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RFID in Harsh and Hazardous Environments 2021



RFIDJOURNAL VIRTUAL EVENTS

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

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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



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

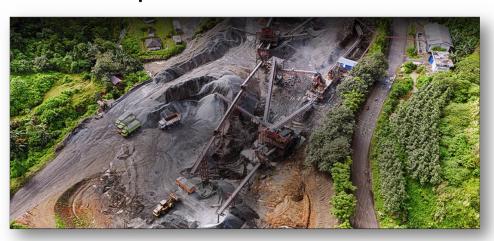


Start Small and Expand

- 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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THANK YOU

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