

Does implementing RFID require suffering-through disruptive operational changes?

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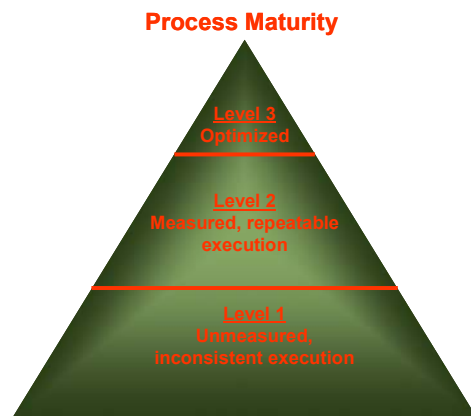
Date: 08 February 2006

Hot Issue: Many manufacturing companies are starting to receive written requirements to implement RFID to satisfy customers that include the Department of Defense, big-box retailers, state regulatory agencies (i.e. pharmaceutical pedigrees), and tier-1 auto manufacturers. For some companies, there are clear, measurable benefits from implementing RFID. For others, there are tough decisions regarding the value of customer retention. The inevitable question is "how much does implementing RFID disrupt our company's business operations?"

Summary The level of disruption caused by implementing RFID is directly related to the maturity of a company's existing processes. Before implementing RFID, candidly assess the "process maturity" of the likely implementation sites. Are they Level 1, 2 or 3? Plan your implementation budget and schedule based on the level of maturity. For sites with inadequate process maturity, allow sufficient time to assimilate process fundamentals, and address the cultural change associated more disciplined operations.

Advice

1. For company's with unmeasured, and inconsistently executed processes, implementing RFID will be very hard and requires significant organizational change. The good news – repeated studies on business performance demonstrate that process-discipline pays off. RFID implementation can improve a company's process discipline by automatically measuring, reporting, and enforcing process compliance.



2. For companies with well defined, reliable, and measured processes, RFID implementation can be a significant project, but is unlikely to be disruptive as long as ample time is allotted to prototype and refine new processes. RFID can enhance process efficiencies, and extend discipline beyond facility borders. With these improvements, many companies will find significant ROI based on the nature of their supply chain relationships and product characteristics. Others find that process efficiencies and streamlined communication with supply chain partners can at least recover the cost of a well conceived RFID implementation, while retaining key customers. The "net" – RFID compliance is part of doing business, but not necessarily drain on earnings.

Level 2 companies must assure their solution strategies are designed to achieve a financial net gain. This entails minimizing RFID tag costs (related to packaging

and tag form factors) and balancing incremental labor versus automation investments. The chosen processes and technology solution must scale incrementally and avoid expensive throw-away [investments/costs].

3. For companies with highly optimized supply chain processes, implementing RFID is not generally disruptive, but achieving positive ROI still requires rigorous financial management. In particular, RFID technology integration costs must be minimized so that incremental benefits aren't fully consumed by the costs of introducing RFID technology into the IT infrastructure.

Focus on simplifying information technology systems. Be aware that RFID does not co-exist well with ERP (or even desktop computing). Tight integration typically costs more up-front and can lead to high costs of ongoing systems management. Your RFID systems should exchange data with business systems using open message-based exchange protocols. The preferred RFID architecture should be SOA or Web Services.

About the Author

Walt DuLaney has spent the last 30 years developing strategies and identifying management practices for performance improvement. His best-practice articles have been published in Optimize, CEO Magazine, Information Week and many other publications. He is the CEO of Adaptive RFID, a software services company that provides managed RFID networks, RFID software, and RFID implementation services.