



Managing the Implementation of Barcode/RFID Tracking and Wireless Mobile Data Collection Systems

The use of barcode/RFID and Wireless Mobile technology can add substantially to the capabilities of financial, ERP and other legacy systems by enabling the capture of real-time material tracking and operations management information. These additional benefits can often result in cost savings of hundreds of thousands of dollars in operational costs and can enable industrial organizations to win millions of dollars in new sales.

Managing the implementation of these systems is, however, a complex process. Responsibility for implementation is typically invested in the IT manager, possibly assisted by a systems integrator who will carry out many of the implementation tasks. The IT manager is the person responsible for ensuring that all the disparate components of such a project come together to result in a working system that is of great value to the IT manager's organization.

Some of the elements needed for a successful systems implementation are:

Supplied by Barcode Equipment Resellers:

1. Barcode scanners and wireless mobile computers with integral barcode scanners.
2. RFID portal equipment as well as mobile scanners
3. Barcode printers, RFID encoders and barcode label software, such as BarTender.
4. Services to setup barcode and RFID devices and to provide training in their use.
5. Maintenance service for devices when they stop working.
6. Barcode labels, printer ribbons, employee badges and other supplies.

Supplied by IT Equipment Resellers:

1. PCs and Servers with Operating Systems
2. Wireless network equipment including access points and antennas
3. LAN equipment, including bridges, routers, and cabling
4. VPN and Firewall appliances for remote operation over Internet.
5. Web servers, if needed
6. Backup devices and servers
7. Services to setup operating systems and network devices
8. Wireless surveys to determine antenna and access point placement
9. Services to install antennas and setup up access points
10. Maintenance service for computing and network equipment

Supplied by BellHawk Systems

1. Software modules, supplied as integrated working software that provides 90% of the required tracking and data collection capability.
2. Customization services to tailor the software modules to the specific business needs of the client organization.
3. Consulting in how to use BellHawk software for a specific application.
4. Explanation of how BellHawk works.
5. Installation and setup services for BellHawk software.
6. Training in the use of the BellHawk software. This is typically provided to the IT manager who then trains other employees in the operation of the system.
7. Software tools to simplify the task of exchanging data between BellHawk and existing systems.
8. Assistance in the interfacing of the BellHawk software to other existing systems.
9. Troubleshooting and problem correction support. This is typically needed when employees make mistakes in data entry or equipment malfunctions.

Supplied by Support Organization for ERP, Accounting or Other Legacy System

1. Work with BellHawk Systems to implement data exchange between BellHawk and existing systems.
2. Resolve accounting issues in integrating data from BellHawk data collection system into financial records database.
3. Thoroughly test the import and export mechanisms.

Provided by IT Department and/or their Systems Integrator

1. Overall project management.
2. Writing of operational procedures.
3. Training of users.
4. Management of change–order request process.
5. Thorough testing of the system before deployment.
6. Post–deployment support of users.

As can be seen from this list, the implementation of a data collection system is a collaborative effort between many organizations that need to work as a team. The IT manager is a critical resource in the success of the project in that he or she needs to manage all the disparate resources to ensure that they all come together into a working system.

None of the suppliers of equipment, software or services can ensure the success of the project alone. It has to be a team effort, lead by the IT manager.