GET A 'BUNDLE' AND RECEIVE VALUABLE BENEFITS: PRELOADED DATA COLLECTION SOFTWARE CAN HELP COMPANIES AUTOMATE INVENTORY, FIELD SERVICE AND ASSET TRACKING APPLICATIONS AT A MINIMAL COST

The Challenges

A growing number of small to mid-size businesses are considering mobility solutions as the means to automate, increase productivity and eliminate errors in their business processes.

This white paper examines challenges confronting small to mid-size businesses interested in mobile solutions as a means of escalating productivity. It also provides a guideline for enterprise use of the Pal data collection application from Datalogic ADC and the value gained by a solution that comes pre-loaded and pre-licensed on all Windows-based mobile computers.

Pal applications embedded on Datalogic mobile devices offers a solution that organizations can use with their existing technology investments to help reduce costs, while optimizing investment in scalable, innovative technologies which help enhance efficiency.

Additionally, this white paper introduces improved benefits and features from the latest tools that come pre-loaded and pre-licensed on all Datalogic devices to effectively address common challenges in business scenarios.

Introduction

More and more companies are automating and extending the capabilities of their workforce via automation using mobile computers. Larger companies are well aware of the benefits of process automation with mobile computing devices, but small businesses, startup companies and even mid-size companies can also improve operational performance, productivity and efficiency by exploiting mobile technology.

However, small and mid-sized companies face a number of challenges when it comes to deploying mobile computers within their operations, including the cost to license and maintain application software, integration issues that can further increase deployment costs and potentially disrupt workforce activities, and a lack of IT resources to identify, integrate, deploy and maintain the mobile technology.

For companies that can clearly see the benefits for the business in utilizing mobile technology, may be hesitant to deploy because of these costs and integration obstacles, a potential solution is to consider business software that comes pre-loaded and pre-licensed in Datalogic's mobile computers, at no additional cost.

When you purchase a laptop, tablet or desktop computer, these devices are generally ready to operate out of the box. In addition to the operating system platform, most PCs and tablets come with Web browsers and other types of software pre-loaded so that users can immediately begin using their new hardware.

This is not typically the case with the types of rugged mobile computers used for warehouse management, field service, asset tracking and other enterprise applications. In order for users to receive any benefit from the mobile hardware they purchase for these types of line-of-business applications, owners need to invest in pre-packaged software, develop their own data collection solutions, or hire an outside systems integrator to create an application or install and modify an existing third-party solution.

Does it have to be this way? For small and mid-sized businesses and those with fairly straightforward data collection needs, it is possible to provide pre-installed or bundled productivity applications on a rugged mobile device so that users can accept orders, take inventory or track assets without having to invest in additional development and integration resources.

This white paper will explore how companies can automate warehouse management, retail, field service, and asset management processes without purchasing software. The paper will identify processes that can be automated using bundled software that is preloaded on mobile computers, allowing users to immediately realize the benefits of mobility. The paper will also show that even small enterprises can achieve a positive ROI by automating basic tasks using mobile computers and no-cost software.

Bundled Software Adds Value

PC manufacturers have long known the value of making it easier for their customers to use their hardware. While new PCs rarely include more advanced applications like the Microsoft Office suite, most computers include some amount of bundled software that allows users to enjoy their devices without additional spending. Web browsers, basic word processing programs, games, and other applications are pre-packaged with most laptops and desktops.

Businesses that want to deploy mobile computing technology have a slightly different approach to hardware purchases—obviously, deploying a solution that could fundamentally change work processes and integrate with a myriad of back-end software and data systems will require testing, training, and preparation. But very basic functions like scanning an item on a shelf to update an inventory database are so straightforward and largely uniform across vertical applications that, given the functionality and processing power now available on mobile computers, there is no reason these devices can't perform this task as soon as they are activated.

For smaller companies, such as retailers that only operate one or two locations, or small warehouses or distributors, having pre-packaged software resident on the devices can mean the difference between deploying or not deploying the technology.

Companies investing in lower-end mobile hardware may simply want to take inventory or place basic orders. But many of these companies have small technology budgets, and likely have no in-house IT resources. If in addition to purchasing the hardware they also have to spend money on software licenses, integration services, development and other expenses, then they may simply not purchase the technology at all.

Bundled software doesn't just offer cost savings; for companies in the initial stages of planning a mobile deployment and evaluating hardware, having onboard applications can allow them to very quickly demo and test basic solutions, experiment with workflows, introduce employees to the technology, and evaluate the return on investment (ROI) potential without relying on vendor-constructed demos (that may not use the company's actual data) or going to the trouble of a full-blown pilot.

Datalogic's Pal Software Suite

Datalogic is one of the only rugged data collection device manufactures that offers pre-installed, bundled data collection software. The company's Pal software suite ships with every handheld Windows® Mobile or Windows® CE device from the factory at no additional cost.

For small businesses, this out-of-the-box functionality can minimize startup costs by reducing the expense and frustration of provisioning devices, reducing training requirements, and eliminating the cost of software license and maintenance. The productivity tools in Pal allow organizations to get their mobile devices up and running quickly, providing a faster ROI while simplifying data collection tasks. Further, Pal is scalable enough to grow and change with the company, while providing a pathway to deploy more complex applications in the future.

There are certain core applications that mobile users in retail, warehouse and field service/sales applications rely on. Pal is configured to offer these functions out of the box and provide businesses with the basic functionality to automate these core practices. Applications include:

- **Asset Tracking** - To quickly take asset inventory, including asset name and location.
- **Shelf Inventory** - For performing physical inventories or cycle counting in a store or warehouse; the application captures location, SKU and quantity data.
- **Shelf Replenishment** - Generate a pick list to replenish low shelf stock using store, shelf I.D., SKU and quantity data.
- **Order Entry** - Take orders in the field using site, order I.D., SKU, and quantity data.

Pal can auto import data into Excel, Notepad, or other host systems, and automatically transfer data when the device docks via the Pal Communicator PC application.

The solution is also configurable, so that users can customize the pre-packaged applications. Resellers and independent software vendors can also create custom applications using Pal, as well.

The return on investment equation for mobility is straightforward and can be illustrated in a warehouse application. According to the Bureau of Labor Statistics, the mean salary of a warehouse worker is $12.16 per hour. In order to pay back the cost of a $1,000 mobile computer, a company would need to realize at least 82 hours of increased efficiency—or 20 minutes of productivity per day over an average 250 work days per year. Industry surveys have shown that rugged mobile computers increase worker efficiency by more than 25%, which means the ROI period would actually be less than 12 weeks. ROI is improved even further when you take into account the impact of reduced manual data entry on back office operations.

Mobility also reduces or eliminates errors, which are often far more costly than the hourly wage of an average warehouse employee or even the cost of a mobile computer. If an error in inventory causes unnecessary purchases or prevents the sale and shipment of an order, the total value of avoiding that error affects the ROI equation.

By reducing time to deployment and eliminating the cost of software licenses and maintenance, Datalogic's Pal software applications can accelerate the return on investment in a mobile solution. Small and mid-sized businesses not only realize productivity improvements faster this way, but also avoid large up-front expenditures and ongoing fees associated with updating third-party applications.

Pal Improves Data Collection Operations

Pal applications help users quickly automate core data collection operations, and delivery immediate benefits in productivity and accuracy. Here are two examples of how Pal can streamline the following business processes.
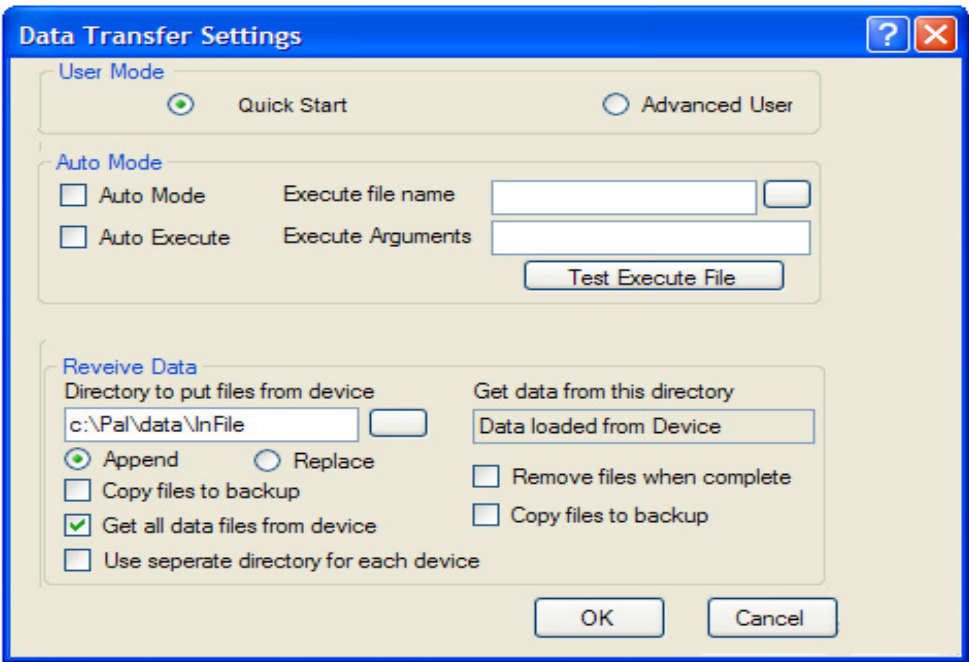
Application Example: Reduce Errors, Eliminate Manual Data Entry

An established bakery operation has expanded to have three drivers that service local restaurants and grocery stores. Each driver visits eight to ten locations per day to pick up unsold items, to restock inventory and deliver special orders. Inventory data is managed manually using paper, pen and a clipboard. At the end of each day, drivers turn in their paperwork at the bakery. That evening an employee manually enters the information into a spreadsheet and clients are invoiced at the end of the week.

The manual system works, but has creates problems including: difficulty in reading driver notes, errors from lack of information, errors in data entry into the spreadsheet, and more. As the products change or routes grow, the complexity of the spreadsheet will continue to increase. This application requires some way to automate the process without increasing costs or dramatically altering workflows.

In this example, bakery drivers could use a mobile computer and the Pal application suite to scan the item number of the merchandise and enter the amount that needs to be ordered. At the end of the day, the driver would download the data collected using Pal Communicator.

Pal Communicator detects the connection of the mobile computer, automatically transferring the data. No user intervention is required. In this example, Pal would be configured to capture driver ID, date stamp, item number, and quantity. Not only would this basic level of automated data collection speed the inventory process in the field, it would also reduce or eliminate errors introduced either through the driver notes or the manual data entry, and save hours of labor each day in the back office. Billing could also be expedited generating invoices more quickly.

Application Example: Increase Warehouse Operations Efficiency

A small distribution or warehouse sales company manually processes orders using paper order sheets to pick items from the warehouse and prepare them for shipment. Inventory counts are manually managed based on input from the workers using the paper forms.

The company needs a way to eliminate the manual data entry during the pick/ship process, and automatically enter order information into the QuickBooks™ system.

The Pal Application suite preloaded on all Datalogic mobile computers could be used to automate this manual process. Pal can be configured to associate a customer number, order number, item number, quantity picked and picker ID to each order record. During order picking, a warehouse employee would enter a customer number and order number. Then the bar code scanner would be used to identify each item picked. Workers would then enter quantities using the keypad on the mobile device. This proceduere is repeated until the complete order is picked. The order information can then be transferred to a PC for processing.

In this case, eliminating manual data entry would speed up order fulfillment, improve order accuracy and eliminate time consuming manual data entry. ROI would stem from internal productivity improvements, combined with the potential savings associated with avoiding inventory and order shipment mistakes.

These examples focus on small and medium-sized business operations where technology budgets and resources are very limited. Regardless of the business size, it is important to consider what your data collection needs are.

Complex mobile applications that require data validation or other functions (i.e.: taking digital photos to be matched with asset data) are not good candidates for basic applications, such as Pal. In those cases, users would be better off investing in other packaged software applications, depending their needs. Complex integrations with multiple back-end software solutions (like CRM, ERP etc.) would also likely require a more robust solution.

Conclusion

The value and utility of mobile computers can be enhanced with the addition of pre-installed, bundled productivity applications that allow users to immediately experience the benefits of mobile computing in their inventory, field service, and asset management applications. Smaller companies or those with limited data collection needs can benefit from the lower cost and more rapid return made possible through onboard software such as Datalogic's Pal application suite. More importantly, these solutions can be easily (and rapidly) deployed with minimal development effort on the part of the user.

Resources

For more information on Datalogic's Pal Applications and mobile devices, visit: www.adc.datalogic.com.

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Datalogic ADC is the world leader in the Automatic Data Capture market, offering state-of-the-art solutions with fixed position retail scanners, handheld scanners and mobile computers. Datalogic ADC's range includes in-counter and on-counter point-of-sale scanners, general purpose and ruggedized handheld scanners, rugged mobile computers, industrial PDAs and vehicle mount computers.

The Solutions business unit of Datalogic ADC is a leader in the development of solutions for the retail industry. Stores can benefit from the latest in vision-based technology solutions, analytical tools, self-shopping solutions and consumer relationship technologies.

A division of the Datalogic Group, Datalogic ADC is headquartered in the US. The company provides solutions for applications in several sectors, including healthcare, hospitality/entertainment, manufacturing, retail, services and transportation & logistics. See us at: www.adc.datalogic.com.