

**Rivalry Through Alliances: Competitive Strategy
In the Global Telecommunications Market**

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By

Sylvia Chan-Olmsted, Ph.D.
Department of Telecommunication
College of Journalism and Communications
University of Florida
Gainesville, FL 32611
chanolmsted@jou.ufl.edu

And

Mark A. Jamison
Director of Telecommunications Studies
Public Utility Research Center
Associate Director, Business and Economic Studies
Center for International Business Education and Research
University of Florida
Gainesville, FL 32611
jamisoma@ufl.edu

Since the early 1990s, Europe and the United States have witnessed multiple mergers involving leading telecommunications companies. The marriages of AT&T with TCI and Media One, MCI with WorldCom, and Vodafone with Mannesman set the stage of a rapidly changing global telecommunications market as players such as British Telecom (BT), AT&T, and DoCoMo acknowledged their plans to build competitive advantages in the world market through combinations with other companies. Other strategic partnerships between major telecommunications operators from North/South America, Europe, and Asia are forming almost daily, although the pace has slowed since the decrease in telecommunication and Internet stock prices tightened capital markets in late 2000 (Rosenbush, 2001).¹ The trend toward alliances goes beyond the traditional wireline telecommunications sector. We are also seeing mergers between major wireless players such as Vodafone and Airtouch, between old and new media companies such as Time Warner and America Online, and between old and new network companies such as US West and Qwest. We are also seeing partial equity investments in leading e-commerce software makers such as Debis by Deutsche Telekom, and online joint ventures in Internet access services between companies such as MCI WorldCom and Yahoo. The nature of competition today in the global telecommunications industry seems to center around market activities that aim at gaining competitive advantages through strategic combinations of resources and presence in multiple products and geographical areas.

This study is the first and the qualitative section of a two-part strategy research project that examines the state of the global telecommunications market and assesses the

business factors and environmental variables (e.g., country/region economic profiles, political systems, and regional alliances) that influence the strategic directions of the firms in the converging global telecommunications market. Specifically, this paper investigates the forces that have contributed to the globalization of telecommunications services, the major telecommunications strategies and strategic alliances in the global telecommunications market, and the factors that might have contributed to the outcome of these alliances.

The Converging Global Telecommunications Industry

The drivers of growth for the telecommunications industry are the expansions of both its products and geography. Once a geographically bound voice transmission service provided over specialized wire-based networks, telecommunications is now part of a worldwide, integrated communications system in which voice, data, and video are transmitted and transformed over integrated wire and wireless networks connected by network and customer devices. This integration redefines markets and products and changes how companies compete.

Convergence of Telecommunications Products: Competing by Connectivity and Functionality

With the convergence of four previously distinct industries: telephone, mass media (print, broadcast and cable), consumer electronics, and computing, the new multimedia, information industry provides products that mix and match four basic

components -- customer devices, networks, network devices, and content/software. Customer devices are the devices such as telephones, PCs, and televisions that customers use to receive, send, and interact with information. Networks carry information from one place to another. Network devices, such as Internet host computers and voice mail hosts, process and store information for customers. Content/software refers to the electronic information and intelligence that customers use. Examples include databases, music, videos, portals, and TV programs (Colombo and Garrone 1998; Jamison 1999b). Table 1 illustrates the unilateral nature of traditional telephone, television, and data processing services and the multilateral nature of an integrated product such as TV/Internet services in regards to the four components (see Table 1).

Convergence changes dramatically the role of the existing telecommunications companies such as AT&T and BT. Instead of being geographically based and hardwired for voice service, they now compete on the basis of coverage (e.g., MCI WorldCom's local-to-global-to-local strategy) and functionality (e.g., Nippon Telegraph and Telephone's (NTT) multimedia features) (Jamison, 1999a). Thus, the degree and quality of access and the variety and differentiation of features are becoming the strategic focus of many telecommunications multinationals. Coverage and functionality are interrelated because of network effects: Network providers become more attractive to customers when they are able to deliver a critical mass of connected customers and content providers/packagers, and visa versa. The critical mass, in turns, allows the network providers to exploit scale economies and develop and market viable features that make the network more valuable for these customers.

While connectivity and functionality are becoming the basis of competition, means of transmitting and switching communications are becoming increasingly substitutable, creating pressure for price competition. Sappington and Weisman (1996) and Huber et al. (1993) describe how cable television networks, satellites, fiber optics, copper wires, cellular and PCS mobile radio, and numerous other networks are substitutable for some services. Broadcast, circuit switching, and various cell-based technologies, such as packet switching, are also substitutable for some services. For example, some credit card verification services and airline reservation services have moved from using telephone networks to satellite networks. Some alarm services have moved from using telephone networks to wireless systems. In some countries such as Finland and Italy the number of mobile telephones exceeds the number of wireline telephones (Italians fall in love, 1999). As voice over the Internet is growing in popularity, customers are substituting e-mail and voice over the Internet for voice telephone calls over traditional networks.

The converging product market becomes even more complex when the historically separated media product is integrated into the wire or wireless network (Pearce, 1998). The growth of media markets began with the issue of media accessibility, which is similar to the building of telecommunications network infrastructure. We do not normally see much overlap between these two markets at a country's early stage of development because the traditional telecommunications infrastructure is wire-based and conventional mass media are either over-the-air or print-based.

The path of convergence begins as a country moves beyond the building of basic telecom infrastructure and media accessibility (see Figure 1). As the telecom sector

increasingly focuses on providing better quality, pricing, and variety of services, the media sector moves toward alternative content delivery systems like cable, satellite, and telephony. Gradually, the overlapping area becomes greater as some traditional network service providers choose to improve its functionality by offering “content” products and some media companies get into the distribution system business to increase efficiency and/or access to customers (Colombo & Garrone, 1998).

Globalization of Telecommunications Services: Competing under New Rules, New Technology, and New Demand

An industry can be defined as global if there is some competitive advantage to integrating activities on a worldwide base. Liberalization, privatization, and a series of international reciprocal agreements have unleashed industries which had been held to traditional boundaries that were nearly 100 years old, and initiated new rules that have created a favorable environment for globalization. Technological development, customer demand, and multilateral competition (Jamison, 1999a) in the new converging market are pushing further the strategic importance of globalization.

Liberalization and Privatization

The liberalization of foreign service markets and the privatization of many historically state-owned telecommunications systems are probably the two most significant changes in the global environment of the telecom industry in recent years. While the opening of markets means new business opportunities for some, it also

translates to greater competition and possibly lower profits for many incumbent telecom service providers (Oh, 1996).

The extent of liberalization and privatization is widespread. Telecommunications privatizations amounted to almost \$160 billion between 1984 and 1996, most of which were in the Asia-Pacific, Americas, and Western Europe regions (Raphael, 1998). As of 1999, 70% of the countries in the region of Americas have privatized their national telecommunications operators. Europe (55%) and Asia-Pacific (46%) are the other two regions that have sped up the pace of privatization (ITU, 2000). Americas (36%) and Europe (39%) have also seen the highest percentages of countries that allow competition in basic telecommunications service, followed by the region of Asia-Pacific (23%) (ITU, 2000). Many countries, especially those in the European region, now even allow foreign entities to own a majority interest in facilities used to provide international voice and data services (see Table 2). As a result, there have been an increase in the number of new entrants providing telecommunications services. Table 3 shows the numbers of new entrants providing telecommunications services at the top ten foreign markets by teledensity (the number of telephone lines per inhabitant) and by revenues. Most of these markets have seen dramatic increases in the numbers of new entrants with markets like Hong Kong, Japan, and Canada surged as high as 1375, 365, and 213 % from 1998 to 1999 respectively (International Bureau, FCC, 2000).

Liberalization and privatization also create new strategic challenges for traditional telecommunication companies from developed countries. Many of the new market opportunities are in developing countries, which lack strong, stable legal and regulatory institutions and have business practices unfamiliar in most developed countries. As a

result, companies from developed countries have to adopt entry strategies that allow them to acquire local expertise and that decrease the probability and cost of expropriation of investment. Such strategies include selecting projects with fast payback, selecting well-connected local partners, and entering markets through alliances rather than through direct investment. (Levy and Spiller, 1996; Oh, 1996; Whalley and Williams, 2000; and Henisz, 2000)

International Reciprocity

The impact of liberalization and privatization of many telecom services in the global market is enhanced further by the recent reciprocity agreement in this industry (Guy, 1997, Flanigan, 1997, Cobhey, 1998). The implementation of the World Trade Organization (WTO) Basic Agreement on Telecommunications and the 1997 FCC Benchmarks Order, which substantially reduced the settlement fees that U.S. carriers pay foreign companies to complete calls from the U.S. (These fees had been set under an international settlement system to compensate countries for handling each other's traffic and for any imbalance in the volume). Before the Benchmarks Order and the WTO Agreement in 1996, the average price of an international long distance call originating from the United States was 74 cents per minute. By 1999, it fell 25% to 55 cents per minute (FCC, 2000). In some parts of the world, fees already have plunged as much as 80 percent (Reinhardt, et al., 1999).

Technological Development

Technology change also drives the globalization of telecommunications. It has altered not only the types of telecommunications services available but also the industry's operation/production cost structure, demands from its clients, degree of product substitution, and ability in attracting capital investment. Technology change often lowers prices and creates higher demand for both consumer and business services, thus facilitating the growth of the telecommunications industry in the domestic as well as global market. Furthermore, technology is enabling the dismissal of time and distance and re-orienting telecom pricing toward a volume or bandwidth principle. For example, distance means nothing for Internet communications and is losing its meaning in mobile communications, where most US companies offer nationwide calling.

Growth of Demand from Multinational Corporations (MNCs) and Multilateral Competition

As the environment of the telecom market continues to change, the nature of demand for telecom services has changed as well. MNCs are demanding better communication services to connect their expanding local branches. In fact, telecommunications companies are destined to operate globally as they respond to the continuous growth of multinational corporations, which increasingly command worldwide, integrated, and seamless communications networks. Finally, the increasingly blurry industry boundaries signal a trend toward multilateral rivalry and collaboration as competition in one industry or in one area spills over into another (Greenstein and Khanna 1997; Jamison, 1999a). Research has shown that multilateral competition in related product markets globally is related positively to firm performance (Geringer,

Beamish, & daCosta, 1989). It was suggested that an international diversification strategy outperforms that of product diversification alone (Sambharya & Hand, 1990). Kashlak and Joshi (1994) have specifically observed the emerging trend of telecom companies venturing into both product and international diversification.

Globalizing Telecommunications Services: The Strategic Alliance Approach

A telecom company has two distinct choices to pursue growth in the global market. It can either enter directly by building the product/service offerings with its own resources in the target country, or it can collaborate with other firms (Joshi, Kashlak, & Sherman, 1998). The “new entrant” globalization strategy gives the telecommunications firm the freedom of choice in markets and technologies. However, it is a slower and more costly process, inevitably lacks initial brand name recognition, lacks local political and business expertise, and increases risk of expropriation of investment. This approach is especially undesirable where time and speed are critical and where resource commitments in a particular market, segment, or technology might be too risky a pursuit for a company by itself, as in the case of the global telecom market (Poshi, Kashlak, & Sherman, 1998). A telecommunications company may also enter a target market through a strategic alliance relationship with other firms. The phrase “strategic alliance” has been used very frequently in the news reports of today’s telecommunications industry. A strategic alliance is a business relationship in which two or more companies, working to achieve a collective advantage, attempt to integrate operational functions, share risks, and align corporate cultures. The degree of strategic alliances may range from a simple licensing agreement, to joint marketing effort, to establishing consortium, to combining resources

for joint ventures, to the ultimate form of mergers and acquisitions. Companies may be interested in alliances to capitalize on different expertise, build strategic synergies, mitigate risks, speed up a venture with combined resources, and develop scope economies (Chan-Olmsted, 1998).

Strategic Patterns of The Telecommunications Multinationals:

Competition through Alliances

To explore the strategic patterns of the major telecommunications companies in the global market, we subscribe to the generic strategic taxonomy for analyzing industries and competitors proposed by Porter (1980) and the Delta model, an adaptive strategic management framework that is especially appropriate for studying firms' competitive behavior in a complex, uncertain market environment, as in the case of the converging global telecom industry (Hax & Wilde, 1999).

Porter suggested that most competitive actions fall into one of the three generic strategies: cost leadership, differentiation, and focus (Porter, 1980). By achieving the lowest cost structure in the industry, a company can either reduce its prices or keep the increased profits to invest in research to develop new and better product and/or to market their products more vigorously. The development of scale economies often contributes to a company's ability to materialize low cost operations. The second strategic approach, differentiation, involves making a product/service appear different in a certain aspect (e.g., design, reliability, and service) in the mind of the consumer through mostly a marketing/branding process. A focus strategy is when a company concentrates on either a market area, a market segment, or a product. The strength of a focus strategy is derived

from knowing the customer and the product category very well so to establish a “franchise” in the marketplace (Porter, 1980).

Hax and Wilde (1999), while recognizing the influential strategic framework espoused by Porter, argued that the generic strategies do not describe all the ways companies compete in the current environment. Based on the research of more than 100 companies, they proposed a new business model, the “triangle” strategic options for firms that compete in the current economy. These potential options include “best product,” “customer solutions,” and “system lock-in.” The best product approach is similar to Porter’s cost leadership or differentiation strategy with a focus on “product or service.” That is, a company may choose to develop the “best” product by aggressively pursuing economies of scale, product and process simplification, and significant product market share that allow it to exploit experience and learning effects. A company may also try to develop the “best” product in the consumer’s mind by differentiate itself through technology, brand image, additional features, or special services. The customer solutions strategic option focuses on “customers” by anticipating, studying, and offering a bundle of products or services that are customized to satisfy a specific target group’s most if not all needs. Finally, the lock-in strategic option emphasizes “market collaborators” instead of the product or the customer. In this case, the company actually concentrates on nurturing, attracting, and retaining complementors (e.g., cell phone manufacturers and mobile networks), providers of products and services that add economic value to its products or services (Hax and Wilde, 1999). The three alternatives have different scope and scale emphases. At the extreme end of the best-product position, scope may be trimmed to minimum to develop scale economies and thus enable low cost. As a

company moves to differentiate or bundle products, its scope is necessarily expanded. When a company reaches the stage of including complementors, it would have moved from a scale to a scope emphasis.

Strategic Pattern I: Focus

There appears to be two segments of telecom companies that have approached the market with more a “focus” strategy. The first group involves public telecom operators such as NTT and China Telecom. Either because of the recency of restructuring or the regional uniqueness, these major PTOs center their growth activities in the Asian region (i.e., a “geographical focus” strategy), unlike their European counterparts such as Deutsche Telekom and Telefonica, which have sought expansion opportunities not only in EU but also in other high-demand areas such as the U.S. and the Americas. The other group that has focused on a particular market segment is the mobile cellular operators. While many traditional wireline service providers are expanding the scope of their services to include wireless communications networks, mobile communications companies such as Vodafone AirTouch and Mannesmann have stayed put in this particular product segment. AT&T is attempting to develop focus by breaking itself into a family of four companies – AT&T Wireless, AT&T Broadband, AT&T Business, and AT&T Consumer (Rosenbush, 2001).

Strategic Pattern II: Best Product-Differentiation

Many telecom service providers have attempted to develop brand assets and marketing programs that would differentiate them in this converging global market. Because of the integration of services and geographical markets, the new generation of

telecom companies needs to establish a market position that is associated with a growing market area and steers clear of a regional utility label. In other words, the new telecommunications multinationals are avoiding being linked with brands that highlight a service (e.g. telephone) combined with a geographic component (e.g., British). A move from British Telecom to BT is to limit potential constraints on its "brand elasticity" (Samzelius & Camman, 1996). Many of the key players continue to distance themselves from the old economy image and begin to build differentiated brand images that stress leadership in high growth areas, especially in mobile communication and the Internet. For example, France Telecom implemented a major branding campaign that promoted a new logo and visual identity for its worldwide communications and branded the international carrier as an innovative, customer-oriented Net company, delivering services focused on wireline, wireless and Internet convergence (France Telecom, 1999). The availability of multimode connections (e.g., telephone, cable, and mobile connections) for a seamless telecom network to customers, mostly through alliances, has also become a differentiated point for companies like MCI WorldCom and AT&T.

Strategic Pattern III: Customer-Solutions Orientation

Many of the global telecom companies have adopted a customer-solution strategy, attempting to provide the connectivity/coverage and features that are attractive to the customers. There are basically three types of customers whose needs are driving multinational investments by telecommunications companies. Large multinational customers often want a single network to provide them with end-to-end telecommunications across multiple countries (Kramer and NiShuilleabhain 1997;

Antonelli 1997; Jamison 1998). These needs for smooth end-to-end networking drive telecommunications companies to pursue local-to-global-to-local network strategies or local-to-regional-to-local strategies. In fact, the emphasis on end-to-end coverage has pushed some telecommunications companies to establish their own local networks where their customers have business locations and connect these networks via their global or regional network. Qwest and KPN in 1999 formed a joint venture to create a pan-European IP-based fiber optic network linked to Qwest's infrastructure in North America for data, voice, and video. MCI WorldCom has invested extensively in building pan-European networks to provide service. To stay competitive in the region, Telmex has made investments in operators throughout the region including Guatemala (Telgua) and Puerto Rico (Cellular Communications) (Arathoon, 1999). A local-to-global-to-local network with facilities in different regions will reduce a telecom company's reliance on incumbent phone monopolies, enable it to deliver greater value and better quality of service control to its customers, and improve the profitability of pricing and capacity decisions. The importance of building such a seamless network often becomes an incentive for alliances. For example, Concert, which includes BT and AT&T, is an alliance formed to pursue a local-to-global-to-local strategy.

In addition to the demand of end-to-end network, customers today are beginning to no longer view wireline telephone, wireless telephone, and Internet as separate products. As a result, some telecommunications companies are bundling the products into a single price, or giving customers discounts for buying more than one (William & Willow, 1997). For example, BellSouth offers a single bill for wireless, Internet, and wireline products. The focus here is on the customer's economics, rather than the

product's economics. And telecom services bundling would likely bring positive impacts on the customer economics either by lowering the customer's internal costs or by allowing the customers to have higher revenue.

It was estimated that as the Internet continues to drive the growth of the global telecommunications industry, so-called "data" would constitute 80 percent of traffic and voice the remaining 20 percent of the total by the year 2010 (Raphael, 1998). Following the consumer demand, many telecom players have ventured into this high growth area. MCI WorldCom has various online joint ventures, including one with Yahoo in Internet access service (Warner, 1998). British Telecom and AT&T through the alliance of Concert, the joint venture that provides telecom services to multinational companies, is investing \$2 billion over three years on the development of e-commerce services (British Telecom, 2000). Deutsche Telecom has just agreed to purchase Debis System, a leading e-commerce and corporate communications software company (Deutsche Telecom, 2000). And Telefonica has invested heavily in content development, aiming to become a key player in the creation and distribution of content across markets and systems (e.g., via its Internet service provider, Terra Networks SA; TV services; and its cell-phone unit, Telefonica Moviles, in addition to the traditional wire network) (Telefonica, 2000).

A customer-solutions strategic option calls for the development of partnerships and alliances, linking various firms' ability to complement a customer offering. MCI WorldCom is an example of expanding horizontally across a range of related services for the targeted customer segment, or bundling. Through a series of acquisitions such as Uunet Technologies, MFS Communications, Brooks Fiber Communications, and GridNet, it is able to bundle services such as local, long-distance, Internet, and advanced

services together to reduce complexity for the customer. To develop a pan-European network, BT has purchased 26% of Cegetel in France, entered a joint venture, Viag, in Germany, and participated in joint ventures with Telfort in Netherlands, Albacom in Italy, Airtel in Spain, Ocean in Ireland, Telenordia in Sweden, and Sunrise Communications in Switzerland (Valletti, 1998; British Telecom, 2000). Also, instead of setting up a Spanish portal internally, Telmex entered a joint venture with Microsoft to develop a region-wide Spanish-language portal, counting on Microsoft's extensive software applications, portal applications and strong branding and its own regional expertise and extensive access network (Hoover, 2000).

To match customers' communications needs, scale also becomes essential for the telecom multinationals. Scale involves both customer base and geographic reach. Customer base is the number, size, and type of customers that connect directly with the company's network. Customer base is important because it determines a network's value or strength for making markets and interconnecting with other networks. (Kramer and NiShuilleabhain 1997; Yoffie 1997) For example, Frontier Communications began as a local exchange company in New York and leveraged its local customer base to succeed in long distance. In 1997, Frontier provided local service in combination with long distance service, Internet, wireless, or calling card services to 40% of its local telephone customers (Frontier Corporation, 1998). Incumbent local exchange companies in Finland had similar success when they began competing in long distance. Southern New England Telephone in the US had a similar experience when it entered the long distance market (Jamison, 1999a).

Strategic Pattern IV: Lock-in Strategy

Because the epitome of this strategy is achieving the de facto proprietary standard, it appears to fall short for the telecom market. In this industry, system lock-in is difficult to achieve because of open standards (e.g., TSP/IP, Java, RJ11 jacks), network interconnection requirements as mandated in the 1996 Act and by the EU (e.g., per EU, Vodafone has to allow open access to its network for 3 years), competitor propensity to compensate for lock-in (e.g., subsidization of mobile handsets in the US), and rapid technological change (e.g., innovation destroyed dBase's lock-in). Positive feedback is important in some systems (e.g., Instant messenger) and may create a tipping effect (e.g., Acrobat), but has only minor effects in other systems (e.g., mobile phones). However, mergers and alliances allow companies to internalize positive feedback and so profit from integrating across markets. Also, creating open standards in all components of the system (e.g., IBM's open PC), except your own (e.g., Windows), allows the proprietary component provider to extract monopoly profits from a large market if the system achieves market dominance.

Strategic Pattern V: Strategic Alliances for Scale (Cost Leadership), Speed, and Scope

The strategies presented so far are not mutually exclusive and may be combined depend on a company's particular circumstances. Note that one central theme runs through all options presented so far. It is the strategy of forming alliances to achieve size, speed, and/or scope in the market. Why and how do telecom multinationals embrace

globalization with such an alliance emphasis? Oh (1996) suggested that the strategic objectives of global alliances in this market are: 1) to reduce risks and entry costs into new markets, especially in regional trade blocks, through joint production and marketing efforts, 2) to improve global competitiveness with cost-effective procurement of critical commodities or components and produce economies of scale through global alliances, 3) to co-develop and co-produce high-tech products more efficiently and effectively, and 4) to benefit from the advantages of pooling limited resources. Joshi, Kashlak, and Sherman (1998) also found that most strategic alliances occurred between telecom firms that have broad product lines and focus on product innovation and new market development. They also discovered that most of the alliances took place outside the U.S. were within industry, while most alliances occurred in the U.S. were inter-industry. Such developments may reflect the domestic deregulation in the U.S. on cross-market competition and trends toward international privatization and deregulation of national telecom industries. We will now discuss the different alliance approaches in gaining scale, speed, and/or scope advantages.

Non-Structural Alliances (Alliances Other Than Mergers and Acquisitions)

The telecommunications industry has seen the development and collapse of many major alliances such as Global One and World Partners/Unisource. Such alliances are easier to set up and undo and a merger, and are often established to create strategic synergies, pooling resources, gaining access to technology, procuring critical components/production/marketing assets/relationship, and mitigate risk. Through a non-structural alliance, partnerships in the forms of marketing agreements, licensing, joint

ventures, and partial equity often involve major global telecommunications players and shape the direction of competition in the market. Oh (1996) has stressed that telecom multinationals select the type of alliance depending on their relative positions with respect to size, profitability, capital structure, and R&D capability. He argued that the more profitable, heavily invested in R&D a firm is, the more self-sufficient it is and thus more likely for it to rely on non-structural alliances. Size and capital structure also influence a firm's alliance options and flexibility.

Structural Alliances

Acquisition occurs when one company acquires the operating assets of another in exchange for cash, securities, or a combination of both. Typically the acquired company continues to exist, while a merger is a combination of two corporations in which only one corporation survives. In a merger, the acquiring company assumes the assets and liabilities of the merged company. A merger differs from a consolidation, which is a business combination whereby two or more companies join to form an entirely new company. Theoretically, consolidation is a friendlier, cooperative deal than either a merger or acquisition because it provides equal footing in the new firm for each corporation. Strategic alliances through mergers and acquisition present an especially attractive avenue for the telecommunications industry since the multinationals will be able to integrate different communications segments quickly, capture a developed customer base, consolidate smaller niches, remove a rival and prevent competition from doing so, and accelerate the implementation of new technologies with combined resources. In sum, such integration is a preferred method of growth when speed and scale

economies are the key to success, as it is in today's information marketplace. To quickly establish a presence and leadership in the converging telecommunications market is another important incentive for many companies pursuing M&A activities. For example, attempting to establish an instance presence in the European wireless market, France Telecom proposed to acquire E-Plus, one of the remaining large mobile communications companies in the region (Young, 2000). To enter the growing U.S. telecom market, Deutsche Telekom has tried unsuccessfully to acquire both Qwest Communications and US West (Shinal, 2000).

Major Strategic Alliances

As discussed, the major telecom multinationals are competing through various alliances, mergers, and divestitures. It is futile to try to describe here the state of affairs in these re-combinations because they change on a regular basis. However, examining some of the major attempts and events provides insights into these businesses' futures.

There have been three primary global alliances that involve key players in the market. They are Concert, Global One, and World Partners, all of which have dissolved and one of which (Concert) is being resurrected (see Figure 2 & 3).

Concert: From BT, MCI, Portugal Telecom, and Telefonica to BT and AT&T

The initial Concert was primarily equity relationships that created partnerships. In Concert, BT purchased a 20% stake in MCI and sought to purchase the rest. The Spanish carrier, Telefonica, joined Concert and engaged in an equity swap with Portugal Telecom, which was also a member of Concert. The combination of Telefonica and Portugal

Telecom gave Concert a strong presence in the Latin American markets where Telefonica and Portugal Telecom are heavily invested. Stentor (a Canadian local exchange company (LEC) alliance that includes Bell Canada) was a distributor for Concert.

BT's attempt to purchase all of MCI signaled BT's intent to operate Concert as a single business owned by BT. However, MCI's financial losses trying to enter the local exchange market in the US created concerns for BT's shareholders, so BT was unable to complete the purchase. As a result, WorldCom purchased MCI to form MCI WorldCom.

BT's attempt to develop Concert indicates some of the complexities of developing a global telecommunications company through mergers. BT encountered at least three problems, the sum of which may have caused the failure of Concert. The first problem was obtaining regulatory approval. US and EU regulators placed conditions on the initial 20% ownership stake that may have decreased its viability. At the same time, BT's UK regulator, Oftel, required BT to commit to continued domestic investments. Later, when BT was obtaining regulatory approval to complete the purchase of all of MCI, the regulatory processes took sufficiently long for the remaining two problems to occur and apparently stop the merger.

The first of these remaining two problems was information asymmetries between the merging companies. BT was unaware of MCI's financial losses trying to enter the US local exchange business. When these losses became known, BT tried to renegotiate the financial aspects of the merger. While BT and MCI were resolving this issue, the last problem, disagreements between management and shareholders on the global strategy, became apparent. BT shareholders appeared unconvinced that the profitability of a global telecommunications company was worth bearing MCI's US losses. This disagreement

became so protracted that two other suitors, GTE and WorldCom, emerged, with WorldCom eventually gaining the upper hand.

The Concert is now comprised of AT&T and BT, providing voice and data telecom services to some 270 multinational corporations and serving another 29,000 customers through a network of distributors (Concert, 2000). They have also been actively searching for global equity partners. Just recently, AT&T and BT teamed up to take a 30 percent stake in Japan Telecom, thus bringing the Japanese carrier into the global market (British Telecom, 2000).

Global One: From Sprint, Deutsche Telekom and France Telecom to France Telecom

Global One is another complicated equity partnership between Sprint, Deutsche Telekom, and France Telecom. As part of the formation of Global One, Deutsche Telekom and France Telecom purchased 20% of Sprint. Deutsche Telekom and France Telecom also had a partnership, Atlas, which operated in Europe. The Global One companies operated Global One as a profit center, meaning that the owners expect the company Global One to earn positive profits. However, apparently because the partners failed to agree upon a single global strategy, Global One did not live up to its expectations. In 1999, MCI WorldCom and Sprint agreed to a merger, which has yet to be approved by US and EU regulators. In anticipation of this merger, Sprint divested its interest in Global One and bought back France Telecom's and Deutsche Telekom's investments in Sprint. France Telecom purchased Deutsche Telekom's Global One shares and is now the sole owner of Global One.

The experiences of Global One illustrate the complexities of global telecommunications partnerships. On the plus side of Global One, each partner was able to pursue its own business strategy. For a while, Global One won large numbers of contracts with multinational customers. On the minus side, the lack of an agreed-upon mission for Global One hurt the partnership's profitability and forced several management changes.

World Partners

The third global telecommunications business, World Partners, was a combination of equity stakes and agreements on billing, marketing, interconnection, etc. Operated largely by AT&T and Unisource, a European alliance that has included Telecom Italia (Italy), Telia (Sweden), Swiss Telecom, and KPN (Netherlands), World Partners also included KDD (the incumbent international carrier for Japan), Telstra (Australia), and Unitel, a Canadian long distance carrier.

The formation of World Partners was a defensive move by AT&T when BT and MCI announced the Concert alliance. To keep its status as THE global player, AT&T, while then still the sole leader of world telecom market and offered services in collaborating with many domestic PTOs, basically renamed its multiple partnerships with these telecom companies "World Partners."

In contrast with the original Concert and the Global One business models, which mostly relied on equity ownership to establish the business relationships, World Partners largely relied upon contracts. Apparently AT&T chose this business model because the contractual relationships already existed as part of the pre-liberalization contract and

settlements arrangements. If this is correct, then World Partners was primarily a branding of the traditional international system. In fact, the partnership was so loosely structured that it proved incapable of delivering consistently strong service around the world.

Presently, it is no longer an active alliance.

Why Do Some Alliances Fail?

Cultural, Strategic, and Management Differences. It is apparent that the alignment of strategic, decision-making, and other managerial differences between these giant global telecom companies is very difficult to accomplish. Successful integrations require trust, which actually translates to a risk of losing one's core competence to a partner and decreasing an organization's autonomy. One former Global One executive has claimed, "there is no trust among the partners" (Inkpen, 1998). Very often the information asymmetry between partners further contributed to the distrust. For example, we observed such asymmetries between the MCI and BT management and BT management and its shareholders. Specifically, MCI management did not tell BT management how much money MCI was losing in the US and then BT shareholders didn't trust BT management to deal in the best interest of the shareholder. The information asymmetry and distrust problem is again evident when Deutsche Telekom failed to notify its Global One partner, France Telecom, before its bid for Telecom Italia, a competitor of France Telecom.

Objective/Vision Differences. Many telecom multinationals came into an alliance with very different underlying motivations and thus different visions for their future in that partnership. For example, entering into Unisource, Telefonica's objective was to

protect their monopolistic position in Spain and strengthen their position in Latin America, while the Dutch, Swiss, and Swedish saw the alliance as a way to become more competitive in a new deregulated environment (Inkpen, 1998). In the case of Concert, Telefónica's presence in the alliance was supposed to give MCI WorldCom a strong presence in the Latin American markets; however, MCI WorldCom's vision was somewhat different from its partner's as it decided to invest in Telefonica's competition in Brazil. The two partners ended up fighting in the Brazilian courts over what kind of services each can provide.

We have seen basically two phases of alliance development. In the first phase, uncertainty prompted the players to take anything that was available in order to experiment, defend themselves, and keep their options open. As a result, there were alliances that were poorly defined and accomplished little (e.g., World Partners and Global One) (D'Amico & Sanchez, 1999). We are now in a phase of developing global network businesses. Here companies are entering strategic countries where their global customers have locations and acquiring assets that will enable them to improve their coverage and integrated features in the converging market. In other words, the customer-solution driven alliance strategy is taking the front row seat in the market today.

Conclusion

It is not surprising that strategic alliances have been the dominant theme of the global telecom industry considering the magnitude of product and geographical convergence occurred in the last decade. Though many of the forces that have contributed

to the first phase of telecom globalization are still present today, there are barriers that may impede the telecom multinationals' growth in this market. We believe that in the next stage of globalization, the integration of competing technologies and the development of standardization that facilitate interoperability between these systems, along with the alignment of goals, information, services, and operations between firms in alliances are the keys to competitive advantages in this technology-driven industry.

It is also essential for the current global players to reexamine the market as it continues to attract new competitors. Figure 2 and 3 show the countries and companies that participated in the major alliances discussed earlier. Conspicuous by their absence in these global telecommunications businesses are the US Bell Operating Companies (BOCs) (with the exception of Sprint) and NTT. In the US, the BOCs interLATA restrictions have kept them from becoming global carriers. However, recent mergers, alliances, and international investments by SBC and Bell Atlantic have given both companies significant US footprints and meaningful international operations from which they can launch their global businesses. Just recently, NTT was restructured to allow its entering to the global telecom market. As a start, in 2000, DoCoMo, NTT's wireless unit, invested \$9.8 billion in AT&T Wireless (Rosenbush, 2001). Also, the growth of demand for telecom services in markets such as China and many Latin American countries will elevate further the competitive roles of the PTOs from these regions (e.g., China Telecom and Telmex). In sum, we expect the trend of competition through alliances to persist as the telecom multinationals continue to face a globalized marketplace that reward scale economy, multilateral competition, and seamless delivery of integrated content to the increasingly demanding global telecom customers.

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Table 1. Examples of Traditional and Converged Products from the Multimedia, Information Industry

Example Products		Components	Telecommunications	Media	Computers
T r a d i t i o n a l P r o d u c t s	Traditional Telephone Service	Customer devices	Telephones		
		Transmission	Telephone lines, switches		
		Network devices			
		Content	Customer conversations		
	Traditional Television	Customer devices		Television sets, converter boxes	
		Transmission		Satellite, cable, broadcast spectrum	
Network devices			Cable headends, distribution network devices, station towers		

		Content		Programming and ads	
	Traditional Data Processing	Customer devices			PCs, computer terminals
		Transmission			LANs
		Network devices			PCs, mainframes
		Content			Software packages
C o n v e r g e d N e w P r o d u c t s	TV-Internet	Customer devices		Television sets, input devices	Chips
		Transmission	Internet, telephone lines	Cable, satellite	
		Network devices		Cable headends	Host computers
		Content	Personal communication	Programming, information, ads	Databases
	Microsoft Network	Customer Devices	Cellular phones		PCs, chips
		Transmission	Internet, wireless networks	Cable	
		Network devices	Switches	Cable headends, distribution networks	Host computers, e-mail servers
		Content		Video, music, information	Games, software, home pages

Source: Adopted from Mark Jamison, "Business Imperatives," in The New Global Telecommunications Industry & Consumers, Penn State University's Institute for Information Policy, 1999.

Table 2: WTO Countries That Permit Foreign Majority Ownership in Telecommunications Facilities for International Service

Europe	Asia Pacific	Latin America
Austria	Japan	Colombia

Belgium	Australia	Chile
Denmark	New Zealand	El Salvador
Finland		Guatemala
France		Peru
Germany		
Iceland		
Ireland		
Italy		
Luxembourg		
Netherlands		
Norway		
Portugal		
Spain		
Sweden		
Switzerland		
United Kingdom		

Source: Adopted from Federal Communications Commission's Report on international telecommunications markets 1999 update, GPO, Washington, D.C.

Table 3: Number of New Entrants in Foreign Markets in 1998 and 1999

Top 10 Foreign Markets by Teledensity				Top 5 Foreign Markets by Market Revenues			
Country	1998	1999	% Change	Country	1998	1999	% Change
Sweden	14	15	7%	Japan	9	42	367%
Switzerland	23	40	74	Germany	32	44	38
Denmark	12	18	50	United Kingdom	122	158	30
Canada	15	47	213	France	33	48	45
Luxembourg	2	3	50	Italy	14	20	43
Iceland	1	3	200				
France	33	48	45				
Finland	8	8	0				
Hong Kong	4	59	1375				
Netherlands	26	29	12				

Source: Adopted from Federal Communications Commission's Report on international telecommunications markets 1999 update, GPO, Washington, D.C.

Table 4: Top 20 Public Telecommunication Operators by Revenue, Net Income, and Employees in 1997 and 1998

Rank	Telecom revenue		Net income		Employees	
	98	97	Total (US\$)	Change	Total	Change
	Operator (Country)					

			million	(97-98)	million	(97-98)	(000s)	(97-98)
1	1	NTT (Japan) a	81'632	3.0%	5'057	107.9%	226.0 *	-1.7%
2	2	AT&T (United States)	53'223	3.2%	6'398	44.9%	107.8	-17.6%
3	3	Deutsche Telekom (Germany)	41'848	3.4%	2'628	32.8%	216.0 *	-5.9%
4	4	Bell Atlantic (United States)	31'566	4.5%	2'965	20.8%	62.6 *	1.3%
5	9	MCI WorldCom (United States)	30'416	14.6%	1'243	‡	77.0	...
6	6	BT (United Kingdom) a	29'378	4.7%	4'809	75.3%	124.7	-
7	8	SBC (United States)	28'777	7.9%	4'023	140.3%	129.9	1.4%
8	5	France Télécom (France)	28'758	5.2%	2'686	1.6%	169.1	2.5%
9	7	Telecom Italia (Italy)	27'503	6.2%	2'317	46.8%	124.0	-1.7%
10	10	GTE (United States)	25'473	9.5%	2'172	-22.3%	120.0	5.3%
11	13	China Telecom (China)	24'061	40.3%	5'375 *	-12.1%	444.5	-5.0%
12	12	BellSouth (United States)	23'123	12.5%	3'527	8.2%	88.5	9.2%
13	11	Telefónica (Spain)	20'378	5.7%	1'526	14.5%	92.2 *	0.0%
14	14	Ameritech (United States)	17'154	7.2%	3'606	57.1%	70.5	-5.2%
15	16	Sprint (United States)	17'134	15.2%	415	-56.5%	49.0 *	2.1%
16	18	US West (United States)	12'378	7.8%	1'508	-1.0%	54.5	6.6%
17	17	Telstra (Australia) b	10'741	8.3%	1'865	85.8%	57.2	-13.4%
18	21	KPN (Netherlands)	9'381	12.3%	802	-21.7%	32.5	1.4%
19	20	DDI (Japan) a	8'927 *	15.9%	63 *	‡	2.9 *	4.7%
20	22	Telmex (Mexico)	7'931	28.8%	1'663	-22.0%	63.1 *	...
Top twenty			529'781	6.2%	54'647	38.4%	2'312	-2.4%

Note: United States dollar values are obtained by using operator supplied exchange rates or ending period exchange rate. Net income is after tax. ‡ Indicates that Net Income was negative in 1997 and/or 1998. ... not available. ^a Year beginning 1 April. ^b Year ending 30 June. * = 1997 data.

Source: International Telecommunication Union, PTO Database

Table 5: Top 20 International Telecommunication Operators by International Telephone Traffic and Revenue in 1998

Rank	Operator (Country)		International telephone traffic, minutes, 1998						International telecom revenue ^a		
			Bothways		Outgoing		Incoming		Total (US\$ m)	Change (97-98)	% of total
			Total (m)	Change (97-98)	Total (m)	Change (97-98)	Total (m)	Change (97-98)			
1	AT&T (United States)	[97]	14'529	7.1%	10'331	8.2%	4'198	4.5%	9'555 G	-2.7%	18.6%
2	Deutsche Telekom (Germany)		10'747	3.0%	4'711	-2.1%	6'036	7.4%	3'357 G	-16.4%	8.0%
3	MCI WorldCom (United States) ^b	[97]	10'058	16.5%	7'313	17.6%	2'745	13.7%	4'743 R	21.2%	17.9%

4	France Télécom (France)		7'300	9.0%	3'400	9.7%	3'900	8.3%	1'859 G	-17.3%	6.5%
5	BT (United Kingdom) ^c		6'350	10.2%	2'710	4.5%	3'640	14.9%	924 G	-14.2%	9.9%
6	Telecom Italia (Italy)		5'289	9.5%	2'339	5.9%	2'950	12.6%	1'438 N	0.6%	5.6%
7	Sprint (United States)	[97]	4'470	10.1%	2'759	0.5%	1'711	30.1%	1'820 G	1.1%	12.2%
8	DGT (China)		4'212	4.5%	1'712	4.9%	2'500	4.2%	2'200 G	3.0%	10.6%
9	Hong Kong Telecom (Hong Kong Sar) ^c		3'818	3.8%	1'718	-2.1%	2'100	8.2%	1'995 G	-17.7%	48.0%
10	Telefónica (Spain)		3'704	16.1%	1'803	15.1%	1'901	17.0%	813 N	-3.9%	4.0%
11	Swisscom (Switzerland)		3'680	-	1'901	-2.9%	1'779	3.3%	1'379 G	2.2%	18.1%
12	Telmex (Mexico)		3'286	-12.8%	880	-12.8%	2'406	-12.8	879 N	-24.3%	11.1%
13	KPN (Netherlands)		3'443	6.0%	1'606	4.6%	1'837	7.3%	847 G	-23.6%	9.0%
14	C&W Comm. (United Kingdom) ^c		2'670	36.2%	971	27.3%	1'699	41.8%	477 G	36.0%	35.1%
15	Belgacom (Belgium)	[97]	2'622	10.0%	1'340	14.9%	1'282	5.3%	548 N	-6.5%	12.8%
16	Singapore Telecom (Singapore) ^c		2'251	25.6%	1'161	23.2%	1'090	28.2%	1'267 G	7.3%	41.4%
17	KDD (Japan) ^c		2'200	3.3%	1'105	0.2%	1'095	6.6%	1'903 G	-5.0%	68.9%
18	PTA (Austria)	[97]	1'954	4.9%	996	5.1%	958	4.7%	492 R	-9.3%	10.8%
19	Teleglobe (Canada)		1'905	3.1%	1'145	3.0%	760	3.2%	631 G	-18.3%	18.6%
20	VSNL (India) ^c		1'679	21.2%	422	9.6%	1'257	25.7%	1'600 G	11.8%	90.3%
Top twenty			97'638	7.0%	51'027	4.3%	46'611	9.3%	38'727	-8.4%	13.3%

Note:

United States dollar values are obtained by using operator supplied exchange rate or ending period exchange rate. Change in revenue based on local currency. Figures in italics are estimates. ^a International revenue as reported by operator. ^b MCI and WorldCom merged in 1998. ^c Year ending 31 March. G=Gross (including settlement receipts). R=Retail (not including settlement receipts or payments). N=Net (after adjusting for settlement transactions).

Source:

International Telecommunication Union: PTO database; TeleGeography (www.telegeography.com).

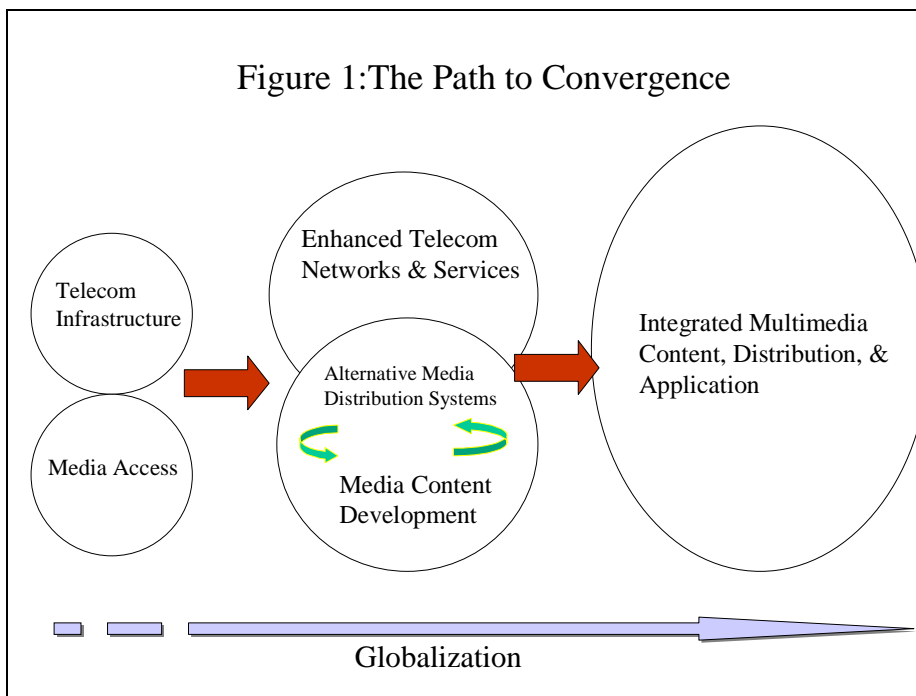
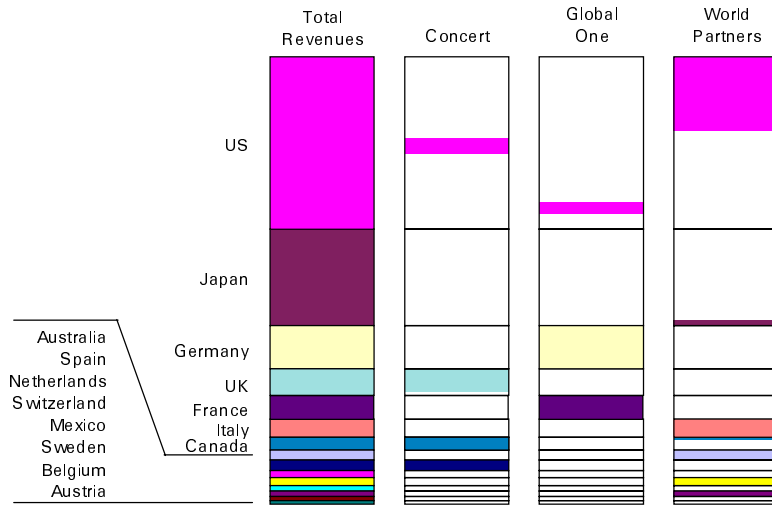


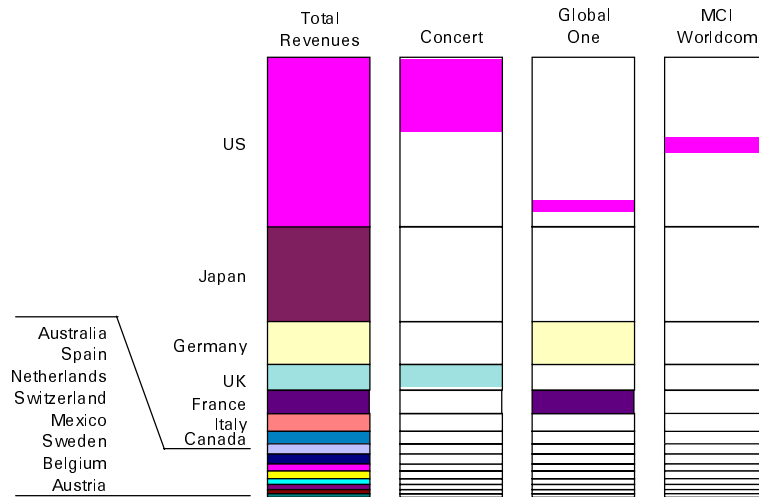
Figure 2: Initial Countries and Companies in Global Alliances



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Figure 3: Countries and Companies in Global Alliances, 1999



¹ The value of telecommunication transactions by the end of 2000 was \$469 billion, down from \$656 billion in 1999. See Rosenbush's article.