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Synergistic pay-offs in Indo–US strategic alliances

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Abstract

In a highly competitive business environment, strategic alliances between companies best ensure their continued survival. An increasing number of firms are therefore willing to share control for the larger benefits which an alliance offers. In recent years many US and Indian corporations have forged an 'entente' to derive such synergistic payoffs. The 1990s are likely to witness a further growth in the popularity of alliances between Indian and US firms. This paper examines the benefits derived by the collaborating companies and studies the experience of some of these firms in building cross-border partnerships.

1. Introduction

International strategic alliances take place among companies wherein partners seek to improve or dramatically change their competitive position in domestic and international markets. A variety of strategic benefits are sought by collaborating partners, including quick penetration of foreign and domestic markets, blocking and coopting competitors to form allies, and spreading cost and risk while creating economies of scale [1–3].

The logic of strategic alliance can best be understood by first defining the term. The operative word in the term is 'strategy' which is defined by Ohmae [4] as "the way in which a corporation endeavours to differentiate itself positively from its competitors, using its relative corporate strengths to better satisfy customer needs". According to Ohmae, only those actions aimed at altering the strength of the company relative to that of its competitors can be considered as part of strategy. It does not encompass such actions as achieving greater profitability, a more streamlined organization, or improved training; they only increase the absolute performance of the company, and not its performance relative to its competitors, which is of crucial importance in the business world.

Strategic alliances, therefore, refer to alliances that enhance the long-term competitive advantage of an enterprise [5]. They are significantly different from the old style of collaborative agreement and can take many forms [6]. The spectrum includes joint ventures,[1] minority participation, co-manufacturing efforts, cross-marketing, cross-distribution, cross-licensing arrangements, supply-purchasing, franchising, R&D consortia, and partnerships in marketing and other areas. For example, Sony is using the cooperative research method of partnering with small companies and shares not only its research staff and production facilities but also product business plans [7]. The gigantic Japanese firm is working with Panavision to develop a lens for high definition television cameras.

IBM, too, has been purchasing minority interests in small businesses, spending in excess of US$500 million [8]. IBM now believes that being a market leader does not mean building everything from scratch, since linkage of the small and large firms enhances both operations. Additionally, IBM has recently formed a joint venture with Coopers and Lybrand to provide management consulting services, an area long overlooked by IBM [9]. This alliance demonstrates that partnerships do not always have to be made between large and small firms. Similar areas of concern by both firms are now addressed: lack of consulting services by IBM and a lack of computer consulting business on the part of Coopers and Lybrand. Thus, similar problems for both firms are now being solved through the use of strategic alliance.

Strategic alliances, then,. are new and different means of doing business in place of the traditional export, or wholly-owned foreign subsidiaries. The purpose is to collaborate with another firm — including suppliers, customers, and perhaps even competitors — to enhance marketplace leverage. Such alliances grow out of a company's basic mission and direction, and are used to fulfill long-term objectives and achieve future competitive advantages.

Small firms enter into an alliance in order to secure financing for future operations. The current credit squeeze has dried up conventional sources of financing, and partnering with large firms is filling the void [7, 10]. The larger firms may also be able to provide the necessary manufacturing capacity and distribution networks that the small firms could not otherwise access.

Consequently, large firms are discovering that partnership with smaller firms offers a swift way to enter new markets. Table 1 shows some of the alliances that have been struck between large and small firms. This table also provides the type of partnership, especially in the area in which the large firm is utilizing the smaller firm.

1.1. Worldwide popularity of strategic alliances

It is not surprising that the popularity of strategic alliances has grown in recent years. According to a report in Fortune magazine, US corporations have formed over 2000 alliances in the 1980s with European companies alone and are still not keeping pace with the Japanese and the Europeans [1]. INSEAD research indicates that, between 1980 and March 1989, more than 262 strategic alliances with foreign partners were formed by British companies alone. Eighty-two percent of these alliances were recorded in the aerospace, electronics, automobile and telecommunications sectors [6]. In some cases, even more than four partners were involved in forming an alliance (such as Airbus Industries). Many US firms such as Texas Instruments and IBM have reported agreements with several companies. For example, Texas Instruments (TI) has collaborated with IBM, Western Digital, General Instrument, Fujitsu, National Semiconductor, Philips/Signetics, Hyundai, Linear Technology, Ericcson, Intel, NMB Semiconductor, Altera, Sun, Cypress, Actel and Hitachi. These alliances are described by TI as "joint development agreements", "cooperative

TABLE 1. Types of alliance

Large firm	Small firm	Type of alliance
IBM	Geographic Systems	marketing & development
Motorola	Applied Intelligent Systems	product development
Sony	Panavision	system development
Glaxo	Gilead Sciences	sales & marketing
Upjohn	Biopure	sales & marketing
Chesapeake	Stake Technology	system development
Kodak	Immunex	technology development

Source: How big companies are joining with little ones for mutual advantage, *Wall Street Journal*, 22 February 1991.

technical efforts", "joint program for developments", "alternate sourcing agreements", and "design/exchange agreements . . . for cooperative product development and exchange of technical data".

IBM established a landmark with its personal computers by using strategic alliances to its advantage. The total product was put together in an alliance between IBM, its suppliers and even its competitors. Key components such as keyboard, monitor, graphics printers, and a large proportion of semiconductor chips, were sourced from Japan, Korea and Singapore; the software 1-2-3 that helped make the PC successful was developed by LOTUS; the operating system by Microsoft; and the microprocessor by Intel.

An interesting example of joint venturing is a Japanese company called Minebea. Its principal product was ball bearings, sold mostly in Japan. In the early 1980s, Minebea entered the chipmaking business through a subsidiary, NMB Semiconductor. It formed a partnership with a tiny California silicon boutique. The California partner designed, and Minebea figured out how to produce, the fastest four-megabit chip in the world. Minebea then formed a joint venture with America's Intel, to market the chip through Intel's distribution network. Minebea is a good example of creative design, separate production, separate marketing in a worldwide, increasingly mobile, commodity business [11]. Similar partnerships in this industry have joined Siemens with IBM, SGS-Thomson with OKI, Texas Instruments with Hitachi and Motorola with Toshiba.

1.2. The transnational corporations

Even the largest global companies, including the likes of AT&T, General Motors, IBM, Boeing Aircraft Company, General Electric, Siemens, Xerox Corporation, Toyota Motors, Mitsubishi, General Foods and several others, find the world too large and competition too strong to go it alone. Increasingly they are seeking collaborations with other companies, even former staunch foreign competitors.

Some authors observe that the spread of collaboration between competitors is in fashion [12]. General Motors and Toyota assemble automobiles; Siemens and Philips develop semiconductors; Canon supplies photocopiers to Kodak; France's Thomson and Japan's JVC manufacture videocassette recorders; Nissan distributes Volkswagens in Japan; while Volkswagen sells Nissan's four-wheel drive cars in Europe.

There are several other examples, but the logic is obvious: as firms develop a global perspective and adopt the transnational model of business organization and competition, strategic alliances become important, even critical, instruments of serving customers. Although the best world-companies may appear totally localized, wherever they operate they are actually more global in scale than ever before. The old multinational corporations tried to maintain stand-alone fiefdoms that operated by themselves in different nations and merely paid a dividend to the home office, but new giants try to orchestrate the efforts of all these partnerships on a regional or global level.[2]

1.3. Size and alliances

The pursuit of the route of strategic alliances for business development is not exclusively that of the largest world companies. As competition gets easier for small businesses, they become more important. Computer software and biotechnology are dominated by innovative small firms worldwide. Big firms, such as Xerox, try to do research in non-core technologies in small companies in which they take only a minority ownership interest. A Canadian corporation, Northern Telecom, has remained small and nimble enough to anticipate and react to changes in technology, while remaining in the top five firms in its field worldwide, and competing (including successfully in India) through joint ventures and alliances [11].

1.4. The growing interest in India

The trend in the formation of strategic partnerships may appear to be dominated by the triad groupings of North America, Western Europe and the Far East which account for approximately 80% of the world's manufacturing and consume 67% of the world's manufactured goods. Yet there is evidence of increasing interest in countries like India. Some of the leading world companies have recently collaborated with Indian business houses to operate in Indian and foreign markets. Table 2 shows examples of such collaborations.

The range of cooperation varies in different sectors, such as steel, office automation, electronics, computers and also non-priority sectors like shaving blades, shoes and other consumer products. Amongs those most keenly interested in cooperation with Indian firms are companies from the triad groupings. The developmental role visualized for India is to build growth capacity. Arguably, the new cooperative ventures could help integrate India into the world economy.

1.5. What drives companies to strike entente

Nations, political parties, individuals and now business firms have a common cause with others whose interests run parallel with their own. The striking of an alliance — 'entente' — is driven by several factors. Some of the more important include:

- the globalization of industry and markets — a world of converging consumer tastes and rapid dispersion of technology;
- increasing costs of research and development;
- the speed of technological change;
- escalating fixed costs;
- the shortening of the period of competitive advantage;
- cost-effective ways to plug a business gap;
- the Single European Act, which led to integration of the European market by 1992;
- growing protectionism and market barriers.

TABLE 2. Examples of collaborations between Indian and foreign companies

Modi–Xerox
Tata–Timken
3M–Birla
Escorts–Yamaha
Digital–Hinditron
Nippon–Denro–Ispat
Maruti–Suzuki
Hero–Honda
Kawasaki–Bajaj
TVS–Whirlpool
Pepsi–Voltas–Punjab Agro
Modi–Olivetti
Modi–Lurgi–BSIDC
Gillette–Indian Shaving Products
Bata–Adidas
Carona–Puma
Tata–Unisys
Tata–Honeywell
Hewlett-Packard–Blue Star
HCL–Hewlett-Packard

1.6. Challenges of globalization

According to Ohmae [14], globalization mandates alliances, making them absolutely essential to strategy. Whatever their nationality, consumers worldwide increasingly receive the same information, seek the same kinds of life styles, and desire the same kinds of products at the lowest possible prices. Few companies can offer such topflight levels of value to all their customers, every time, all by themselves. They need partners and entente.

Thus, the globalization of industry, increasing costs of research and development and the speed of technological changes are important forces that drive high-technology companies toward strategic alliance formation. To ensure survival in the future, many companies involved in the telecommunications, aerospace, electronics, automotive and pharmaceutical sectors have formed alliances not only to spread costs but also to increase their chances of success and reduce the risk of failure in global markets. The Hitachi strategic alliance with Texas Instruments for the design and production of new 16 megabyte dynamic random-access memory (DRAM) chips is characteristic of such an alliance. The investment in manufacturing, alone, is of the order of $400 million.

1.7. A way to close the business gap

Strategic alliance is also a cost-effective means of bridging a 'business gap' while at the same time securing competitive advantage. This action is reflective of many alliances where one party lacks a product to serve a particular market but has in-depth knowledge of the local scene, whereas the other has the product but lacks local sales and marketing expertise and distribution capability. The recent agreement between Hewlett-Packard and HCL Ltd of India, whereby the latter will market, service and support the former's series 3000 and 9000 computers in India, is an example of this. HCL has also tied up with HP Asia Pacific to market and support the computer systems manufactured by HP worldwide so that the combined range of the two offers capabilities ranging from microcomputers to mainframes.

The same can also be said of manufacturing alliances. Usually one party fails to possess the necessary manufacturing process technology and is in the market, while the other has the technology but is not in the market. Tata Steel, through acquisition of Metal Box, sells Tata bearings in India. It did not, however, have the technology to manufacture tapered roller bearings. Timken pioneered this technology, but, without any presence in the South Asia market, found it prudent to collaborate with Tata Steel to form the joint venture, Tata Timken. Such alliances basically bridge a business gap.

Many companies are being coaxed to build strategic alliances to penetrate Europe, given the attraction of emergence of a single market by the end of 1992 [15, 16]. As companies maneuver to capitalize on opportunities, an alliance is perceived as providing both defensive and offensive strategic possibilities.

2. Indo–US alliances

While current Indo–US cooperation in business and industry dates back to the 1960s, the majority of collaborations between American and Indian companies were established in the 1980s. Although many collaborations are technical in nature, and limited to sharing of design and drawings, or licensing arrangements, several US companies have invested in India with the objective of increasing their production base. Table 3 identifies the US share of the total foreign investment in India. US companies have secured the largest number of approvals for new collaborative projects in India, sharing their technology, expertise and capital. Table 4 indicates the total number of collaborations approved with US companies in India in the years 1987–89. Indo–US collaboration up to 1986, classified by nature of collaboration, is given in Table 5, and classification by industry/product categories is provided in Table 6.

TABLE 3. Foreign investment in India

Year	Total (millions)	US (millions)
1987	Rs 1077 (\$82·8)	Rs 295 (\$22·7)
1988	Rs 2381 (\$149·84)	Rs 971 (\$60·68)
1989	Rs 3166 (\$189·05)	Rs 621 (\$37·11)

Source: Indian Investment Center.

2.1. Types of Indo–US collaboration

Foreign corporations are allowed to collaborate with Indian businesses in three basic ways: (1) licensing of technology where no equity capital is involved; (2) joint venture with foreign equity capital; and (3) outright purchase of technical know-how in the form of design and drawings. Beyond these arrangements, other forms of collaborations are rarely, if ever, permitted by the Indian government. Franchising generally does not exist,

TABLE 4. Number of foreign collaborations in India

Year	Total	US
1987	852	196
1988	926	191
1989	605	125

Source: Indian Investment Center.

TABLE 5. Types of Indo–US business collaboration (up to 1986)[6]

Year/Type[7]	Technical	Financial	Equity
Before 1960	—	—	5
1960–1964	5	9	8
1965–1969	2	2	7
1970–1974	10	5	12
1975–1979	33	4	7
1980–1984	237	72	10
1985–1986	59	26	2
*[8]	7	15	119
Total	353	133	170

Source: *Indo–US Cooperation in Business and Industry 1986*, published by the US Agency for International Development Mission to India (these are the most recent data available). See also Notes 6–8 at end of paper.

since Indian policy usually does not allow the use of foreign brand names for domestic sales.[3] Production sharing and risk service arrangements are uncommon due to government restrictions and the ready availability of trained professional and technical personnel in India. In fact joint ventures account for approximately 15–20% of all foreign collaborations approved by the Indian government.

Since some of these joint ventures and other arrangements are part of the overall strategic plan of the sponsoring companies, they qualify to be termed strategic alliances. Prominent partnerships of this kind are between leading US corporations and well-known business houses of India, such as: 3M and Birla, Tatas and Timken, Modi and Xerox Corporation, Poddar and Gillette, HCL Group and Hewlett-Packard, Whirlpool Inc. and TVS Group, and Digital Equipment and Hinditron Group, However, other lesser known companies have also joined hands to avail themselves of the benefits of strategic alliance: Bell South with TCIL, Fusion Financial Services with BEAL Corp., and RC Industries with Precision Carbide Tools Co.

2.2. Synergistic payoffs

Indian and American corporations enhance their marketplace leverage through synergistic payoffs

TABLE 6. Indo–US collaborations by industry/product categories (up to 1986)

Industry/product categories	Number of collaborations
Agricultural machinery	1
Boilers and turbines	12
Cement products	2
Ceramics	10
Chemical	108
Commercial/Office equipment	10
Drugs/Pharmaceuticals	28
Earthmoving/Construction machinery	9
Electrical equipment/Electronics	160
Food processing	9
Fuel	10
Glass	8
Hardboard/Wood products	2
Industrial instruments	13
Industrial machinery	120
Leather and leather goods	3
Machine tools	12
Metallurgical industries	43
Paper products	4
Rubber goods	15
Scientific instruments	8
Services	45
Soaps/Cosmetics/Toiletries	5
Telecommunications	18
Textiles	11
Transportation	14
Miscellaneous industries	140
Total	820

Source: *Indo–US Cooperation in Business and Industry 1986*, published by the US Agency for International Development Mission to India (these are the most recent data available).

in strategic alliances. These synergistic benefits arise out of the relative strengths of the partners. Some of these strengths are manifested in the macro-environment of the two nations. Other strengths could be attributed to the individual company's capabilities.

Usually Indian partners seek the benefit of technology available in the US, while their American counterparts like to achieve synergistic payoffs using the low labor cost in India (almost a ratio of 1:20). Tables 7 and 8 list advantages for both Indian and US allies respectively.

The benefits are so compelling that some US companies have, for the first time, agreed to form a joint venture. Timken has traditionally operated

TABLE 7. Benefits sought by Indian companies through US alliances

1.	Availability of the latest US technology.
2.	Worldwide information on technology and products can be obtained through the US partner.
3.	Exposure to large global markets.
4.	The ability to become part of a global supply network. Thus they obtain the benefits of large volume production, or a larger share with less downtime of machines, due to economic production.
5.	Piggyback on the US partner to sell abroad and earn export benefits. Otherwise, selling abroad is difficult for an Indian company due to the poor image of Indian products in foreign markets.
6.	Benefits of value-addition.
7.	Knowledge on 'hard' aspects of management, such as systems and processes. US companies have superior management systems for planning, operations and control.
8.	Higher credibility in the domestic market.
9.	The ability to develop an engineering culture with total quality consciousness and a market orientation.

TABLE 8. Benefits sought by American companies through Indian alliances

1.	Entry into the large Indian market. In some cases the joint venture route is the only entry mode permitted by the Indian government.
2.	Setting up a production base to serve South Asia, the Far East, USSR and Africa.
3.	Low labor costs make India a very attractive location for buy-back arrangements and out-sourcing.
4.	The availability of cheap raw materials and skilled manpower. India has the third largest pool of skilled and technical personnel in the world.
5.	Obtain synergy with the experience and local market knowledge of Indian partners.
6.	Capitalize on the goodwill of the Indian partner for government clearance and regular relationships.
7.	Avoid creating a future competitor out of an Indian partner. If US companies did not collaborate, the Japanese would, and could further undermine the US position in world competition.

in foreign countries through wholly owned subsidiaries. The Indian venture is the firm's first collaborative establishment (50–50 partnership). Also, 3M Co. operates in most other parts of the world primarily through wholly owned subsidiaries, but in India 3M–Birla is a joint venture corporation.

3. Strategy, structure and purpose of some Indo-US alliances

In this section we will discuss three cases where strategic alliances between Indian and US companies have been forged.

3.1. Tata Timken Ltd

In a joint venture between two giants, Tata Iron and Steel Company (TISCO) and Timken, the synergistic payoffs are quite obvious. Timken, being a world leader in tapered roller bearings, provides an ideal partner to TISCO, manufacturer of steel and steel products in India, because Timken is the only bearing manufacturer which also has a steel plant in the US. Quality steel is crucial for the quality manufacture of bearings. For TISCO, downstream product-mix is enhanced by the addition of tapered roller bearings in its portfolio which is in consonance with the business purpose of Tata Steel — "to be a profitable producer of quality steel and value-added engineering products".

The venture reflects TISCO's strategy to increase its presence in the global arena. The shortage of a global presence was also the main reason for Timken to look for potential countries where it could establish a competitive manufacturing base. TISCO realized the prowess of Timken, saw major non-monetary benefits in the alliance, and visualized that a long-term gain to the parent organization of TISCO would accrue through direct importation of a new engineering culture. Such a culture is consistent with the growth objective of the organization and would make TISCO more market oriented.

The choice of partner was governed by several other considerations. Though initially reluctant to disclose and share its technology, Timken agreed to collaborate because TISCO was perceived as the best company which could provide credibility to the new venture and could help in being accepted by customers, attracting the best personnel and obtaining the necessary government support. Also, the rapport TISCO had with its workers — the care for people, the long-term relationship and the philosophy of making enough money to pay one's employees — became a special attraction for being chosen as a partner.

For TISCO, on the other hand, the overriding consideration in favor of choosing Timken was its technology and the satisfaction that the tie-up would be with the best company in its field. TISCO also hoped that the exposure of its employees to such an organization would help enhance their own skills.

A big Indian market (about US$110 million in expected potential), with opportunity for future market operations in the whole of the Indian peninsula; a changing labor productivity scenario, coupled with a growing market in the South East Asia and Pacific region; protection of trademarks in India; permission to import its own manufactured machines; agreement on conditions with financial institutions; and discovery of a befitting local partner — these were reasons why Timken agreed to form the joint venture and share control with TISCO.

3.1.1. Management policy and structure

For Tata Timken Ltd (TTL), the mission was to be a product performance leader in tapered roller bearings. It therefore established a value system based on total quality, customer service and customer satisfaction. Obviously, the investment is both in technology and in training of personnel. Labor cost being a crucial element in competitive advantage (TTL labor cost expected to be 4% as compared to Timken, New York's 14% and their main competitor SKF-India's 12%), the investment in training of personnel is therefore of great value. The organization is also planned as a lean, flexible institution with a managerial approach of decentralized authority, recognition of people, sense of urgency and balance between speed and consensus in decision making.

Partners share control in the management of Tata Timken Ltd. Two nominee directors, including the CEO, belong to Timken and two directors are TISCO nominees. Since Timken is providing the technical know-how[4] and has had international experience marketing the product, manufacturing and marketing functions are responsibilities of the expatriate directors. Finance and human resources development are the direct responsibilities of the two TISCO nominee directors. TISCO's experience in dealing with Indian laws and regulations, and its proven ability in man-management, should complement the technical and marketing strengths of Timken. The emphasis, however, is on teamwork whereby this management committee jointly makes all major decisions in the organization.

In the first phase of manpower planning, several employees in Tata Timken Ltd were those on deputation from TISCO. Progressively the new organization selected and developed its own band of employees, helping to create a new unique culture and value system to fit a relatively lean organization. The effort is to effectively marry the viewpoints of the sponsoring parents and create a unique blended culture. At a full-strength employment of 549, only two classes of employees are planned: the officers and the operators. Maintaining a lean and nimble organization is the overriding management concern.

The free flow of communication is, therefore, most important. Frequently, formal meetings and dialogues, along with weekly operational committee reviews by four directors, are supplemented by informal, cross-functional discussions amongst employees. The company policy is to share all information with all employees, so that each person understands the organizational focus, visualizes his or her own role and is able to identify himself or herself with company goals.

Interestingly, the venture CEO could partly be considered an 'outsider'. Although nominated by Timken, the Managing Director of TTL is a Frenchman. It is not clear whether this was deliberately planned, but he himself feels that, being an outsider, he is better able to maintain the balance between partners. His role is 'integrative' — effectively managing the diverse perspectives of the cross-border partners.

At the top level, support of the Timken family and the chairman of TISCO provides the necessary impetus for the alliance to grow and strengthen. Management support in the form of resources and executive commitment of both partners is acknowledged. Although independence is accorded to the new organization, the initial costs of raising the 'child' are being borne to a great extent by both parents.

There are several problems encountered in this partnership. In the words of the TTL CEO, "the going is not always smooth". On several occasions officials feel frustrated. Lack of infrastructural facilities, poor communication link-up, dull responsiveness of suppliers of equipment, conservative policies of the government and sometimes differing perceptions of the partners have to be tolerated. Because the CEO feels that significant changes on both sides have occurred through interaction, they are now better positioned to understand each other.

Since the product-related capabilities of Timken and the human resource management abilities of TISCO provide the necessary synergy, each partner is eagerly learning to borrow these strengths from one another.

3.2. Modi–Xerox Ltd

As a leading business house in India the Modi group has a lot of financial power, necessary political clout, and experiences in many types of business, all of which Xerox thought would complement its efforts to establish a base in India.

Incorporated in 1983 with a project outlay of four million rupees[5] (initial capital equity one million rupees and 40–40 partnership promoters), Modi–Xerox is a strategic joint venture between Modi Rubber Ltd of India and Rank Xerox UK, a subsidiary of Xerox Corp., USA. For Xerox, this is the second major global alliance. After the successful experience of allying with Fuji of Japan in a 50–50 partnership, Xerox Corp. accepted the proposal of Modi Rubber Ltd to collaborate in India.

The attraction for Xerox was not only the large Indian market, but also that this alliance could partly fulfill its ambition to become a leading world company and improve its ranking among world corporations. The attraction of the Indian operations was enhancement of market share, global presence and the possibilities of achieving cost leverage. India is also an ideal location to serve West and South Asia and the former USSR markets.

Modi had multiple reasons to approach Xerox for a collaboration. As a part of its strategic plan, the Modi Group of Companies was keen to enter the growing business in office automation equipment and a partnership was necessary to obtain the needed technology.

The strategy of forging a strategic partnership has had potential for several other spin-off benefits. The Modi group of companies has now become a part of the global network facilitating the adoption of managerial systems of an international company. In a sense, this was necessary because Modi had been known to follow the traditional Indian approach to management — autocratic and family managed (often termed 'Marwari style'). Attracting quality professional managers with the updated perception was difficult. Since then Modi–Xerox has achieved an image of total quality management and has developed a reputation for professionalism.

Xerox's strategy also included the offloading of low technology research to smaller organizations. In fact, the role of Modi–Xerox was similar to that of Fuji–Xerox — to produce office automation equipment to fulfill the needs of the low end of the market, providing synergy to the entire Xerox organization.

3.2.1. Management policy and culture

Managed by an Operations Committee of three directors, respectively nominated by Rank Xerox, Xerox Corp. and Modi, the company has established itself as the No. 1 reprographics company in India. The orientation on high technology has been borrowed mostly from the foreign partners. The critical success factors are identified as service, customer satisfaction and technology. Hence, employee training in total quality is a major area of emphasis. Understandably, therefore, the influence of Xerox worldwide training is visible in Modi–Xerox. Yet there are certain aspects of human resource management in the new venture that are unique and which other Xerox organizations are keenly learning. As in Tata Timken, Modi–Xerox emphasizes the selection of hardworking quality personnel. The organization promotes teamwork and cross-functional development by adopting a matrix structure. At the same time, teamwork is emphasized by the compensation plan in the company. All increments for employees are linked to customer satisfaction, which is regularly assessed by surveys.

A corporate culture of 'trust' and 'openness' is operationalized by extensive communication link-up and the desire to provide all information to all employees. The corporate theme of "Original sets the standard" reflects the company's vision and strategy to sustain its leadership position. Therefore benchmarks for goal attainment are in unison with Xerox Corporation's international plans.

3.3. Composite Tools (India) Pvt Ltd

As a 100% export oriented unit, Composite Tools is a joint venture between a young entrepreneur from India and a 20 year old, $12 million US company, Precision Carbide Tools. The company was established in 1984 with an initial capital investment of Rs. 100 000 (the US company having a 40% stake and the Indian partner a 60% share). Composite Tools manufactures precision carbide tools for electronic engineering applications such as drills and routers. The alliance is unique in the sense that the partners are currently not interested in serving the Indian market. The major focus is primarily to market the product in the US, Europe and Southeast Asian countries. Precision Carbide Tools, already engaged in this business, was interested in a low-cost production base to give the company a worldwide price competitive advantage. Because manufacturing of drills and routers requires highly skilled labor, automation is only partly possible. Since the labor component is approximately 50% of the total cost of production, manufacturing in India meant a substantial cost saving (as the cost of labor is almost 20 times greater in the US). The mutual dependency of the two partners is very high in this case since the US company's price advantage stems from the low cost of production in India. The Indian partner is dependent on its counterpart for equipment and spares. Marketing in the USA is the exclusive responsibility of Precision Carbide Tools. Although Composite Tools has the option to market on its own to buyers in countries other than the US, it has found it more advantageous to market jointly with Precision Carbide in Europe and Southeast Asia. The chief executive of Composite Tools feels that the alliance has given the company the latest technology, and the partners have kept it informed of other technical developments worldwide. Access to a big market like the US provides manufacturing leverage, while large volume production, along with economic order sizes, minimizes machine downtime for adjustments. Hence, capacity utilization is optimum.

3.3.1. Role of partners

Both partners have defined roles. The Indian company concentrates on manufacturing quality products, and the necessary training is provided by the US partner. Feedback on surrounding markets in Southeast Asia is given by Composite Tools, whereas overall marketing responsibility in the US and the Far East rests with Precision Carbide. Certain types of tools that are difficult to manufacture in the US are made in India, and in some cases the American company derives payoffs from the experience of modifying manufacturing processes that may be required to solve problems.

3.3.2 *Problems encountered*

The usual relationship problems arise, sometimes due to lack of appreciation of difficulties faced by other parties. For example, delays in remittances and in the delivery of goods are areas of concern for the US partner, while slow markets and not enough orders could be irritants for Composite Tools. An agreement that no decision of strategic importance would be taken by either party without personal meetings is an important way to resolve problems and maintain entente. Face-to-face communication helps to develop an understanding of each other's viewpoint. Moreover, an Operating Committee consisting of four people, a director and the Manufacturing Manager of Composite Tools, and Vice Presidents of Manufacturing and Marketing of Precision Carbide, meet at least four times in a year to review operations and plan for the future. Other meetings with a full team of the Board of Directors discuss strategic issues. Such strategic dependency on each other means that neither party can move independently and break the alliance.

4. Conclusions

The three cases examined indicate that in essence they are all strategic 'marketing' alliances since they all enhance marketplace leverage for partners. A variety of strategic benefits can be obtained from Indo–US alliances. Several other fields such as computer software, telecommunications, engineering products such as castings and forgings, automotive parts, health care and service industries have tremendous potential to provide strategic payoffs from Indo–US alliances. The ultimate success of these ventures would depend not on their legal agreements but on successful operations [15]. Ideally, the strength of one venture partner should make up for the weaknesses of the other partner. The American product technology and market experience complements the good quality, cheap, skilled manpower in India. Inherently, the Indian business culture is amenable to cooperative efforts and American companies can take advantage of this.

To make the alliance work, a spirit of trust, cooperation and integrity reinforced by a 'win–win' commitment of both parties is essential. Strategic and operational synergy are not difficult to achieve but the partners must be ready to address risks, to be committed to flexibility, and be willing to share control. Truly efficient decision-making structure can emerge from a free flow of communication. As labor is the key component of competitive advantage, investment in training of personnel is also essential. Good attention to operations planning, clarity of goal and role, teamwork, strong communication networks, proper personnel selection are some of the characteristics of successful alliances. In addition, top management support in the form of resource allocation and executive commitment, along with a team of 'champions' from each side, are key factors that make the alliance work. Integrative approaches of the venture managers are also critical. Lack of patience and insensitivity to others' difficulties may easily break an alliance, as the two cultures are different and cannot easily be married. After all, interfirm relationships are much like a marriage. They work when both partners do.

Notes

[1] Traditional joint ventures often fall short of becoming strategic alliances, especially when companies do not enter into them as part of an overall strategic plan but rather to deal with a specific problem, such as how to handle a single product or market. That is a tactical, short-term move.

[2] The strengths and weaknesses of the different forms of global organizations, such as multinational firms, global firms, international firms and transnational firms, are well developed in *Managing across Borders* [13].

[3] Some foreign companies have been allowed to use hybrid names, for example, '7 O'clock Ejtek' and 'Lehar Pepsi'.

[4] This is the only Timken plant world-wide which is to operate on the just-in-time (JIT) production principle.

[5] Indian currency (US$1≈Rs.31).

[6] Some collaborations involved all types, e.g. Financial and Equity or Technical, Financial and Equity.

[7] There are approximately 47 additional collaborations of the Trade/Service type which have not been included in Table 5.

[8] Dates not indicated.

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