

PERSPECTIVE

Breakups part of industry cycle

BY ELI M. NOAM

In 1982, AT&T was split up by the U.S. government. In Japan, the state is considering a similar policy toward NTT. In both cases, the companies have strenuously resisted. But in the future, divestitures may not be state-imposed at all but rather company-initiated, for it may be in the telecommunications companies' own interests to split themselves up. AT&T just did so in a second and voluntary divestiture.

All this is part of the logic of transformation in telecommunications, in which service competition leads to infrastructure competition, which in turn leads to interconnection, unbundling, systems integration and, eventually, radical corporate restructuring.

With liberalization of entry, multiple networks emerge. They must become linked with one another through various interconnection arrangements. Interconnection is fairly meaningless without multiple physical interfaces. Thus, interconnection and unbundling of network functionalities into modules go hand-in-hand.

How can the numerous network hardware and software modules be integrated into a usable whole? Perhaps the most promising approach is systems integration. Pure systems integrators do not own or operate the various subproduction activities, but rather select optimal elements in terms of price and performance, package them, manage the bundles, and offer them to the customer on a one-stop basis.

These systems access into one another, so that the telecommunications environment evolves from the "network of networks," in which carriers interconnect, to the "system of systems," in which systems integrators link up.

If carriers want to survive in this highly competitive market, they must seek their own suppliers independently of their corporate affiliates. When separate markets for separate modules exist, it is every module financially on its own bottom, in the long run. Each module provider must buy, sell or joint-venture with modules that compete with its own parent company, if the rival offers better terms. This creates major centrifugal forces inside the organization, which in time make coherent strategies difficult.

This must inevitably lead to corporate reorganization. There are two main avenues: separating the firm into independent business units for different modules or module combinations; and breaking up the firm, separating modules from the systems integrators, from one another and from part of the business.

The strategy depends on different factors—the economies versus the diseconomies of scope; the extent of regulation and restrictions on various modules; different anti-monopoly and anti-concentration rules; organizational cultures; and turf battles inside the firm.

In the United States, Pacific Telesis Group reorganized itself in 1994, spinning off its mobile subsidiary so that it receives no "fraternal" preferences. Rochester Telephone Corp. separated it-

self into a network company that offers transmission to all, including service competitors and a services company that offers the actual service to customers. And now AT&T, once split by government mandate into eight pieces, is separating itself voluntarily into four independent parts. Chairman Robert Allen argues that "the complexity of trying to manage these different businesses began to overwhelm the advantages of our integration."

Traditional public telecoms operators may try to delude themselves that AT&T's second divestiture is about computers and equipment, not networks. But that is a distinction without a big difference.

The economic point is that part of the company is harmed by another part competing against its best customers. The same dynamics will affect different network modules in a competitive environment. The widening of national markets inside the European Union will delay but not contain these pressures.

At present, many media firms are engaging in high-priced empire building, invoicing vague synergies. In some cases, the theory is that the mating of two elephants produces a tiger rather than a dinosaur.

But in a competitive future, company attention will have to shift to a radical restructuring and focusing. Liberalization is just the beginning.

Eli M. Noam is director of the Institute for Tele-Information at New York's Columbia University.

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