RFID Strategies and Best Practices for End Users in the Energy Industry

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RFID Journal

What's Covered

- Point solution versions infrastructure

- Taking a strategic approach to RFID

- Creating an RFID team

- Setting clear goals

- Mapping processes

- Managing change

- Scaling

Point Solution

- Solves a specific business problem
    - Improves worker safety
    - Manages access to secure sites
    - Locates assets in real time
    - Condition monitoring

RFID as Infrastructure

- Acts as a platform for many applications all at once
  - Think of the Internet
    - Email
    - Document/information sharing
    - Information sharing
    - Marketing

A Strategic Approach to RFID

- Creating an infrastructure enables the entire enterprise to leverage RFID
  - Construction of new facilities
  - Materials handling
  - Production
  - Inspections and maintenance
  - Product delivery

Creating an RFID Team

- It is important to include representatives from the above areas of the business

- Additional members that should be included:
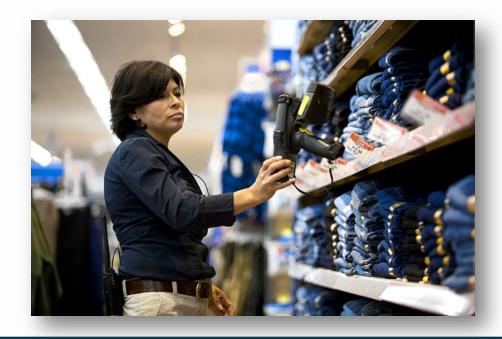 - Finance
  - IT
  - Marketing

Setting Goals

- RFID is not a strategy
- RFID needs to support the company's overall strategy and business goals
    - Walmart vs Prada

Setting Goals

- What should your goal be?
  - Produce the most oil at the lowest cost
  - Be the company with the best safety record
  - Be the best at serving our customers needs
  - Complete every project on time and within budget

What Should You Tag?

- There are many possibilities:
  - Spare parts
  - Oil pipe and casings
  - Tools and equipment
  - Vehicles
  - People
  - Goods shipped to rigs

Map the Process

- What happens to a piece of drill pipe or spare part from the moment it is acquired until the moment it is disposed of?

- Answering this will help determine what type of tag to use and what kind of *useful* data can be collected on the object

Choose the Technology

- Active RFID for larger assets tracked over long distances
- Passive tags for smaller objects tracked over shorter distances

Things to Consider

- Over what distance do I need to track an object?

- What location accuracy is required?

- What is the object made of?

- What other RF devices operate in the area?

- Does the RFID system need to be intrinsically safe?

More Things to Consider

- Do I need to monitor the condition of the asset?

- Will the tag be subject to extreme temperatures or physical punishment?

- How important is the security of the data on the tag?

Prioritize, Prioritize, Prioritize

- Which applications will deliver the most short-term value?
  - Greatest cost savings
  - Greatest contribution to company goals
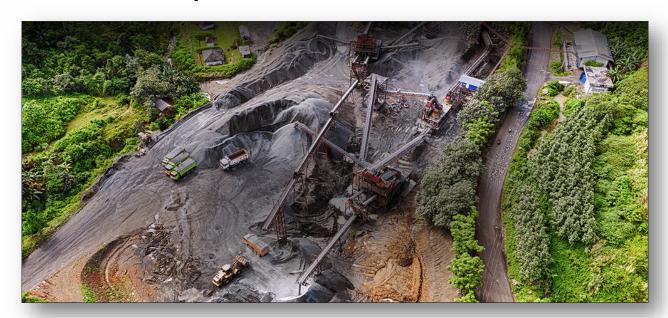 - Greatest contribution to worker safety

Start Small and Expand

- Start with an application that will give you a return on investment
- Have a clear idea of what the overall infrastructure will look like
- Each new application should build on the existing infrastructure
- The final product should be an enterprise-wide solution

Pilot the Application

- Make sure the technology works in your environment

- Make sure the system delivers the expected ROI

- Work out any kinks

Pilot the Application

- Identify primary and secondary technology suppliers

- Role out the application

- Expand the rollout

Change Management

- People will be suspicious that they are being tracked or will be fired
- Explain what data is collected and why
- Explain how RFID will improve operations
- Make sure system complies with union rules
- Train people on the basics of maintenance

Keys to Ensuring Success

- Make sure one senior executive "owns" RFID and is the champion for the project

- Have a clear set of goals and a phased implementation for achieving them

- Educate those who will be affected by RFID and get them to buy into it

Questions?

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