JGIM: What has been the role of information technology in the internationalization of Federal Express business?

JONES: Information technology has played a key role in the internationalization of Federal Express. We depend on our mainframe and distributed systems to give employees and customers the same information worldwide. By providing a single unified source for package status information request to every country we serve, but also have spread the higher expectations of our ability to keep track of shipments to a global customer base. Effective use of system technology allows us to pickup packages and freight from hundreds of points each day and still prepare a complete customs manifest as required for entry using a single data collection format.

JGIM: Please describe the worldwide global information technology architecture at Federal Express.

JONES: Federal Express’ primary data center is located in Memphis. Regional data centers include minicomputers in Brussels and various customs clearance locations around the world. Our global data network is currently based on a very large T-1 backbone with numerous interconnects and customer dial access. Global package tracking is supported via digital radio networks and intelligent devices used to transmit package status information to the corporate database in Memphis.

JGIM: Please name and briefly describe some of your key international information technology applications.

JONES: The key applications which make up Federal Express’s computer systems vary widely in function and platform. Our tracking system receives initial information entered by couriers worldwide as they pickup customer’s international shipments and input scan data into their handheld SuperTrackers. This information is instantly available to Customer Service agents worldwide. Detailed shipment data is input into Federal Express supplied computers at customer sites to provide export and import clearance sites with required regulatory manifests.

JGIM: What have been the most important technologies that have facilitated international expansion?

JONES: International expansion has been facilitated by the international network and distribution of SuperTracker network nodes overseas, along with the strategic location of distributed systems supporting international customs clearance applications.

JGIM: What have been the key technical challenges/problems in the overseas implementation of information technology applications?

JONES: The key technical challenges which Federal Express has faced begin with communications between various computer systems either developed, purchased, or inherited through corporate acquisitions. The establishment of effective telecommunications from the Memphis based headquarters, through Value Added Networks, through dedicated phone lines, through local phone companies, eventually to local governmental agencies is a constant challenge. Evaluation of the various possible protocols, communications pathways, and associated costs is extremely complex, and reliable sources of information regarding available connectivity are often difficult to come by.

JGIM: What have been key management challenges/