

discussion paper **RFID**



A Clearer Road to RFID

RFID implementations can help automate a large part of the tracking requirements in the areas of supply chain, assets, stock and inventory. However, analysis of environment and return on investment (ROI) need to be carried out in depth to ensure that RFID is the right solution to your problem

Radio Frequency Identification

(RFID) is an automatic identification method utilising radio frequency to accurately monitor movements of RFID tags.

There are two major RFID tag technologies that are utilised, active (contain battery source) and passive (no battery source).

The major uses of RFID today is to improve the efficiency and management of:

- Asset Management
- Supply Chain Management
- Stock Management
- Inventory Management

MAJOR RFID TRAPS

- NOT ANALYSING ENVIRONMENT

CORRECTLY.

- NOT ACCURATELY DETERMINING

RETURN ON INVESTMENT



5 Halley Street
Blackburn, VIC, 3130
Australia
www.shumisoft.com



Remember to perform your due diligence. Even though RFID is an exciting technology, it must be right for you!



Contact ShumiSoft

email: support@shumisoft.com

web: www.shumisoft.com

Implementing a RFID solution

Depending on your requirements, an active or passive approach can be adopted to meet the scope of your project within a defined budget and quality level.

Implementing a solution with Active Tag technologies

There are three (3) major components in implementing an Active Tag RFID solution

1. RFID Active Reader Device
2. RFID Active Antenna
3. RFID Active Tags (contains battery)

The major advantages of implementing an Active RFID solution over a Passive RFID solution include

- Can read tags at distances of 100 feet or more, greatly improving the utility of the device
- Can utilise electricity for power

The major disadvantages of implementing an Active RFID solution over a Passive RFID solution include

- Tag cannot function without battery power
- Tag is typically more expensive
- Long term maintenance costs (replacement of batteries, bad reads due to battery outage)

Implementing a solution with Passive Tag Technologies

There are three (3) major components in implementing an Active Tag RFID solution

1. RFID Passive Reader Device
2. RFID Passive Antenna
3. RFID Passive Tags (no battery)

The major advantages of implementing a Passive RFID solution over an Active RFID solution include

- Tag functions without a battery (20 year life)
- Tag is typically less expensive
- Tag is typically much smaller

The major disadvantages of implementing a Passive RFID solution over an Active RFID solution include

- Tag can only be read at very short distances, typically a few feet at most

RFID Integration to Software

Each different type of RFID reader allows for integration to existing systems through proprietary protocols. These protocols differ from manufacturer to manufacturer and require a sound knowledge of network and hardware programming knowledge to integrate seamlessly.

ShumiSoft are one of the companies that provide seamless integration between RFID hardware and software to allow for plug and play functionality to successfully automate vendor RFID environments

Benefits of using ShumiSoft technology for your RFID solution

- No need to understand the technical aspects of RFID
- Adaptive technology to current and future needs
- Subject Matter Experts in RFID and Barcoding technologies



WE'VE WORKED WITH A DIVERSE CUSTOMER BASE. HOW CAN WE HELP YOU?

ShumiSoft Pty Ltd © Copyright 2009. All Rights Reserved.