the research. Nine firms are mostly oriented on Western markets with small proportion of development work for domestic businesses. Seven providers are domestic market oriented but also have project work for export. There are no companies in the survey that have an even percentage breakdown between export and domestic services provision. This can be interpreted as a tendency for strong focus on either export or home market amongst Ukrainian providers.

Size

Size of the surveyed firms can be commonly assessed by two parameters:

1. Annual turnover
2. Number of IT staff

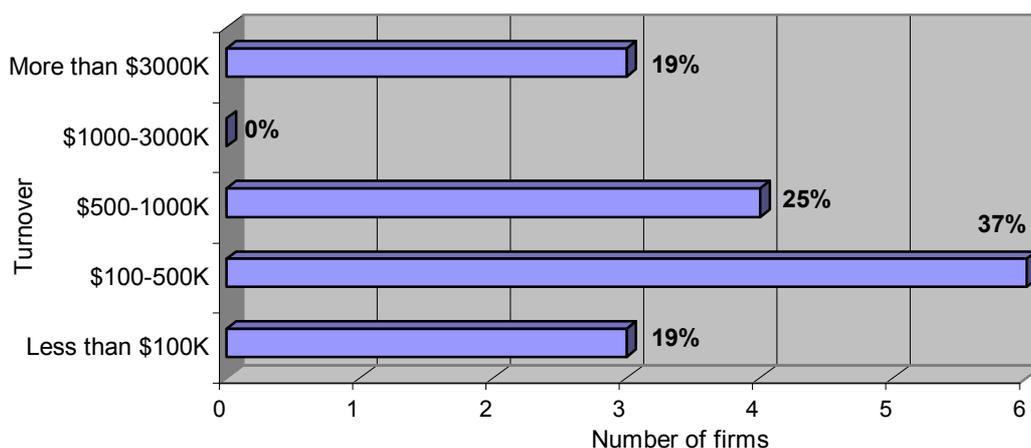
Annual Turnover

Figure 1.2 presents a categorised range of companies based on their annual turnover indicators.

Most of the surveyed firms are middle-sized companies, which fall into two categories from \$100,000 to \$1,000,000. There are also three small sized firms with less than \$100,000 and three large organisations with revenue over \$3,000,000 per annum. Thus, the actual

research sample represents a wide range of the companies including small to large sized firms.

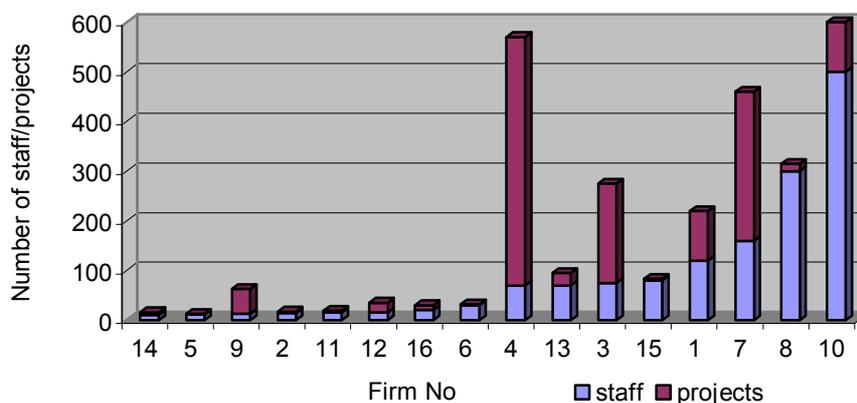
Figure 1.2 Annual turnover



Number of staff

Number of IT staff employed in surveyed firms ranges from 10 to 500 (Figure 1.3). Conventionally, these can be categorised in three major groups: 1) 1-50 employees 2) 50-100 and 3) 100-500. There are eight firms that fall into group 1, four that belong to group 2 and four big organisations (more than 100 staff) in group 3. Figure 1.3 gives clear indication that the research embraced a wide range of responding organisations.

Figure 1.3 Number of staff and offshore projects



Location

All surveyed firms are located in Ukraine. The companies are dispersed throughout the entirety of Ukraine. The headquarters of the majority of the companies are in Kyiv, the capital, but also in Western Ukraine such as Lviv, and Eastern parts of the country – Kharkiv and Donetsk. Sixty seven percent of the firms have a formal presence in other countries.

2 Industry Infrastructure

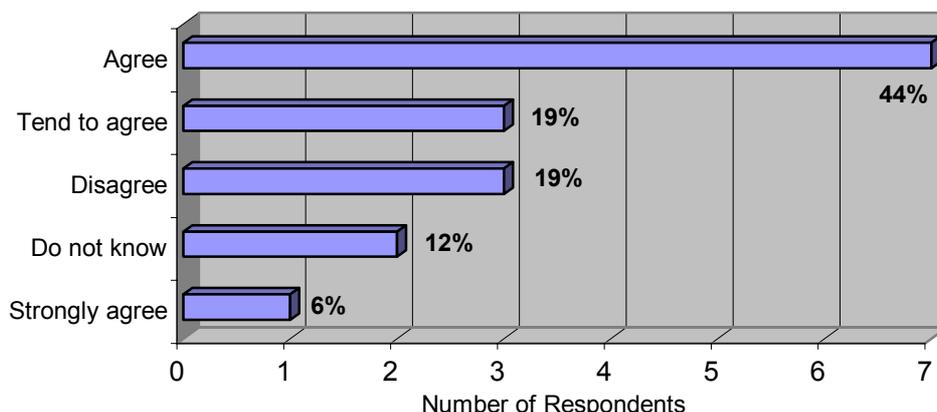
2.1 Stability

Political and economic stability is a key factor not only to clients but also to offshore providers. Although Ukraine is considered a more stable country than India or Pakistan in a political context, there are some political uncertainties that undoubtedly stop potential customers going in Ukraine.

The country stability is constrained by the interests of large financial groups and several parliament divisions. Their interests distract parliament from concentrating efforts on implementing important industry decisions.

The research results indicate that political hurdles do have a negative impact on the industry. Figure 2.1a shows that only 19 percent of the respondents do not feel a negative impact on the business.

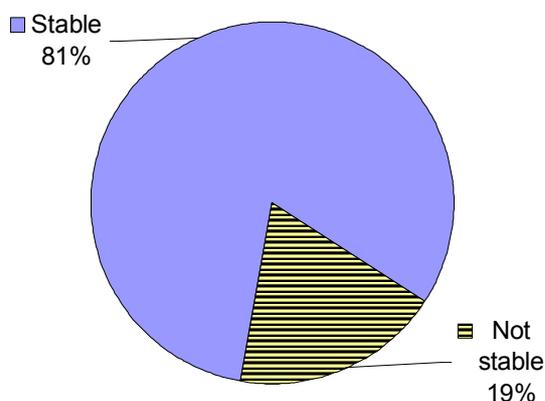
Figure 5.2.1a Political instability impact on business



12% of the respondents are not certain about the effect of the instability. The figure indicates that the majority of the rest of the respondents (69%) agree with the fact that there is negative political impact on the business to various degrees. Six percent of the firms feel that this strongly affects their business and discourages many potential customers.

Figure 2.1b demonstrates the aggregate results on whether providers regard Ukraine as a stable country for business.

Figure 2.1b Country stability



Despite experiencing harmful influence from political unsteadiness the majority of software providers consider Ukraine a stable, significantly developed country to conduct their business in. Even those 19 percent of the respondents, that believe that Ukraine is not very stable do not always state political factors. The factors that have negative impact have a stronger economic nature such as low market potential and lack of financial resources.

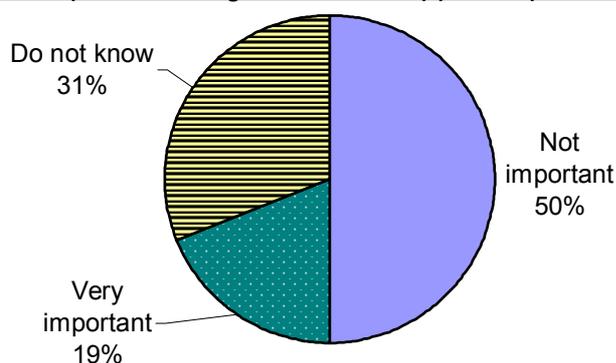
2.2 Government support

Government support plays a critical role in offshore outsourcing. The degree of government support provided in the global market differs from country to country. It has been discussed in the literature that some countries like Philippines have managed to raise large offshore industries with little or no government support. Others, mostly market leaders, have enjoyed great support from their governments that has allowed the industry to progress faster.

It appears that in Ukraine more than half of the surveyed firms do not recognise the importance of government support. Figure 2.2a illustrates that only 19 percent of the respondents view government support as very important to the business.

Half of the respondents stated the fact that government support is not very important to them. 31 percent of the respondents stated that they do not know whether government support is important.

Figure 2.2a Importance of government support to providers



This finding is quite unexpected. It was anticipated that there would be higher reliance on government amongst software firms. However the result shows the opposite. Such disbelief and apprehension towards government support possibly can be explained by the following details.

There were no positive responses received on questions:

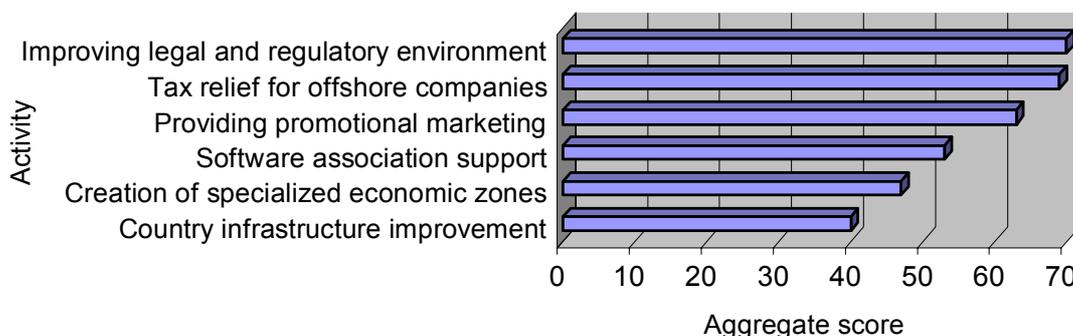
1. Does government provide enough support for your business?
2. Do you rely on government support?

The responses to these questions suggest that there is no governmental support for offshore providers and for that reason providers in Ukraine rely purely on their own capabilities and resources. They have never had the benefits that Indian or Irish companies have had. The Ukrainian offshore industry has never been regarded as a priority industry by government.

Government support activities ranking

The respondents were asked to rank government support activities in order of importance to their business. Figure 2.2b illustrates the findings.

Figure 2.2b Support activities ranking



Aggregate outcomes show that the most important action that service providers would like to see is improving legal and regulatory environment. Other highly significant government activities are tax relief for offshore firms followed by promotional marketing provision. This is a widely used practice in some countries, in particular Ireland, where the industry was relieved from taxation for ten years and has strong promotion programmes. Association support is the fourth ranked action. Creation of specialised economic zones and infrastructure improvement conclude the list of government support measures that can favourably influence the Ukrainian offshore outsourcing industry.

2.3 Regulatory environment

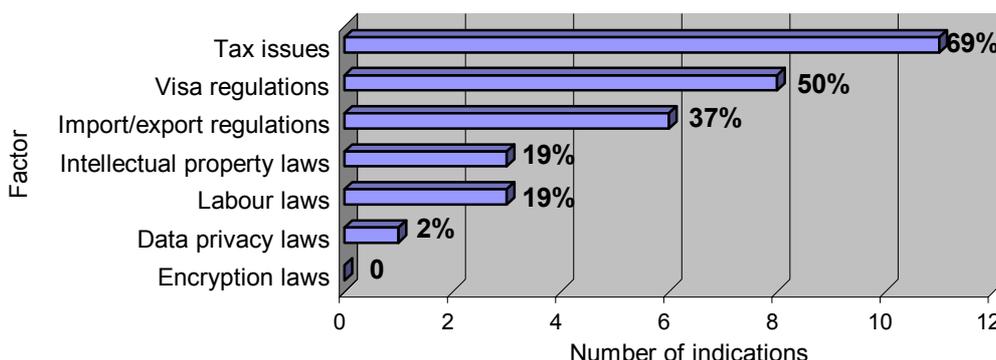
Taxation

The findings received during the investigation are as follows.

The main underlying reason lies within the taxation system (Figure 2.3). Sixty nine percent of the respondents indicated very high taxes, plus numerous issues and drawbacks in the taxation system. Several of them stated that this system is extremely inefficient and in some case is used to exercise pressure by tax officials. This results in the providers' unwillingness to publicize and legalise their revenues so as to avoid problems with taxation bodies.

Figure 2.3 graphically other shows regulatory factors which respondents perceive to negatively impact on Ukrainian offshore suppliers'.

Figure 2.3 Regulatory environment negative factors



Legal system

The legal system is the second main underlying reason for the ‘black market’ in Ukraine. The respondents describe the Ukrainian legal environment as very complicated and not adapted for work with international customers. Multiple legal procedures in offshore work do not take into account unusual cases inherent in offshore deals. The Ukrainian legislation in relation to intellectual property rights, import/export regulations, visa regulations, labour and data privacy laws is not deliberated, thus presents obstacles for transparency in a business context.

Other factors mentioned by respondents include the old and inefficient Ukrainian accounting system and internal managerial issues. Summarised qualitative opinions of respondents that answered this question are presented in Table 2.3b.

Table 2.3b ‘Black market’ reasons

Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13
Reason	LEG	LEG, TAX	TAX, LEG	TAX	IMP	LEG	TAX	IMP	TAX, LEG	TAX	TAX	ACC	LEG, TAX

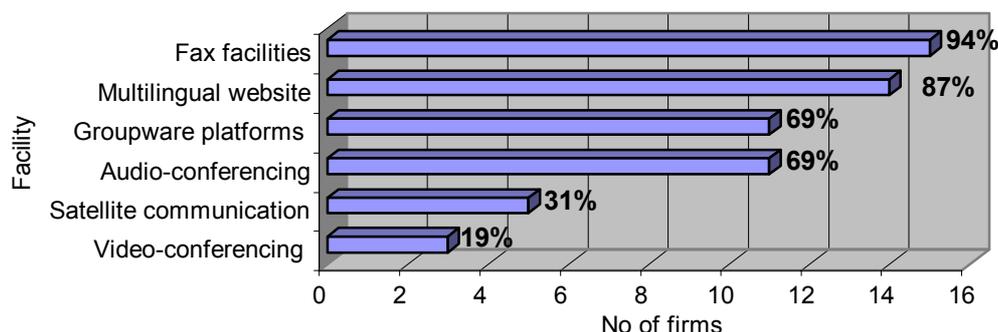
- LEG – Legal system
- TAX – Taxation system
- IMP – Internal management problems
- ACC – Accounting framework

2.4 Communication infrastructure

In general, the respondents assessed the Ukrainian communication infrastructure as adequate to conduct offshore outsourcing. This opinion coincides with the view of UASWD [2002]. Despite weak telecommunication infrastructure compared to developed countries, respondents did not express big concerns about the infrastructure. There were no extreme responses (highly adequate or inadequate) received.

The majority of Ukrainian offshore IT services suppliers are well equipped with essential communication technologies. Almost all surveyed firms possess fax facilities and Multilanguage websites (Figure 2.4).

Figure 2.4 Availability of support facilities



Groupware platforms are another common tool amongst the companies. However Ukraine's current telecommunications infrastructure capability does not allow most of the firms to have advanced facilities such as video-conferencing and satellite connections.

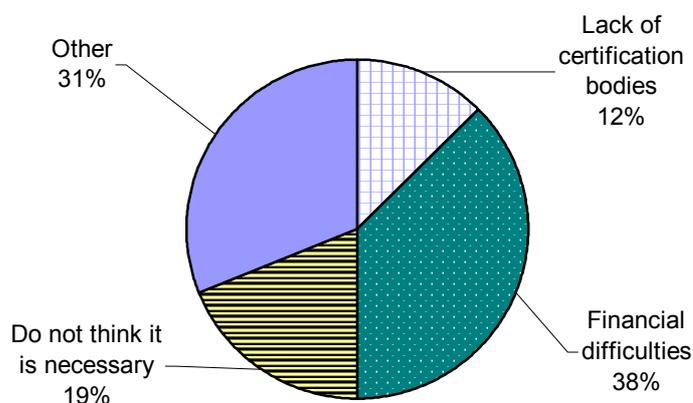
2.5 Quality initiatives

Following the Aberdeen Group's statement "If you are an offshore provider and you are not CMM certified, companies do not even consider you" [Lane, 2002], investigation of quality initiatives in Ukraine was clearly vital.

The majority of the surveyed firms recognise the importance of certification. The research results point out that 75 percent of the respondents believe that quality certification by international bodies (ISO/SEI) do play an important role in the business. However, only 25 percent of companies have certified their processes, from which three firms have ISO 9001:2000 certificates, one already has, allegedly, CMM Level 3 and one ISO 9001. Out of these four, two are export oriented and two are oriented for domestic market.

It was anticipated that the number of firms that are not certified would be bigger than the ones who have certificates. Thus, finding out the inhibiting factors was important. Based on the research findings the aggregate difficulties are presented in Figure 2.5a.

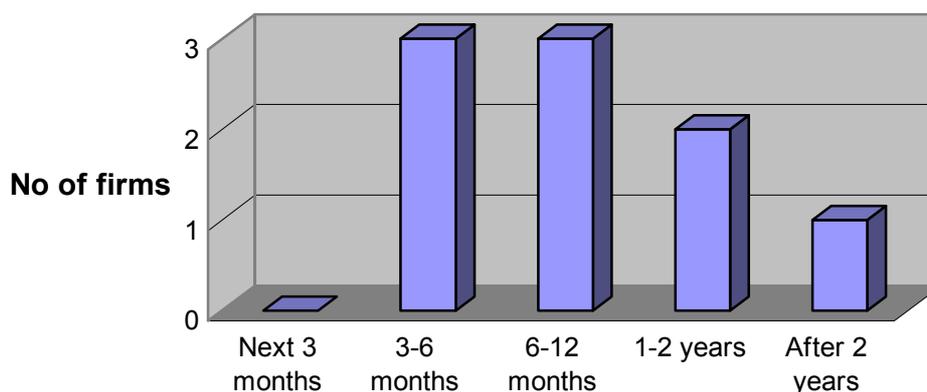
Figure 2.5a Certification difficulties



The main reason for not certifying IT processes appears to be financial difficulties in 38 percent of cases. Lack of certification bodies in Ukraine is another significant reason with 12 percent. Other reasons, which account for 31 percent, are complexity of certification, a lot of time needed to implement these initiatives and a fundamental change of organisational culture that firms cannot take up easily.

Nevertheless, the majority of the firms have undertaken initial steps to implementing CMM procedures and made internal assessment of their quality assurance processes. Fifty six percent of firms plan to pass formal CMM assessment. Figure 2.5b shows the period of time that the surveyed companies plan to have formal CMM assessment.

Figure 2.5b Certification assessment planning



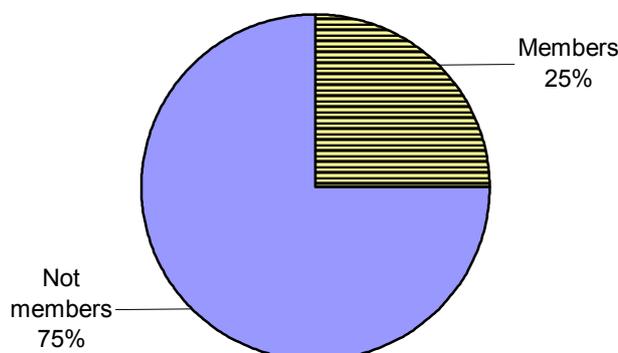
As can be seen from this figure most of the firms plan to have their processes certified within a two-year period.

UASWD has revealed to the author an intention to take CMM certification in Ukraine forward. The organisation has already taken the first steps towards this.

2.6 Industry association

The sample for the research was selected by advice of the UASWD Executive Director (see methodology). However, only 25 percent of surveyed firms are members of UASWD (Figure 2.6).

Figure 2.6 UASWD members



This suggests that many of the major offshore service providers in Ukraine have not joined the association for some reason. The most common reasons stated by the respondents are

lack of awareness about the organisation, not seeing a purpose for joining, or did not have a chance to join. Many non-member firms intend to join UASWD in the near future though. Only one member evaluated UASWD membership as useful, others are not so sure about it. This can be regarded as underdeveloped association support for the industry. Most respondents would like to see a strong industry association, such as NASSCOM, that has the capability to support all software firms in Ukraine. Two UASWD members are export oriented and two have domestic market orientation.

3 Resources

3.1 Skilled resources

An estimated annual figure for IT specialists leaving Ukraine is 2,500 [AmCham, 2002]. Such a big number undoubtedly affects the industry. Therefore it was logical to examine the issues related to staff retention.

Thirty seven percent of the respondents reported experiencing difficulties in retaining qualified programmers. Although firms have employee turnover, they acknowledge that it is not so high to have a considerable impact on the business.

The study showed that the biggest cause for leaving the job is salary issues with 31 percent (Figure 3.1a). Two other significant reasons are the better perspectives for professional growth and gaining experience in a foreign country. The respondents state also that many employees leave the job to emigrate to more developed countries where they can improve their standard of living and have better professional perspectives at the same time.

Figure 3.1a Reasons for skilled employees leaving

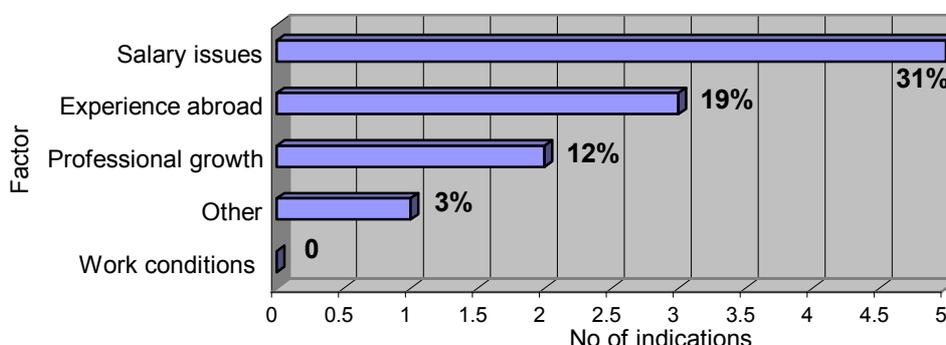
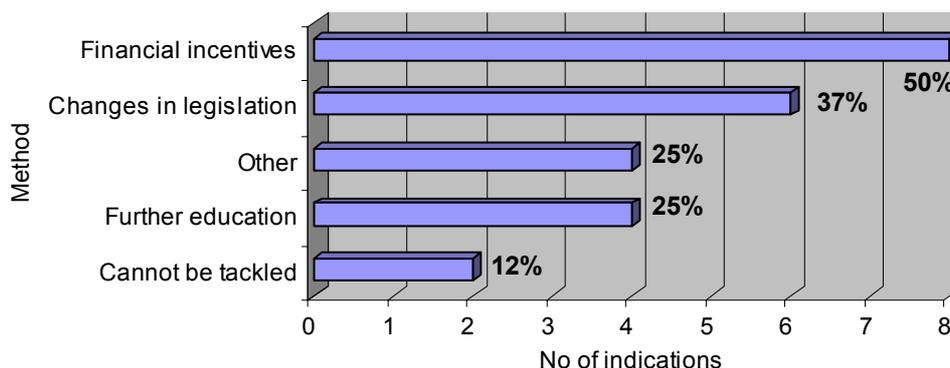


Figure 3.1b illustrates methods that companies employ in order to tackle 'brain drain' conditions. Only 12 percent respondents do not think that this situation cannot be tackled. They say that retention will not be as difficult as it is now after general economic and political improvements in Ukraine.

Better financial incentives are the most common retention strategy, which corresponds with salary issues as the biggest retention problem. Thirty seven percent of the respondents believe that the best option to deal with retention is by making changes to current outdated labour legislation.

Figure 3.1b Staff retention methods



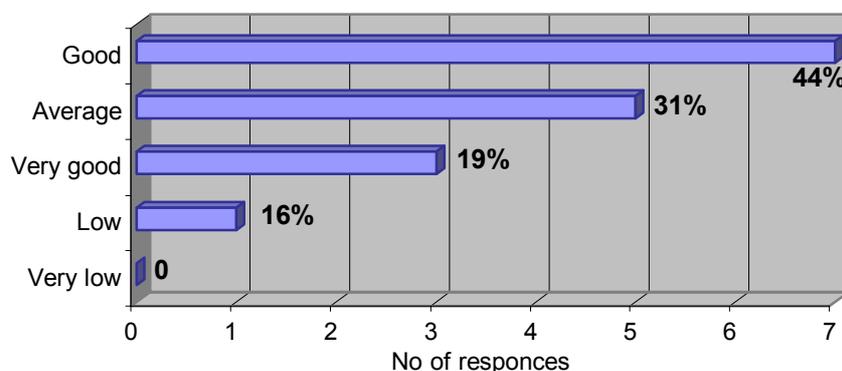
The rest of the firms suggest introducing education programmes and other initiatives. Some respondents suggest changing corporate culture, improving management approaches and changing programmers' attitude towards their work.

3.2 Educational system

The Ukrainian education system inherited from the Soviet Union proves to be good in engineering and technical disciplines. Programmers often have good technical backgrounds and can undertake complex projects.

The study results show that Ukrainian software companies are reasonably satisfied with IT graduates skills. Figure 3.2 illustrates the combined findings for competence level as estimated by offshore outsourcing firms in Ukraine.

Figure 3.2 Graduates competence level



In general the competence of Ukrainian programmers is regarded by employees as above average. Fifty six percent of the respondents also noted that they find the quality of higher education institutions is not up to date. At the same time suggests that even without having knowledge of the latest IT practices the programmers' skills are highly valued.

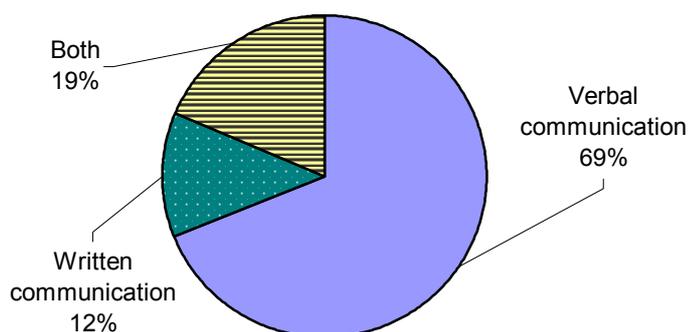
The survey demonstrates that in order to develop graduates' skills, all firms spend time on retraining. Retraining programs vary from firm to firm and take 7-8 weeks on average. Furthermore, 56 percent of the companies provide continuous improvement courses to keep in pace with the latest technology innovations.

3.3 Foreign language proficiency

It is not surprising that all firms in the survey have a foreign language-speaking workforce. The percentage of those varies considerably. The lowest proportion of the staff with knowledge of a foreign language is 10% and the biggest is 90%. On average firms have 53 percent of their workforce that are able to communicate at the proficiency level.

The most common difficulty in communication is verbal (Figure 3.3). Sixty nine percent of respondents expressed concerns related to verbal communication and only 12 percent cited difficulties with written aspects of communication.

Figure 3.3 Communication difficulties



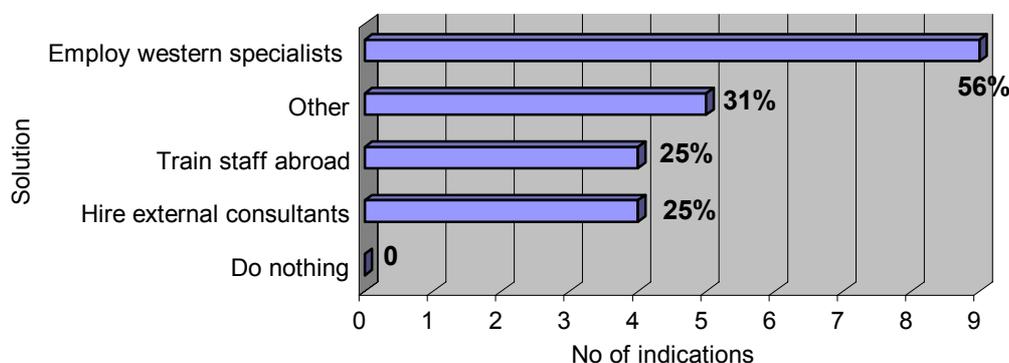
To address these issues a little more than half of the companies have introduced language courses for the staff.

3.4 Business skills

Eighty one percent of the responding organisations agreed with the AmCham's statement that business and management skills of Ukrainian IT companies is a weakness in the offshore software industry. Indeed, the firms do not have enough expertise in dealing with Western customers and do not know how to market and promote their services. Only bigger, well-established companies have the resources to employ experienced expatriates, MBA graduates or specialists from the West.

Figure 3.4 shows the most popular solutions to solve the business skills shortage problem.

Figure 3.4 Skills shortage solutions



As can be seen from the figure, most firms prefer to employ specialists with knowledge of Western business practices. Some of the companies hire external consultants to receive advice on their particular issues. Others try to solve the shortage by training some of their staff abroad or establishing contacts with intermediaries and partners.

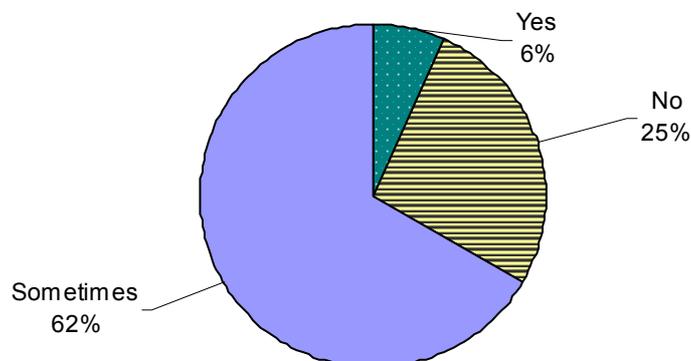
The findings indicate that Ukrainian offshore providers do take business development initiatives seriously. Eighty one percent of them have engaged in marketing events abroad and 87 percent have developed an Internet marketing strategy.

4 Culture

Culture is not an easy topic to analyse and discuss. This domain is new for software professionals not only in Ukraine but also in the whole world. Many people involved in offshore IT work believe that culture is never a problem. Carmel [1999] after researching this area in his study stated that cultural differences are significant.

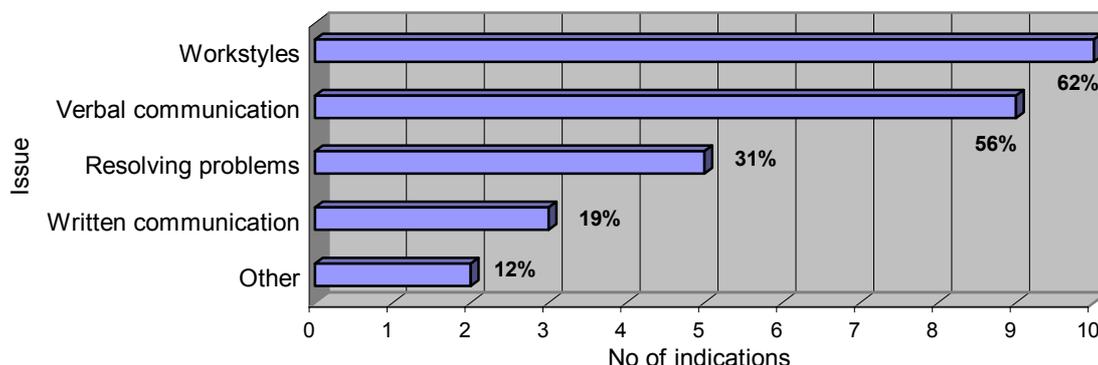
Culture exploratory questions were included in the study. Awareness of cultural differences amongst Ukrainian firms was examined. The results point out (Figure 4.1) that only 6 percent of the respondents always pay attention to cultural fit with their clients. One third of the respondents are not concerned with this matter and 62 percent said that only sometimes different interpretations of the realities inherent to various cultural differences require clarification.

Figure 4.1 Attention to cultural fit



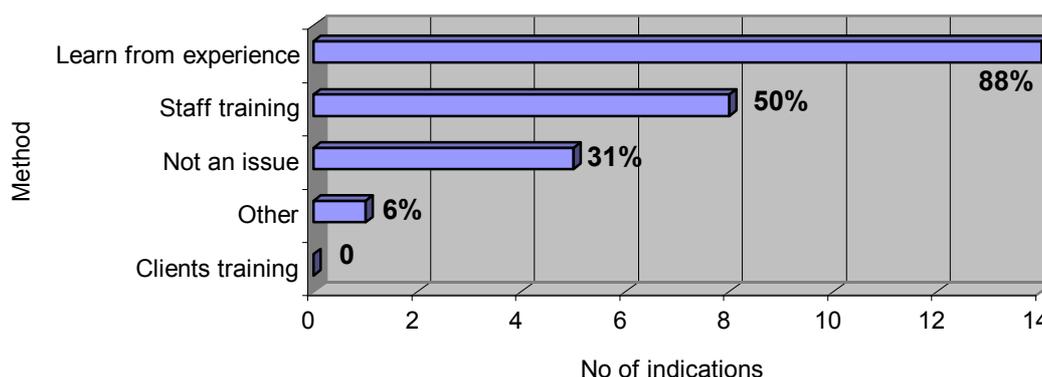
Partially, this can be explained by the fact that 69 percent of firms in the study find it the same or even easier to deal with foreign customers compared to Ukrainian clients. Only one provider claimed to find it a lot harder working with international companies. The language barrier, in particular verbal communication, is one of the major issues that triggers cultural misunderstanding. Difficulties in resolving problems accounts for 31% of the issues, and the biggest obstacles towards harmonic relationships are different workstyles, as indicated by Ukrainian IT suppliers. (Figure 4.2).

Figure 4.2 Cultural issues



In order to address the cultural issues, offshore firms employ various means. It has already been mentioned that only 6% of surveyed companies pay attention to cultural fit, therefore there is a widespread tendency to learn just from experience about how to deal with such differences (Figure 4.3).

Figure 4.3 Addressing cultural issues



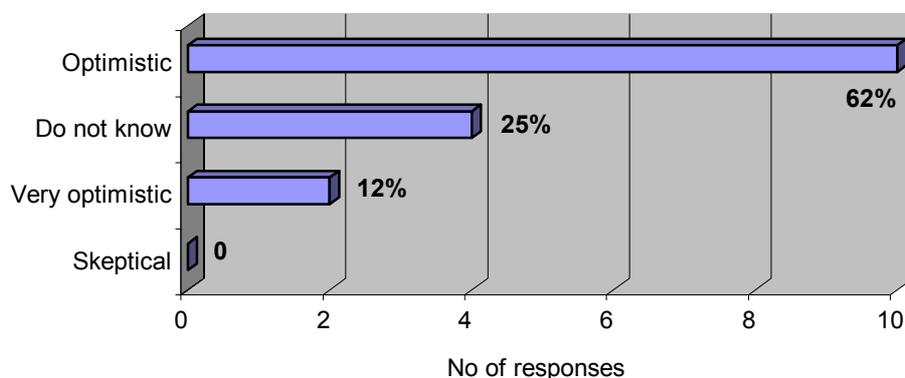
Site visits by both parties often help suppliers to better understand different culture peculiarities. Fifty percent of the firms have provided internal cultural courses for their staff. There are no firms that provide training sessions for clients though.

5 Future Development

One of the most pleasing findings about the industry is that there were no respondents who are sceptical about its prospects. Prevalent optimism in the industry can be the major driver for future progress.

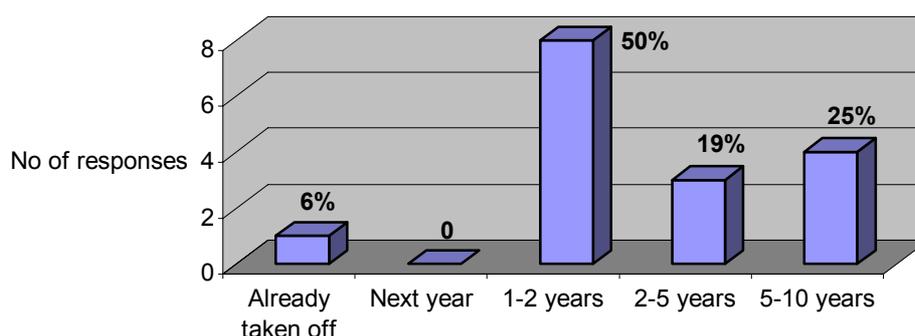
There are overall 73 percent of the respondents (Figure 5.1) that are optimistically looking forward to further integration with the Western world.

Figure 5.1 Industry development expectations



The respondents do not believe, however, that rapid growth of the industry will happen in the near future. There were no responses indicating expectation of the industry's progression next year (Figure 5.2). In the author's opinion this is connected with current uncertainties in the political arena of the country. In 1-2 years time we should expect quick industry advancement.

Figure 5.2 Industry growth forecast



A list of summarised major future developments that responding organisations would like to see is presented below.

1. Legislation improvement
(including software import/export law, labour law and others)
2. Taxation system review
3. Accounting system change
4. Government support
5. Industry conferences
6. Promotion and marketing activities
7. Education system innovation

The list was derived from respondents' comments throughout the study.

Conclusions

This study examined the potential of Ukraine in the global offshore outsourcing market. The main conclusion drawn from the findings is that the Ukrainian industry is still very young but possesses all necessary attributes needed to compete successfully.

The Ukrainian offshore industry research showed that surveyed companies are looking forward to establishing good relationships with Western customers and have plans to extend contacts even further by entering new markets and winning new clients. The study gave evidence that their expectations are very realistic and have good grounds for further expansion into global market. However, improving some aspects of industry infrastructure would speed up this process, while leaving them out will inhibit the development.

Infrastructure

From the findings and analysis of industry infrastructure it can be concluded that Ukrainian companies do not have support from the government. All examined firms indicated that lack of such support is a major factor that holds back the industry. Companies do not have the benefits of a prioritised industry. Clearly, the government do not recognise the need to pay attention to such nationally important for country strategic development industry sector. Ukrainian firms have therefore always relied only on their own resources and capabilities. Hence, they do not believe and rely on the government, which has not been supportive.

Current taxation and legal systems are not adequate and present the main obstacle for offshore development in Ukraine. Virtually all respondents expressed significant dissatisfaction with the existing systems. These aspects of the infrastructure are fundamental reasons for 90% of offshore development work being done on the 'black market'. Firms do not want to legalise their actual sales due to flawed taxation/legislation frameworks. It is easier to make payments for development work through bank accounts abroad and avoid problems with Ukrainian laws. As a result, considerable amount of money stays in foreign bank accounts without being invested in the Ukrainian economy.

The communication infrastructure is adequate for conducting offshore IT work. This aspect of the industry is not considered the industry's weakness, but it is not its strongest side either. Further improvements in the sector of information and communication technology that could lead to reducing communication costs would be very helpful to all providers.

The Ukrainian industry is not the best certified industry in the world. Only a handful of surveyed companies are already certified, mostly by ISO. The positive finding is that there is a growing recognition of certification. The majority of respondents do want to certify their quality in the near future, and many have already taken up initial steps towards it.

The study revealed underdeveloped association support for the industry. A lot of firms did not engage in any sort of association memberships. UASWD is a fairly young organisation with limited experience in the area. The respondents know how helpful the support of an association can be if it is sufficiently developed, and expressed the hope for association advancement.

Resources

Some reassuring findings were discovered about the industry resources. There is a lot of hype in the literature about 'brain drain' issues. This study has enough evidence to refute this notion. It might be the truth that a lot of programmers leave Ukraine to go abroad, but this does not affect the Ukrainian offshore outsourcing industry. The companies state that although there is certain rate of employee turnover, they do not consider it as a problem. Programmers' wages are higher than the average wages in many other sectors of the Ukrainian economy. This induces more and more people to go into computing related education. Therefore, even if there are vacancies they are filled up very quickly.

The research showed that firms are satisfied with university IT graduates' skills and evaluate their ability above average. Firms spend some time on retraining graduates in order to update the skills and to adjust them for specific company requirements.

It was found that firms do suffer from a lack of business and management knowledge. The most effective way to solve this, in the opinion of the respondents, is to employ specialists who have experience working abroad.

Culture

Unfortunately, the scope and limitations did not allow examination of Ukrainian culture in depth as it requires a more qualitative approach, but some problematic areas of this were determined.

A worrying fact that has been discovered during the study is that only a small proportion of Ukrainian providers pay attention to cultural fit with the customers. The majority of software companies do not state culture as a major problem. Hence, they do not focus on this aspect of work. Nevertheless this aspect has an immense importance to the clients and should not be underestimated (Carmel, 1999).

Different workstyles is the biggest cultural barrier to Ukrainians. Dealing with it is not easy, and it is even more difficult due to verbal communication difficulties, the most often issue referred to by the offshore providers in Ukraine.

Concluding remark

On the whole, the providers of IT services in Ukraine are optimistic about the industry. They believe that this is only the beginning and all major developments are still ahead. It is not easy for them to compete with the rest of the world on the basis of pure enthusiasm, with no government support, plus numerous tax and legislation issues. However, there is a strong belief that the time will come that will change things for the better and we will see the industry prospering.

Recommendations

The previous section of this study summarised the main findings identified by the research. This section of the study focuses on the recommendations for the Ukrainian government, software business associations (e.g., UASWD) and offshore outsourcing exporters. Recommendations emerged from the study conclusions in the context of three criteria: industry infrastructure, resources and culture.

Recommendations for the Ukrainian Government

The continuous improvement of the Ukrainian offshore outsourcing industry directly brings up the question of size growth and investments. It is unlikely and extremely hard to grow without supporting government policies. Traditionally the Ukrainian government has had proactive policies that support and subsidize sectors of the economy such as metallurgy, coal mining and agriculture. These sectors already have massive government lobbying power and political representation. The IT industry in Ukraine does not have and has never had anything like that.

The central recommendation to the government is to establish clear responsibility for technology policy. The president of the Ukraine passed a decree for more IT parks, pro technology policies and tech business incubators [CIO Magazine, 2002], but, as this research findings show, there are no indications of noticeable positive effect from this. A special position in the Cabinet has to be created with an allocated budget and coordinated policy with other Ministry agencies. A division of responsibilities and, especially, bureaucratic administration must be avoided.

Other recommendations are given below in order of importance:

1. Improving the legal and regulatory environment. The American Chamber of Commerce [2002] explored issues in this area in detail and gave some good recommendations. Urgent actions have to be taken by the government. Close cooperation with offshore exporters to make progressive and effective changes is highly advisable.

2. Introduce tax incentives for offshore outsourcing companies. The government has to take Indian and Irish practices as successful models of the offshore industry development. This measure will induce providers to legalise their profits, ensure greater transparency and stimulate investments in IT business.

3. Provide assistance in international promotion and lobbying. Outsourcing conferences organised by government agencies will draw attention to the industry in the global arena and potentially bring new Western customers.

4. Provide more resources on IT education programmes. An innovative approach to higher education can be introduced in order to make the system more competitive. National scholarships, foreign study and internships would be valuable, especially in the area of IT business management.

Recommendations for IT Business Associations

The study showed that association support in Ukraine is underdeveloped. UASWD is not anywhere near the size and effectiveness of NASSCOM, which provides an excellent model that UASWD can learn from.

In the author's view the best way forward is to create one single yet strong non-government software business association in Ukraine rather than many weak organisations. UASWD can be a base for this. Multiple associations are probably not the most productive idea. Ukraine has to avoid the mistakes that neighbouring Russia has experienced where efforts to organise strong association have often failed due to internal wrangling. However, establishment of separate governmental IT association would create a competitive and stimulating environment (as in the case of India).

To become an effective association UASWD needs to build membership and to develop resources. The study showed that the majority of the firms are not members of the association. Therefore, UASWD has to put efforts in promoting itself amongst domestic companies and to build trust and tangible/intangible support. Training, consultancy and advice are the prerequisites for starting a successful relationship. The initial steps the association has already undertaken. V.Spiridonov, Executive Director of UASWD has revealed to the author plans to form CMM certification assessment facilities on the base of the association. This is a positive move by the association. The leadership of UASWD should be capable of operating as a domestic as well as an international promoter.

Other recommendations to UASWD include:

1. Create promotion programmes aimed at a Western audience
2. Offer providers support for international promotion
3. Develop certification support
4. Make contacts and utilize international diasporas abroad, especially in US and Canada, the biggest Ukrainian diasporas settlements
5. Close cooperation with the foreign commercial community
6. Establish a physical presence in global strategic markets
7. Assist Western clients with business in Ukraine

Recommendations for Ukrainian providers

The offshore outsourcing industry in Ukraine is relatively small, growing and lacks scale. But this research has indicated great aspirations and optimism amongst the respondents. It has also shown that a lot has to be done before Ukrainian IT exporters become a competitive force in the global market. Each year more and more new firms enter the market offering improved services. The literature reviewed suggests that competition is likely to increase. Therefore, if Ukrainians do not want to be left out of this contest, they must urgently implement the following recommended programmes:

1. *Unite*

Working together to develop strong business associations, both governmental and non-governmental, that could lobby government for a favourable offshore work environment.

2. Differentiate

Ukrainian providers need to differentiate their services. At the moment they can compete on the basis of low price, but the time will come when they will have to compete on a better quality basis. CMM certification is the first step towards it. However they have to clearly recognise this need.

Another aspect of differentiation is to promote and to set apart the Ukrainian industry from the Russian and other Eastern European offshore industries. Collaboration with those industries is vital but it has to be promoted as a separate and distinct unit.

3. R&D

Working closely with universities and R&D institutions. This cooperation will benefit both firms and institutions. Sponsorship programs, training opportunities for students and academic contacts will make the industry more innovative and competitive.

4. Business education

The reason for the lack of business and management skills is that many firms were established by technical entrepreneurs. There is a shortage of skills which can be solved by investing in management education. Links with business schools at home and abroad in addition to training and hiring policies are the most important opportunities in the area.

5. Strategic partnering

Forming joint ventures and strategic partnerships with Western firms is the fastest way to gain much needed business expertise, experience and recognition. In some cases a good option is to become specialised subcontractors to global outsourcing firm.

6. Cultural education

As business grows there is a growing need to spend more time for multicultural interaction on large-scale projects. This requires constant awareness of cultural differences. It is advised that Ukrainian providers ask themselves not just how they feel working with international clients, but how their customers feel working with them.

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