Mobile Computing in the Warehouse

GETTING STARTED

Rugged devices are still the norm in the warehouse environment. Consumer devices have been tried, but the need for integrated barcode scanning and a device that can take many drops from high places quickly ruled them out. So, you recognize that you need a rugged, mobile terminal, but which one? This guide is intended to help you make some good decisions for your warehouse operations.

1   FORM FACTOR

Handheld, Tablet, Forklift Mount, Wearable: These are the major form factors for mobile computers in the warehouse. Usually there is a mix of devices depending on the job being done. Warehouses that are pallet in and pallet out tend to use forklift terminals or handheld with hard keys. Below are some questions to ask yourself.

1. Do my software applications need a full-sized screen?
2. Do I mainly have operators on forklift and don't want them to have to get on and off the lift?
3. Do my forklift operators need to frequently get off the lift and take their mobile computers with them?
4. Are my forklift's owned or leased?
5. Are my forklifts gas or electric?
6. Do my forklifts go inside and outside frequently?
7. How smooth are my warehouse floors?
8. Do my operators need both hands free to do their job?

The answers to these questions will help you decide what mobile computers are best for you.

Handheld Computers   Wearable Computers   Vehicle-Mounted Computers

Keys or No Keys: Handheld, rugged, mobile devices for the warehouse come in basically 2 flavors with hard keys or with on screen keys. Which is right for you? Your workers and you application will help you decide which is best. Here are some questions to ask yourself about your operations.

1. Do my operators wear gloves?
2. Is there much key entry required for my application?
3. Does my application have room on the screen for a pop-up keyboard?
4. Can my workforce work with a smaller screen that has small buttons?
5. Am I running a browser application or terminal emulation?

These questions should help guide you to an answer. TE applications tend to require function keys that better lend themselves to hard buttons. Older workers prefer hard buttons. Gloves usually require hard buttons.
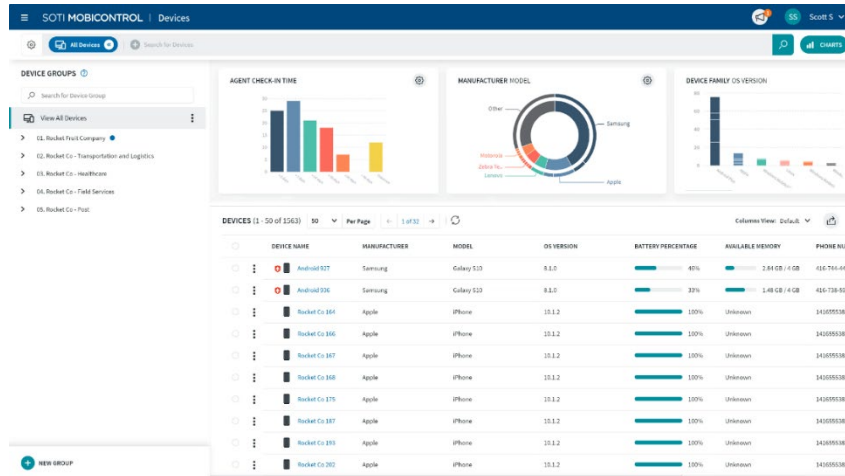

2   SCANNER RANGE

Do I Need Long Range Scanners: Modern, long range barcode scanners are so good, that it almost always makes sense to have them in your mobile computers. They read very well up close, but also read from many feet away allowing your operators to scan from great distances. But not all the form factors above have long range scanners available. Wearable terminals and ring scanners are typically short range only. Also, tablet computers typically only have short range available. Forklift mount computers have separate scanners, and they can be either short or long range.
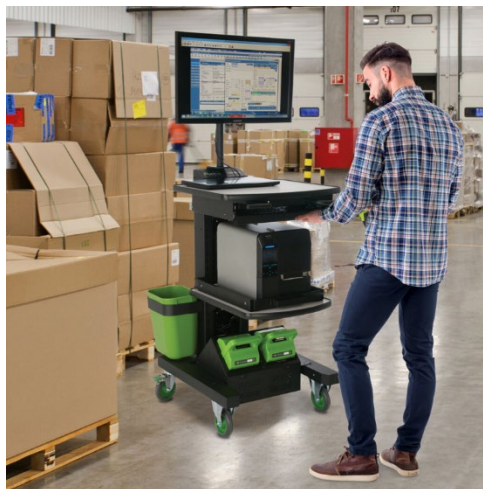
3   MOBILE DEVICE MANAGEMENT SOFTWARE

Do I Need Mobile Device Management (MDM) Software: With most mobile computers in the warehouse now being Android, the need for more frequent OS and application updates is real. If you have a handful of devices all in one location, you can probably get away without some sort of device management. But if have many devices and particularly spread out amongst many locations, a good MDM to manage updates and more easily support users is a must.

4   MOBILE POWER CARTS

Should I be looking at Mobile Power Carts: There are some hard triggers for mobile power being a good fit for you. One is the need for a full-sized PC with a keyboard and mouse for your application. The other has more to do with printing than mobile computing. If you need to print a pack slip on a full sheet of paper, then you might need a mobile power cart. If you are printing a large number of labels per shift, then having a full-sized label printer with the operator at all times is a huge time saver. Operator fatigue is minimized by adopting mobile power carts.

5 POWER FROM FORKLIFT

Should I Power my Devices from the Forklift: These days, the answer is frequently no. The only time it is yes, is when you have the need for a full time, rugged forklift terminal because of atmosphere or floor conditions. And even then, leased forklifts can be a deterrent to mounting rugged terminals and powering them from the lift. If you are using handheld mobile computers, having gang chargers, and simply putting in a fresh battery at the beginning of the shift is the recommendation. Modern mobile computers can easily last a full shift even with frequent barcode scanning.

6 CONCLUSION

When in doubt, hire an expert! The EMP Tech Group specializes in mobile computing for the warehouse. We bring years of expertise to your application and will help you specify the best mobile computing form factors for your warehouse operations. But more than that, our team can be an extension of your team. Experts helping your group manage mobile devices by providing support for your users, helping you manage devices going back for repair or making sure that new devices arrive at your door ready to use.

	Basic	Basic +	Basic + Spares	Full Support
Manage Multiple Manufacturers	X	X	X	X
Manage Factory Maintenance Contracts	X	X	X	X
Manage RMAs	X	X	X	X
Access to OneTouch	X	X	X	X
Device Configuration		X	X	X
Spares Pool			X	X
Remote-In Support				X
On-site Support				X
Manage Factory Repairs				X