# SmartStorage

Introduction

Synertech's unrivalled expertise and experience in the design, development, installation and support of innovative Radio Frequency Identification (RFID) business systems and information management solutions, enables the company to manufacture and supply the Synertech SmartStorage range of devices that provide a unique solution to the turnkey management of high-value assets and specialised inventory in a totally secure environment.

Traxsense

Synertech's Traxsense software platform brings to life innovative, automated monitoring and tracking solutions by providing clients with dashboards and analytics to easily track all assets and to monitor business performance indicators. Smart sensor enabled assets are transformed into intelligent data sources. These smart assets are connected in real-time which provides organisations with controlled and auditable IOT information. Traxsense not only provides for immediate management decisions, it also harnesses the power of data analytics for business optimisation.

Integrated, User-driven System

SmartRack

SmartShelf
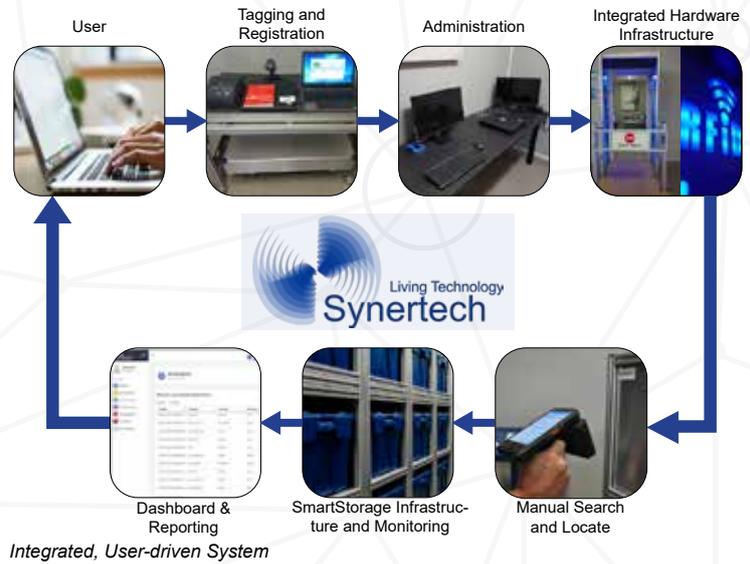
Background

High-value items listed on a company's asset register or specialised inventory held within an ERP or stock management system more often than not need to be subjected to extraordinary risk management measures to help ensure that they can be detected, located and authenticated on a continuous basis.

While conventional security measures such as CCTV surveillance and strict access control to secure, lockable storage facilities where the items are held are often an obvious and necessary measure, many security techniques have the potential to impact negatively on operational efficiencies.

What's more, the installation of various additional security measures that are often totally unrelated to the management systems associated with asset or stock control means that the carrying cost for these items can be dramatically increased.

Other issues that can compound the risks and increase complexity associated with certain stock items are legislative or statutory compliance and control standards that need to be applied and strictly adhered to. These requirements include constant monitoring of issues such as time sensitive expiry dates for prescribed medicines, the maintenance of chain of custody audit trails for items such as weapons or controlled substances, predictive stock replenishment cycles, the proactive maintenance of consignment stock, including progressive usage billing etc.

Business Benefits at a Glance

The most significant business benefit guaranteed by Synertech's asset tracking and management solution is based on the power and versatility of RFID as an enabling technology.

The establishment of an RFID infrastructure for SmartStorage enables the organisation to build and implement many other different applications that will reduce cost and increase efficiencies at an accelerated rate of return on investment. This is achieved through the following:

• **Improved tracking** – Pinpoint accuracy related to the ability to trace, track and monitor the movement and control of valuable assets and high-risk inventory
• **Increased security** - The system can be configured to provide configurable alerts and alarms as well as other security features such links into other options such as Closed Circuit Television (CCTV) and biometric access
• **Enhanced compliance and risk management** - A system that can be configured to conform to and therefore automate the management of complex compliance requirements such as chain of custody, authorised access, date and time-sensitive stock controls etc.
• **Unrestricted access to data** - The ability to provide completely objective and consistently reliable data that can be accessed by authorised users via the web from anywhere in the world on virtually any digital device on a 24/7 basis
• **High level of customisation** - A system that is quickly and easily designed and customised to meet the exact requirements of virtually any business environment or specific operational requirements

SmartCupboard used to facilitate Medical Supplies

Solution Overview

Synertech SmartStorage solutions feature a wide range of fully RFID-enabled cabinets, shelving, cupboards and other storage related enclosures and containers that are specifically adapted from off-the-shelf commercial products such as steel cabinets, warehouse shelving and office filing cupboards, or purpose built devices or enclosures designed to accommodate various asset objects or stock items.

Typical of the types of assets or inventory ideally suited to SmartStorage management are firearms, forensic analysis exhibits, scientific and biological exhibits, valuable documents, regulatory controlled or extremely high-value items such as prescribed drugs and diamonds etc.

Used in association with Synertech's Traxsense software suite that is designed, developed and customised to meet the client's exacting requirements for managing a wide range of high-value assets, SmartStorage solutions enable these items to be identified, authenticated, tracked and traced from the repository in which they are held to any user-defined areas and beyond.

Key Features at a Glance

SmartStorage solutions, in common with all Synertech RFID-based management systems, are purpose-built to take into account the client's specific requirements. Key features include:

• **Live monitoring via dashboards** - The ability to track, locate and authenticate where an asset or inventory item is in near-real time according to user-defined parameters such as its allocated shelf or position in a cabinet, its movements within a storage facility or its handling by authorised individuals etc.
• **Reporting** - The generation of reports based on user-defined requirements. Virtually any report can be drawn up based on the type of information required. Reports can be delivered via e-mail and printed, or integrated into other applications

SmartRoll

- **Alerts and notifications** - The ability to notify nominated individuals or key personnel when user-defined parameters are invoked by rules or control measures that are securely integrated into the solution. Alerts can be triggered by events such as a date stamp indicating the imminent expiry of an item such as drug, a critical level in the holding of stock, the movement out of a designated area or location, or when other user-defined parameters are invoked. Alerts can be sent out via SMS, e-mail or both based on defined roles and respon-sibilities, escalation procedures and other critical business control rules
- **System management** - A management module that provides an easy to use interface for the management and administra-tion of the system according to a wide range of user-defined parameters that also conform to risk management standards and other control policies and procedures
- **System integration** - Integration into mainstream ERP sytems in order to ensure that actions such as a stock replen-ishment order can be placed on a supplier or the progressive billing of consignment stock can go ahead etc.

SmartStorage Product Range

Among a wide range of cabinets, cupboards, containers, filing systems and enclosures that constitute the SmartStorage solution set and that can be adapted or built to customised specifications to meet client requirements are the following products:

- **SmartCupboard** - Based on a commercial off-the-shelf (COTS) steel cupboard and intended for rapid deployment use in applications involving limited qualities of tagged items
- **SmartShelf** - Used to manage items of high value and intend-ed for use in industrial environments. Made from high grade anodised aluminium and customised to complement the exist-ing client infrastructure. Lockable doors for increased security are available as an option
- **SmartRack** - A system that can be configured to conform to and therefore automate the management of complex com-pliance requirements such as chain of custody, authorised access, date and time-sensitive stock controls etc.
- **SmartRoll** - Ideal for high density document storage envi-ronments in confined spaces. Also available as an upgrade to existing document cabinets or custom made and RFID enabled to meet particular customer needs

After-Sales Service

- **Warranty** – All systems are backed by a 12-month warranty on materials and workmanship commencing from date of delivery
- **Maintenance and support** - A range of technical support and maintenance options are available based on formal service level agreements
- **Training** - Various training options are available ranging from comprehensive classroom training to on-the job training. All systems are provided with training documentation

Summary

Designed, developed and implemented by Synertech, a proudly South African company with nearly two decades of success at the forefront of supplying innovative RFID technological solutions to clients across a broad range of industry sectors, Smartshelf solutions offer unprecedented control, flexibility and business benefit in the management of high-value assets and specialised inventory.

Smart Storage integrated with IT Infrastructure

Synertech
Living Technology