

Revolutionising Parcels Delivery: One-Stop Logistics Provider Deutsche Post World Net Taps Into Cisco's Experience For Its 'Last Mile' Collection And Retrieval System

"THE RELIABILITY OF CISCO'S TECHNOLOGY USED FOR PACKSTATION MAKES A SIGNIFICANT CONTRIBUTION TO THE STABILITY OF OUR SYSTEM."

Dr Peter Kruse, Board Member, Deutsche Post World Net

Executive Summary

CUSTOMER NAME

- Deutsche Post World Net

INDUSTRY

- Transport & Logistics

BUSINESS CHALLENGE

- A way was needed to solve the problem of 'last mile' delivery for goods ordered over the telephone or on the Internet
- There had to be significant customer choice over delivery options, plus security and assured delivery

NETWORK SOLUTION

- Deutsche Post World Net introduced a system of 'PACKSTATION' secure automated delivery lockers
- Cisco routers provide data connectivity required to communicate with the lockers and operate a 'track and trace' system. Mobility is a future option

BUSINESS VALUE

- The PACKSTATION solution is proving a powerful differentiator for Deutsche Post and is currently being rolled out to 450 locations in Germany
- Corporate solutions are proving popular to make internal mailroom processes more efficient, as well as parts distribution and collection for field service companies

Cisco Systems' Internet Business Solutions Group has contributed best practice benchmarking advice to Deutsche Post World Net's market-leading PACKSTATION parcel deposit and retrieval service, enabling Deutsche Post World Net to differentiate itself from the competition and significantly improve its value and service to customers.

STRATEGIC INTENT

The growing business-to-consumer (B2C) and consumer-to-consumer (C2C) market of Amazon and eBay users can now order 24 hours a day, seven days a week, and increasingly expect 24*7 collection. Yet, as parcel volumes have increased (the number of products sold via eBay and shipped by Deutsche Post World Net in Germany alone was over 30 million packages in 2003) logistics models have remained focused on traditional postal delivery methods.

Unfortunately, changing lifestyles with people away from home during (daytime) delivery hours – and an increasing number of single households and households with two people working – means they are frequently not available to receive traditional home parcel delivery. This leads to frustration for the consumer and increasing costs of failed deliveries and repeated delivery attempts.

In addressing this problem, Deutsche Post World Net's PACKSTATION service provides parcel customers with the option of deciding for themselves where they would like to have their items delivered – rather than be stuck with just a home delivery – by directing their online purchases to a network of secure automated delivery lockers. A customer can pick up parcels from the lockers day or night following notification of delivery via text message or email.

PACKSTATION satisfies Deutsche Post World Net's objective to provide more value to its customers by optimising the 'last mile' of the Group's delivery capability. Boris Mayer, Deutsche Post World Net's Project Manager for PACKSTATIONs says: "The PACKSTATION service assures consumers – and now businesses – that their delivery will be accepted at a convenient, alternate location of their choosing, while Deutsche Post World Net knows that the delivery will be successful on the first attempt."



Prepared by Cisco Systems, Inc.
Internet Business Solutions Group

INTERNET BUSINESS SOLUTIONS

Cisco has worked alongside Deutsche Post World Net for more than two years. "Cisco has been an excellent adviser, bringing to the table experience of how technology has benefited customers in other markets," says Boris Mayer.

Deutsche Post World Net began piloting PACKSTATION in June 2001. Cisco's Internet Business Solutions Group (IBSG) has liaised with the project's IT department to develop PACKSTATION's network infrastructure, and quickly built up a relationship with the management team. From May 2003, IBSG has provided creative input and consultancy to the PACKSTATION management team through a series of workshops and discussions.

In particular, Cisco contributed relevant best practice ideas for the solution from other industries. This included experience gleaned from examining comparable business models executed by retail industry players around the globe. IBSG helped Deutsche Post World Net brainstorm ideas as to how PACKSTATION might be expanded in the future, using new business models to see how novel service offerings might leverage technology to capture new revenue streams.

Boris Mayer says: "Because Cisco had an overview of so many companies and their approaches, they could suggest different PACKSTATION service scenarios."

Cisco's retail expertise showed that similar service ideas had been shelved because they had been difficult to use in outdoor conditions, or were not robust enough to withstand problems from vandalism and theft. Unlike trials in other countries, the German units are accessible 24*7 because they are connected to the Internet and constantly monitored for security purposes (which also means that items can be tracked). Any attempt to attack the unit or access the sealed compartments would result in immediate notification and alert.

The units are robust and – using their customer card and a personal code – a person can only access the compartment that contains their package. Customer service can be phoned for by pressing a button on the control panel.

RESULTS

The PACKSTATION service has proved to be a compelling solution for business-to-business (B2B) customers. For example Deutsche Telekom, Vaillant and Roche Diagnostics have been using PACKSTATION successfully with field service engineers who needed flexible options for collecting and returning spare parts. Engineers on the way to the customer collect parts at various locations around the clock. Old parts and their containers can also be returned to any PACKSTATION. Dispatchers track package progress via their own web site.

By June 2004, after its three-year pilot, PACKSTATION was rolled out in over 450 locations including Cologne, Berlin, Hamburg, and Munich. At the end of 2004, PACKSTATION is expected to have more than 150,000 customers and will be potentially available to over 10 million people in Germany.

In addition, in-house solutions at companies' headquarters will make internal mailroom processes more efficient, saving money by avoiding distributing packages internally and clearly separating private and business packages. Business customers already making use of the PACKSTATION service on their own premises include SAP, Avon, Deutsche Telekom, T-Mobile and Deutsche Post World Net itself.

Deutsche Post World Net's longer-term aim is to develop a countrywide PACKSTATION network for high-density areas, and gradually introduce more sophisticated locker technology with more features (e.g. pre-paid Freeway parcel stamps are sold already at PACKSTATIONS).

PACKSTATION was voted Best Interactive Solution (Kiosk Systems) at the German Multimedia Awards in 2004. This was its second award of the year, the first being named as the most innovative postal product worldwide at the World Mail Awards. The judges were swayed by PACKSTATION's demonstrable economic success, as well as the high level of customer acceptance. Dr Peter Kruse, Deutsche Post World Net Board Member, comments: "The reliability of Cisco's technology used for PACKSTATION makes a significant contribution to the stability of our system."

TECHNOLOGY BLUEPRINT

In the project's pilot stages, Deutsche Post World Net used Cisco VPN 3000 Series – secure Virtual Private Network technology – to test the PACKSTATION network's functionality. Cisco SOHO 96 ADSL over ISDN Secure Broadband Routers and Cisco 800 Series Routers (over Frame Relay) connect the PACKSTATIONS to DHL's Hanover Data Centre via Deutsche Telekom's MPLS network.

Twin redundant Cisco 7206VXR Routers function as one virtual router in the Data Centre. A track-and-trace system operates over the current network infrastructure. Information flows contain parcel pick-up and delivery data, customer identity verification (PIN) and payment data, as well as Voice over IP (VoIP) traffic (which runs from the PACKSTATIONS to the 7206VXR). Plans to introduce mobile PACKSTATIONS using wireless network (GPRS) connectivity into the project are well advanced. Boris Mayer concludes: "Deutsche Post World Net is the only express and logistics company in the world to have deployed such a fully automated and networked logistics solution beyond pilot stage."

MORE INFORMATION

For further information on Internet business solutions, visit <http://www.cisco.com/go/ibsg>



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