Forces Affecting Offshore Software Development

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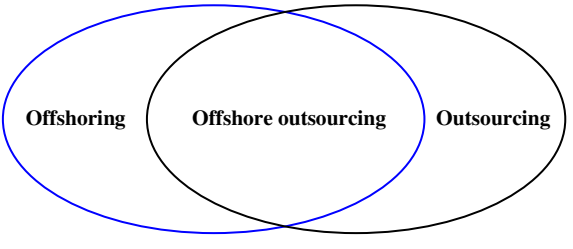
Abstract. This paper identifies the forces affecting offshore software development based on a knowledge management perspective. The identified four major forces act along the dimensions of finance, individual education, organizational maturity, and culture. The analysis is validated on cases of European offshoring practice exhibited in the database of the EuroSPI (European Software Process Improvement) series of conferences.

1 Introduction

Contrary to the commonly joint use of the words "offshore outsourcing", offshoring is not a special case of outsourcing whose most concise definition is "**contracting of work to another company**"[1]. Offshoring can be defined on the other hand as the **relocation of work to another country**. By consequent, the relationship of offshoring and outsourcing can be depicted as two sets whose intersection consists of offshore outsourcing:



The distinction of the above cases is important because of their different business significance.

Recent as it may seem, outsourcing is one of the oldest process reengineering activities of humanity, formerly called "**specialization**" or "**division of labour**"[1]. The recent outburst of interest in this approach is due to the globally **increasing share of services and intellectual content** in products which opens new levels of outsourcing opportunities **onshore, nearshore, and offshore** depending on the factors discussed below.

It is the spread of **Information Society Technologies** which gave the most recent **boost to offshoring** whether through the establishment of **offshore development**

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centers fully controled by the mother company, or through **offshore outsourcing** to companies in the other country. In fact, in addition to being highly enabling, **Internet services are themselves inherently outsourced offshore**, since we definitely have to rely on services operated in other countries because of its fundamentally distributed nature.

Similarly to outsourcing, offshoring is also a new expression for an old business approach. Beyond technology, it is enabled by globalization whose history just goes back to the times of **Chandragupta Maurya** founder of the first Indian empire (321 B.C.) and **Alexander the Great** whose troops were the first to open the route from Europe to Asia called **Silk Road** later. The significance of globalization is clearly recognized by **Adam Smith** back in the 18th century[2]: "But if in any of those distant employments, which in ordinary cases are less advantageous to the country, the profit should happen to rise somewhat higher than what is sufficient to balance the natural preference which is given to nearer employments, this superiority of profit will draw stock from those nearer employments…".

And we are at the heart of the issue. What are the opportunities and threats raised by offshore software development? The fact is that all opportunities are challenged by threats both of which are dialectically present in all business decisions (yin-yang).
Here are the generalised dimensions which were identified as a result of our literature review, and which were analysed in our research:

1. **Financial dimension:** Low salaries vs. labour market forces having an increasing effect on salaries (see Adam Smith[2] quotation above)

2. **Individual education dimension:** Workforce benefiting of traditionally high quality professional education vs. disadvantaged by traditionally undervalued but improving management education and practice.[3][4][5]

3. **Organizational maturity dimension:** Organizations leapfrogging to high maturity levels avoiding resistance to change vs. missing motivated gradual process improvement.[6][7]
   In the more general terms terms of knowledge transfer, the issue underlying this dimension is the following:
   The transfer to another company of an intellectual asset like a mature process has the advantage of time savings and the avoidance of the necessity of unfreezing. It has on the other hand the potential disadvantage of the lack of the individual internalization and of the socialization process at the receiving company.[8]

4. **Cultural dimension:** National cultures and value systems are becoming increasingly visible across the globe due to the Internet facilitating the comprehension of the way of thinking of people in distant locations. This comprehension will hopefully turn into the recognition that the variety of cultures can be beneficial for progress in a variety of ways. National cultures on the other hand determine strongly implanted value systems whose clash may result in serious conflicts even in case of apparently minor differences. [13]

The research directions were expanded on the basis of case-studies, and the research model was built on the identified driving forces of offshoring (Figure 1). This model is analysed and explained in the paper.

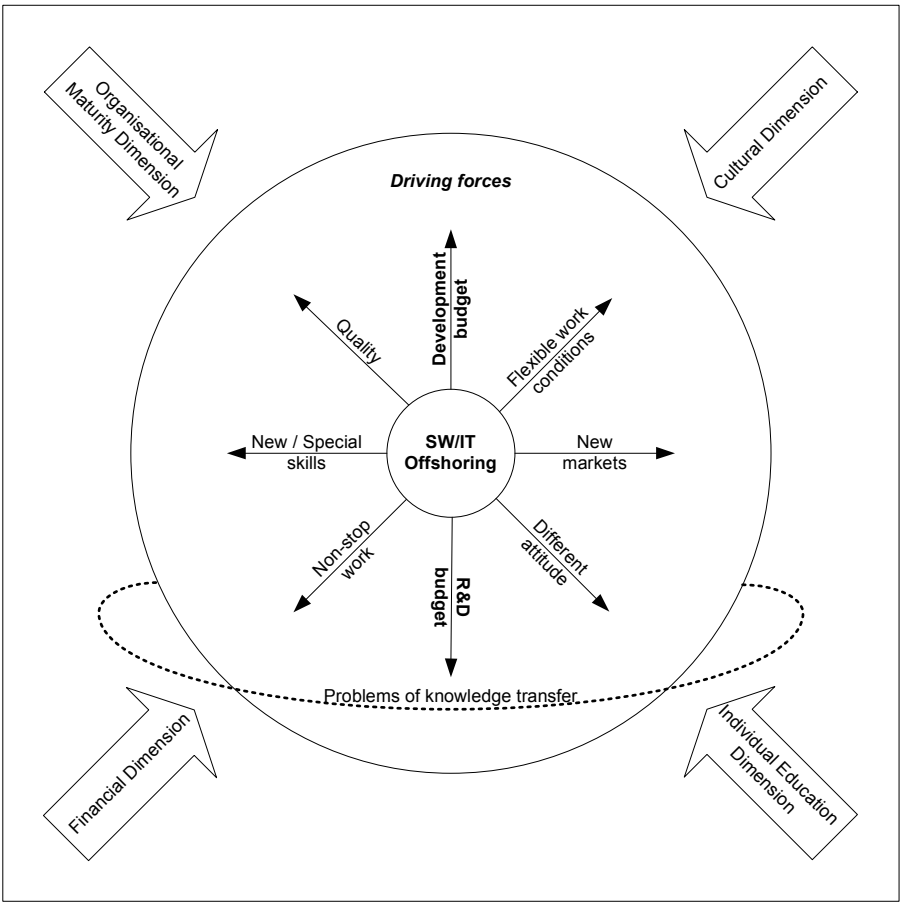

Fig. 1. Driving factors and influence challenges of offshoring

2 Research Methodology

This study is part of a research that analyses the relationship of software process improvement practices, maturity models, and offshoring, focusing on European practice exhibited in the database of the EuroSPI (European Software Process Improvement) series of conferences. A total of 80 cases - software development organisations and software/IT consulting companies – were analysed. The results are based on both the reports of the organisations (from the EuroSPI database) and personal interviews.

In order to explore the deep relationships and details, a qualitative and explorative research approach was selected. Since the relationship of software process improvement and offshoring, concerning intellectual capital, is a rarely explored area, the results are not matured, and this area is a frontier of more than one scientific fields, a qualitative approach is required.

In qualitative research, there is the possibility to explore the thoughts, definitions and assumptions of the researched persons and organisation – the context of the research. In this complex field, researchers have more possibilities to explore new, unexpected results that are relevant to the research [31]. In qualitative research, analysis of numerical data is also possible, but the main emphasis is on the deep exploration and understanding of relationships of the research area [32].

Among the tools of the qualitative research approache, the case study based research method is the most suitable, because it provides the possibility of deep understanding. Based on Yin, case study based research should be used when the field of research is wide and complex. The research can answer the questions of why…? and how…?, but the questions should be posed by the researcher. Case study based research is suitable for testing, developing and competing theories [30]. Therefore the addressed research questions were analysed through the cases, and based on the analysis, further factors were identified (Figure 1).

Because of the research approach (explorative, qualitative, case-based), the phenomena that were identified during the research are illustrated with living examples of the analysed organisations, as short cases. Inasmuch as these case studies are presenting some problems and difficulties of companies, the names of the organisations are presented in the form of a three-character anonymous code. The cases were used as the basis of the analysis of the addressed phenomenon to explore more the research questions in detail.

3 The Financial Dimension

Undoubtedly, the major driving force behind offshoring is financial leverage (see Adam Smith2 quotation above) resulting from reduced labour costs. But financial leverage for whom and for how long time? The challenging questions relate to the **interests of stakeholders** and to the **balancing effect of labour market forces**.

The primary stakeholders of offshoring are of course the capital-owners who must benefit, otherwise would not do it. The other stakeholders are the workers of both the capital exporting country and the offshore service provider country, supplier industries, and the government of the offshore service provider country collecting taxes.

Table 1. Share of the gain by stakeholders in the US and India from 1 Dollar spent offshore

	US	India	Total
Capital-owners and customers	.62		
Extra revenue from additional exports	.05		
Profits retained		.10	
Central and State Government		.04	
Suppliers		.09	
Workers	.47	.10	
Country economy	1.14	.33	1.47

The McKinsey Global Institute (MGI) published studies in 2003 and 2004 showing statistics about the benefits of offshoring to stakeholders in the US, India[9], and Germany[10]. The aggregated summary (table 1) shows the share of the gain by the stakeholders from 1 Dollar or Euro spent offshore according to the MGI studies. The benefits include the net cost savings due to offshoring instead of spendig at home.

The numbers indicate that the offhore service provider country and the investors clearly win, while the 47 cents going back to the workers from new jobs generated is 25 cents less than the 72 cents of wage they lose according to the same study. The savings realized by lower wages are actually moderated by additional costs of telecommunication and management.

The study regarding Germany shows the numbers summarized in Table 2.

Table 2. Share of the gain by stakeholders in Germany from 1 Euro spent offshore

	Germany
Capital-owners and customers	.48
Extra revenue from additional exports	.03
Workers	.29
Country economy	.80

According to the study, the difference in capital-owners' and customers' gain between the US and Germany is due to higher coordinating costs resulting from differences in language and culture. Offshoring investors still win in Germany, the overall economy is however loosing because of the unflexible labour market.

In summary, offshoring means definite financial leverage for capital-owners, while labour market forces exercise increasing pressure on wages in capital exporting countries. On the other hand, wages are naturally increasing in the offshore service provider countries including Eastern Europe. As a consequence, time will make offshoring less attractive on the long run.

Because of the above, and many other reasons, a very recent study by Deloitte Consulting[11] states regarding general outsourcing, that "In today's economy and labor market, organizations looking for differentiated growth solutions should avoid outsourcing when based solely on cost savings."

Nevertheless, lower costs in the offshore service provider countries have also an indirect beneficial effect on the capital exporting countries and their workers on the long run. Lower costs allow for more flexibility in experimenting with innovative products and services[12] which leads to competitive advantage and eventually more highly qualified jobs in the capital exporting countries. It has to be mentioned that in the case of Germany, experimentation is also enabled by the less uncertainty avoiding culture of the offshore service provider country, as well as the higher flexibility of the labour market.

4 The Individual Education Dimension

It is generally recognized that the educational systems of offshoring target countries releases graduates with a high quality professional education. This characteristic is

mainly due to the traditionally high respect for intellect and wisdom in these countries as compared to the business and management abilities. Whether the observation of these priorities originates from the political system or the national culture, globalization made it visible that it cannot secure a competitive position alone.

As the need became imminent, business and management education started to spread based on practices proven in other countries. There are however natural obstacles to the transfer of best practices even within developed countries, one of which is the resistance to change, while the other one is the difference in cultural value systems.

The issue of the resistance to change was clearly experienced by trainers from Western Europe invited to Eastern Europe for example. "Management development in Eastern Europe needs to emphasize the skills associated with diagnosing the environment, reacting to it in the approporiate manner and negotiating adequate political power to initiate and maintain the change" [5]. The above author also recognized however that this problem is only amplified in the fast changing Eastern European business environment and in fact, there is a global need to "abandon the traditional model of management education". And this is again the result of Information Society Technologies whose message is that "education is no longer a matter of content but rather an attitude of mind with a 'tool-box' of developed skills, chief of which must be diagnosing the environment and managing change".

The impact of the differences in cultural value systems on the potential of the penetration of individual management skills is highlighted by the following example of a senior Indian executive with a Ph.D. from the U.S. [13]:

– "What is most important for me and my department is not what I do or achieve for the company, but whether the Master's favor is bestowed on me. ... This I have achieved by saying "yes" to everything the Master says or does. ... To contradict him is to look for another job. ... I left my freedom of thought in Boston."

5 The Organizational Maturity Dimension - Problems of Transferring Organisational Maturity

Analysing the offshoring practice of organisations, several typical problem areas were identified. One of the major problems of offshoring is the transfer of knowledge, transfer of intellectual capital related to the organisational processes, standardisation, quality, control – in summary: the maturity of the organisation.

The basic problem is that knowledge that should be transferred is mostly tacit, and therefore it is hard to formalise, hard to codify [14], furthermore, it is embedded in the minds of the employees, and in organisational processes. Transferring this intellectual capital can give rise to the following problems:

- **Codification problem:** A task of the codification process is to transform organisational knowledge into a form that makes it accessible to the members of the offshore company. Therefore, the knowledge should be organised, converted into explicated, formalised and portable form that is easy to understand. In this process, the loss of the tacit parts is the most important challenge. For capturing tacit knowledge stories, detailed case descriptions are necessary, but the most

useable solution of transferring tacit knowledge is the transfer of the employees themselves [15].

- **Absorption capacity problem:** In order to use the transferred knowledge, users should have the required experience, perquisite knowledge and skills so that they understand and accept knowledge [16]. If the users have different views about the world, the internal workings of the company that is included in the transferred knowledge, users will question this knowledge [17]. In this case, the use of the transferred knowledge may be either blocked, or may require further validation. In this case, knowledge transfer does not make sense, since the time and cost of this process will dramatically raise. In order to avoid the absorption capacity problem, it is necessary to recur to the right level of formalisation that can be different in different situations and contexts. Employees in similar environments, with similar tasks and in similar culture do not need a detailed explanation or background for new knowledge, for an unknown person however, at least a full overview is required. Therefore, every situation requires different abstraction levels. The highest abstraction level is the level of self knowledge sharing (e.g. personal notes or diary), that can hardly or not at all be understood by other persons. Higher abstraction level requires higher perquisite knowledge, while knowledge on lower abstraction level is understandable for more people, but the costs of formalisation are high. In the case of knowledge transfer, the optimal zone is required, in which neither abstraction level nor costs (and time requirement) are high.[18]
- **Trust problem:** It is widely investigated and accepted, that the basic condition of knowledge friendly culture is the confidence towards those, to whom employees give the knowledge, or from whom they accept it [19]. Confidence helps to form human relationships, which make possible communicational and knowledge changes. As Huemer et al [20] make a point, confidence is the main condition of knowledge changing, combination and also its development. Controversial or incomplete communication, non-defined expectations and secret-mongering of management can lead to losing the confidence [21].
- **Support problem:** Another common success factor is the right environment, support for sharing knowledge. Based on a codification approach [21], the transfer process should be supported by information technology solutions. The problem is that this approach neglects the importance of tacit knowledge. Therefore, organisational support factors, other communication solutions are necessary. In order to develop a conscious support environment, it is necessary to develop knowledge management practices, that include a well-grounded knowledge management strategy (that covers the possible goals and tools), technological tools (systems, infrastructure), and organisational solutions (HRM, culture, learning processes, structure, processes, and leadership). The continous assessment of the practice is also required (for further details: [23]).

Offshore companies are subsidiaries of existing organisations, therefore in most cases they are newly founded. But practising at the same level as the mother organisation does is not any easy process. The transferable methods, processes, culture can be identified as intellectual capital. The intellectual capital, that is required for the same practice is often tacit, hard to formalise and transfer. The national environment, culture, the behaviour of the new employees could be a barrier of using the same methods and processes that are quite common in the mother organisation. In order to

transfer the existing intellectual capital and provide the same practice level, the following methods were identified.

The simplest and most common case, when the offshore subsidiary of newly founded, and the practice is based on the methods and the processes of the mother organisation. In this case, new employees should accept the methods, processes and culture of the organisation, the perquisite employment is acceptation. Employees are using this intellectual capital without questioning it, but the problem is that employees probably do not understand the reasons of this practice. In addition, the experience that is required for understanding the reasons is embedded in the mind of the employees of the mother organisation, it is tacit and therefore hard to transfer. The danger with this solution is that employees only mechanically repeating the instructions, without the possibility of improving it, and they often believe, that these requirements are only company requirements without deeper meaning. This phenomenon can lead to half-hearted work, or sabotage of the processes.

Case Studies of transferring organisational maturity and knowledge

WMA was founded in 1994 with around 10 employees as a subsidiary of a German company. Since 1994 – despite of the economical problems – the organisation dynamically grows. At the beginning, the organisation has a family-like working environment with 2-3 groups of employees. Every worker knew everything about all of the projects, methods, processes and all of the colleagues. They had all competencies which were required to solve the problems. Everybody had the possibility to know the outcomes of every project, and it was easy to ask details from the colleagues. By 2000 the number of the employees has durative exceeded 100.

Selecting a new employee was always a very important and critical task. The organisation hired not only fresh graduates but also experts in the area of IT and management. New employees should be flexible, open-, logically thinking and talent, should accept the organisational culture, methods and processes. Acceptance is not the only criteria: the personality of new employees should fit to the existing organisational culture. Even in the case of a talent expert does not pass the test (because the personality is radically different, or cannot accept the requirements), this applicant can not be hired. This approach effects the very slowly change of the organisational culture, but the acceptance and usability of the required processes and methods are high.

Over the years of successful working, new problems arisen: because employees did not understand the reasons why processes are regulated by very strict ISO specifications, the continuous use became occasionally: several documentation of report task were performed only when it was really necessary, and the practice became to abrade. Another problem was, that rules, policies, processes were good for a small company are not suit the requirements of a bigger one, therefore new locally arisen problems should be solved for what the original methods are not useable.

To avoid these problems of understanding, companies let their subsidiaries to develop themselves, to gain experience, and the employees to understand the requirements of standardization and quality orientation. The introduction of the methods and processes of the mother organization can be performed as a radical change, or as a step-by-step way.

RER initiated a project to improve its software engineering processes, this improvement required however a more formalised documentation of employees during their work. As could have been expected, the resistance to change was very strong, since employees did not know why the changes were necessary, and what the benefits of the project were. This negative attitude was overcome by formal training activities which involved the employees for whom the advantages of the new requirements were clarified. This change in the behaviour of employees resulted in their acceptance of the new methods and empowered them with personal experience, which means knowledge development. As a positive side-effect of the project, personal knowledge sharing and team-work were intensified.

CTO is the Hungarian office of an international company that has a major practice in IT consulting and system development area. The office was opened in 1989, similarly to other international organizations. The organisation has high quality standards, and it was one of the first few companies who have realised the importance of knowledge as a resource, already in the early '90s. In 1996 the company headquarter decided to apply standardized processes and methods to control the organisational practice. The new processes were introduced with certain incentives to the employees, in order to motivate acceptation.

After a few years, the management of the subsidiary were able to proudly present the success of the change management project: employees accepted and use the newly introduced processes and methods, they document their activities, and the whole practice is monitorable. But after many years of use, it is visible, that the culture of the headquarter can not impact the culture of the subsidiary any more. The turnover of the employees are very high: the expected employment of a fresh graduate is around 3 years. Therefore new employees do not feel that they should support expected processes of *CTO*.

The headquarter realized the problems, and decided changes: The incentives were cancelled, and it was believed, that the existing culture and habits will vitalise the system. It was expected that starting from that moment, the impact of the culture will be strong enough, that employees will use the expected processes for their usefulness, and not for the incentives. The outcome was a total failure: the number of the submitted items is almost dropped to zero, and the usage is lower than before.

Although in the case of *CTO*, the organization had the experience, in order to know, why the standard processes, documentation and measurability is important, this culture cannot be strong enough, because it was controlled by the mother company. To avoid these problem, it is suggested, that based on its experience, the subsidiary should realize the necessity of standardization, documentation and related activities, and with the help and advices of the mother organization, they should step forward in maturity, in their own speed. This process is more successful, but the introduction and development is much more longer than in other cases.

To summarise these experiences, it is visible, that the direct and immediate transfer of intellectual capital for methods and processes can be successful for new organisation, but problems can arise after years. For developing companies the introduction can be successful, if it is not a radical change, the changes build into the culture and the daily life of the organisations. Therefore conscious change management is required.

Table 3. Comparing organisational types related to maturity

Phenomena	**Advantages**	**Disadvantages / Problems**
New organisations with accepted methods *e.g.: WMA*	- Easy introduction - Fast acceptation	- Tacit knowledge is hard to transfer - Employees do not understand the reasons - Risk of sabotage - Neglecting local requirements
Experienced organisations *e.g.: CTO*	- Existing experience	- Unstable introduction - Required CHM - Sabotage
Developing organisations	- Stable introduction - Existing experience	- Different results - Long time of success

6 The Cultural Dimension

It was already mentioned in the introduction that Information Society Technologies enable people to easily get in touch with other cultures facilitating the comprehension of the way of thinking of people in distant locations, and that this comprehension will hopefully turn into the recognition that the variety of cultures can be beneficial for progress in a variety of ways.

The above mentioned comprehension and recognition are especially critical in the software and services industry where the capability of identifying itself with the customer's value system is of utmost importance.

It was the seminal work of Hofstede[24] which identified the generic factors, which characterize value systems in different national cultures, including those of software and systems developers', applying statistical cluster analysis. The analysis was based on questionnaires from more than 50 countries. Each of the countries could be given an index score for each of the following dimensions of national cultures:

- Power distance
- Individualism versus collectivism
- Masculinity versus femininity
- Uncertainty avoidance
- Long-term versus short-term orientation or Confucian dynamism

From the point of view of offshoring, uncertainty avoidance is particularly interesting, since it characterizes people's attitude towards ambiguous or unknown situations. Innovation usually involves a lot of uncertainty; it is by consequence easier in weak uncertainty avoiding cultures. A strong uncertainty avoiding culture like the German one, creates high anxiety in people who usually like to work hard and like establishing and following rules. The actual implementation of the results of innovation is an activity, which exactly requires this attitude.

The above discussion is a proof of the existance of different benefits that different cultures can bring to progress.

It was also mentioned that national cultures determine strongly implanted value systems whose clash may result in serious conflicts even in case of apparently minor differences. In order to highlight the impact of cultural differences[25] on the management of offshore businesses, a few examples will be described which also prove that this issue is not only relevant between distant cultures but between otherwise close ones as well.

- **Example: USA and Finland**

Atwong and Lange [26] give account of a virtual classroom experiment with students of the California State University-Fullerton and Lappeenranta University of Technology, Finland. The subject of the experiment was a marketing research project, which is irrelevant in our context. The important is that "the project combined the American and Finnish students into one virtual classroom with cross-national teams. Students used the Internet extensively for data collection… and conducted Internet chat with foreign team members when necessary." The message of the story can be summarized with the opinion of a Finnish student:

- "It was interesting to see the effect of cultural differences, even in a relatively simple project like this. When we first established contact with our American teammates, they wanted first to introduce themselves and chat about their interests and hobbies, which we thought was strange. Later we realized that this was their way to establish rapport with small talk. The Finns are used to getting immediately down to business. In the oral presentations, the American students seemed to emphasize presentation technologies more than us. However, in my opinion the quality of the work was roughly equal."

It is noteworthy that even these two otherwise close cultures may find each other ridiculous, strange, shocking or even hateful.

- **Example: France, Germany, England**

Hofstede[19] describes the results of an organizational behavior course examination reported by Owen James Stevens, an American professor at INSEAD business school in Fontainebleau, France. A mixture of French, German, and British students received a case study where they had to resolve a conflict between two department heads within a company. A sales and a manufacturing manager for example have usually conflicts since sales tries to satisfy changing customer demands, while manufacturing is more efficient if batches are larger and changes are less frequent. "The results were striking."

- "The solution preferred by the French was for the opponents to take the conflict to their common boss, who would issue orders for settling such dilemmas in the future."
- "The solution preferred by the Germans was the establishment of procedures."
- The British solution was the registration of both department heads to a management course to develop their negotiation skills.

In summary, the French with large power distance and strong uncertainty avoidance prefer to concentrate the authority and structure the activities, the Germans

with strong uncertainty avoidance but smaller power distance want to structure the activities without concentrating the authority, while the British with small power distance and weak uncertainty avoidance believe in resolving conflicts ad hoc.

Case Studies related to the Cultural Dimension

To illustrate the problems of cultural differences, the example of a Polish offshore company is presented: *ITP* is a subsidiary of a German company. In the mother organisation, the standardisation of processes and methods, as well as continuous evaluation is very strong, and it is the basis of the organisational culture (that is very well suited to the national culture). In the subsidiary, this kind of approach was strange, and the risk emerged that the activities connected to the individual processes can lead to the measurement of the individual or team performance (that is embedded in the national culture, and it was new for an Eastern-European country). So e.g. the use of the system registering the defects and failures can reflect on the developers. Therefore, instead of documenting, they chose informal channels (telephone, notes). This process can compromise the quality of the processes and products on the long run. Therefore, ITP sharply separated the performance evaluation from the development processes, i.e. the information about the development processes cannot be applied for evaluating the individual or team performance. The human research management department does these evaluations in the frame of a separate process.

In another case, *DIS* can maintain an open, communication supporting culture. The company has 30 employees, therefore knowledge sharing is mainly based on personal interaction, that is even tacit knowledge can be transferred. Because of the openness of the culture, it allows fast acceptance of new ideas, and higher quality level based on direct knowledge exchange and feedback.

7 Conclusion

The goal of this paper was to identify the forces affecting offshoring. Based on the analysed cases, the following phenomena were identified in the practice of offshore software development organisations and software/IT consulting companies (Figure 1):

The most important reason for offshoring is cost reduction. The cost of the software development companies consists of two parts: development costs and research costs. The costs of these activities are concurrent, but because of the high level of competition, a general decrease of costs is required. In most cases, an offshore solution can release 20% of the budget for innovation goals [27]. In addition, this cost reduction effects, these offshore companies can have a higher budget, and they can handle more tasks, than the mother organisation. This can lead to the effect that offshore organisations are leading the competition for quality products.

In offshore countries, the company can not only use the skills (and probably the different professional views) of the new employees, and integrate them into the global practice of the organisation, but these countries can be a new, developing market of the products and services. Most of the time, in offshore countries, software development companies can find unique and special knowledge. *"We outsourced, because we had skills over there we couldn't find [here]"* says Vivek Wadhwa, CEO of Relativity Technologies, a Cary, North Carolina [28].

Beside the costs, and business perspective, offshore countries have most of the time flexible policies for work conditions and practice, and these developing countries with skilled employees gladly welcome any new investment.

Sean Chou, CTO of Fieldglass mentioned the reason for offshoring that with several offshore organisations around the world, they can stay on-line 24 hours a day, and they can satisfy the requirement of their customers very quickly [28].

Of course, there are more reasons for offshoring, but these are the main driving forces supporting a decision to found an offshore organisation. Although, there are these factors, there are some problems, challenges for these activities, which were presented in this paper. The success of every offshore organisation is very highly dependent on the success of the transfer of intellectual capital, knowledge and experience of the mother organisation. At least the transfer of core knowledge is required, that is the minimal scope and level for becoming part in the competition [29].Organisations have to deal with the challenges of codification, absorption capacity, trust, and knowledge management support factors. The challenge of the transfer of intellectual capital is a problem for every offshore organisation.

A solution for knowledge transfer is also required, when organisational processes, maturity should be shared, but it is not only a challenge for knowledge transfer, it is also a cultural change, acceptance and understanding (organisational maturity dimension, cultural dimension): employees should understand and accept the processes, policies and ideas of the mother organisation, in order to use them. Organisations should decide between a centralised solution (full standardisation for every company), and the half-independence of offshore organisation (standard policies, but freedom for realisation).

As it was seen, offshoring is a complex process, which is driven by several factors, and which is influenced by other challenges. Organisations that want to achieve success in offshoring should consciously analyse the possibilities and satisfy the requirements.

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