

## A White Paper from Datalogic Mobile

Enterprises automate their operations to increase efficiency and maintain competitiveness. The decision to do so is usually precluded by extensive analysis that compares the systems, procedures, expenses, and other factors against the costs and benefits of the incoming systems. This analysis is done to assure the purchase makes good financial sense illustrating an ROI period that suits the company's business model. Upper management reviews and approves the decision based upon this analysis and moves forward with the implementation.

But what happens years later can be very different. A capital purchase decision such as a system implementation moves to a maintenance and expense line item in the budget. These do not require the same level of analysis and review. Moreover visibility to the true maintenance costs is often lost in the hectic pace of daily business. These factors can lead to a misconceived idea that maintenance of existing equipment is saving an enterprise money when replacement may provide greater savings. This is more commonly the case after equipment has been in use for 3-5 years at which point changes in technology and expiring warranties have impact.

This white paper identifies factors to consider when considering a Repair or Replace decision. It is important to explore the criteria and become aware of the hidden costs or missed opportunities associated with handheld computers that are over three years old.

### **Downtime**

Downtime is the period of time when the handheld computer is not in operation as the result of a malfunction or needed repair. As units age device failure rates increase especially since many of these devices are used in harsh environments. Enterprises will experience more downtime on the older units impacting their efficiency.

Downtime does not cost the same throughout the year. A busy warehouse that runs two shifts during the autumn and goes to one shift during the summer has a different cost model at different times of the year. Autumn failures and downtime are going to cost significantly more during these peak months if a unit needs to be sent out for repair. Downtime costs are not limited to the device but also include lost productivity of the worker; labor costs to troubleshoot the failure; labor costs to process the repair – getting the unit fixed; cost of the repair; labor costs to reconfigure and deploy the repaired device; shipping expenses and maintain the device; and more.

Review repair logs to get a sense of your downtime expenses. Assign a cost to each of the people and systems that are impacted when a handheld computer goes down. If you don't have a repair log get one started.

### **Maintenance Contracts and Repair Cost**

Review your maintenance contract and get a solid understanding of the repair costs. In most cases maintenance contracts provide a defined price for repair of units over a specific timeframe. The details of a contract should be clearly understood as time progresses. In some cases maintenance contracts have sliding expense scales that can change with age; do not cover shipping costs in both directions; or different response times for repairs. These details impact the cost of repair for failed units. For example a typical warranty or flat rate repair may have a 10 day repair turnaround plus shipping. This means the handheld computer is out of your facility for 15 -20 working days. Most maintenance contracts decrease the repair turnaround. The most popular is the 2 or 3 day repair turnaround significantly decreasing the time out of your location by about 2/3 the time of a standard warranty claim. By contrast the flat rate repair cost is a per incident fee. You only pay

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when the unit is in need of repair. This cost is significantly higher than a 3 year contract and it is not a planned expense.

It is also important to note the length of any existing repair contract and the renewal price. As units age the cost of repair contracts can become significant. Also cost of a three or five year program can be significantly less, in the range of 30% - 50% less, than the purchase of a annual contract. Assess the full costs of your repair contracts for current and upcoming years and use them in your Repair or Replace expense model.

Datalogic Mobile understands that speed is of the essence for today's enterprises, offering a wide and complete range of post-sales services to protect your investment in mobile products. The EaseofCare Maintenance and Service programs offer a variety of options for keeping the cost of handheld computer under control. Datalogic offers overnight replacement, two day or five day service levels to choose from, each with two way shipping included for each unit. Contact your Datalogic representative for more information or visit [www.mobile.datalogic.com](http://www.mobile.datalogic.com).

### Technology Advancement

Technology Advancement of mobile devices leaps forward every year with changes in operating systems, off the shelf software applications, and hardware that is faster and more feature rich. Your existing implementation or system may not take advantage of the advances that have developed since its deployment. This means your enterprise efficiency may not be as high today as it could be or as high as your competitions.

Some handheld computers are only capable of running a single application which renders the device useless except for that one specific task. Device hardware limitations can have a similar affect. As mobile computer use evolves, users realize their potential and look to expand their use. Age can limit this pursuit. For example, cameras in handheld devices can be used to take pictures of damaged goods before accepting inventory or shelf displays to show for adherence to codes and demonstration of setup. Devices that lack this ability require extra steps such as asking someone to bring a camera or traveling to a different location to get one. Both are examples of inefficiencies that come about from devices that lack advanced technology.

Review your existing hardware and system implementation and compare it to a modern configuration. There may be significant improvements that have evolved since your systems deployment. These improvements can impact the efficiency of your system and have an impact on the Repair or Replace analysis.

### Device Management

By their nature handheld computers can be found throughout an enterprise and move from location to location. Moreover they are deployed in multiple locations. How these devices are managed can be costly. In many installations, a centralized IT department manages all the enterprise devices. In some cases there may be a power user that helps troubleshoot and account for the equipment. If either of these is your method of device management you may have unnecessary costs.

Remote management of handheld computers brings a significant reduction in costs and an increase in reliability and security of the devices. The industry leader in remote mobile device management is the Avalanche® system by Wavelink™. Avalanche is a powerful yet easy-to-use management solution that provides complete visibility and control of mobile devices from a central

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console. Avalanche eases the configuration, deployment, and management of mobile devices which effectively reduces the cost of supporting the handheld computers and their users. Administrators predefine configuration details that can be automatically applied to new devices meeting specified criteria or coming back from repair rather than provisioning each device individually.

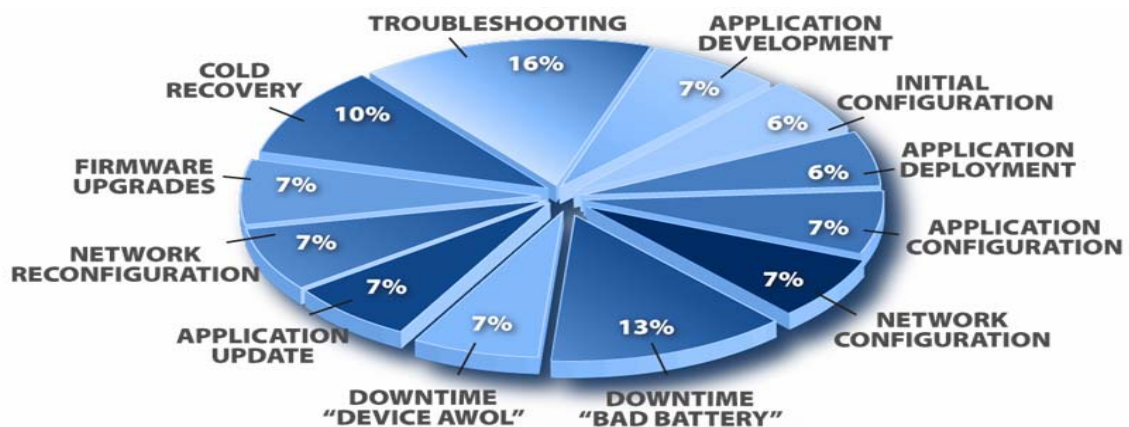
Remote device management give IT departments the ability to diagnose and remedy the applications and devices settings regardless of their location from a central location. It also provides assisted guidance or training for an end-user, thereby reducing mobile device downtime and increasing end-user productivity.

Avalanche is preloaded and prelicensed on every Datalogic handheld computer. The power of this system comes with each unit and significantly impacts the Repair or Replace analysis in many instances.

### Summary

Some people are proud of the length of time they are able to hang on to antiquated systems. This pride is often justified by the thinking that the longer old systems are kept in use the more money the company saves from not buy new equipment. This thinking is often shattered when old systems are finally replaced and users the increased efficiencies, increased customer service, better ergonomics, and reduced cost of operations. It is important to consider Repair or Replace analysis on an annual basis once equipment and systems become three years old.

The goal of Repair or Replace analysis is to make a decision to upgrade at the right time. This decision should be made before the cost of maintaining existing equipment becomes higher than the cost and benefits of upgrading. Operational costs for existing equipment must be considered as the Total Cost of Ownership or TCO. Research done by Gartner illustrates that the total cost of ownership for handheld devices is considerably more than the cost of the hardware alone. Each time a device fails a domino effect of expenses are incurred. As devices age these costs begin to multiply. The illustration below shows the Gartner found as the elements that define the total cost of a failed device. Their analysis indicates that a device failure can result in an annual cost of \$2000 - \$3000 per device.



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These are significant values and illustrate the importance of Repair or Replace analysis. If you need help with Repair or Replace analysis Datalogic Mobile can help. Our representatives have years of experience analyzing needs and helping companies make Repair or Replace decisions.

### About Datalogic Mobile

Datalogic Mobile is a global manufacturer of mobility solutions for retail applications, assisted shopping, warehouse solutions, and field-force automation.

Our diverse product range of rugged mobile computers includes pocket-sized computers, pistol grip mobile computers, and industrial PDAs designed to keep workers connected to their enterprise inside or outside the four walls. Our mobile computers use Cisco® Certified CCX radios for maximum levels of: RF security, data throughput, and efficiency. Datalogic Mobile computers use the latest technologies for voice and data communications giving mobile workers on-the-go connectivity.



*Datalogic Mobile has a complete line of rugged mobile computers for retail, warehouse and field force applications.*

Datalogic Mobile is the worldwide leader in Assisted Shopping. Over 350 retail stores have implemented Datalogic Shop evolution™ software and the Datalogic Joya™ handheld pod as their assisted shopping solution. Datalogic assisted shopping gives retailers a competitive advantage while reducing their operational costs. Joya makes shopping a multimedia experience that increases consumer loyalty.

Datalogic Mobile has worldwide presence in over 30 countries and over 800 business partners worldwide. A leader in technology, Datalogic has a growing portfolio of over 850 patents, eight research and development centers, and 300 engineers.

See us on the web at [www.mobile.datalogic.com](http://www.mobile.datalogic.com) or call 800-929-7899