

In 1981-1989, total supplier annual revenues in the information systems market grew from US\$ 1.1 billion to US\$ 7.1 billion, with approximately 12% corresponding to teleprocessing and data communications-related equipment.

The mid and late 80's were also marked by the introduction and commercial launch of Embratel's packet-switching offering, the Rempac network, and of its domestic satellite data services. In this period, store-and-forward message services were also been made available by Embratel, as its first step towards other telematic and value-added services.

From an applications perspective, the main customer base for DC in Brazil has always been made up of large and medium-size mainframe (mostly IBM) companies, with a strong preference for large centralized on-line systems (banking, manufacturing, distribution and retail). The application mix is presently changing, with fast growing interest in downsizing, distribution, microcomputer and workstation communication, interconnection of Local Area Networks and messaging value-added services, like EDI. Data and voice integration are also becoming more popular.

The late 80's also saw some emergence of private value-added-networks, typically out of DP-service bureaus and/or information diffusion operations, some of which were initiated in the 70's, focusing on remote information services, facilities management and inter-company value-added communications services, with EDI as their principal focus. At the same time, while data communications was a virtual monopoly of Embratel inside the Telebras system, by effect of Resolutions 109/79 and 525/88 (see also item 2.2 above), government decided to decentralize DC service to telcos. This came about as a consequence of political pressure from the individual states to provide faster and more adequate responses to local customer needs.

The two most important legacies from these 15 years of simultaneous development of the customer base, basic services, legislation, technological, industrial policies and the associated investments in manufacturing, engineering and operations management, are certainly an informed and demanding market for quality DC services and technologically up-to-date and diversified equipment. Both are presently effected by a lack of new investment, changing government procurement, industrial and technology policies and the ongoing economic recession, however they are also primed for growth, as the Brazilian economy opens up and benefits from deregulation and privatization.

The next two sections provide qualitative and, as available, quantitative descriptions of the DC service and equipment markets and attempt to forecast future market opportunities.