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Changing Paradigms of International Entrepreneurship Strategy

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Abstract. This article identifies sweeping transformations taking place in the contemporary international business environment, and discusses their impact on international entrepreneurship. We focus on two overarching trends: (1) the demise of the nation-state as the relevant unit around which international business activity is organised and conducted; and (2) the demise of the stand-alone firm, with a hierarchic distribution of power and control, as the principal unit of business competition. We then discuss an alternate approach to internationalisation: one that involves a multi-polar distribution of power and control. Traditional approaches to internationalisation focus on the hierarchic centralised firm, with a uni-polar distribution of power and control. We suggest that the world is moving towards multi-polar networks of firms, involved in what we term symbiotic management: each entity benefits from working together within a multi-polar network. This includes large corporations as well as small and medium-sized enterprises (SMEs). As corporations out-source to specialised firms—increasingly SMEs—power and control are dispersed among independently owned firms that are cooperating voluntarily for increased efficiency and profit. The new paradigm moves from a focus on the firm, towards a focus on relationships within multi-polar networks. We conclude by illustrating how this emerging competitive paradigm may impact on the strategic management of small firms, with examples from a real-world company.

Keywords: International entrepreneurship, strategy, internationalization, paradigms, networks, competition.

Introduction

The global business environment is changing dramatically. Traditionally competition in international markets was the realm of large companies, while smaller businesses remained local or regional in scope. However, the removal of government-imposed barriers that segregated and protected domestic markets, and recent technological advances in manufacturing, transportation and telecommunications, allow even the smallest firms access to customers, suppliers, and collaborators around the world. Small companies and/or entrepreneurial enterprises—both domestically and internationally—are increasingly fuelling economic growth and innovation. These trends are transforming management strategies, public policies, and the daily lives of people around the world.

Globalisation is impacting dramatically on the opportunities and challenges facing business firms. Two changes, in particular, are revolutionising the management policies and competitive strategies of large and small firms alike. One is the demise of

the nation-state as the primary macroeconomic player, or the principal unit around which international economic activity is organised and conducted. The other is the demise of the stand-alone firm as the primary microeconomic player, or the basic unit of competition. We will discuss each of these transformations and then illustrate their impact, with reference to real-world examples.

Demise of the nation-state as the primary macroeconomic player

For centuries, the nation-state was the basic unit around which international economic activity was planned, organised, and conducted, regardless of the origin of firms. Even business activities that appear highly "international," such as traditional foreign direct investment (FDI), have been moulded strongly by the boundaries of nation-states. The *multi-domestic* model of FDI, for example, which has typified foreign investment by European multinationals such as Ericsson, Nestlé, Philips, and Unilever, manages highly autonomous subsidiaries, each conforming to local or national environments. The so-called *international* model, characteristic of the foreign involvement of many American multinationals such as Procter & Gamble, is a more ethnocentric arrangement, in which products and technology are generated mainly by the parent company, but with national subsidiaries in each major (national) market to produce the parent's products for that market. Many Japanese firms, including Komatsu, Matsushita, Sony, and Toyota, have followed a more *global* approach. In this model, production may be centralised—often at home—to achieve large production runs of standardised products, but the parent firm still retains a highly national orientation, in its structure and control. Traditional practice and traditional theories thus conform to the prevailing paradigm of the times, reflecting a macroeconomic environment in which international economic activity is moulded and constrained largely by the power of individual nation-states.

The trend towards supra-national powers

The traditional models of business involvement, in which business activity is organised largely around the segmentation of factor and product markets into distinct nation-states, is giving way to a new paradigm in which the firm—regardless of where the parent company happens to be based—will obtain various elements of value added from wherever in the world they may be most efficiently obtained, combine or assemble them in whatever location may be the most cost-effective, and then distribute them to wherever appropriate demand conditions exist, almost without regard to national boundaries. We see examples throughout the world of the decline in the segmentation of product and factor markets by individual nations as power evolves from nation-states to higher, supra-national units. This occurs in regional trade agreements such as the European Union (EU), where increasing degrees of power are shifting from the individual member nation-states to the pan-European level, as well as in broader international agreements such as the World Trade Organisation (WTO).

This diminution of national power, and its transfer to supra-national or global levels, has profound implications for small businesses and entrepreneurial firms. Primarily, smaller firms now have access to worldwide markets, which most could only have dreamed of a decade ago—as long as they can gain access to the requisite resources.

Reynolds (1997) noted that the recent expansion of markets has not been associated with an expanded role for larger firms. Instead, smaller firms are filling niche roles (Buckley, 1997). Later sections of this article will discuss how smaller firms may use collaborative arrangements—especially with larger firms—to springboard themselves into this new, largely borderless world.

The upward evolution of national powers to higher levels also means that firms everywhere now face global competition, without the domestic-market protection formerly afforded by national governments. Even if a small firm prefers not to enter international markets, it must achieve world-scale efficiencies in order to remain competitive and viable in today's open markets. New avenues by which SMEs may achieve these new efficiencies are discussed and illustrated below.

The integration of product and factor markets implies further that any firm operating outside of its domestic environment—or even one seeking to obtain world-scale efficiencies without leaving its domestic market—will increasingly need to interface with suppliers and customers in other national cultures. The firm can no longer operate solely within its domestic environment, nor can it de-centralise its activities into discreet national profit centres, in which managers often need be sensitive to a single local economy or culture. Therefore, managers of large and small firms alike will need intercultural awareness and skills as never before.

The trend towards localisation of powers

While economic power and sovereignty are clearly seen evolving from national to supra-national levels, we are simultaneously witnessing another important, albeit less obvious, diminution of the traditional powers of nations-states in the opposite direction: from nation-states to local or regional levels. This is especially true in the realm of political and cultural sovereignty.

This trend towards the fragmentation or devolution of national powers is most dramatically evident in the abrupt disintegration of the Soviet Union and the former Yugoslav federation. However, devolution of national powers—albeit on a more gradual and rational basis—is seen elsewhere as well, most obviously in Western Europe:

1. In the United Kingdom, significant new legislative and cultural powers are being decentralised to Scotland and Wales.
2. In Spain, the linguistic and cultural assertiveness of regions such as Catalonia, the Basque Region, and Galicia are becoming far more pronounced than before.
3. Despite the unification of East and West Germany, much greater local autonomy is devolving to the individual German *lender*, or states.

4. Even in France—long considered a bastion of centralised power in the nation-state—a new, semi-autonomous status has been granted to Corsica; and there is a notable resurgence of regional languages and culture, such as Languedoc or Provencal in the south, and Breton in the west.
5. In Canada, the Province of Quebec is enjoying greater cultural and political autonomy than ever before.

It is our belief that local and regional cultural distinctions are becoming more pronounced in the globalised economy, rather than less so. While the consolidation of economic power at increasingly high, supra-national levels may enable internationally oriented firms to achieve new productive efficiencies, the growing devolution of cultural and political sovereignty to local and regional jurisdictions means that large firms may need to rely increasingly on smaller, localised firms to achieve the cultural sensitivities they need for local adaptation, thus providing new niche opportunities for SMEs.

Demise of the firm as the primary microeconomic player

The profound change occurring at the microeconomic level is the demise of the company as the primary unit of competition. Management has long viewed the company as a "black box," a self-contained unit with clearly defined parameters, within which the various management functions take place. Emphasis has been on *internalising* value-added functions, to bring them more fully within the control of the firm's management, and on building walls around the firm to help secure the retention of its internal proprietary advantages from competitors. In the new paradigm, however, firms—large and small alike—are often incapable of acquiring and retaining control of the full range of value-added functions on their own. Increasingly, we see firms forming collaborative alliances with other firms—even with potential or actual competitors in the same industry.

Traditional internationalisation models

Traditional approaches to internationalisation focused on a uni-polar and hierarchic distribution of power and control. Internalisation Theory (Buckley and Casson, 1976; Rugman, 1979, 1981; Teece, 1985; Morck and Yeung, 1991, 1992) taught us that, by investing in its own foreign subsidiaries, a firm could expand operations, while maintaining control at head office. Likewise, the Eclectic Paradigm (Dunning, 1973, 1977, 1980, 1988) focused on ownership-specific advantages and location-specific advantages that a firm can enjoy, while maintaining centralised control.

A uni-polar scenario is implicit, as well, in the Stage Models of incremental internationalisation (Johanson and Wiedersheim-Paul, 1975; Bilkey and Tesar, 1977; Johanson and Vahlne, 1977, 1990; Bilkey, 1978; Newbould et al., 1978; Cavusgil, 1980, 1984; Cavusgil and Nevin, 1981; Buckley, et al., 1988; Bartlett and Ghoshal,

1989; Leonidou and Katsikeas, 1996). Internationalisation could be achieved without giving up power and control; the internationalising firm could maintain its uni-polar distribution of power and control, albeit at a heavy capital cost. Internationalisation, under this model was expensive because ownership and uni-polar (centralised) decision-making led to huge, integrated factory complexes. Iron ore entered a plant from one end, and automobiles drove out the other. Nowadays, even Ford has decentralised operations into a multi-polar structure. The factory where 100,000 employees used to produce 1,200 cars a day, is down to 3,000 employees making 800 cars a day, and this brings us to a new paradigm of international business through networks.

Network models

An alternate to the uni-polar paradigm of internationalisation assumes a multi-polar distribution of power and control. Rather than focusing on the internationalisation of an individual centralised firm with a uni-polar distribution of power and control, we can focus on a multi-polar network of firms. Power and control are divided among independent firms that cooperate voluntarily for increased efficiency and profit. Networks result in the demise of the stand-alone firm (with a hierarchic distribution of power and control) as the principal unit of business competition. Literature pertaining to this networking perspective includes Acs and Dana (2001); Axelsson and Easton (1992); Bodur and Madsen (1993); Brüderl and Preisendörfer (1998); Chetty and Blackenburg-Holm (2000); Coviello and Munro (1997); Dana (2001); Etemad et al., (2001); Fontes and Coombs (1997); Gomes-Casseres (1996); Gynawali and Madhavan (2001); and Holmlund and Kock (1998). As well, Stabell and Fjeldstad (1998) discuss reciprocal interdependence.

Examples of this move towards global alliances among large firms abound, from a variety of industries. In the airline industry, for example, Northwest and KLM used to be true competitors. Each tried to take away market share from the other; each used to advertise to encourage consumers to *select one over the other*. Marketing by one firm actually hurt the other firm: it was a zero sum game with a limited pie. Today, the former rivals engage in symbiotic marketing. By acting together, the two firms increase the attractiveness of flying *either* airline. In other words, it is no longer a zero sum game. We are no longer dealing with two isolated uni-polar firms, but with a multi-polar network—in this case an integrated interline product. People who otherwise would not fly decide to fly, thanks to the new convenience. In other words, symbiotic management yields an enlarged pie. It is possible, therefore, to play a non-zero sum game (Webster, 1992; Jarillo, 1993; Casti and Karlqvist, 1995; Zineldin, 1998). Leading alliances in the airline sector include the Star Alliance (14 airlines) and Oneworld (8 airlines).

Similar alliances among major firms in other industries abound. Examples include:

1. An alliance among IBM (USA), Toshiba (Japan), and Siemens (Germany) in electronics;

2. Another alliance in electronics among ATT (USA), Philips (Netherlands), and Olivetti (Italy);
3. An automotive alliance among Ford (USA), Mazda (Japan), Jaguar (UK), and Volvo (Sweden);
4. Another automotive alliance among GM (USA), Toyota (Japan), Daewoo (South Korea), and Saab (Sweden);
5. A network of alliances between Millennium Pharmaceuticals (USA) and nearly 700 partners. For a discussion of alliances in this industry, see Pangarkar and Klein (1998).

Even academic institutions have become networked. As competition has been increasing, for the recruitment of professors and students, schools such as E M Lyon and HEC Montreal have created partnerships. Perhaps most notable is the AEA Alliance, known as The Cross-Regional Business School. Its founding members are E M Lyon (France), HEC Montreal (Canada), Warwick Business School (UK), Universidad de Belgrano (Argentina), and Lingnan University College—ZSU (China).

The new paradigm of multi-polar competition

Relationships of one form or another have always been at the core of competitiveness. Increasingly, however, firms are finding that networks of relationships need not necessarily be "internalised" or controlled by direct ownership and internal hierarchies to be effective. What we are witnessing today is a shift in paradigm from traditional forms of collaboration, in which the locus of control lies in formal control through ownership and internal hierarchy, to newer forms of collaboration in which mutual control emanates from interdependence and mutuality of benefit. This represents a significant departure from the past tradition. In the newly emerging competitive paradigm, the unit of competition is no longer the individual firm; but rather, networks of firms collaborating interdependently for higher mutual benefit than their respective independent operations can yield. In this network-centred system, SMEs can specialise on a set of capabilities, competencies, knowledge, and skills much needed by the network, in order to generate higher benefits both to themselves and to their network partners than any of them could by operating independently. Each member of such networks—often regardless of size—would specialise on a different part of the value chain, which may be located in different parts of the world.

The alliance imperative for large firms

A rich literature has been developed on collaboration among large firms. Among the most prominent contributions are Doz and Hamel (1997), Forrest (1992), Gomes-Casseres (1994), Kanter (1994), Parkhe (1997), Stafford (1994), and the three-volume series edited by Beamish and Killing (1997).

There are several reasons why alliances are becoming not just a convenience, but also an imperative for large firms competing in the global arena:

1. *High fixed-cost threshold.* Formerly, companies could expand or contract freely by adjusting their variable costs—especially their cost of labour. However, the relative cost of labour to total value has diminished dramatically in many industries: labour now accounts for only 12–15% of the cost of producing electronic goods, for example; and the portion of labour to the total cost of a Japanese car has been reduced to only 10%. Increasingly, a minimum threshold of large fixed costs must be incurred if a company is to become a serious player on the world scene. These include major investments in plant and equipment, R&D, brand-name development, distribution systems, etc. Developing a new car model today costs $3–5 billion; a new aircraft some $7–10 billion. The magnitude of these costs and risks is often beyond the ability of large multinationals to absorb; alliances can share the costs and risks.

2. *Rapid product-life-cycle.* The increasingly rapid dispersion of technology requires swift access to major markets—especially those of the Triad (North America, Europe, and Japan)—before a firm loses its proprietary advantage. Yet, few if any of even the largest firms can achieve instant market presence in all the triad areas on their own. The urgent need for speed to markets dictates reliance on others.

3. *Need for related technologies.* Complex systems today often require the fusing of technologies across industry lines. IBM, for example, uses Lotus for software, Microsoft for operating systems, and Intel for chips. Similarly, technologies from the computer, telecommunications, and entertainment industries are fusing across industry lines. Access to related technologies increasingly requires collaborative linkages with other firms.

4. *Global standards.* Increasingly, rival technologies vie for adaptation as the world standard. An early example was the rivalry for a worldwide VCR standard among Matsushita, Philips, and Sony, each with its own format. Although it originally lagged behind Sony and Philips, Matsushita was able to achieve enormous cost economies—and consequently to get its VHS format accepted as the world standard—largely through collaborative arrangements with other firms (including the U.S. subsidiary of Philips!). A current example is the struggle to establish a worldwide standard technology for high-definition television (HDTV). By allying with other firms, even competitors, a firm may enhance the likelihood of establishing sufficient market presence to become the accepted world standard.

The alliance imperative for small firms

For small firms, perhaps even more than for large ones, partnering with other firms through various forms of collaborative arrangements is becoming imperative:

1. SMEs often lack the resources for gradual, "stages" progression into the international arena over time; particularly within a time frame needed to exploit increasingly short-lived proprietary advantages.

2. SMEs need to achieve world-scale efficiencies even if they are not entering world markets, to withstand new competition from abroad.

As a consequence of these new imperatives, small firms are benefiting increasingly from mutual interaction with other small firms. This is documented by Bartels (2000); Chetty and Blackenburg-Holm (2000); Coviello and Munro (1995, 1997); Holmlund and Kock (1998); Perrow (1992); Sadler and Chetty (2000); Welsh et al. (2000).

A typology of networks

To facilitate the illustrative discussion that follows, we suggest a typology of networking:

- *Horizontal networks*, which transform competitors into allies
- *Vertical networks*, integrating buyers and suppliers
- *Trans-industry networks*, which relate or connect otherwise unrelated value chains.

In the following section we shall discuss the experience of a small firm as it entered into these different types of networking arrangements.

Changing strategies in response to changing economic variables

We have noted a trend towards larger units both at the macroeconomic level and at the microeconomic level. Both the state and the firm have yielded control, in exchange for the advantages inherent in being a part of a larger entity. Simultaneously, at both the macro and micro levels, there is a trend towards greater specialisation and local expertise. Governments feel increasing pressure to delegate political and cultural powers to local jurisdictions, while firms benefit from increased focus and specialisation in their business activities.

In this global environment, the firm faces unprecedented opportunities and complexities. On the one hand, networks allow a firm to compensate for its deficiencies in size and factor endowments by linking existing resources in networks that also allow for an acceleration of growth and international activities, without the heavy capital expenditures that were required in former times. As well, outsourcing allows for delegated management. A paradox, however, is that while networking gives rise to opportunities for delegating management, this is only efficient when an appropriate management framework is in place. This translates into increased managerial complexity, in order to benefit from less complex management. Thus, resource complementarity is a competitive resource, but only when managed appropriately.

Why is network management so complex? Simply because there are more alternatives. Under a uni-polar structure, a firm could employ a single, integrated

international strategy. In networks, differentiated strategies may be needed for dissimilar situations:

- Dealing with a small firm in the same network
- Dealing with a large firm in the same network
- Dealing with a small firm in a different network
- Dealing with a large firm in a different network
- Dealing with a different network, and perhaps joining it.

We shall now illustrate these new opportunities and constraints, by focusing on a family business that successfully transformed itself, in response to the changing environmental factors discussed above. We shall begin with a background to the firm—Sicoph S.A.—and then discuss how the company once operated in a compartmentalised uni-polar environment. We will then proceed to illustrate how the firm readjusted its structure and policies to benefit from the advantages of multi-polar collaboration: what we call symbiotic management. A network orientation caused a complete restructuring of the firm's financing, marketing, and strategic posture.

The uni-polar operation of a family business

The origins of Sicoph go back to the early 20th century, when its predecessor was a centralised trading operation, with no production facilities. The enterprise was completely based on arbitrage. If there was a drought in Nation X and a surplus in Nation Y, the entrepreneur—Leone—would transfer produce and merchandise from Y to X. Leone was an owner-manager, and his competitive advantage was his knowledge of prices and markets. He understood where and when to buy what, and where and when to sell. At the time, search costs were high, and information was valuable. Born in 1885, fluent in several languages, and well-travelled, Leone was a popular socialite and philanthropist, he knew many people, he had countless contacts and his knowledge was a great asset. World War II, however, threatened all of Europe.

During the war, Leone relocated his family business to Cairo—away from the wartime activities. Much business was done with the Allied Forces in Egypt, which needed to feed and supply their men. Leone would source sheep in Libya and have them walked to Egypt. He consulted with his brothers Raphaelo and Josebe and it was suggested that if the family could raise some food locally, it would save them importing it. Leone's eldest son subsequently established a chicken farm. The problem now was where to get chicken feed, in the middle of a war. Importing the grain was a problem because of exchange controls. To import feed, the entrepreneurs were required to export at least the equivalent of what was imported, in order to obtain hard currency. Hence, they exported Egyptian cotton, cloth, and fruit, and were able to obtain plenty of chicken feed. Leone also became distributor for

Packard automobiles, in Egypt; however, the war disrupted a shipment of cars, and these arrived only after the war.

In time, Leone's sons took over the family firm. One of them had gone to school at Victoria College with King Farouk, and the family developed good relations with the palace. This was good for business, until Farouk was forced to abdicate, and Alberto, the elder of Leone's sons, was forced to leave Egypt on short notice. He followed Farouk to Italy and set up a branch of the family business. When he subsequently expanded to India, Switzerland, Spain, and Canada, internationalisation of his enterprise was based on a traditional, uni-polar and hierarchic distribution of power and control. However, the heavy capital expenditures involved in owning overseas operations limited the firm's internationalisation. Larger firms could set up, own and operate production facilities in many nations; smaller enterprises were restricted to activities in fewer nations.

Alberto's brother Clemente remained in Egypt where he prospered in business until 1956, when he was imprisoned for being a British sympathiser during the Sinai Campaign. Although his firm and assets were nationalised without compensation, his entrepreneurial spirit was not extinguished. Instead, he became a key player in the development of a market among the detainees. He traded Red Cross food rations, and cultivated relationships with sellers as well as with buyers. Prices fluctuated with supply and demand inside the prison. Clemente began to store supplies of food, and this allowed prices to stabilise. When he was released and exiled, in 1957, he went to Paris and launched Sicoph. He kept in touch with others who had served as prisoners of war with him, and this helped him develop business networks later on. Soon, he expanded to Hong Kong, where sourcing was less costly than in Europe. As was the case with his father's firm and with his older brother's business, internationalisation was based on a uni-polar and hierarchic distribution of power and control.

Sicoph became involved in the production and international marketing of cameras, chairs, sporting goods, furniture, and shoes. Yet, in the context of the uni-polar structure, in a nation-state that was the primary economic actor, the strategic options for Sicoph were very limited. A company spokesman told the authors:

> Given these external constraints, it was very easy for us to have a single, standard expansion strategy, which was applicable in almost any situation. The prevailing belief was that ownership was an absolute necessity, in order to have control. In Romania, where ownership was a complex matter, we entered a joint venture.

Internationalisation was gradual, in line with the Stage theories, as growth was limited by financial constraints. Soon, this would change, as networks would allow expansion without additional investment. Outsourcing would result in delegated management, and accelerated growth would be possible through resource complementarity.

Towards multi-polar networks

Sicoph's policy shift from internationalisation through direct ownership, towards decentralised alliances, was summarised succinctly by a senior manager:

> In response to the changes taking place in the international business environment, our strategy at the firm level had to adapt accordingly. We could no longer use our generic "one solution fits all" strategy. We needed one strategy for horizontal networks, another for vertical networks, and we had to consider trans-industry networks. In the past we had to own everything in order to control it. The new environment allowed us to achieve more effective control by not owning. In Romania, for example, we withdrew from the joint venture and subcontracted to the same factory. Suddenly, the production per hour increased and sick days were reduced. The quality of the product increased and we could sell it as a premium brand, which we couldn't do before. This was very unexpected for us, because the traditional theory said that if you owned, you knew what was happening. Yet, we became more profitable when our former workers were given greater incentives.

This quote corresponds to a passage in McMillan (2002): "The best way to motivate creative people is to give them a stake...This means using a decentralised system." (p. 157)

The firm thus moved away from direct ownership as the means of internationalisation. The ownership structure changed, as preference shifted from a corporate strategy involving FDI, to one of networking. The new path to internationalisation was, in the words of a Sicoph manager:

> ...to link up with firms who needed us as much as we needed them. The fact that they depended on us was the guarantee that they would work properly. The strength of any one of us was limited to the weakest link among all of us. This was a very powerful motivating factor, which increased quality and reduced the number of factory seconds that were sent back by the stores...

Commenting further on the company's response to the new competitive paradigm:

> We used to own five companies to operate in five geographic regions, on the assumption that geography (nation-states) was the way of segmenting markets. Then we realised that it was better to have five independently owned firms with each one having a specialised niche, with no geographic limits. Rather, each of the five serviced the world market for a specific good.

Sicoph had previously distributed cameras, chairs, sporting goods, furniture, and shoes across France. A sister company, Wicotrade, was responsible for the distribution of cameras, chairs, sporting goods, furniture, and shoes across the

United States. Another sister company, Omnidiffusion, had a similar mandate for Canada; while still another, Diana Diffusion, focused on China. In other words, the family business was structured and defined largely by the boundaries of nation-states. Within a few years, this changed dramatically. Each of what had been five nationally focused subsidiaries began to focus instead on producing a single product line for the world market, in collaboration with the other four. As well, the ownership structure changed as each subsidiary became locally owned.

As the nation-state lost importance and the individual firm lost relative power, Sicoph dropped its lines of cameras, sporting goods, furniture, and shoes. It decided to focus on chairs, for the global market, and it engaged in symbiotic management in order to network with the other four firms. The company prospered: multi-polar, symbiotic management within a network proved to be more efficient than had been operations under a uni-polar model. Horizontal networks linked the resources and competencies of firms, which might otherwise have been competitors. Vertical networks integrated buyers and suppliers, and trans-industry networks brought together otherwise unrelated value chains. As firms found themselves serving the European Economic Community, and later the EU, rather than France, it became increasingly interesting to appear large. How could small firms appear like large players in the larger playing field? By working together and bidding together, for deals that none could win alone. Rather than compete with its German equivalent, Sicoph could network with like firms; together, they could produce sufficient quantities to win large contracts. A Sicoph executive explained:

> We started out very misguided, because of the texts we used in our MBA class. These led us to believe that we could run our small firms with the same strategies we had learned in the business case studies of large corporations. But soon, we realised that by operating alone, we could never deliver the massive quantities required by the big buyers such as Macy's and Bloomingdale's. Only in networks could we succeed.

In other words, **horizontal networks** transformed competitors into allies, and symbiotic management resulted in a win–win situation. Horizontal networks allowed the realisation of formerly unattainable economies of scale; bulk purchasing reduced costs; and network members gained market power, as well as access to otherwise expensive technology.

Likewise, the firm entered **vertical networks** resulting in integration with retailers (buyers) and suppliers. The vertical networks facilitated market research, and provided better access to raw materials.

As well, when a Sicoph representative went to visit a client, he also represented deBotton, producers of unrelated goods that were distributed by the same retailers. Such **trans-industry networks** saved costs, provided a more complete product line, and resulted in a better market presence when selling to large buyers.

Symbiotic management, in networks, thus allowed Sicoph to optimise competitive advantage by linking its resources with those of others. At the firm level, differences

in factor endowments were compensated through network participation. Sicoph executives met with another 100 small firms in Melbourne, Florida in the summer of 1983, leading to the creation of private label sporting goods for what came to be the Athletic Dealers Association.

The production function within Sicoph's system was dramatically restructured, phasing out the formerly used concept of national-market compartmentalisation. Instead, the firm focused on product specialisation. Expansion strategy was redesigned such that entry into new markets was no longer dependent upon ownership. Paradoxically, the new strategy of symbiotic management, with its multi-polar control structure, provided more effective control than had been the case with ownership. Marketing in networks significantly reduced selling costs. Even finance was restructured to benefit from banking networks. Simultaneously, Sicoph benefited from new technologies. Transaction costs were lowered via the Internet, which reduced the cost of acquiring information. Previously local or regional markets became global. One executive summarised the shift in Sicoph's management strategy as follows:

> We coped with increased managerial complexity by delegating to network participants. This was more efficient than burdening ourselves with elaborate management structures. It was important to maintain a spirit of entrepreneurship.

Conclusions

The strategic alternatives facing small firms have changed, and businesses must recognise that spatial constraints, based on the geography of nation-states, are no longer significant barriers to internationalisation. This article has explained how the demise of nation-states and individual firms has led to international multi-polar business networks. We have discussed collaborative imperatives as they relate to small and medium enterprises, and we have provided a summary of ideas about networks and value chains.

It used to be sufficient to think of individual value chains. As these were either horizontal or vertical, this could be conceptualised along two dimensions. Nowadays, trans-integration causes the collapse of specialised elements of a value chain, resulting in larger units. This is due to several factors, including economies of scale and comparative as well as absolute cost advantage. The result is a systems unit, as opposed to a simple value chain.

These sea-changes in the global business environment have far-reaching implications for business managers, public-policy formulators, and researchers alike. Changes at the macroeconomic level will necessitate strategic changes at the microeconomic level. While differences in resource endowments can be compensated by symbiotic marketing (Etemad et al., 2001), and network membership (Chen, 1996), networking also increases managerial complexity (Dyer et al., 2001; Pangarkar and

Klein, 2001). To cope with increased managerial complexity, firms will need multi-prong strategies to handle the different sets of scenarios introduced above:

- Symbiotic management with an ally in the same network
- Competing with a rival in a different network
- Dealing with a different network, and perhaps joining it.

Implications for managers

The essence of the emerging paradigm is that preferential treatment, when reciprocated, reduces transaction costs and provides the key to survival and long-term profitability. Gone are the days when everybody could expect equal treatment and equal pricing; it is important that managers take note of this.

The economic environment facing organisations is becoming increasingly dynamic and complex, transcending traditional geographic and political boundaries. Consequently, organisations, including SMEs, must face the reality that they must now compete on a global stage, regardless of where they are based. For some entrepreneurs and small-business managers, this reality may be a daunting one, because traditionally organisations have focused on uni-polar management, in which resources and control were retained largely within the individual company. SMEs are no longer faced with insurmountable barriers to internationalisation, perpetuated by larger and more-established firms. Business organisations—both large and small—are moving towards a multi-polar distribution of power and control, focused on the development of networks. While this provides new opportunities for SME managers, it also adds new complexity to their tasks. The "old and the proven" methods may no longer work, as the conventional economics of competition, mainly based on the models of the firm-type economy, is largely incapable of capturing the newly emerging paradigm of global competition based on relationships, customisation, and collaborative alliances.

Entrepreneurs and small-business managers will need dramatically different strategies to compete successfully in the multi-polar world economy. They will need world-class efficiency in order to survive, and for many the means to achieving that efficiency is by symbiotic networks. Above all, they must reorient themselves and their firms from their traditional models of competition of the firm-type economy, based on centralised control and stand-alone competition, towards competing by collaborating. Just as a focus on the product gave way to a focus on the market, the emerging paradigm involves a focus on symbiotic management within networks.

New skills will be needed to manage relationships and networks—with suppliers, with customers, and with other firms. Entrepreneurs will need to develop ways to identify network-based opportunities for developing the capabilities and acquiring the specialised resources needed to compete in today's global marketplace, and to understand their own strategic value in the context of networks as an interdependent, as opposed to an independent entity.

Implications for public policy

With the accelerating transfer of powers from nation-states to both larger and smaller units, the nature of public policy-making and regulation has changed. Increasingly, relevant powers and control are evolving from the national level to both supra-national and local/regional levels. Public-policy leaders will need to decide on the optimal degree of governmental policy and regulation, as well as the appropriate level at which to locate those powers, in order to provide the most suitable environment conducive to internationalisation without excessive regulation, which may hinder growth.

This new environment also calls for increased cooperation among the different levels of government, if they are to create an environment that will foster entrepreneurship—an environment in which entrepreneurs will easily identify networks and participate in them.

Implications for future research

Given the above discussion, we suggest that future research on entrepreneurship and international business should reflect the context of networks rather than focusing solely on the firm or the individual entrepreneur. Specifically, we would like to encourage the following:

- Clarification of the domain of international entrepreneurship, relevant theories and constructs
- More research on the nature and variation of public support for entrepreneur initiatives at various levels of government
- Research reflecting the context of networks, rather than focusing solely on the firm or the individual entrepreneur.

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