# Interactive session

Business, Management

Interactive Session 1 INTERACTIVE SESSION: TECHNOLOGYUPS COMPETES GLOBALLY WITH INFORMATION TECHNOLOGY United Parcel Service (UPS), is the world's largest air and ground package-distribution company. It started out in 1907 in a closet-sized basement office. Jim Casey and Claude Ryan—two teenagers from Seattle with two bicycles and one phone—promised the " best service and lowest rates. " UPS has used this formula successfully for more than 90 years. Today UPS delivers more than 14. 1 million parcels and documents each day in the United States and more than 200 other countries and territories.

The firm has been able to maintainleadershipin small-package delivery services despite stiff competition from FedEx and Airborne Express by investing heavily in advanced information technology. During the past decade, UPS has poured billions of dollars into technology and systems to boost customer service while keeping costs low and streamlining its overall operations. Using a handheld computer called a Delivery Information Acquisition Device (DIAD), a UPS driver can automatically capture customers' signatures along with pickup, delivery, and timecard information.

The driver then places the DIAD into the UPS truck's vehicle adapter, an information-transmitting device that is connected to the cellular telephone network. Package tracking information is then transmitted to UPS's computer network for storage and processing by UPS's main computers in Mahwah, New Jersey, and Alpharetta, Georgia. From there, the information can be accessed worldwide to provide proof of delivery to customers or to respond to customer queries. Through its automated package tracking system, UPS can monitor packages throughout the delivery process.

At various points along the route from sender to receiver, bar code devices scan shipping information on the package label; the information is then fed into the central computer. Customer service representatives can check the status of any package from desktop computers linked to the central computers and are able to respond immediately to inquiries from customers. UPS customers can also access this information from the company's Web site using their own computers or wireless devices, such as pagers and cell phones. Anyone with a package to hip can access the UPS Web site to track packages, check delivery routes, calculate shipping rates, determine time in transit, and schedule a pickup. Businesses can use the Web site to arrange UPS shipments and bill the shipments to the company's UPS account number or to a credit card. The data collected at the UPS Web site are transmitted to the UPS central computer and then back to the customer after processing. UPS also provides tools that enable customers, such Cisco Systems, to embed UPS functions, such as tracking and cost calculations, into their own Web sites so that they can track shipments without visiting the UPS site.

Information technology has helped UPS reinvent itself and keep growing. UPS implemented a suite of custom-built software that uses operations research and mapping technology to optimize the way packages are loaded and delivered. Because UPS delivers 14 million small packages each day, the resulting information is cutting the distance that delivery trucks travel by more than 100 million miles each year. UPS is now leveraging its decades of expertise managing its own global delivery network to manage logistics and supply-chain management for other companies.

It created a UPS Supply Chain Solutions division that provides a complete bundle of standardized services to 1 subscribing companies at a fraction of what it would cost to build their own systems and infrastructure. These services include supply-chain design and management, freight forwarding, customs brokerage, mail services, multimodal transportation, and financial services, in addition to logistics services. Adidas America, based in Portland, Oregon, is one of many companies benefiting from these services. Every three months the company introduces as many as 10, 000 new apparel items and 4, 000 new footwear items.

It must handle orders for many thousands of retailers for these orders, and many of these orders are priority requests that must be fulfilled within one or two days. UPS Supply Chain Solutions Consolidated what was previously handled by multiple third-party logistics providers into a single streamlined network outfitted with automated inventory and order fulfillment systems. By having UPS coordinate and manage distribution, Adidas America increased its order accuracy rate, boosted on-time deliveries, and improved customer service,

Sources: " Adidas Goes for the Gold in Customer Service," www. ups. com, accessed June 14, 2006; United Parcel Service, Round UPS, Winter 2006; and Dave Barnes, " Delivering Corporate Citizenship," Optimize, September 2005. CASE STUDYQUESTIONS 1. 2. 3. What are the inputs, processing, and outputs of UPS’s package tracking system? What technologies are used by UPS? How are these technologies related to UPS's business strategy? What problems do UPS's information systems solve. What would happen if these systems were not available? 2