

**GLOBALIZATION AND IT OUTSOURCING:
THE CASE OF JAPANESE BANKS**

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USJP Occasional Paper 05-12

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2005

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TABLE OF CONTENTS

Introduction	1
Chapter 1. What Is IT Outsourcing?	2
Chapter 2. Market Trends	4
Chapter 3. Advantages and Risks	9
Chapter 4. Offshoring	19
Chapter 5. Banks, Market Prospects	23
Conclusion	26
Figures	28
Bibliography	33

LIST OF FIGURES

Figure 1. Example of Allocation of IT Functions (Mitsubishi Trust Bank)	28
Figure 2. Average Annual Salaries of IT Labor by Country	29
Figure 3. IT Offshoring Markets in the United States, India, China, and Japan	30
Figure 4. Impact of IT Offshoring on the U.S. Economy and Employment	30
Figure 5. The Business Factors Matrix	31
Figure 6. Actual Benefits of IT Outsourcing	32

ABBREVIATIONS

BCBS	Basel Committee on Banking Supervision
BOJ	Bank of Japan
CFO	Chief financial officer
CIO	Chief information officer
CMM	Competitor Maturity Model
FFIEC	Federal Financial Institution Examination Council
IT	Information technology
ITAA	Information Technology Association of America
JEITA	Japan Electronics and Information Technology Industries Association
JISA	Japan Information Technology Services Industry Association
JPSA	Japan Personal Computer Software Association
NASSCOM	National Association of Software and Services Companies (of India)
NRI	Nomura Research Institute
SLA	Service level agreement

INTRODUCTION

OUTSOURCING: A COMMON BUSINESS PRACTICE

“Outsourcing,” which is one of the most familiar concepts in the business world today, means utilization of outside resources by alliances with other companies.

It is difficult to think of an automobile in which every part is made and assembled by a single manufacturing firm. The same is true for personal computers and many other products. Traditionally, even before the term “outsourcing” became widespread, alliances among multiple companies were common business practice in manufacturing. In other sectors as well, the use of third-party services has become common for general corporate functions, such as payroll, procurement, or call center services.

This paper will focus on outsourcing in the field of information technology (IT). In addition to considering IT outsourcing from several points of view, including cross-border cases, I will refer to problems and future directions of Japanese banks with regard to this issue.

CHAPTER 1

WHAT IS IT OUTSOURCING?

IT Outsourcing

Nowadays, IT is a lifeline for and firmly combined with every part of every company's business, so it is not surprising that outsourcing services have been extended to IT-related functions, such as software development and maintenance, operation of information systems, and management of servers and networks. In addition, the planning of information systems is sometimes relegated to outside companies. Figure 1 shows an example of the allocation of IT functions among an internal IT department, a subsidiary IT company, and an outside service provider.

Motives for IT Outsourcing

Although numerous publications report that there are several advantages of IT outsourcing, the most commonly cited and substantial motives for companies that are undertaking or thinking about IT outsourcing can be summarized as follows:

- To improve quality of services
- To reduce costs
- To maximize flexibility
- To concentrate on core competencies

Initially, companies can expect higher-quality services by using experienced outside specialists. As the technologies progress and diversify and are integrated with businesses, more advanced skills are demanded to meet more sophisticated IT services requirements.

Secondly, IT service providers have advantages in cost efficiency based on their scalability. Large providers can offer the same type of services to multiple client companies through their pool of labor and infrastructure. This resource sharing makes a substantial contribution to cost reduction in comparison to a situation whereby each company performs the services by itself.

Thirdly, outsourcing lessens the load and risk of corporate resource management. The shift of human resources, facilities, software, and infrastructure to the service providers gives client companies flexibility and makes it easier for them to adjust their strategies in response to changing environments for businesses, markets, and technologies.

And finally, enterprises can afford to concentrate their resources into core competencies, a strategy aimed as increasing their real values most effectively.

Motives for IT Offshoring

When outsourcing is conducted across borders it is called “offshoring.” While global alliances have long been common practice in the manufacturing industries, offshoring in the field of IT services did not spread rapidly until the 1990’s with the globalization of business, supported by deregulation, standardization, and the progress of telecommunications technology.

The primary motive for IT offshoring is cost reduction. Companies can find opportunities for drastic cost reduction by taking advantage of the wage differences between countries. Figure 2 shows average annual salaries of IT labor in the United States and those countries that are known as offshoring service providers. It is necessary, however, to be aware that these numbers do not directly correspond to the provider’s bills.

CHAPTER 2

MARKET TRENDS

Global Trends in IT Outsourcing

Going with the tide of business process outsourcing, which is an effective methodology of corporate restructuring to seek for higher efficiency and flexibility, the global market for IT outsourcing is continuing to expand.

According to the Gartner Group, an American IT research firm, overall IT outsourcing spending was \$180.5 billion in 2003, and this is expected to increase to \$253.1 billion in 2008, meaning that the market will grow at an average annual compound rate of 7.0 percent throughout the period.¹ Gartner also says that outsourcing accounted for 53 percent of the total worldwide IT services market in 2004 and will rise to 56 percent by 2007.²

According to Equant – a global communication service provider – another research firm, IDC, reports the latest trends of more than 300 of the world’s largest multinational corporations. IDC says that 64 percent of chief information officers (CIOs) and 77 percent of chief financial officers (CFOs) are positive about “selective” IT outsourcing, while more than 75 percent of IT and finance board directors would not want “entire” IT outsourcing. The research also shows that 72 percent have already been involved with IT outsourcing, and the most popular function to outsource is the network/communications infrastructure (50 percent), followed by security services (32 percent), and server management (also 32 percent).³

¹Gartner, 10/5/2004.

²Gartner, 5/17/2004.

³Equant, 11/24/2004.

Offshoring Trends by Country

Figure 3 shows the scale of IT offshoring markets in the United States, India, China, and Japan. The United States and Japan are buy side (i.e., expenses), while India and China are sell side (i.e., revenues). With the exception of the figure for the U.S. market in 2008 (\$31 billion) forecast in the original source, the future numbers are calculated on my assumption of growth rate stability, which might not be entirely realistic or accurate. Nonetheless, it is apparent that the markets in Japan and China are still small and have just started to soar, while those in the United States and India have already moved to the stage of steady growth.

The United States

India is the leading service provider for the U.S. IT offshoring market, estimated to account for about 60 percent of the total, based on data by the National Association of Software and Service Companies (NASSCOM) of India and the Information Technology Association of America (ITAA).⁴

The rush into offshoring has threatened U.S. software engineers and, in 2003, raised a labor issue. On March 30, 2004, however, the ITAA released findings from Global Insight, a research firm, claiming that IT offshoring had had a positive impact on the U.S. economy and employment picture as a whole. Since then, the issue has been less prominent. Figure 4 shows some of the major points of the Global Insight study.⁵

⁴NASSCOM, 6/3/2004, and ITAA, 3/30/2004.

⁵ITAA.

Japan

A collaborative survey by three Japanese IT industry organizations (the Japan Electronics and Information Technology Industries Association [JEITA], the Japan Personal Computer Software Association [JPSA], and the Japan Information Technology Services Industry Association [JISA]) reported that China is the largest provider and accounts for more than half of the IT offshoring market in Japan.⁶ The reason for this is believed to be the relatively short geographical distance as well as the cultural similarities between the two Asian countries.

In addition, a series of attempts by the Japanese industry to capture the Chinese computer market starting in the mid-1980's, beginning with production of localized computers for use with Chinese characters, seems to have also contributed to the current close relations between the two nations.⁷

To sum up the state of the Japanese market, it is appropriate to say that “it stands at the dawn,” proven by the fact that only 23 percent of the 251 companies that answered the JEITA/JPSA/JISA survey have ever been involved in IT offshoring.⁸

India

India is the world's largest IT offshoring service provider. According to NASSCOM, the total revenues of the Indian software service industry in fiscal year 2003-04 were \$15.9 billion, an increase of 28 percent over the previous fiscal year; at \$12.5 billion, exports accounted for 80 percent of this. Exports comprised \$8.9 billion for software and IT services and \$3.6 billion for

⁶JEITA, JPSA, and JISA, 2004.

⁷S-open, 2004: 30.

⁸JEITA, JPSA, and JISA.

IT-related business process outsourcing. For fiscal 2004-05, \$20.5 billion in total revenues, with \$16.3 billion in exports, is expected.⁹

In the mid-1980's, when the Indian government designated software as one of its key industries, the total revenues of the sector were only about \$15 million, but serious efforts by the government to promote the industry by easing regulations, accelerating foreign investments, and building telecommunication infrastructures have achieved this rapid growth.¹⁰

Though Indian IT companies have succeeded in the U.S. market and 70 percent of Indian software exports are headed toward the United States at present,¹¹ this means that Indian IT companies have all their eggs in one basket. Seeking for another growth opportunity, they began to promote sales in Japan, which has the world's second largest market after the United States, and to give high priority to Japanese language training for their personnel.¹²

The strengths of Indian IT companies are their sophisticated skills in project management and quality control, and India has largest number companies in the world that meet the highest standard of CMM (Capability Maturity Model), a well-known model for the evaluation of organizational capability in managing software development processes.¹³

China

Based on statistics by the Ministry of Information Industry of China, in 2003, total revenues from software in that country were ¥2.4 trillion (\$24 billion), a 45 percent increase over

⁹NASSCOM.

¹⁰S-open 34.

¹¹NASSCOM.

¹²*Nikkei Sangyo Shinbun*, 7/9/2004.

¹³S-open 38.

the previous year, while exports amounted to ¥240 billion (\$2.4 billion), a tenth of the total revenues, up by 29 percent over the previous year and by almost 70 percent annually on average between 2000 and 2003.¹⁴

Like its Indian counterpart, the Chinese government has promoted the IT sector and has built “software parks” equipped with infrastructure for the industry at 29 locations around the nation. Currently, Japan, a neighboring country that also uses Chinese characters, is the destination of 70 percent of China’s software exports; at the same time, the Chinese government has embarked on some projects aimed at Western markets that may be more profitable than Japan.¹⁵

Most Chinese IT companies are small and have little experience in all phases of software development except for program coding, but gradually they are improving their ability to manage entire projects.¹⁶

¹⁴S-open 44.

¹⁵S-open 43-53.

¹⁶S-open 48.

CHAPTER 3

ADVANTAGES AND RISKS

Advantages of IT Outsourcing

In general, what are the concrete advantages that can be expected from IT outsourcing? Although I could look through only a few of the many publications concerning IT outsourcing, I believe that Klepper and Jones have exhaustively described the expectations of companies that undertake outsourcing of their IT functions from various points of view, and I will summarize this description below. Obviously, as the authors state in their book, the extent of each advantage depends on the characteristics and situations of the actual projects in each company.¹⁷

Motives for IT Outsourcing

Perspective of business

- *Improvement of business outcome*
- *Business process restructuring*
- *Expansion of business value*

Perspective of cost

- *Lower service cost than that of internal IT department*
- *Better prediction and management of cost*
- *Variability of information systems cost*
- *Accommodation of IT budget to dropping prices of computers*

Perspective of finance

- *Refining balance sheet through*
- *Leveling of information systems investments*
- *Variability of business expenditure*
- *Enhancement of profitability looking at business unit divestiture*

Perspective of IT services

- *Shift of internal IT from commodity to value-adding services*
- *Focusing internal IT department on strategic projects with new technology*
- *Improvement of services utilizing resources inherent to vendors*

¹⁷Klepper and Jones, 1998: 47-51.

- *Motivating internal IT department by reorganization with focus on core*
 - *Flexible recruiting corresponding to workload requirement changes*
- Perspective of technology and skills*
- *Access to state-of-the-art technology and skills*
 - *Utilization of skills and equipments unavailable in-house*
 - *Shifting risks involved in use of new technology to vendors*
 - *Shifting risks of sustaining obsolescent technology to vendors*
- Perspective of IT personnel*
- *Reducing overwork of IT personnel during projects such as new ventures and mergers*
 - *Providing IT personnel opportunities to learn new technology and solutions*
- Perspective of organization and politics*
- *Reduction of initial information systems investment at launch of company*
 - *Use of vendor's experiences in merger and reorganization of companies*
 - *Use of vendor's neutral position as outside party during reorganization*
 - *Business promotion based on partnership relations with vendors*
 - *Motivating IT department by comparison of performance with vendors*
 - *Restoring control of corporate IT function in chaotic situations*
 - *Career development opportunities for senior managers*

Next, I will look through the above-listed motives in more detail.

First, as for business-oriented motives, the basis of these ideas is that IT outsourcing is a golden opportunity to review and improve business processes because of the necessarily close relationship between business and IT, and this concept is the essential and substantial driving force to take the best advantage of outsourcing, not only for IT services.

The motives from the cost perspective are based on scale economics of vendors that provide similar services to multiple clients. Efficient resource-sharing and flexible resource allocation make it possible for these vendors to provide inexpensive services that could not be expected if clients were to perform the services on their own. The anticipated effect of a given vendor's economy depends greatly on the degree of standardization and magnitude of the services. In addition, companies that delegate functions to vendors have to consider some extra

cost for managing the projects; thus, the cost advantage of outsourcing is somewhat lessened, as I will mention below.

The financial motives are based on the intention to adjust the financial burden of the company – both the level and timing – and cost bearing through a third party makes these adjustments possible. Favorable balance sheets and financial ratios, however, are superficial unless the company attempts to improve real efficiency through outsourcing.

As for the perspective of IT services, invigoration of the internal IT department that results from a concentration on core businesses and new technology is one of the fundamental motives for outsourcing, along with the improvement of service level based on vendor expertise.

With respect to technology and skills, vendors are regarded as depositories of skills and technology especially those at the cutting-edge. This might be a critical motive for IT outsourcing, especially for relatively small companies as a way of compensating for insufficient internal IT resources.

Regarding IT personnel-related motives, these are simple and straightforward answers to the chronic IT labor shortage that results from technological innovation and constant changes in the business environment.

Finally, most of the above-listed motives that arise from organizational or political interests are believed to be rational in the sense of trying to take full advantage of a vendor's position as a third party. Nevertheless, as Klepper and Jones point out in their publication, especially in cases of political motives, companies sometimes jump to hasty conclusions, thereby glossing over their own problems, which they both could and should solve themselves.¹⁸

¹⁸Klepper and Jones 51-52.

I think most of the motives for IT outsourcing that I have mentioned, except for those based on financial techniques or for specific political purposes, are organized into the following four fundamental goals, as stated previously.

- Value of services
- Efficiency
- Flexibility
- Strategic concentration

Risks of IT Outsourcing

Essentially, there are great risks in outsourcing IT functions, mainly the structural risk of outsourcing as a methodology and the intrinsic risk of IT functions, and the two work synergistically.

First, I will look at the structural risk of outsourcing methodology. Outsourcing means that companies depend on outside companies for some of their tasks, and generally it is more difficult to control outsourced operations conducted by third parties than internal ones.

One of the reasons for this difficulty is that outsourcing requires a heavier load of communication with outside vendors than is the case with an internal IT department that is familiar with and accustomed to the business and culture of its own company. Another is based on the substantial, but often dismissed, fact “the vendor has to make a profit or it goes out of business... your organization and the vendor organization are fundamentally in conflict in the sense that you will want the vendor to do more and the vendor will want to do less.”¹⁹ Naturally, vendors are reluctant to work beyond their roles defined in the contract documents.

¹⁹Klepper and Jones 61.

Accordingly, “you cannot expect the vendor to work voluntarily having as good a grasp of business strategies and business requirements as an internal IT department would.”²⁰ Besides, when a company puts important information in the hands of outsiders, it has to carefully consider the incremental risk of confidential data leakage and copyright infringement.

Another potential, but fundamental, problem of outsourcing methodology is the skill drain from the company. It could lead to raising the bar of difficulty in order to pull the service back into the company or switching to another vendor. “Like marriage... outsourcing arrangements are much easier to enter than to sustain or dissolve.”²¹

Next, as for the intrinsic risk of IT functions, these functions are tightly linked with business processes, and vice versa, so that IT functions are under the influence not only of accelerating technological progress, but also of an ever-changing business environment. Consequently, IT functions have high risks of obsolescence in a short time. In the case of IT outsourcing, rapidly changing trends in the IT outsourcing solution market are another impetus that encourages obsolescence. Lacity, Willcocks, and Feeny state: “The underlying assumption of the (IT outsourcing) approach is that managers can place big bets about their markets, future technologies, and suppliers’ capabilities and motives with a great deal of certainty. They can’t.”²²

When the risks of IT outsourcing discussed above are turned into reality, the substantial motives of IT outsourcing, i.e., value of services, efficiency, flexibility and strategic concentration, are not fulfilled as expected, and the situation may possibly even become worse than before outsourcing.

²⁰NRI, 2003: 83-84.

²¹Applegate, 2003: 251.

²²Lacity, Willcocks, and Feeny in HBR, 1999: 57-58.

Mitigation of Risks

How should the above-mentioned risks of IT outsourcing be approached? There are some ways of mitigating the risks of IT outsourcing when entering into the contract, and I will discuss these below.

Currently, the IT outsourcing market has grown sufficiently to have the capacity to provide a wide variety of services on diverse scales. In such circumstances, “selective” outsourcing, that is, partial outsourcing of IT functions as needed, is adopted by the majority of companies in preference to comprehensive outsourcing of all IT functions. According to Lacity and Willcocks, 77 percent of the companies that practice selective IT outsourcing are satisfied with the results, vs. 38 percent for those that undertake comprehensive IT outsourcing.²³

Scope Setting

Therefore, any company that considers IT outsourcing first has to set the appropriate scope of IT functions that will be delegated to the vendor, taking into account corporate strategy and the current status of its own managerial resources. (Conceivably, the result could be all IT functions.)

To set the scope of outsourcing, companies are generally recommended to retain core and strategic functions in-house and to outsource commodities. As Laplante et al. write: “... if you can consider an IT activity a commodity, there is little justification for performing it internally... any IT function that is not part of a company’s core business is a candidate for outsourcing.”²⁴

²³Lacity and Willcocks, 2001: 156.

²⁴Laplante et al., *IT Pro* (Jan/Feb 2004): 21.

On the contrary, Lacity et al. state: “The strategic-versus-commodity approach usually led to disappointments.... Just because an IT activity was business-critical or even strategic did not mean that all its elements had to be kept in-house.”²⁵

In addition, Ripin and Sayles claim from another point of view: “Whether the function is core or not does not matter at the scope setting. ‘What everyone can do in the same way’ should be outsourced.”²⁶

I believe that all of the above-noted ideas about scope setting of IT outsourcing are covered in Figure 5, the matrix indicated by Lacity and Willcocks with two axes, the degrees of risk allowance and expected advantage.²⁷

Contract Arrangement

After setting the scope of outsourcing, the company needs to choose the vendor with a deliberate examination and a comparative review of reliability, scale, technology, skills, and potential results. Finally, the company should conclude the contract with the vendor; it is at this time that the assignment of explicit roles as well as responsibilities and concrete measures to be taken against various kinds of contractual risks is the key to mitigating the risks of outsourcing. Klepper and Jones state: “Notice that a good contract is the basis for control in each (risk) instance. In outsourcing, it is the legal document that makes vendors responsible.”²⁸

²⁵Lacity, Willcocks and Feeny 57.

²⁶Ripin and Sayles, 2000: 54.

²⁷Lacity and Willcocks 188.

²⁸Klepper and Jones 56.

It is obviously impossible, however, for the contract to anticipate every possible future problem. And there is no argument against the importance of building a relationship of mutual trust with the vendor; this relationship enables the company to get the dedicated cooperation of the vendor when faced with difficulties.

With respect to the content of services, the fulfillment criteria should be defined as a service level agreement (SLA) as tangibly as possible. This is effective, in addition to the penal provisions in the SLA, for encouraging spontaneous efforts on the part of the vendor to set incentive clauses that reward the vendor for a superior outcome.

In addition, as future risks increase over time, the term of the contract is significant for risk mitigation. “Companies should pursue short-term outsourcing contracts whenever they can.”²⁹

Following the Contract

After entering the contract, it is necessary not only for the vendor, but also for the client, to establish an administrative structure for monitoring the progress of the project and the status of fulfillments, so that prompt response is secured once problems arise. Because of diminished control, outsourcing requires more efforts to ensure smooth communications so as to avoid any information gap between the two parties, and the companies involved have to anticipate reasonable costs for the added administrative load.

Moreover, in the case of relatively short-term contracts on an as-needed basis, the client company should make contracts with the vendor with some degree of frequency in order to maintain the mutual relationship and maintain its resources for its own benefit.

²⁹Lacity, Willcocks, and Feeny 63.

All these costs that arise through and after the contract for vendor selection, contract negotiations, operation management, and relation maintenance are collectively called the “transaction cost.”³⁰ And this transaction cost has to be offset by the cost reduction effect of the outsourcing contract.

The Reality of Advantages and Risks in IT Outsourcing

In order to glimpse the reality of IT outsourcing, I will introduce below some of the results of a survey by Lacity and Willcocks. This survey was conducted in 1999, targeting 600 CIOs and senior IT managers in the United States and the United Kingdom.³¹

Benefits

Figure 6 illustrates actually experienced benefits of IT outsourcing with the achievement rates of each. The figure shows that 53 percent of the CIOs surveyed realized cost reductions to at least some degree; this means that almost half of these CIOs experienced outsourcing without cost reduction or cost elevation, although “cost reduction” was the most experienced benefit. In addition, the fact that “refocus in-house IT employees” was the second most experienced benefit might draw attention. As a whole, this figure demonstrates the existence of a large gap between the expectation and realities of IT outsourcing.

³⁰Klepper and Jones 54.

³¹Lacity and Willcocks 332-39.

Facts of Risks

In another part of the survey, Lacity and Willcocks observed problems encountered in IT outsourcing according to the rate of severity, concluding that “one-quarter of all respondents were encountering serious/difficult problems during outsourcing.” Some of their results are as below.³²

Problems Actually Experienced with IT Outsourcing

- *Serious strategic problems were experienced by 21 percent (starting with the supplier’s lack of understanding of business)*
- *On cost issues, 31 percent indicated serious problems with service beyond the contract, 26 percent with cost escalation due to contract loopholes, 22 percent with monitoring/controlling costs.*
- *The major managerial problem experienced was the supplier not properly staffing the contract (42 percent of respondents)*
- *On operational issues, 38 percent experienced serious problems due to poor service-level definitions.*
- *On technical issues, a significant minority complained of a serious shortage of IT skills (31 percent), duplicate systems (23 percent), and inexperienced supplier employees (17 percent)*

The survey also indicated that “nearly one-third of organizations have cancelled contracts in the last five years.... Of these, half changed suppliers, a third brought IT back in-house, 11 percent renegotiated the contract, and only 3 percent went to litigation.”³³

³²Lacity and Willcocks 335-37.

³³Lacity and Willcocks 337.

CHAPTER 4

OFFSHORING

Risks of Offshoring

When a company enters into offshoring aiming at further cost reduction, which may accompany other goals, what risks should it consider? It is easy to imagine that geographical distance and differences in language and culture would boost the difficulty in communication compared to domestic outsourcing.

According to Ripin and Sayles, overseas outsourcing may make it possible for companies to realize significant cost reductions as a result of transnational gaps in wage levels and to facilitate procurement from extended markets, while the distance, time and cultural differences greatly increase the difficulty in information-sharing or collaborative work.³⁴

Moreover, the same authors emphasize the sensitiveness of cultural differences, which, even if they are slight, could be “fatal” to communication. This is true even among English-speaking countries.³⁵

They go on to say that, even though communication is apparently the most serious issue, offshoring is associated with other kinds of risks such as differences of legislation and of views or attitudes toward contracts, property, and copyright as well as the possibility of sudden political change.³⁶

³⁴Ripin and Sayles 123.

³⁵Ripin and Sayles 123.

³⁶Ripin and Sayles 125.

To deal with the risks of offshoring, they state, in the following, steady efforts to manage the project are essential, along with explicitness in the contract clauses as is the case with domestic outsourcing. “Sharing of knowledge or loyalty that would be fostered in face-to-face contacts cannot be replaced entirely with communication support tools like e-mail or video conferencing.... And cultural difference tends to cause mutual distrust that breaks harmony among the project members.... Administrative structure that enables relentless monitoring of the whole project status is essential.”³⁷

In the case of offshoring projects in Japan – in order to facilitate communication – it is common to appoint one or more coordinators who understand several languages and cultures. But those coordinators require extremely high-level skills, so that risks attributable to individuals are inevitable.

After all, the expensive transaction cost for contract arrangement, operation management, etc., and the reasonable risk of cost creep possibly caused by problems throughout the project have to be taken into account when considering the possible cost advantages of an offshoring project.

Differences Between the United States and Japan

In spite of the various above-noted risks, IT offshoring is pervasive in the United States, although this is not yet the case in Japan. The reasons for this difference are believed to be as follows.

First, it is apparent that the difference of language between the United States and Japan explains a large portion of the different looks of offshoring in the two countries. English is the

³⁷Ripin and Sayles 130.

de facto global language in the field of IT as in other businesses, so U.S. companies rarely experience any linguistic barrier in communication. On the other hand, in addition to the lack of communication skills in English, as is the case with most ordinary Japanese people, Japanese IT workers have done their jobs mostly in-house or with domestic clients, so that in Japan only a minority of IT workers have work experience in English.

Next, I would like to mention cultural differences. The United States is a country of immigrants from many parts of the world and has strived to solve cross-cultural communication problems throughout society since the birth of the nation. In contrast, Japan is an ethnically homogeneous country and has little experience of contact with different cultures. It is natural to think that these respective backgrounds would lead to disparities in capabilities in dealing with cross-cultural communication.

Problems in IT Offshoring in Japan

S-open, a network of professional software engineers in Japan, analyzes problems in IT offshoring there based on its survey of domestic companies and foreign software vendors. Although the scale of the survey is not very large, it would help to look at some of the actual situations. I have summarized the S-open analysis according to the three points below.³⁸

The first problem exists in the software development procedure peculiar to Japan based on the corporate culture commonly seen in Japanese companies by which system specifications are confirmed gradually along with the progress of the software development project. This development style, which allows continual improvement of specifications throughout the project period, assumes nonverbal communication (*a-un-no-kokyu*) between the client and the vendor.

³⁸S-open 60-103.

It does, however, tend to cause substantial cost creep and quality degradation. As a rule, overseas vendors will not accept the frequent requests for specification changes after the contract is signed, unless extra load charging is clarified in the contract.

Secondly, Japanese companies lack documentation skills. Japanese vendors do read between the lines of ambiguous documents, while foreign vendors cannot and do not.

Thirdly, there is a unique client-vendor relation in Japan. According to Japanese business customs, vendors are to accept client requests unconditionally, and this adaptability toward somewhat unreasonable demands (*yuzu-o-kikaseru*) is considered to be necessary for vendors to do business. This problem might be said to underlie the previous two. Foreign vendors do not accept requests beyond the contract scope.

Moreover, with reference to the second problem, Sahey et al. relate Japanese companies' disregard for documents to their lifetime employment system. "... the Japanese would typically start without a formal plan or a specification document. This preference could be understood in relation to the historical experience of the 'employment for life' system where employees shared the same mindset about how things were done, and requirements need not to be written out, since a person could always walk across to a colleague and seek clarification."³⁹ By perceiving the culture according to individual company, instead of by country or ethnic group, the lifetime employment system can be regarded as the framework that sustains strict cultural homogeneity within each enterprise and that minimizes contact with different corporate cultures.

Sahey et al. further refer to the Japanese view toward contracts quoting Hampden-Turner and Trompenaars (1993): "Historically, the Japanese have shown a seeming indifference to formal contracts, relying more on the 'spirit of the law' rather than the 'letter of the law.'"⁴⁰

³⁹Sahay, Nicholson, and Krishna, 2003: 188.

⁴⁰Sahay, Nicholson, and Krishna 188.

CHAPTER 5

BANKS, MARKET PROSPECTS

IT Outsourcing in Financial Institutions

Financial institutions, especially banks, have social infrastructure characteristics to sustain financial systems. Thus, such institutions are required to have a high level of accuracy in operations, stability of systems, and confidentiality of data as compared to organizations in other industries.

Meanwhile, IT outsourcing has become a common means of corporate management in the financial as well as other sectors. In response to these developments, international regulatory and supervisory authorities and agencies in each country, including the Basel Committee on Banking Supervision (BCBS), the Federal Financial Institutions Examination Council (FFIEC), and the Bank of Japan (BOJ), show understanding of outsourcing by financial institutions.

At the same time, the authorities are asking financial institutions for appropriate risk control and have published guidelines in this connection. In addition to the argument about each institution's own risks as discussed in this paper, the following two issues are sources of concern on the part of the authorities.

First is the risk of difficulty in the authorities' supervision of operations outsourced to third parties that may not be under their regulation; this is called "Access Risk" in the BCBS guidelines.⁴¹

⁴¹BCBS, 2005: 12.

The second is the risk of excessive concentration of outsourced operations to specific providers. This risk can potentially cause industry-level problems and, in the BCBS guidelines, is called “Concentration and Systemic Risk.”⁴²

Market Prospects

The IT Outsourcing Market

The IT outsourcing market has grown rapidly over the last two decades to reach a global level of about \$200 billion. This trend is expected to continue for the foreseeable future. What is the outlook for this market?

First, standardization of service is expected to move forward. Cost reduction is the most popular motive for IT outsourcing, so more intense competition in cost effectiveness is inevitable. Aiming at cost reduction led by improving economies of scale, vendors will attempt to promote standardization of services so that they can be offered to more clients at lower cost. Nomura Research Institute (NRI) forecasts: “xSP, service providers that are specialized to specific types of services, such as ASP (application), ISP (Internet) or NSP (network), will develop standardization of their services toward commodities in the true sense. And maturing of the providers’ environment will attract more client companies to outsourcing.”⁴³

Second, progress of integration with business process outsourcing is expected. Standardization of IT services leads to standardization of business processes, and the integration

⁴²BCBS, 12.

⁴³NRI 20.

of the two will promote streamlining of the clients' businesses. NRI asserts that "pursuit of higher value-added outsourcing will inevitably end up in business process outsourcing."⁴⁴

The Offshoring Market

What is the next step in the offshoring market? Globalization of outsourcing encourages market competition, and, as a result, that transnational gap of IT labor wages will decrease. In addition, rapid economic growth in Asian countries like China and India is also accelerating the decrease in the wage gap. "Overseas outsourcing will keep occupying an important place in the global strategy of companies.... Companies that are now seeking for cheap brains in India, China, or Eastern Europe, however, may cease to do so soon.... The diminishing gap between Japan or the United States and Asia is the background."⁴⁵

Accordingly, in the future, vendors will have to differentiate themselves not by the cost, but by the service. And finally, international division of IT labor, "global sourcing: to procure required technology at reasonable cost when needed from anywhere around the world," will be the result.⁴⁶

⁴⁴NRI 184.

⁴⁵Kitagawa, 10/15/2004: 86.

⁴⁶S-open 54.

CONCLUSION

Prospects for Japanese Banks

IT outsourcing is now common practice in Japanese banks, and, as stated in the previous chapter, with the progress of standardization of outsourcing services, commodity outsourcing aiming at cost reduction and streamlining will increase steadily in the foreseeable future.

As for IT outsourcing involved with business process outsourcing, due to the underlying risk-averse attitude of the banks, integrated outsourcing to third-party vendors is not likely to spread among Japanese banks. Instead, it will take the form of delegation to subsidiaries or joint ventures associated with the banks, as is already the case.

So far as I can tell, offshoring has not yet been grasped by most Japanese banks, with the exception of Shinsei, which realized overall renewal of its legacy systems under the direction of an Indian CIO. Offshoring has high risks that come mainly from difficulties in communication, and cost advantages, though diminishing, are still the most expected advantages. Consequently, the chance of boom in offshoring among Japanese banks is not believed to be large.

Suggestions for Japanese Banks

Finally, I would like to make some suggestions for major Japanese banks.

As a result of repeated mergers, major Japanese banks, including their subsidiaries, have acquired huge information systems and large numbers of IT employees. Thus, streamlining these systems and personnel is a priority issue for them now. Under these circumstances, outsourcing is no doubt a major option of managerial strategy. Considering the close connection between IT and business, however, comprehensive outsourcing of IT functions is not considered to be the right choice, in the sense that any attempt at moving internal risks out might

end up in taking on outside risks. Accordingly, the banks should selectively outsource their IT functions depending on the situation.

In addition, I believe that improvement of the efficiency of internal IT departments is the key to cost reduction. The importance of internal IT functions has not declined, and it is even more vital now with the spread of IT outsourcing, which requires strong control. Compared to direct cost reduction realized through outsourced services, costs might be even further reduced by improvement of internal IT efficiency than would be realized through experiencing offshoring. From that point of view, offshoring can be an effective instrument to raise the awareness of internal employees. “Everybody who has experienced offshoring says, ‘if you enter into offshoring, you will find that your traditional manners of documentation, testing, or management are far from the mandatory level.’”⁴⁷

Through efforts to overcome the communication barriers in offshoring projects, universal skills of communication and management will be nurtured in-house, and this will enable the banks to attain greater efficiency over a wide range of IT functions beyond the scope of the outsourced services. In addition, the acquisition of these skills will certainly help the banks to get ready to deal with the upcoming era of global sourcing.

⁴⁷S-open 96.

FIGURES

**Figure 1. Example of Allocation of IT Functions
(Mitsubishi Trust Bank)**

	Software	Hardware	Network
Planning	Internal IT department		
Development & Maintenance	Subsidiary IT company	IT service provider	
Operation & Monitoring			

**Figure 2. Average Annual Salaries
of IT Labor By Country**

Country	Average IT salary	Ratio vs. United States
United States	\$61,630	
Singapore	\$33,504	54%
Ireland	\$23,000-\$34,000	37%-55%
Israel	\$15,000-\$38,000	24%-62%
China	\$8,952	15%
India	\$5,880	10%
Russia	\$5,000-\$7,500	8%-12%
Mexico	\$1,400	2%

Source: Blunden (2004: 20), quoting the U.S. Bureau of Labor Statistics 2002 for the United States and *CIO Magazine* 11/15/2002 for other countries.

**Figure 3. IT Offshoring Markets
in the United States, India, China, and Japan**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Growth	Source
United States				10.00	<i>12.54</i>	<i>15.72</i>	<i>19.72</i>	<i>24.72</i>	31.00	25.4%	ITAA/GI
India			7.10	8.90	11.20	<i>14.07</i>	<i>17.67</i>	<i>22.19</i>	<i>27.87</i>	25.6%	NASSCOM
Japan			0.20	0.49	<i>1.20</i>	<i>2.94</i>	<i>7.21</i>	<i>17.65</i>	<i>43.25</i>	145.0%	JEITA/JPSA/JISA
China	0.50	0.90	1.86	2.40	<i>4.05</i>	<i>6.83</i>	<i>11.52</i>	<i>19.43</i>	<i>32.78</i>	68.7%	MII-China*

- Figures for India and China are revenues as providers.

- *Italic numbers* are calculated on the assumption that growth rates do not change.

* Figures for China are quoted from S-open (p 44)

Figure 4. The Impact of IT Offshoring on the U.S. Economy and Employment

	2003	2008
IT offshoring market (total)	\$10 billion	\$31 billion
Impact on GDP	+\$33.6 billion	+\$124.2 billion
Impact on employment	+90,000 persons	+317,000 persons
Impact on real wages	+0.13%	+0.44%

Source: ITAA.

Figure 5. The Business Factors Matrix

Contribution of IT Activity to Business Operations	Critical	Best Source Ex. Aircraft Maintenance Support System (Airline Co.)	In-house/Insource Ex. Reservation and Checking System (Ferry Co.)
	Useful	Outsource Ex. Personal Computer Support (Chemical Co.)	Eliminate or Migrate Ex. Package Software with Unnecessary Customization
		Commodity	Differentiate
Contribution of an IT Activity to Business Positioning			

Source: Lacity and Willcocks (188).

Figure 6. Actual Benefits of IT Outsourcing

Actual Benefit	US (%)	UK (%)	Average (%)
Cost reduction:	40	64	53
- Some cost reduction	34	39	37
- Significant cost reduction	6	25	16
Refocus in-house IT employees	37	50	44
Improved IT flexibility	46	36	41
Better quality service	40	39	39
Improved use of IT resources	43	36	39
Access to scarce IT skills	43	36	39
Improved business flexibility	26	36	32
Focus on core business	29	34	32
Better management control	17	25	22
Access to new IT	26	16	20
Balanced processing loads	11	9	10
Assist cash flow problems	6	14	10

(Source: Lacity & Willcocks [2001] p 334)

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