



Parcel and Post: Increase service efficiency from pickup to delivery with mobility



Whether you are in the business of delivering letters, packages or both, Motorola's real-time mobility solutions can help automate business processes and eliminate errors to: improve employee productivity; improve customer service, reduce costs; and reduce the invoicing cycle, improving cash flow.

The challenge:

increase competitiveness while controlling costs

The parcel and post industry faces a number of challenges, from heavy competition and increasing costs to increasing parcel volumes and deregulation (also known as postal reform). Intense competition is forcing providers to search for a way to offer improved services without increasing prices. There is the need to contain costs — fuel and healthcare costs are rising; yet service fees must remain affordable and competitive. In addition, the advent of Internet shopping is causing organizations to look at ways to handle the substantial increase in parcel volume without increasing operating costs. And finally, postal deregulation is permanently changing the face of letter service in Europe, where private businesses can now compete with national government agencies for letter carrier service. Now, European government-run postal operations must think like a private business — they must determine how to keep service fees competitive and offer value added services to maintain market share and customer loyalty.

The solution: enterprise mobility

Mobility streamlines business processes by moving computing power from the desktop to the point of work. With advanced data capture capabilities in hand — such as bar code scanning, RFID, image capture and GPS — workers throughout the operational chain have the tools they need to perform tasks faster and with fewer errors. Productivity improves — delivery workers on the streets, at the retail sales counter and in the warehouse and sortation centers can now handle more tasks in the same amount of time...or less.

Mobility provides a number of core capabilities that provide distinct business advantages:

Automated data capture via bar code scanning or keyboard data entry significantly reduce errors. Paper forms no longer need to be completed, eliminating:

- The opportunity for those forms to be damaged or lost in transit

KEY BENEFITS

- Reduce capital and operational costs
- Improve customer service
- Maximize worker productivity
- Streamline business processes
- Provide differentiating value-add customers services
- Improve fleet efficiency and utilization



With mobile computing, field delivery personnel have the tools they need in hand to capture and instantly transmit proof of delivery (POD); process credit cards for cash-on-demand (COD) deliveries; create attempted delivery notices at the press of a button and more. The resulting process efficiency improvements help deliver real business advantage in the competitive parcel and post industry. The same workforce can now make more deliveries per day, reducing costs while improving delivery times — and customer service levels.

Industry leaders in parcel and delivery have deployed wearable technology from Motorola. Each system contains miniature scanners and rugged, compact wireless mobile computers to speed operations in their processing hubs. Workers equipped with Symbol wearable ring scanners and wrist computers divert bulk mail containers —tagged bags, trays, boxes and racks —as they move through the facility to their final destinations.

Deutsche Post, the second largest post office in the world after the U.S., reduced staffing by 30 percent after implementing a mobility solution — while still providing next-day delivery for 96 percent of its first class mail.

- Time required to process and/or enter the forms into the computer at a later time
- The increased opportunity for errors due to the 'double touch' of data, where handwriting can be misinterpreted or data entry errors can occur

Image capture enables instant documentation of package condition as well as signature capture for proof of delivery.

GPS enables better fleet management. Routes can be easily optimized, reducing fuel and maintenance costs. Visibility into the whereabouts of every vehicle in the fleet enables a cost-effective response to new service requests throughout the day.

Finally, the ability to put business applications in the hands of your workers combines with real-time voice and data transmission, delivering a host of benefits. For example, real-time status of parcels, registered letters and more is now available. Instant transmission of proof of delivery reduces the invoicing and cash cycle. And the ability to extend real-time business applications opens the door for the creation of a wide range of differentiating services, from real-time delivery confirmation notices to at-the-door cash-on-delivery (COD) payment options, such as ATM or credit card processing.

Whether you are involved in letter or package delivery, or both, mobility enables enterprises to:

- Get more out of present resources, controlling costs while simultaneously improving throughput
- Provide faster customer service
- Provide new and differentiated service offerings

And the same mobility solution can also provide the foundation to support future applications to further streamline operations and improve customer services, such as the digital indicia, on-call pick up parcel services for government postal agencies and more.

Following is a look at mobility in action in today's parcel and post operations, and how it can improve the customer experience and operational efficiencies as well as reduce costs.

Streamlined retail point-of-sale processing

When clerks are enabled with bar code scanners or mobile computers at the retail point of sale (POS), customers enjoy an efficient interaction at

the counter. Bar code scanning allows clerks to rapidly and accurately process the sales of stamps, packaging materials and more. In addition, mobile computers equipped with magnetic stripe readers enable queue busting, ensuring prompt service even when lines are long during peak and holiday times. Workers can be reallocated from the back room to the sales floor as needed, providing ad-hoc POS stations as needed — without requiring permanent counter space, an additional investment in POS terminals or the cost of hardwiring those terminals. Instead, the enterprise achieves a new level of business agility at the retail POS, able to quickly scale up and down as needed with existing staff and existing devices to meet day-to-day fluctuating volumes of traffic at the retail counters.

Electronic Proof of Delivery (POD)

When field workers are enabled with a mobile computer with signature capture capability, proof of delivery can be obtained quickly and accurately. In addition, this paperless process includes the ability to instantly transmit the POD information to business systems, providing immediate visibility for accounting and customers alike. Accounting can immediately invoice as soon as POD is received, increasing the velocity of the invoice cycle — and improving cash flow. And customer service is improved, since customers can instantly see when the delivery cycle is complete.

Flexible Cash-on-Demand (COD) payment options

A mobile computer with signature capture and a magnetic stripe or chip and pin reader enables delivery personnel in the field to provide customers with a variety of options for COD deliveries. Instead of requiring customers to have cash on hand, delivery personnel can easily offer the convenience of credit and debit card processing. The financial transaction can be completed in seconds without the need for any paper forms — and with security levels that ensure PCI compliance.

Automated creation of attempted delivery notices

Attempted delivery notices provide the information needed by customers and the business alike. Customers have the information needed to easily retrieve items at the retail counter, and businesses have proof of delivery attempts as well as the information required to efficiently reschedule deliveries. Mobility streamlines the creation of physical 'attempted delivery' notices as well as the delivery notice record.

A driver with a mobile device can easily create and print an attempted delivery notice for the customer that includes all the pertinent information about the shipment, including the bar code identifier. The same software application used to create the attempted delivery notice can also electronically file the notice in real time in the company's business system. In the event the customer comes into the retail area to claim the item, the bar-coded physical delivery notice enables prompt processing — the retail clerk can quickly and easily locate the item. If the customer has lost the delivery notice, the clerk can quickly access the notice with a few keystrokes on the mobile or desktop computer. Deliveries can be rescheduled automatically. And finally, since the data is recorded instantly and electronically, the enterprise maintains proof of attempted delivery, including time and driver — without the need, cost and errors that can be associated with paper forms.

Cost-effective track and trace functionality

Tracking all shipments in real time is crucial to the improving the overall management of parcel and post operations. It is this information that enables more efficient deliveries as well as the creation of value added services, such as web-based anytime on-demand tracking. All throughout the supply chain, handheld and wearable bar code scanners and RFID readers enable the automated and accurate capture of package information as they arrive and depart every destination. As a result, parcel and post providers enjoy cost-effective global visibility into every movement of each and every parcel.

Automated pick-up

Whether a driver is picking up a parcel at a customer location, or a customer is dropping off a package at a retail POS, mobile computers and printers enable the automated and rapid generation of an accurate and legible bar coded label. The need for paper forms is eliminated — along with the cost and errors that frequently accompany paper-based processes. And the bar code paves the way for the automated door-to-door tracking of the parcel at every stage of its travels.

Automated sorting

Mobility dramatically improves productivity and accuracy inside the sortation facility. Wearable mobile computers with bar code scanning provide the hands-free functionality needed to achieve maximum throughput with minimal errors. As a result, more packages reach the right destination on time, improving customer service levels.

In addition, wearable devices also reduce the time and cost associated with exception management. With a wearable scanner and printer, an employee can reprint a damaged label within the sorting process, eliminating the need to move the package to the exception table. Even if the bar code has been torn off or the address is too damaged to read, workers can utilize the keyboard to enter whatever information is available to locate the package record and promptly print a new label. As a result, exception processing achieves an exceptional level of efficiency, improving the overall distribution process and consistency in delivery speed.

Automated asset management

Assets such as bulk mail containers and racks can represent a significant capital investment. If these assets are not available when and where they are needed, the result can be delays that increase operational costs and reduce customer service quality.

Radio Frequency Identification (RFID) technology enables the automated tracking of these assets without any human intervention. By equipping these assets with RFID tags, RFID readers at dock doors and on depot shelves can automatically record movement and location. The resulting real-time view of inventory and asset location enables more efficient management of these resources. Stocking levels reduced, theft is discouraged and misplaced assets can be quickly located, effectively reducing the management time as well as capital expenditures associated with these business assets.

Reduced fleet costs

Improving route efficiency is one of the best tools against rising fuel and insurance costs. When drivers are equipped with mobile computers enabled with GPS technology, dispatchers have the data required to continually analyze and improve route efficiency in order to minimize mileage, fuel costs and vehicle wear and tear. In addition, dispatchers can see the location of each and every vehicle in the fleet, providing the information needed to support dynamic routing. Now, dispatchers can easily provide the most cost-efficient response to incoming customer requests for pick-ups. The driver closest to the pick-up location can be instantly identified and dispatched to the customer site, exceeding customer expectations for pick-up times while simultaneously reducing the mileage driven. If drivers take a wrong turn or are caught in a traffic jam, real-time location-based directions and traffic information can help them stay on schedule. And

finally, the automatic capture of mileage information provides two benefits:

- Automatic scheduling of standard vehicle maintenance. The ability to ensure on-time performance of regular maintenance maximizes fuel efficiency. In addition, the prompt identification and repair of any developing vehicle issues reduces vehicle breakdowns — and the high cost of an unproductive vehicle and driver.
- Automatic capture of fuel tax information. Drivers who cross state or county lines no longer need to complete forms to capture information to compute fuel taxes, increasing driving time and improving driver productivity. The information can be automatically collected and transferred to the right business system for automated completion of accurate fuel tax calculations. As a result, drivers now have more time to make more stops.

The benefits: maximize resources, reduce costs and deliver differentiated services

Motorola enterprise mobility solutions can help parcel and post businesses achieve competitive advantage by improving productivity and reducing costs throughout operations, as well as enabling the rapid and cost-effective development and deployment of differentiating customer services. Our mobility solutions will position you to better compete by:

- **Increasing employee productivity throughout your entire operation — from door to door.** Replacing paper forms with automated data capture via bar code scanning, RFID, image capture and signature capture streamlines virtually every process — from pick-up or drop off to sortation and delivery.
- **Reducing costs across the enterprise.** Enterprise mobility solutions can reduce costs throughout your operations:
 - Improved employee efficiency allows the same number of workers to handle an increased volume of transactions — businesses are positioned to handle an increase in business without an increase in staff, or reduce staff to trim employee-related costs.
 - The ability to minimize mileage reduces related vehicle costs.

- The increase in route efficiency can lead to a reduction in fleet size.
- Real-time visibility into the location of the everyday assets required to move letters and packages (such as bulk mail containers and racks) reduces stocking levels and the related capital and operational expenses.
- **Increasing customer satisfaction and retention levels.** The ability to move more parcels more rapidly and with greater accuracy provides the dependable delivery service that earns repeat business and loyal customers.
- **Improving cash flow.** The ability to reduce the invoicing cycle time through real-time data communications improves cash flow, reducing carrying costs — and improving overall profitability.

Invest in a mobility platform for today — and tomorrow

When you choose Motorola enterprise mobility solutions, you choose investment protection you can count on — a future proof platform that can serve your needs today as well as in the future. For example, the U.S. Postal Service is developing a self-service system to allow customers to retrieve letters and packages 24 hours a day, seven days a week. This program, known as Automated Mail Pickup System (AMPS), allows customers to take attempted delivery notices to a designated facility at any time of the day or night to retrieve packages, certified letters and more. Customers can use a Motorola Micro Kiosk to scan the bar code on the delivery notice and swipe a credit card to verify identify before the automated carousel presents and unlocks the compartment with the right items.

Another enhancement in the near future is the digital indicia, a two-dimensional bar code that provides additional information and improved security for letters and parcels. The digital indicia can identify the vendor that sold the indicia, the specific meter that printed the indicia, the creation time and date and more. Since Motorola offers bar code scanners and mobile computers with 1D and 2D bar code scanning capabilities, the same mobility solution you choose today can accommodate the postal indicia of the future.

In addition, you have the technology needed to continue to develop new and differentiating customers services. For example, secure 2D money orders could be printed at the retail POS or on the delivery

Over 300,000 Motorola rugged handheld scanning systems are used by U.S. postal carriers for accountable mail applications, such as Express Mail, Priority Mail Delivery Confirmation and Signature Confirmation. Their counterparts in Finland, Germany, Italy, and Sweden use similar devices for mail and package delivery, as well as COD collection applications.

At many post offices, including those in Australia, Canada, Italy, South Africa, Thailand and many other countries, Motorola point-of-sale scanners improve throughput at the retail counter by automating a wide variety of retail tasks, including stamp and packaging material purchases.

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At UPS, a case study on a specific application found wearable solutions reduced labor by 30 percent, and increased data capture accuracy by six percent, enabling that company to reduce costs and improve services.

route at a customer's door. And postal services could leverage mobility and GPS functionality to enable same-day on-call parcel pickup service to better compete against private parcel services.

Motorola — the technology partner you can count on

Your customers count on you to consistently deliver letters and parcels to the right person at the right time for the right price. With Motorola as your technology partner, you can. Our proven end-to-end mobility solutions are in use in more than 70 postal systems as well as many of the largest of parcel, package and express companies around the world. Every day, Motorola technology provides the real-time visibility into the whereabouts of every letter, package, vehicle and driver required to keep parcel and post operations running smoothly, ensuring on-time deliveries and maximum cost-efficiencies. And regardless of where you want to start, our comprehensive solutions provide what you need.

- Our planning services help you design your mobility solution from the ground up to achieve maximum success, factoring in ease-of-use and user adoption rates as well as wireless connectivity requirements.
- Our broad line of data capture devices includes bar code scanners, rugged integrated voice and data mobile computers and rugged two-way radios, designed for all day every day use inside and outside the four walls of the enterprise. And our devices are packed with processing power and Motorola-only features for consistent outstanding application performance.

- Our comprehensive wireless infrastructure portfolio wireless LANs, WiMAX, mesh networking, RFID, and wireless broadband point-to-point and point-to-multipoint networks, designed to deliver secure mobile communications for workers inside and outside the four walls and between business locations.
- Our management solutions bring a new level of simplicity to the management of complex mobility solutions, providing unprecedented centralized control over your mobile computers, the data and applications resident on those mobile computers and your wireless infrastructure.
- Our world-class business partners provide best-in-class applications that integrate easily with existing workflows to minimize development costs as well as disruption to day-to-day business procedures.
- Our post-deployment services minimize downtime, helping to keep your mobility solution up and running at peak performance every day of the year.

For more information on how Motorola can give your parcel and post operations a competitive edge, please visit us on the web at www.motorola.com/supplychainmobility or access our global directory at www.motorola.com/enterprise/contactus



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