Chapter 4 Future Outlook

Indian firms shaking things up in the IT services industry

At present, the IT services industry appears to be continually veering towards a major turning point amid the spreading tide of offshoring and globalization. The choice of where to outsource by end users continues to be determined by global support capabilities and cost competitiveness and a polarized gap is appearing in business performance between firms that have aggressively embraced offshoring and established a services structure on a global scale, and those that have not. It is thought that sooner or later this will become the driving force behind a restructuring of the industry within each region. The trigger will be Indian IT services firms establishing their standing as global players in connection with new business system-based innovation. In line with the above macro and micro analyses, this chapter shall provide an outlook for the strategies of the major Indian players in the IT services industry and summarize the implications they bring to the Japanese IT services industry.

1. Strategies of Major Players in India

(1) Growth and Survival Strategies of Indian Firms

Indian IT services firms approaching a turning point: advancing polarization The infiltration of Indian IT services firms in European and US markets has spurred European and US IT services companies to develop their business in India and has fuelled competition with Indian firms in two areas: securing contracts mainly in European and US markets, and acquiring human resources in the Indian job market. An across-the-board upward trend for hitherto low turnover rates and an annual 15% increase in wages, continue to be seen as risk factors for development structures focused on India. It is predicted that among medium-sized Indian firms, some companies will have trouble maintaining the same high growth rates and profit turnover as seen in the past. As in Chapter 3, this section categorizes the different types of firms into four groups and examines the strategies that typify each group (Table 4-41).

	Position in India	Assumed Growth Strategies	Strategic Responses	Leading Firms
Leaders	◆Well-established brand ◆Competing with leading foreign firms such as IBM and Accenture to secure HR ◆Heavy focus also on Indian domestic market	◆ Expansion of centers in India ◆ Expansion into low cost regions other than India ◆ Strengthen efforts to penetrate European and Japanese markets ◆ Bolstering BPO operations	◆ Expansion of centers in Latin America and Eastern Europe ◆ M&As in Europe ◆ Acquisitions of captive BPOs of end users	TCS Infosys Wipro
Challengers	◆Well-established brand ◆Around half the size of leader firms in terms of sales and number of employees	◆ Expansion of centers in India ◆ Differentiation with the three major leader firms ◆ Bolsteringr BPO operations	◆ Medium-sized M&As in Europe and the US ◆ Diversification of regions where operations are carried out ◆ Focus on specific business fields ◆ Acquisitions of BPO providers	Satyam Cognizant HCL Patni
Followers	◆ Inferior ability to secure HR due to mass hiring by the leading six major firms and European and US companies ◆ Brand well recognized	◆ Expansion of size (quickly establish structure of 10,000 staff) ◆ Differentiation with top firms	◆ Expansion of size by amalgamating with Indian competitor firms ◆ Focus on client industries and regions ◆ Acquisitions of medium-sized European and US firms ◆ Capital tie-ups with major foreign companies	iGate GS NIIT Technologies Hexaware Mastek
Nichers	◆ Brand well recognized in specific fields ◆ Noted as promising next generation companies	◆ Expansion of field-specific centers in India ◆ Establishment of 5,000-10,000 employee structures as well as expanding operations in Europe and the US	◆ Strengthening specific business fields (Inorganic – acquisition of medium-sized leading local firms)	Polaris Nucleus KPIT Neilsoft Mindtree Sasken

[Table 4-1] Strategies of Major Players by Market Position

(Source) Mizuho Corporate Bank, Industry Research Division

1) Strategies of Leader Firms

Semi-major class in the US market. Stepping up strategies to penetrate continental Europe and Japan

TCS, Infosys and Wipro have already developed their businesses in European markets to the extent of establishing themselves as semi-major class firms. In North America and the UK, they already have an established customer base, but because of a lack of medium-sized blue-chip firms worthy of being targeted for acquisition, one can predict that these leader firms will carry out organic growth-based takeovers that focus on the acquisition of software package solutions for specific industries and IP such as SaaS. At the same time, these firms will probably direct their efforts towards full-scale penetration of the continental European and Japanese markets - designated as key markets after English speaking regions - adopting both organic and inorganic growth strategies. With regard to the former, each market has formidable market entry barriers such as language and culture, but on the other hand, because globalization on the part of local IT services firms is still at the midway stage, an effective strategy to develop one's business in a domestic system is to enter the market by securing overseas support projects for multi-national companies exposed to competition with overseas firms and in industries that have overseas offices such as finance and manufacturing. Furthermore, acquisitions are thought to be effective with regard to the latter. Possible candidates may include (1) IT consulting firms, (2) firms with high ratios of prime contracts with semi-major to medium-sized companies that are

aggressively strengthening overseas operations, or (3) IT services business and BPO operations of end users.

Utilization of Chinese and Vietnamese centers with the Japanese market in mind

In terms of the development framework of these companies, while continuing to expand their centers in India, it can be envisaged that these firms will strive to enlarge their other offshore and nearshore centers in other locations and establish a system that is capable of meeting the more meticulous needs of clients. There is reason to believe that enhancing centers in Latin America and Eastern Europe for continental European markets and in the sense of storming the Japanese market, centers in China and Vietnam, will become a crucial part of leader firms' strategies. In particular, Indian firms will be keen to seek out opportunities for alliances with Chinese and Vietnamese companies.

2) Challenger Strategies

Differentiation by strengthening skills and solutions in fields where leader firms fall short

The types of business that challenger firms engage in are similar to that of leaders and in many cases, challengers compete with leader firms in various markets. Since challengers have already consolidated their presence in English speaking markets, it is crucial that they ramp-up the scale of their operations while at the same time come up with strategies to differentiate themselves in order to catch up to leader companies. In the Japanese market too, in addition to organic growth, taking over medium-sized firms will be the key to success. In particular, while also maintaining a customer base, it is likely that both parties can enjoy the benefits of an M&A when a challenger firm acquires another country's medium-sized firm that is lagging in terms of overseas operations and offshoring initiatives. Moreover, Satyam's engineering outsourcing for the manufacturing industry and SAP related solutions and HCL's embedded systems business are fields that require a high level of service not only in Europe and the US, but also in the Japanese market, therefore, an effective strategy for challenger firms would be to penetrate markets focusing only on areas that they excel in.

Expanding offshore centers outside of India

As for development structures of challenger firms, the establishment and upgrading of new offshore centers will become crucial in terms of the following three view points. 1) Excessive rivalry with major foreign affiliates and Indian leader firms to secure HR in India needs to be avoided, 2) reliance on centers in India needs to be lowered and risks diversified, and 3) offshore centers need to be strengthened in consideration of breaking into the Japanese market. In particular, the

resources of China, Vietnam and the Philippines should be utilized.

3) Follower Strategies

Strategic turning point of whether to go all-purpose or specialize

In all likelihood, survival strategies may well carry more meaning than growth strategies for medium-sized and smaller firms categorized as followers. Unlike leader and challenger firms, these companies are smaller than the Indian centers of leading European and US IT services firms and are recognized as medium-sized firms in European and US markets. The challenge now for follower firms is how to gain the competitive edge when competing with the top firms to secure human resources and customers. These firms will need to quicken their pace of growth if they aim to become general IT services firms, while it is thought that the time has come for them to seek out capital tie-ups with major foreign affiliated IT services companies or merge with other Indian medium-sized firms. As an alternative, it may be worthwhile for these companies to shift to niche strategies by concentrating their managerial resources in fields they already excel in. However, because followers already diversify their operations in multiple disciplines, a review of their business portfolios would be required in order to execute specialized strategies in the same way as nicher firms.

4) Nicher Strategies

Establishing an ecosystem to expand sales of solutions

In addition to avoiding generalization and expanding their customer bases in specialized fields, nicher firms must utilize R&D to outrun leading companies in terms of sector-specific technology. In order to achieve this, the accumulation of superior solutions and IP, as well as acquisitions from external sources will become key strategies for these companies. Furthermore, it will be crucial for nichers to establish a system that can provide high value-added solutions to clients by bolstering onshore technical consulting, or form alliances with other nicher firms in the same industries in other countries and create ecosystems with system integrators that can implement and maintain the firm's own solutions, as well as aiming to become packaged software companies much like Microsoft and SAP, which have constructed systems to expand their own products and provide cooperative support.

Strategies in India of Japanese, US and European Firms

This section examines the future directions of three groups of Japanese, US and European IT services firms in accordance with the development of their India-based global strategies. The three categories are first movers, second movers and new entrants (Table 4-2).

[Table 4-2] Strategies of Major Players by Market Position

	Position in India	Assumed Strategies in India	Means to Achieve Strategies	Leading Firms
First Movers	◆ Well-established corporate brand due to global name recognition and organic growth ◆ Advantage over major Indian firms in terms of securing HR	◆ Expansion of centers in India ◆ Securing Indian domestic demand ◆ Bolstering BPO operations	◆ Basic course is via organic growth ◆ Acquisition of captive BPO subsidiaries of end users	IBM Accenture EDS CSC Capgemini
Second Movers	◆Corporate brand weaker than first movers ◆Size of centers the same as that of medium-sized leading Indian firms	◆ Tie-ups with leading universities ◆ Bostlering BPO operations ◆ Quick establishment of 10,000 employee structures	◆ Organic growth ◆ Acquisition of medium-sized local firms ◆ Acquisition of captive BPO subsidiaries of end users	Steria Logica Atos Origin Fujitsu
New Entrants	◆ Penetration of corporate brand limited ◆ Tough battle securing talented HR	◆ Expansion of field-specific centers in India ◆ Establishment of structures with thousands of employees as well as expanding operations in Europe and US	◆ Organic growth ◆ Expansion of overseas centers in addition to inorganic growth (acquisition of medium-sized local firms)	Medium-sized European firms NEC Hitachi NTT DATA

(Source) Mizuho Corporate Bank, Industry Research Division

1) Strategies of First Movers

Mostly organic growth in the Indian market. **Expanding next** generation nearshore and offshore centers

First movers command centers in India with over 10,000 staff and are equal to major Indian firms in terms of brand recognition. Firms such as IBM and Accenture that have expanded mainly through organic growth and companies like EDS, CSC and Capgemini, which have rapidly expanded by taking over other firms, have established a presence in India and have an upper hand when competing to secure human resources. Consequently, it can be predicted that these firms' strategies will now focus on organic growth. As for BPO operations, even though these companies already possess productive service frameworks, it is possible that they may acquire Captive BPOs and specialist BPO firms of European and US companies from the objective of expanding customer bases. Moreover, even though there will be no change to the fact that India will continue to be an important IT center, one may guess that first mover firms will strive to enhance the completeness of their global delivery models by also stepping-up their operations in other emerging countries as locations for offshore and nearshore centers.

Shift in India's position: offshore center and high growth market

As well as positioning India as the base of their global deliveries, first movers are likely to enhance their domestic support framework in India – which is now viewed as a growth market. This is because the Indian market, together with China, is expected to develop into a giant market for IT services in the medium to long-term as markets in developed nations reach maturity. At present, buoyed by the rush of foreign affiliates into India and active IT investment in social infrastructure sectors such as telecommunications, the number of development projects is going through the roof and there is the perception that establishing their presence quickly by building up a solid track record from here on in will be crucial to the future growth of foreign affiliates.

2) Strategies of Second Movers

Becoming top-class will be tough if the timing of India's boom is missed

Second mover firms are characterized by their position in the top sales rankings in the mother market or overseas markets but much like Indian follower companies, only employ a few thousand people at their Indian centers. These firms' level of recognition in India in some cases is lower than Indian medium-sized firms and they may have a hard time laying their hands on talented personnel. If second movers plan to adopt organic growth as a strategy for expanding in India, they will probably continue to face much hardship as a lot of time will be required for them to establish their presence in India. This is because they will need to offer wages higher than top-level firms in order to secure first-class personnel in addition to the fact that the gap with firms that mass hire tens of thousands of personnel annually will continue to expand. As an alternative method, these firms may be able to secure this number of employees by hiring less qualified applicants, however, it can be inferred that the gap in competition will widen with firms that mass hire tier 1 class engineers, as seen by overall QCD capabilities.

Capital tie-ups with follower firms an effective strategy In light of this situation, capital tie-ups with Indian medium-sized firms will be the key. Although second movers – which need to build up their Indian offshore centers – have a strong presence in the mother market and also among general service type follower firms that are oriented towards catching up to challengers and leaders, a mutually complementary relationship can be formed with follower firms. Furthermore, at this point in time, there is still the possibility of second movers securing the same level of market share as first movers in the Indian domestic market.

3) Strategies of New Entrants

The need to develop overseas operations based on Indian offshoring Although new entrants have a strong presence in the mother market, their overseas offices and Indian offshore centers are still in the development stage. Accordingly, how these firms strengthen both offices at the same time will become important. In particular, because new entrant firms will compete against Indian companies and European and US first and second movers in English speaking markets, it is likely that new entrant firms will become entangled in competition to secure projects that are subject to offshoring, therefore, upgrading and expanding centers in India will be a necessary condition if globalization is to be achieved.

Shift in India's position: offshore center and high growth market

Utilizing the disadvantages of market latecomers will be crucial when expanding overseas. In other words, new entrants can use their centers in developed countries to specialize in consulting and upstream processes by acquiring IT consulting firms and Indian follower companies in European and US markets. Meanwhile, their India-based offshore centers can focus on ADM and infrastructure management to handle all aspects of the services value chain. By doing so, these firms are able to establish an offshore-based business model and do not need to amass more employees than required in European and US markets. However, as many Indian firms have already taken over IT consulting companies, it will not be easy for new entrants to acquire blue-chip firms.

2. Three Changes in the Competitive Environment of the Japanese Market

Globalization of Japanese firms and three changes As competition between firms in the global IT services industry becomes more intense with the race to establish global delivery models centering on offshore centers in India, there is an even greater need for IT services firms – which have thus far carried out their operations focusing on securing domestic demand in various countries – to develop global operations. In Japan too, there is an obvious need to consolidate outsourcing of domestic and overseas information systems beginning with end users that have already expanded overseas. It is very likely that this trend will grow stronger in connection with time differences between Japan and regions in Europe and the US. This section takes a look at three probable changes brought about by globalization based on the five forces framework of Fig. 1-1 (Fig. 4-1). The first change is in the environment surrounding end users (1), the second is in the environment surrounding prime contractors (2), and the third is the globalization of each firm (3).

New Entrants Outsourcing services ranging from IT systems development, operation and back **Indian IT Services Firms** office operations with the objective of concentrating managerial resources on core businesses, reducing IT investment and providing support to overseas centers. Major / semi-major / medium-sized Firms Customers **Suppliers** Japanese End Users Competition Japanese Subcontractors Private firms Competition within Fuiitsu, NEC Medium-sized Foreign-owned industries Hitachi, NTT Data etitio and smaller Competition 1 apanese firms npetition Privatized Competition Competition in government-M&A domestic and affiliated firms · Domestic Restructuring 1 overseas markets (3) Competition M&A Substitute Products (Services) Some Japanese firms have Non-Indian Foreign IT Services Firms also withdrawn from the market Outsourcing services ranging from IT systems development, operation and back Major European and US office operations with the objective of concentrating managerial resources on core businesses, reducing IT investment and providing support to overseas centers. firms and semi-major M&A M&As between Indian firms and major European and US firms Current Outsourcing Route and semi-major companies Outsourcing Route After Change Competitive Relationship M&A

[Fig. 4-1] Structural Analysis of Japan's IT Services Industry in View of 3 Probable Changes

(Source) Mizuho Corporate Bank, Industry Research Division

(1) Harsher Selection of Subcontractors by End Users

Reducing costs with overseas support and offshoring a must

It is even more likely now for end users of outsourcing services to increase their contracts to IT services firms capable of providing support for overseas systems. There are two reasons for this. Firstly, an increase in the needs of users to seamlessly integrate and operate IT systems and business processes across national borders in connection with more firms expanding overseas. Secondly, the impending need for firms to reduce costs associated with operations other than their core business, such as IT systems development and maintenance and back office operations due to more intense competition with foreign affiliated firms at home and abroad in the company's main line of business. It is thought that user firms receiving uniform services that are cheap and quickly delivered and which utilize offshore centers, is essential to enabling user firms to concentrate on their core business amid such global competition. Already, European and US firms have achieved cost reductions of around 30 to 50% on systems development and operation and back office operations either on their own or by utilizing offshore centers of external IT services firms. This suggests that in order to compete with foreign affiliated firms, Japanese end users will be required to conduct offshore outsourcing and aim to reduce costs to the same level of rival foreign affiliates.

Possible increase in overseas projects for Japanese users landed by foreign IT services firms

Nonetheless, one can assume that responding to these needs will be an extremely difficult hurdle for many Japanese IT services firms. In the future, there is a strong possibility that end users will focus more on cost competitiveness and overseas support capabilities rather than long-term relationships established thus far and consider changing from Japanese IT services firms to European and US or India-based IT services firms for their outsourcing in order to maintain a competitive edge over rival foreign firms. Japanese end users may deepen their business relationships by outsourcing overseas projects as trials to foreign affiliated firms that they have yet to deal with and then gradually expand the scope of projects to be outsourced, including Japanese domestic projects, as the advantages of those relationships are enjoyed by end users. Already in the US market, examples are emerging where a project that was outsourced to an Indian IT services firm by an end user via a local IT services firm was then directly outsourced to an Indian IT services firm without the need for a middleman. Resultingly, the position of that Indian IT services firm was boosted. The fact that the same thing is beginning to occur in Japan too indicates that major Indian firms -

which have fought hard to win direct contracts from Japanese end users – are starting to see results when securing projects.

Full-scale strengthening of Japanese operations by foreign IT services firms Not only Indian firms, but foreign IT services companies that have begun to bolster their offshoring have an opportunity to seriously ramp up their operations in the Japanese market due to Japanese end users being entangled in competition on a global scale and the sluggish global responses of Japanese IT services firms. Already, leading European, US and Indian firms are acquiring the skills to deal with Japan's unique system development practices and are pursuing cost cut-backs utilizing offshoring by having delivery centers in China and regional cities in Japan (Table 4-3). In addition to establishing a delivery center in Sapporo, Accenture has continued to boost its presence in Japan in the field of solutions such as Oracle ERP by taking over the trailblazing Japanese firm Sopia.

[Table 4-3] Initiatives of Foreign IT Services Firms to Penetrate the Japanese Market

	Examples of Recent Business Reinforcement in the Japanese Market
IBM	· IBM shifted jurisdiction over IBM Japan to the U.S. head office and sped up decision making in line with the Japanese market · Enhanced IBM Japan's utilization of offshore centers in China and India
Accenture	Opened their first Japanese delivery center in Sapporo Acquired Sopia, an IT consulting firm specializing in Oracle
EDS	Stepped up their cooperative framework with Japan Systems, which the company has a 53.6% stake in, through the One Japan project Collaborated with umbrella company MphasiS by establishing the Best Shore Promotion Group to promote offshoring
TCS	Established a specialized offshore center, J-ODC, for Japanese customers in Kolkata, India Strengthened embedded systems operations – its core business in Japan
Infosys	Concluded an agreement to form a strategic alliance with Nihon Unisys. Cooperative alliance including the provision of global development support to Japanese customers through collective marketing and development
Wipro	Strategic alliance with Oki Electric Industry in the field of semiconductor design (scheduled to wholly acquire Oki Electric Industry's wireless communication LSI development subsidiary and the establishment of an exclusive LSI development center for Oki Electric Industry) Comprehensive business tie-up with CTC
Satyam	Established Kanzen, its center of excellence (CoE) for Japan Established new delivery centers for Japan in China and India (delivery center also scheduled for Fukuoka)

(Source) Mizuho Corporate Bank, Industry Research Division, based on publicly available company material

(2) Selection of Subcontractors by Prime Contractors

Reorganization of industry in Japan triggered by penetration of European, US and Indian firms in Japan's market

Triggered by the aforementioned first change, it is predicted that prime contractors will aim to gain a competitive advantage over rival firms by overhauling their poly-hierarchical structures, accelerating offshoring and carrying out M&As. Simplification of transaction structures has also been confirmed in some instances, such as where some prime contractors have cut down on their number of partner firms and prohibited outsourcing to a company through another company. As for offshoring, there is an increasing trend for jobs to be contracted out to low cost regions like India, China and Vietnam. This means that the Japanese subcontractors receiving orders will be replaced by offshore firms and one can predict that there will be more M&As taking place in Japan due to flagging business results caused by more intense competition and weaker firms going broke. As a result, there is also the increased chance that business reorganization within groups may go beyond the group's framework and expand to a reorganization of the industry itself. The consolidation of TIS and Intec³² announced in December 2007 may be the beginning of such a trend. Under such circumstances, subcontractors face the prospect of a decline in the number of contracts receivable, therefore in order for them to survive there is now an even greater need for them to enhance their ability to secure prime contracts by affiliating with prime contractors or joining forces with other subcontractors.

(3) Increase in Cross-border M&As

Foreign firms may also acquire Japanese companies

_

The third change is an increase in the number of cross-border M&As. Although an M&A between Japanese firms, which have most of their sales based in the domestic market, can boost the scale of their operations, because it is a difficult task to establish a support structure for the overseas operations of users, Japanese firms will be required to form alliances with foreign affiliated IT services firms. The combination of a Japanese IT services firm's Japanese market customer base and the global reach and offshore centers of a foreign IT services firm can meet the needs of Japanese users by providing low cost, global services. Already, four Japanese super prime contractors have actively begun M&As with European and US firms, which is a trend that may spread to other prime contractors. On the other hand, one can also forecast an increase in takeovers of Japanese IT services firms by foreign affiliated

³² Intense price competition due to the utilization of offshore centers in locations such as China and India and the emergence of foreign firms was cited as one of the reasons for the integration.

companies as expectation in the outsourcing market heightens in Japan.

3. Implications of Strengthening Global Competitiveness of Japan's IT Services Industry

Signs that the aforementioned three changes are emerging suggest that Japanese IT services firms require a shift in strategy. The main implications associated with this include a review of outsourcing strategies, a change in thinking towards M&A strategies, and a restructuring of organizational frameworks. All three will be crucial if Japan's IT services industry is to bolster its global competitiveness in the future.

(1) Reviewing Outsourcing Strategies

Reexamining outsourcing risks

As a generally widespread method of cutting back costs, IT services firms outsource downstream processes, mainly programming, to domestic subcontractors with no capital relationship or to IT services firms in offshore regions. However, it seems as though the time has arrived where these companies are realizing anew the risks involved with such methods. This is because this transaction structure is probably directly linked to a decline in the competitiveness of Japan's IT services firms. More specifically, while technology and know-how is accumulated on the part of the subcontractor, a decline in the group's own system development and construction abilities takes place. Furthermore, there is the risk that the subcontracting firm will grow and become a rival firm, or be acquired by a competitor of the IT services firm. Preventing a subcontractor from becoming a rival firm can be achieved if the right balance of competition and partnership is struck, however, it is thought that as subcontractors increase their ratio of prime contracts, the importance of outsourcing operations that continue to lose profitability will comparatively deteriorate. Accordingly, companies will need to consider the risk that a decline in the importance of outsourcing projects will degrade the quality of its services. A subcontracting firm that is acquired by a rival firm means that costs will be incurred from implementing knowledge transfer and knowledge management approaches for a new subcontractor, which had previously been carried out on the basis of a medium to long-term customer relationship.

Increasing need to establish own offshore centers

In addressing the issues mentioned above, the implementation of the in-house completion type delivery model by Indian firms – a source of their competitive advantage – will serve as a useful reference. In other

words, by keeping downstream processes within the company group and creating its own completion type system, a Japanese IT services firm can aim to accumulate technology and know-how within its own company group.

(2) Change in Thinking Towards M&A Strategies

As part of a change in mindset towards M&A strategies, it will be vital for Japanese IT services firms to set their sights on the competitive environment of overseas markets following acquisition and plot growth strategies not only as companies taking over other firms, but also with the assumption that they too may be bought out.

M&As strengthen overseas operations on the basis of offshoring

In view of bolstering overseas support for Japanese users, an acquisition of a European or US firm can allow a company to lay its hands on offices in Europe, the US or Asia in a short period of time. However, companies must recognize that in overseas markets, they will be enveloped in competition with foreign IT services firms with established India-based global delivery models employing thousands to tens of thousands of people. This implies that the utilization of offshore centers based in India is a prerequisite to making business advances overseas.

Strengthening competitiveness by affiliating with leading foreign firms

On the other hand, affiliating with a foreign IT services firm and utilizing its already established global delivery model to gain a top-class ranking within Japan is also an effective strategy. With Japanese end users coming face to face with intense competition from global firms, promoting IT systems investment and the efficiency of business operations on a global basis will be absolutely necessary. Since European, US and Indian IT services firms already possess sales offices in key countries, offshore centers in India and China, and nearshore centers in Latin America and Eastern Europe, they hold an advantage over Japanese IT services firms in terms of both global reach and cost competitiveness. The flipside is that many foreign IT services companies recognize the tough entry barriers to the Japanese market as a consequence of their low public profile and differences in language and business practices. At present, Japanese companies stand the chance of pushing for tie-up negotiations on favorable terms and may contribute to a change in the structure of the IT services industry in Japan that is dominated by a small number of prime contractors. Still, to achieve this, firms will need to possess a base of influential customers that are leaders in implementing new technologies, business models and

services so that they will be regarded as possible tie-up companies. They must also strive to set themselves apart from other companies by achieving a high profit margin through software industrialization and offshoring.

(3) Organizational Restructuring

As the penetration of Japan's market by foreign affiliated IT services firms moves into high gear, cut-throat competition between group companies (either domestic and overseas) to secure clients is emerging in some Japanese IT services firms. As competition is predicted to heat up, group consolidation through the rearrangement of overlapping group businesses and the sharing of offshore centers is becoming more and more important. Some companies have started the ball rolling by taking full ownership of listed subsidiaries and reorganizing overlapping group sectors, however, it is thought that the pace of these initiatives should be sped up and overseas subsidiaries too must simultaneously carry out organizational realignment with the goal of establishing a global and seamless services structure. Common features provided by multiple case analyses of foreign IT services firms include the following three points, while the implementation of these mechanisms will be essential to Japanese IT services firms when advancing globalization in the future. Firstly, having variation in the lineup of services provided based on the location and manpower attributes of offices. Secondly, having each onshore sales office and offshore and nearshore delivery centers integrated as one virtual organization. Thirdly, endeavoring to standardize project management and delivery processes, share past best practices, industrialize solutions and maintain a system capable of providing uniform services in order to successfully achieve cooperation between multiple centers.

Chapter 5 Conclusion

This report has analyzed the actual state of globalization of the IT services industry that has emerged from India – the global center of the Industry – and has examined the possibility of this trend causing structural changes to the Japanese market. In light of this, this report has also highlighted the implications of strengthening the global competitiveness of Japan's IT services industry. The following sections focus on the future outlook of the industry and consider the benefits that globalization will bring to Japan's IT services industry, as well as the role the government will be required to fulfill in order to bolster Japan's global competitiveness.

(1) Benefits of Globalization

Multiple benefits of globalization

There are three benefits that globalization of Japan's IT services industry can provide. Firstly, a structure to support the globalization of Japanese end users will also expand customer bases of IT services firms to non-Japanese companies. Secondly, IT services firms will enjoy an influx of opportunities to utilize solutions such as Japanese packaged software in the global marketplace. Thirdly, more chances to heighten experiences of global standard development styles and outsourcing services.

1) Customer base expansion

As well as avoiding a decline in ranking in domestic markets by strengthening ways to deal with the overseas support needs of Japanese clients, Japanese IT services firms will be able to break into European, US and Asian markets and acquire new platforms of revenue. Additionally, there is the likelihood of increased opportunities for firms to undertake not only IT systems, but also other outsourcing projects relating to business operations such as human resources, accounting and procurement.

2) Globalization of sales channels for Japanese solutions

As for the second benefit, it is expected that global sales channels will open up for Japanese packaged software as the presence of Japanese IT services firms gets a boost. Owing to the fact that European, US and Indian global players have already accumulated a wealth of experience with their own packaged software or software meeting international standards, there is a lack of incentives for firms to adopt Japanese packaged software. Nevertheless, if Japanese IT services firms that are expected to expand globally in the future get more chances to utilize in overseas markets the knowledge they have accumulated in Japan

regarding packaged software, they will be able to reap the benefits of reduced costs for each service provided through multi-utilization of such knowledge. At that time, it will be crucial to differentiate products from competing global standard software and establish target customers. From the viewpoint of differentiation, the software must be competitively priced and be easy to customize in accordance with languages and local features. Target customers may include overseas divisions of users that have successfully implemented the product in Japan and users in emerging regions that are yet to see widespread implementation of packaged software like ERP and IT systems. Particularly in emerging regions, the high price of software licenses will be a stumbling block, and in many cases, IT systems have not been implemented yet. On top of this, rather than competing with de facto standard products in already maturing markets of Europe and the US, Japanese firms will probably have a much higher chance of success by penetrating potentially huge markets. As a preceding example, some Indian IT services firms have already actively unrolled their own financial packages in emerging countries.

3) Incorporating global standards

The third benefit is that Japanese IT services firms will be able to obtain global standard system development capabilities. Generally, there is a tendency for Japanese end users to prefer customized IT systems because they like to make them compatible with their own business processes. Many overseas end users, on the other hand, make do with a minimal amount of customization because they prefer to make their business processes compatible with ready-made IT systems such as packaged software. The latter case indicates the advantages of improving business processes for the client and will require the ability to provide support in order to achieve those improvements, however, it is assumed that this is a field where Japanese IT services firms are still lacking in experience. With the advent of global competition, high end IT systems are being developed with excessive qualities due to customization among end users, therefore, if there is an increased need for quickly delivered, low cost packaged software, their commercial ranking will still decline on the markets even though customized systems developed from scratch are superior in quality and technology. Establishing a development framework that is capable of dealing with this kind of "Innovator' Dilemma" will be crucial, while it is thought that Japanese firms can solve such issues by incorporating a foreign framework well acquainted with global standards into their company group as part of their overseas expansion but at the same time, retaining

their much vaunted framework that was developed from scratch.

(2) Roles Government Must Fulfill

Indian government's support measures for the IT services industry The above mentioned initiatives will be vital if companies are to do something about the situation on their own accord, however, it is a fact that assistance from the Indian government played a role in the rapid growth of the Indian IT services industry. The main initiatives of the central government and state governments include support measures such as preferential tax treatment and environmental considerations. Namely, exemption of corporate taxes on earnings derived from exports until the end of March 2010; exemption of consumption taxes on purchases of capital goods and raw materials; and a reduction of the period for depreciation on computer and software assets. On the state government level, maintenance of development environments of an international standard in economic zones and software parks; and cultivation of IT human resources by establishing training institutes.

Three environmental considerations to enhance global competitiveness It is hoped that the Japanese government too will consider concrete support measures centering on maintaining an environment to enhance global competitiveness. Firstly, to nurture and strengthen the solutions sector that Japan has a competitive edge in, secondly, to foster IT services firms capable of marketing promising Japanese solutions overseas, and thirdly, to cultivate manpower good enough to be dispatched overseas.

Selecting solutions fields and the need to examine intensive support measures

In view of the first point, it is thought that the government will need to choose sectors to provide support to from the solutions field where Japan is already competitive, and the solutions field that will increase in importance in the future, and then provide intensive support to those areas. As for solutions that Japan is already competitive in, one leading candidate is the area of embedded systems, which has gained much recognition by being competitive in terms of innovation. Already, results from the formulation of ETSS (Embedded Technology Skill Standards) utilized to cultivate human resources in the field of embedded systems and the achievements of JasPar, a body to standardize software specifications and development and evaluation tools in the automobile industry, continue to emerge and further developments will come under focus from here on in. Globalizing intellectual property immersed within Japan's domestic market by introducing support measures for solutions and packaged software that are to be exported may be a beneficial strategy when supporting solutions that are expected to increase in importance in the future.

Supporting globalization of IT services firms

The objective of the second point is to promote the globalization of IT services firms that will be responsible for promulgating Japanese solutions in overseas markets. This can be achieved by creating incentives for Japanese IT services firms to export and promulgate Japanese solutions abroad. Additionally, a support system should be set in place that facilitates global development of Japanese IT services firms that have no experience in doing business overseas. The exemption of corporate taxes on exports for IT services firms that emerging nations such as India have implemented will serve as a useful reference when considering these initiatives.

Developing HR by creating training and practical opportunities abroad

The third point relates to nurturing globally capable Japanese SEs. Even though it is important to compensate for the shortage of technicians by cultivating engineers in emerging nations that can carry out their duties in the Japanese language, the fostering of Japanese SEs with English language skills will be essential if Japanese IT services firms are to expand their operations overseas on their own steam. If the Japanese government teams up with major Indian firms and leading universities and establishes institutions to train IT technicians with the basics of software development, right through to practical skills, Japanese educational institutions and companies will be able to contribute to enhancing the global competitiveness of Japanese software engineers by providing an environment where Japanese technicians can be dispatched to. Furthermore, with a medium to long-term goal in mind, leaders in the IT field that have what it takes to work in overseas markets can be trained. As Japanese IT services firms probably turn to M&As with leading foreign firms as a means to expanding their operations overseas, it appears that there are many firms that lack the personnel to manage foreign companies in a capital relationship.

Amid advancing globalization of the IT services industry, industry, government and academia must now collaborate to implement initiatives that can globalize Japan's IT services industry and strengthen its global competitiveness.

(Takahiro Hasegawa, Information and Telecommunications Team, Industry Research Division) takahiro.hasegawa@mizuho-cb.co.jp

Bibliography

Arora, A, Arunachalam, V.S, Asundi, J and Fernandes, R (2001) "The Indian Software Services Industry", *Research Policy* 30 pp. 1267 – 1287

Athreye, S.S (2005) "The Indian Software Industry and Its Evolving Service Capability", Industrial and Corporate Change, Vol. 14, Number 3, pp. 393 -418

Capur, A and Burgelman, R.A (2006) "Infosys Consulting in 2006: Leading the Next Generation of Business and Information Technology Consulting", Stanford Graduate School of Business

Carmel, E and Tija, P (2005) Offshoring Information Technology, Cambridge University Press

Cusumano, M (2004) The Business of Software, Free Press

Gemawat, P (2007) Redefining Global Strategy, Harvard Business School Press

Hamm, S (2007) Bangalore Tiger, McGrawHill

Kojima, M Indo no sofutouea sangyo, Toyo Keizai (2004)

NASSCOM (2007) Strategic Review 2007

NASSCOM (2008) Strategic Review 2008

Porter, M.E (1982) Competitive Strategy, Free Press

Upton, D.M and Fuller, V.A (2005) "Wipro Technologies: The Factory Model", Harvard Business School

Upton, D.M and Staats, B.R (2006) "Lean at Wipro Technologies", Harvard Business School

Accenture (2007) CMMI Kihon to Jissen, Softbank Creative

Nobeoka. K (2006) MOT Nyumon, Nihon Keizai Shinbunsha