While the use of radio frequency identification (RFID) technology in supply chain management is relatively new, it is rapidly becoming a crucial supply chain element in the manufacturing, pharmaceutical, retail, consumer goods, government, and service sectors. And more and more, RFID is being used in the supply chain to improve visibility and monitoring and maintenance of equipment.

The potential benefits of RFID are enormous, and so are the potential pitfalls. Many companies – driven by such factors as regulatory compliance, customer mandates, and the fundamental need to reduce costs in the supply chain network – rush to install RFID systems. In their haste, they often create serious roadblocks to progress.

One such problem is the lack of careful planning for the role of RFID now and in the future. Another is the use of custom or proprietary systems that are difficult and costly to integrate into existing supply chain operations and reporting.

You can avoid difficulties like these with SAP® RFID technology. This software leverages your existing IT investments by easily integrating with SAP and non-SAP supply chain applications, alerts you when problems occur, and helps you to create exception-based reporting. Now and in the future, SAP RFID is the on-ramp for all RFID data into SAP solutions.
For companies that use SAP software, the first step in careful RFID planning is the assessment provided by the SAP Service Select for SAP RFID package. SAP Consulting experts collaborate with your experts to assess the following:

• Your organization’s environment
• What you need to RFID-enable your supply chain network quickly and easily
• What you will require to meet mandates and regulations

Working with your employees, the consultants will analyze your business processes, your technical infrastructure, and your methods for capturing and handling RFID data. When the assessment has been completed, you will have a well-marked road map for deploying SAP RFID in your company—a road map to which your senior management can commit.

Do You Need a High-Level Assessment?

Embarking on projects without a plan is a risk under any circumstances. When a new technology like RFID is involved, you must take steps to avoid risks and ensure success.

Careful planning is even more important if there are external pressures to implement RFID. Increasingly, customers are mandating that suppliers “slap and ship” RFID tags on their products. These customers include government agencies, such as the United States Department of Defense, and global retailers, such as Wal-Mart and Albertsons.

Whatever drives your RFID project, you must choose from a range of implementation alternatives, such as these:

• Do the bare minimum, for example, creating a stand-alone system that simply captures and tracks electronic product code (EPC) information locally
• Use RFID as a minor adjunct to existing systems, simply to report faulty equipment for repair, or to enhance shipping notices and invoices with EPC information as you prepare to transmit data to customers
• Fully integrate RFID into existing applications and business processes for improved adaptability and competitive advantage

Whatever you choose, keep the future in mind. If RFID can significantly increase your ability to track goods throughout the supply chain, can the data then be used throughout the enterprise, to help you reduce inventory, improve the distribution network, and raise the accuracy of demand forecasting?

With the right RFID technology and the right plan, you can operate with unprecedented levels of accurate and timely information.

What Makes RFID Implementations Complex?

When you are developing a strategy and defining the scope of your initial implementation, you need to consider everything from the technology, processes, and logistics, to the impact on your business relationships and your compliance with government regulations.

You can find good examples of these issues among retailers, consumer packaged goods and pharmaceutical manufacturers, and transportation service companies—sectors that are particularly aggressive in implementing RFID applications.

For instance, many major retailers, seeking to reduce out-of-stock situations, are requiring suppliers to identify their pallets and cases with RFID tags. One global retailer now pilot testing this project in selected stores has established readers at three sites:

• At the receiving dock, to register case and pallet delivery
• Between the store room and retail floor, to record case movement to the shelves (so personnel are no longer needed to record what has been picked in the store room)
• At the trash compactor, where the RFID reader scans the boxes that are crushed, thus confirming that the goods reached the shelves

The result: the store, corporate departments, and suppliers can receive updates on the location of goods within 30 minutes of each movement from the dock to the shelf. To date, the project is providing more timely and accurate data and is not only improving replenishment by store but also affecting demand forecasting across the pilot stores.
Such projects are having a domino effect, expanding the goals of “slap and ship.” Many participating suppliers are examining the potential impact of real-time tracking and tracing on their own forecasting, planning, and distribution network. One pharmaceutical supplier is also putting RFID tags on bottles and packages, particularly when controlled substances are involved, to track the manufacturing-to-delivery life cycle and to help uncover thefts and counterfeiting.

What about technological complexity? Some RFID projects involve great technological challenges and many integration partners. For instance, RFID tags, or transponders, must be designed to operate in a steel-structured environment, and the readers—carried by workers in their mobile devices—must be within a few feet to read them accurately. The entire process requires design collaboration among producers of transponders, mobile devices, and software.

Inevitably, you will face many of these issues, and SAP Service Select for SAP RFID will help you address them quickly.

**Major Results with a Small Investment in Time**

**With the SAP Service Select assessment, you and the SAP team can develop a comprehensive plan in as little as two to five days.**

In the first major task, the stage must be set. Working with your team, SAP Consulting experts will review your current environment and help you determine its readiness for implementing RFID. This includes your current business-process focus and the pain points to be resolved, your technical landscape, and your analytics and reporting requirements. The team will also define your future needs.

Keeping your immediate and long-range requirements in mind, SAP RFID experts will detail the functional and technical benefits that SAP RFID can provide. These include the following:

- Integration of all automated and communications devices, such as bar code, Bluetooth, and RFID devices
- Control and use of the SAP Auto-ID component data by relevant applications
- Tracking and exchange of SAP Auto-ID data through systems of supply chain partners
- Role-based access to data
- Facilitated integration with SAP and non-SAP applications

These activities are enabled by the SAP NetWeaver® platform and by the SAP Event Management application, part of the mySAP™ Supply Chain Management solution.

Your SAP RFID project must be well planned. Once you have defined it, SAP Consulting and your team will establish a high-level time frame, the project dependencies to be considered in planning, and the skill-set resources you will need to complete the project.

It is also critical to determine the following:

- Whether and how business processes are to be changed
- The number and type of products or components to be tracked
- The locations and environment involved
- Budget constraints
- Custom technology, integration, and other requirements

In the final phase of the assessment, you get a business case validation and review, a project plan and sequence, a resource plan, and a rough estimate of time and deliverables involved in implementation. Within days, you will have a road map to jump-start your SAP RFID implementation.
Business Benefits of SAP RFID Service Select Assessment

Comprehensive planning for RFID will pay off for years to come, as RFID inspires new business processes and new benefits. With SAP Service Select for SAP RFID, you will be able to do the following:

- Identify all critical issues including business drivers, business process changes, expected benefits and costs, and required resources
- Solidify senior management commitment through comprehensive planning and justification
- Create a phased, cohesive RFID strategy and objectives plan
- Jump-start and improve the implementation
- Reduce implementation costs
- Reduce risk of costly errors and failure to meet expectations
- Prepare your company to realize all the short- and long-term benefits of SAP RFID
- Create a long-term strategy
- Clearly measure results using key performance indicators

For more information on how SAP Service Select for SAP RFID can help you plan your RFID implementations and strategies for the future, please visit us online at www.sap.com/usa/services/consulting or call us at +1 888-727-2955 or contact your SAP customer engagement manager.

Powered by SAP NetWeaver

SAP RFID is powered by the SAP NetWeaver platform, the open integration and application platform that enables change. SAP NetWeaver helps companies align IT with their business. It allows companies to obtain more business value from existing IT investments and to deploy a service-oriented architecture. SAP NetWeaver reduces total cost of ownership and complexity across the entire IT landscape.

SAP NetWeaver powers mySAP Business Suite solutions, SAP xApps™ packaged composite applications, and partner solutions. It provides the best way to integrate all systems running SAP or non-SAP software. SAP NetWeaver unifies integration technologies into a single platform and is preintegrated with business applications, reducing the need for custom integration.