Managing Cross-Cultural Issues
in Global Software Outsourcing

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Summary

Cross-cultural issues are of key importance to the effective management of global software work. We outline some of the best practices to address such issues, derived from our extensive research on cross-border software outsourcing.

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IT outsourcing continues to be a booming business. The reasons why companies choose to outsource have been well-documented, including reduced cost, improved performance, and access to wider labor markets [4,1]. One aspect of IT outsourcing is the outsourcing of software production, and an important trend which started in the 1990s, and continues to the present time, is to outsource software production globally [9]. Much of the software development takes place in the ‘offshore’ locations, where costs are low and labor in plentiful supply. Software suppliers normally maintain small ‘bridgehead teams’ in the client countries for sales and customer liaison purposes. Outsourcers in turn often locate executives in the supplier countries, for example to oversee large projects.

All of this makes good economic sense for both sides of a cross-border outsourcing relationship, but it raises the question of how best to manage the process. In particular, cross-cultural issues are likely to come into play here in a big way, as they do for example in the management of international joint ventures [2]. We have been investigating such issues over a 5-year period, primarily through in-depth case studies, and with a particular empirical focus on outsourcers in North America, Western Europe and Japan to software suppliers in India. ¹

The primary conclusion from our research is that working across cultures when outsourcing software production is not a trouble-free process [10]. Particular societies tend to have distinct ways of working, and these can prove problematic when attempting cross-border collaboration. For example, Indian software companies have found that they need to approach communication with US and Japanese clients in very different ways. US client companies normally work to extensive written agreements and explicit documentation, reinforced with frequent and informal electronic contact through media such as e-mail. In
contrast, Japanese clients tend to prefer verbal communication, more tacit and continuously negotiated agreements, and less frequent but more formal use of electronic media.

A second area where problems can arise in cross-border outsourcing is in the cultural adaptation of the bridgehead teams working in the client countries. Challenges not only concern the need to adapt to different ways of working, but to cultural norms of social behaviour, attitudes to authority, and language issues. For example, some Norwegian outsourcers express a preference for Russian software suppliers rather than Asian companies. They explain this in terms of physical proximity, the similarity of the ‘European mindset’, and the relative ease with which Russians can learn the Norwegian language.

How can the cross-cultural difficulties of global software outsourcing relationships be addressed? This is the focus of the rest of our article.²

**Strategic Choice of Projects**

| Minimize cross-cultural issues through project choice of ‘culturally-neutral’ software | • Embedded software  
• Middleware |
|---|---|
| Use relationship to learn about leading-edge business systems, particular business sectors or higher-level software work | • For example, in telecomms or e-business systems (outsourcer)  
• To gain domain expertise/move up the value chain (supplier) |
| Choose applications software only when good cross-cultural working feasible | • Cross-cultural match  
• Or major effort through staffing/training |
Table 1: Choice of software projects for cross-cultural outsourcing

One approach to handling the difficulties of cross-cultural working is through the appropriate choice of projects to be outsourced. For example, software which is to be ‘embedded’ in operating systems or consumer products can often be specified in a relatively ‘culturally-neutral’ way, so that software development needs less cross-cultural understanding.

Similarly, ‘middleware’ is a layer of software between the network and the applications, which performs the function of enabling different end-user systems to communicate more effectively with one another in advanced network applications. This again can often be specified in a way that does not depend on continuous cross-cultural contact between outsourcer and supplier.

A second strategic approach to the choice of appropriate projects concerns the value in learning that can be gained through them. Many Indian software suppliers have acquired knowledge in the telecommunications and e-business domains through projects carried out for North American and European companies. This has resulted in some cases in Japanese outsourcers being keen to learn from the Indian software suppliers about leading-edge business systems in these domains. Software suppliers in developing countries such as China often focus on particular outsourced projects which offer them the opportunity to gain domain expertise, in the banking sector for example; or to move up the value chain, from tasks such as simple maintenance to higher levels of project involvement and ownership.

The development of applications software is only a good strategic choice for cross-border outsourcing where conditions are such that effective in-depth working relationships can be
achieved throughout the project. This exists where, for example, there is a good cultural match, such as that between Japan and China for example. This match relates not merely to linguistic closeness, but also to compatible ways of working, and understanding of user attitudes. Similarly, Indian software developers speak English and often have extensive educational and cultural contact with the UK, so that there is normally a good cultural match here also. In contrast, Germany has not been very successful in attracting Asian software developers to work there, reflecting cross-cultural barriers of language and culture. The harder way to achieve effective cross-cultural working, where the cultural match is not close, is through careful attention to issues such as relationship management, staffing and training, as discussed below.

Managing the Relationship

| Use systems to harmonise between outsourcer and supplier | • Coordination/control systems |
| Understand differences in norms and values | • Processes |
| | • Technology |
| Encourage ‘negotiated culture’ of cross-cultural teams developing compromise ‘working culture’ | • Hierarchy/power |
| | • Business practices |
| | • Bridgeheads and exchange mechanisms |
| | • Staffing and training |

Table 2: Approaches to managing the cross-cultural relationship
In all cases of cross-border outsourcing, active management of the client-supplier relationship on both sides is of key importance. The use of common systems is one way in which the relationship can be facilitated [7]. Such systems include agreed coordination and control mechanisms, for example to report on and monitor project progress. Further harmonisation can be achieved through common processes such as systems development methodologies [6], and common compatible technologies in terms of computers, software systems and telecommunications links.

However, although much can be achieved through the use of compatible technology and systems, it is important to recognise the limits of this approach. Major differences in norms and values cannot be ‘harmonised’, since they derive from deep-seated differences in cultural background, education and working life. Examples include attitudes to hierarchy and power, and different business practices. For example, British managers in an outsourcing relationship with a particular Indian software supplier found that Indian programmers, in deference to authority, would not voice criticisms in face-to-face meetings but would sometimes send their opinions in e-mails after the meeting. The British managers, used to intense interaction and the development of ideas through meetings, felt frustrated at this ‘polite’ behaviour [11]. Such difficulties can, however, be recognised and understood, but it requires substantial effort on the part of both sides in the cross-border collaboration.

An attempt to understand and move some way towards the other partner in a cross-cultural collaboration has been called a ‘negotiated culture’ perspective [2]. This perspective focuses on attempts to form and develop cross-cultural teams so that a compromise ‘working culture’ is achieved in which both sides of the partnership modify their work behaviours to take account of the cultural norms of their partners. For example, Germans and Japanese typically
have very different attitudes to ‘out of hours’ working. However, it was noted in a particular German-Japanese international joint venture that some of the German managers began to stay later at work while many of the Japanese worked fewer hours than they were accustomed to in Japan [2]. Negotiated culture of this type is not something that can be achieved easily, and normally only occurs over a significant time period. Approaches to its achievement include the use of bridgehead teams who spend significant periods in client premises, exchange of staff on a long-term basis between cross-cultural partners, and staffing and training issues as discussed below.

**Staffing Issues**

<table>
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<tr>
<th>Recognise limits to cultural adaptation</th>
<th>• Foreigners cannot ‘become’ locals</th>
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<tbody>
<tr>
<td>Use ‘cultural bridging’ staff</td>
<td>• People rooted in both cultures</td>
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<tr>
<td></td>
<td>• Locals as on-site workers (supplier)</td>
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<tr>
<td>Use locally-relevant recruitment and</td>
<td>• Salary</td>
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<tr>
<td>retention incentives</td>
<td>• But also status/expertise acquisition</td>
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**Table 3: Choice of staff and incentives**

Although some movement towards other cultures is possible, it is unrealistic to expect expatriates in any country to be able to think and act like locals. This can create serious problems in areas such as applications software development, where in-depth client contact is needed. As one approach to this problem, successful outsourcing relationships often involve people who can ‘bridge’ cultures. For example, people originally from India, but with higher
education and long-term residence in North America, have been reposted to India as expatriate managers for outsourcing projects. Such managers have often been very effective in overseeing complex outsourcing projects.

A complementary solution to the problem of cultural bridging is for the software supplier to maintain a mixed cultural team in the client country. Locals in this country can then be used to perform a range of tasks, including being members of the sales force and of bridgehead teams in client premises, or sometimes as senior staff dealing with the corresponding level in the client company. One reservation that third world software suppliers have about employing ‘first world’ staff is cost. However, such staff should be regarded as an essential overhead for major projects.

How can such link people be recruited and retained? Salary is one means, but there are cultural differences in the weight which is ascribed this factor. In many western economies, such as the USA, salary is arguably the most important incentive for many people. In Japan, for example, this is less so, with many Japanese being very concerned about the status of the employing company rather than merely the salary. This is one of the problems that Indian companies, for example, have in recruiting locals in Japan. In a similar fashion, German companies have often found it difficult to locate managers with the right profile for directing their development centres in Asia. A suitable person, apart from technical competence, has to be open and adaptable to the very different living and work environments. Recruitment and retention packages for staff need to be tailored to the realities of these issues in specific contexts and labor markets.

**Training**
Give pre-posting cultural training for supplier employees working in outsourcer companies (supplier)

- Language
- Cultural practices, norms and values

Develop systematic on-the-job cross-cultural training

- To reflect on ongoing experience
- To share knowledge with colleagues

Recognise that training needs are two-way (outsourcer)

- Not just for supplier staff

Table 4: Training needs and processes

Many organizations, including those in the cross-border software business, do offer pre-posting cultural training for employees, varying from very basic orientation courses through to rather more substantive programs on language and cultural practices [5]. For difficult software outsourcing situations, such as Indian companies working in Japan [8], the fuller type of program is certainly necessary.

Systematic on-the-job cross-cultural training is less common in our experience. Staff involved in cross-border relationships learn ways to achieve better cross-cultural collaboration, but there tends to be no structured opportunity at which this experience can be reflected upon and shared with colleagues in a formal way. Informal sharing of experience is of course very important. However, we would argue that formal cross-cultural training should not stop when the staff member has arrived at the foreign posting.
A further issue is that cultural training is often perceived as only necessary ‘one-way’, namely for the staff from the software supplier to learn about the culture of the country of their client organizations. Regardless of any ethical concerns about such a culturally-blind attitude, it is surely bad business practice also. Training for cross-border software outsourcing should be seen as a two-way learning process. Then, all aspects of the relationship from contract negotiation through to the delivery of the final software product can take place on the basis of a well-informed understanding of the culture and business practices of one’s customer or supplier.

Conclusions

In this article, we have suggested ways of tackling problems and challenges in cross-border software outsourcing relationships. These involved the strategic choice of appropriate projects in the first place, ways of managing the relationship, and approaches to staffing and training. Although targeted on software outsourcing, many of our conclusions are also relevant to the area of global software teams operating within a specific company [3]. Some increased convergence of attitudes and approaches can be expected in such a context, when compared to outsourcing to a different company, but the challenges of working in multi-cultural teams still apply.

We are living in a more globalized world, in which there is increasing interconnection between different societies, and cross-border software outsourcing provides one example of this. But globalization does not imply homogeneity of culture [12]. In working in the contemporary world, we need to make extra efforts to tackle the cross-cultural issues that
arise. This should lead not only to more effective business practices, in areas such as cross-border software outsourcing, but also to a world of increased cross-cultural understanding.

References


We have also carried out some more limited empirical work involving software suppliers in China and Eastern Europe, and we have studied the literature and interacted with other researchers on all aspects of cross-border outsourcing. On the basis of this, we believe that the analysis and conclusions of our article apply quite generally to cross-cultural software outsourcing relationships. Our conclusions, as summarised in the tables below, apply to the relationship between outsourcers and software suppliers, and thus have relevance for both sides of that relationship. In cases where the conclusion relates specifically to the outsourcer or supplier, we have indicated this in the table.