EVOLUTION OF OFFSHORE SOFTWARE OUTSOURCING IN EAST ASIAN COUNTRIES: FROM COST TO RELATION

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Abstract

This paper aims to show the evolution of offshore outsourcing from a different viewpoint. In particular, it will be focusing on the offshore outsourcing in East Asian countries, especially in China, Vietnam and Japan. In spite of relatively short period of offshoring experiences, East Asian countries, however, are undergoing the shift in formulating and implementing offshore software outsourcing strategies. Most researches concerning offshoring are based on ‘cost proposition’, focusing on cost as a driving force of the offshoring. Offshoring strategy being dubbed as ‘relation proposition’ appears in East Asian countries. Rather than pursuing short-term profits from cheap labor cost, some East Asian countries’ offshoring look for long-term and strategic relationship through continuing development and cooperation among them.

Keywords: Offshore, Software, Outsourcing, East Asia, Cost, Relation
1 INTRODUCTION

The main purpose of the paper is to show and analyze East Asian countries’ practice of offshore outsourcing, especially in China, Vietnam, and Japan. This paper is different from most studies at least in two aspects. First, most studies understand global offshoring practices through the spread of the most successful offshoring model, i.e., the Indian model. Moreover, most studies just apply the Indian model to each country and examine the success and failures of the cases. However, when looked into the East Asian offshoring market, this kind of myopic understanding of offshoring will not be fitted to those countries. Rather, East Asian countries like China, Vietnam and Japan are forming a special relationship among them.

Second, most researches emphasize that the main success factor of offshore outsourcing is related to ‘cost’. The ‘cost’ here refers to direct wages. But, direct wages reflect only part of the labor cost (Carmel and Tija 2005). It is argued that low-wage in India and other developing countries is the driving force led such development. Following the Indian model, many countries are participating in offshoring market with low-cost strategy. But growth of China and Vietnam can’t be explained only by the factor of ‘cost’. Lowering operational costs does not necessarily translate into a company’s strategic advantage, just as saving money by less spending on employees is not a strategic advantage, but merely the relentless day-to-day effort of any company to reduce its operating costs (Carmel and Tija 2005).

And there are strategic relationships between East Asian offshoring companies. From this point we pose the research questions. This study suggests ‘relation proposition’ in order to tackle the issues of offshoring in East Asian countries, rather than ‘cost proposition’. Examining ‘relation proposition’ in the cases of China and Vietnam, this study intends to show new success models, other than India. Moreover, although there are many comparative studies of China and India (Gregory, Nollen and Tenev, 2009), there are not many researchers engaging in comparative studies on structures and trends of offshoring in which Chinese and Vietnamese firms do with Japanese business enterprises. In this regard, the authors already reported a case of Vietnamese offshore outsourcing company, FPT software, are highlighting significance of the evolutionary moves in East Asian countries (Jang, et. al., 2008; Jang, Lee and Ko, 2010).

2 LITERATURE REVIEW

There are many attempts to find out the main factor that has made developing countries to be software exporting countries. But due to the fact that success in India had a great impact on the software industry strategy in developing countries, most researches are focused on Indian IT and software industry (Heeks 1996, 1998, 1999, 2004; Harindranath and Liebenau 1995; Bahtanagar and Madon, 1997; Balasubramaniam and Balasubramaniam, 1997; Krishna et. al., 2000; Arora et al., 2001; Arora and Athreye, 2002; D’Mello, 2005; Gajjala, 2006; Carmel and Agarwal, 2002; Khan et. al., 2003).

The researches have analyzed and suggested the various success factors of offshoring such as government policy, private enterprise, infrastructure, and so on. Notably these factors contributed to the development of India’s software industry.

The case studies about the software industry development strategy can be divided into several ways. First, there are studies that chose ‘advanced software exporting countries’ like India, Ireland and Israel as analysis subjects and analyzed the strategy and success factor of software industry of these countries (O’Riain, 1997; Cochran, 2001; Ariav and Goodman, 1994; de Fontenay and Carmel, 2002).

Second, there are series of researches about transition economies like Russia, Rumania, Ukraine, Hungary (Malinovsky and Malinovsky, 2004; Heeks and Grundey, 2004; Gengler, 2003), Asian developing countries like Bangladesh, Indonesia, Vietnam, China (Tjia, 2003; Bruell, 2003; Li and Gao, 2003), Iran in Middle East (Nicholson and Sahay, 2003), and Caribbean states (Abbott, 2005).

The researches related to software industry are distinguished in two aspects. In theoretical aspect, they abstracted success factors from Indian software industry and tried to generalize it and to apply in developing countries. But these kinds of studies have limitations that it can only analyze the
conditions of successful countries. However, the condition of offshoring between East Asian countries such as Japan-Vietnam and Japan-China, relationship-base approach is more appropriate because they have a strong tie of shared culture.

3 OFFSHORE SOFTWARE OUTSOURCING IN EAST ASIAN COUNTRIES

The market structure of global software industry is dominated by advanced software enterprises in OECD countries, US, Japan, UK, France, and so on. But major changes are triggered in such monopolized software industry. ‘3I’ countries, including India, Israel, and Ireland, successfully entered the global software market and joined the ranks of software exporting countries. Especially India became a center of offshore outsourcing.

Encouraged by the India’s success, many countries among transitional economies and developing nations, are supporting software industry as their strategic industry to accomplish economic development (Carmel, 2003). Many countries in East Asia like Malaysia, the Philippines, and Vietnam are joining the stream. Consequently, market size of offshoring is growing rapidly. Furthermore, improvements in software technology (technology factor), and active enterprise strategy of software developing businesses to deal with it (business factor), and globalized economy (economy factor) are all contributing offshoring market expansion.

Nevertheless, we argue that offshoring practices in East Asian countries are different from the Indian model and commonsensical understanding of offshoring, i.e., cost proposition. And it is worthwhile casting light on the strategy in Japan, China and Vietnam’s offshoring business. China and Vietnam are one of the fastest growing economies in the world. Even if they are still under socialist regime, they are moving swiftly toward globalized market economy. Therefore, these countries have high potential and market value in global market. Especially to Japan, these East Asian countries are neighboring countries so they have been maintaining and expanding the support and cooperation in various fields. So it can be called ‘nearshore outsourcing rather than ‘offshore outsourcing’ (Kehal and Singh, 2006).

In this context, there are possibilities of implementing ‘relation proposition’ to offshore software outsourcing in China and Vietnam, beyond the ‘cost proposition’. If this new proposition can be examined and finally justified, researchers interested in offshore software development outsourcing should pay attention to the significance of the East Asian countries’ offshoring businesses. Although most researches are currently carried out in the cases of India as well as advanced countries, different strategy of offshore software outsourcing between Japan, China and Vietnam will be paid an attention by global researchers.

4 FRAMEWORK FOR UNDERSTANDING OFFSHORE SOFTWARE OUTSOURCING IN EAST ASIAN COUNTRIES

How could success of the emerging countries like China and Vietnam in software offshoring market be explained? Are they just following the Indian model? Or is there any other competitive strategy? We assume that there are other development strategies for Chinese and Vietnamese offshoring, being different from the Indian model.

For understanding offshore software outsourcing strategies and logics in East Asian countries, one has to overcome the old wisdom in offshoring businesses. The mainstream researches on offshoring are limited to ‘cost proposition’ focusing on the cost as a driving force of the offshoring. On the contrary, this study intends to suggest a new strategy and logic for the newly emerging offshore software outsourcing in East Asian countries. The core of the argument is concerned with ‘relation proposition’. It approaches offshoring as a medium to build a long-term and strategic relationship between East Asian countries by continuing development and cooperation. It is different from pursuing short-term profit based on cost-saving. Using offshoring as a managerial practice, East Asian countries can create and share knowledge of software development with long-term relationship. In this view, it is different
from offshoring strategies between India and advanced countries which are mostly based on the ‘cost proposition’. To account for the changes from ‘cost proposition’ to ‘relation proposition’, we elaborate the framework to understand offshore software development outsourcing.

Although offshoring is one of the major software industry development strategies of developing countries, it does not always offer benefits. According to the study shown in table 1, there are benefits and risks as offshoring develops.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Risk</th>
</tr>
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<tbody>
<tr>
<td>Solution to the IT skills shortage</td>
<td>Threat of opportunism</td>
</tr>
<tr>
<td>Cost efficiency</td>
<td>Unexpected costs</td>
</tr>
<tr>
<td>Competitive advantage</td>
<td>Trust &amp; Security concerns</td>
</tr>
<tr>
<td>Simplicity and remain focused on core competencies</td>
<td>Hidden costs</td>
</tr>
<tr>
<td>Round the clock service</td>
<td>Geopolitical risk</td>
</tr>
<tr>
<td>Assurance of quality development</td>
<td>Detailed specification is required</td>
</tr>
</tbody>
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*Table 1. A benefits and risks framework for offshore IT outsourcing (Khan, Currie, Weerakkody & Desai, 2003)*

Even if it is not easy to measure the balance between benefits and risk exactly, many developing countries are promoting offshoring strategically as an opportunity for the development of their software industry and economy. Particularly, due to the transformation of socialist economies to market economy and globalization, IT cooperation and division of labor system of East Asian countries are reforming in progress. Concerning such global and regional context, the process of offshoring development is increasingly important for understanding the current situation of East Asian countries.

Moreover, there are gaps between China and Vietnam at the level of software industry and economic development. But they have also similar strategic goal: promoting software industry. For this, they have valued big software market potential and growth potential among East Asian developing countries.

Carmel and Tija (2005) explained the process of offshoring development by stages shown in figure1. Although this stage model can’t be denied, we argue that offshore software development outsourcing practices between East Asian countries are based on cultural relationship. These affinities between countries are mainly derived of cultural and historical heritages such as Chinese characters and religion such as Confucianism. It is the case even when these countries are initiated offshoring at the first stage looking for low cost benefit. And it may give some ideas to identify how China, Vietnam, and Japan are constructing offshoring bilateral relation.

There is a research concerning evolution of offshore outsourcing, having underscored cosourcing practices between a client and a vendor during the eight years alliance (Kaiser and Hawk, 2004). We are rather similar position to this. But our relation proposition of offshoring is not based on ‘time’ they have worked, but on ‘proximity’ between culture, historical ties, languages, etc. When the proposition is tested by empirical researches, new way of understanding the present stage of offshoring in East Asian countries will be revealed.
Figure 1. Offshore Stage Model (Carmel & Tija 2005, p. 9)

5 CONCLUSION

In this paper, we discuss about an evolutionary process between East Asian countries regarding offshore software development outsourcing; and argue that the significant facet of offshoring in East Asia is not simply cost-driven short-term motivation but relation-enabled long-term strategic intent.

Finally, this research contributes theoretically and practically in that we suggest a new viewpoint to study the development strategy of East Asian software industry. It is possible to discuss various theoretical arguments related to the software industry development in developing countries, and to find out sustainable and feasible software industry development strategy in East Asian countries.

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