



INVESTING IN MOBILE AND WIRELESS

1

What should I look for in a mobile computer vendor?

First, look for a manufacturer committed to understanding your application before talking hardware. All too often, end users become enamored with the hardware and lose sight of how it fits into the real-world application.

Second, select a vendor willing to spend time with your mobile employees. Understanding how they work and the features important to them will help you select the hardware that will improve efficiencies.

Third, beware of vendors that focus only on price. Factors such as durability, training and support, battery life, and implementation costs are just a few important issues that lead to a very high – or low – total cost of ownership.

Finally, the right partnerships can make all the difference. A manufacturer who works with industry leaders in mobile software and networking hardware will ensure that you'll be receiving the best solution for your application.

2

Why should I embrace an image-based mobile computer rather than a traditional laser-based device?

While lasers are adequate for reading basic linear bar codes and can serve niche long-distance applications, the technology itself has reached its functional boundaries. Imaging technology, on the other hand, takes advantage of a popular consumer electronics product – a digital camera – to deliver the next generation of data collection capabilities.

- Reads every type of linear and 2D bar code
- Captures digital images for proof of delivery or package condition
- Captures digital signatures
- Reads codes at every angle to make data capture easy on your operators
- Solid-state construction with no internal moving parts reduces downtime

The power, flexibility and versatility of imaging will give your workforce a sophisticated productivity tool that can deliver real-time inventory updates, delivery confirmation, and many other time and money-saving benefits.

3

What makes an open architecture approach the intelligent solution?

Quite simply, open architecture gives you a level of flexibility a proprietary system can't offer. With open architecture, your mobile computer can freely communicate with most enterprise systems. In addition, a product that embraces industry-standard development tools such as Microsoft® Visual Studio.NET and Sun® Java™ allows for even greater programming flexibility. Your mobile computer should also have the ability to interface with Cisco® infrastructures that will greatly extend your current hardware investments.

4

What should I expect from a vendor regarding device management?

Handling the IT requirements of computers in your building is one thing – dealing with hundreds or even thousands of mobile computers deployed into the field represents an entirely different challenge.

A recent VDC (Venture Development Corporation) report¹ focused on analyzing the TCO of industrial mobile computers within supply chain market verticals revealed that the average annual operational expense due to “operator downtime” and the resulting “IT support to resolve downtime” is \$710 per device! These costs occur due to labor-intensive activities such as:

- Application update/reload
- Device reconfiguration/reset
- Data loss/data re-entry

- Operator instruction
- Problem diagnosis & fix
- Telephone/help desk support

Compounded over a typical lifespan of five years, these operational costs can run as high as \$3,550 per deployed device.

A supplier dedicated to meeting your business and financial objectives should be prepared to discuss device management solutions that could drive significant cost savings and efficiency back to your business.

5

Are mobile computers rugged enough to be dropped or used in harsh environments?

Since mobile computers are often destined for rough handling and rugged environments, it only makes sense to look for a product that's built specifically to work under those conditions. One of the first mistakes to avoid in deploying a mobile solution is settling for a PDA or cellular phone when a true industrial-grade device is required for the application. Features of a true industrial-grade device will include:

- Industrial-grade touch panel and magnesium alloy housing
- Solid-state construction throughout, with no mechanical interfaces
- Image engines instead of fragile laser engines for data collection

Combine all of these attributes in one solution, and you have a mobile computer that will greatly reduce downtime and ensure maximum productivity.



Total Cost of Ownership Modules for Mobile Computer and Communication Platforms – Industrial and Harsh Commercial Environments: Volume II: Supply Chain (Nov. 2003)





How easy will it be to interface the mobile computer with my current system?

Obviously, no one wants to invest in a wireless system that cannot communicate with data bases, mainframes, and other computers. The mobile computer manufacturer and integration partners you select must be willing to work with you to ensure compatibility with everything from terminal emulation to Wi-Fi (IEEE 802.11b). This is where the standards-based architecture and open operating systems will prove beneficial.

majority of mobile devices offer only four to six hours of use, adding inefficiencies and cost to your business while frustrating your mobile employees.

When evaluating the real cost of a device and the solution that will best meet your needs, look for a mobile terminal that offers full work-shift battery life. Mobile computers featuring Shift-Plus battery performance deliver up to 12 hours of use for uninterrupted work flow and improved customer service.



How secure is the data that is being transmitted?

Whatever type of technology you go with, you should never have to compromise efficiency and productivity for the sake of security. An open architecture solution uses the latest security standards while providing the flexibility to integrate new industry standards as they are developed.

With that in mind, the mobile computer manufacturer and its alliance partners, such as Cisco, should be at the forefront in establishing the next generation of security standards, including LEAP technology and the development of IEEE 802.11.



What should I expect the ROI to be?

With the added benefits of real-time data, a more efficient work force and enhanced value for your customers, a mobile system could pay for itself within a year. When you factor in the residual benefits that often accompany increased workforce and customer satisfaction, a mobile solution makes good financial sense.



What should I expect in the way of after-sale support and service?

Being abandoned by your vendor after the sale can have a crippling effect on your operation. Increased productivity, customer satisfaction, employee morale, and profit margins all hinge on thorough, helpful after-sale support. That's why it's critical to ensure your mobile computer supplier, integrators, and partners are all proven players with an excellent customer service track record and a vested interest in your success.



How important is battery life?

Although battery technology has come a long way in the past few years, it is the mobile terminal's efficient use of that power that dictates battery longevity. Today, the large

