![Internet of Things SL logo]

Internet of Things SL
Sensing Assets

LANDSCAPE

- Healthcare facility responsible for multiple surgical procedures
- Repeated use of multiple surgical trays and multiple surgical instruments
- Responsibility of wellbeing of patients

BUSINESS DRIVERS

- Efficient tray assembly, speed and accuracy with same resources
- Easier tracking resulting in greater utilisation
- Better quality control and workflow
- Traceability of tray/patient
- Reputation of healthcare facility

CHALLENGES

- Location of surgical equipment
- Link of surgical tray to procedure/patient
- Post-surgical outcome analysis

HEALTHCARE INSTRUMENT TRACKING
AN RFID USE CASE

Superior healthcare and patient safety equates to superior clinical outcomes. A surgical tray, including the instruments that are used for a particular surgical procedure, is assembled, sanitised and stored several weeks before a surgery is scheduled to take place. A tray is then labelled with information pertaining to expiration dates. Surgical trays and their contents directly affect clinical outcomes. Incomplete or incorrect surgical trays are a frequent reason for OR (operating room) procedure delays. Such delays result in a decrease in the utilisation of assets directly affecting operational costs, as well as patient safety risks. This directly results in a loss of revenue due to last minute rescheduling of procedures, surgeons and patients which can inadvertently affect future business.

HIGHLIGHTS

The IoT software platform includes a comprehensive automated tracking and management system for the assembly and tracking of surgical trays and equipment utilising a combination of RFID and Barcode technologies. It provides for accurate tray assembly with a system that is intuitive and easy to use. Healthcare facilities (clinics) can now track surgical trays and instruments through the entire surgical workflow process which includes contents, decontamination, washing and sterilisation processes. Touch screen, wireless (RFID) and scanning technologies facilitate precise logistical inventory management of surgical trays and instruments as they move throughout sterile processing and OR (operating room). Over and above, accurate reporting processes improves/eliminates infection control and provides the data for meaningful benchmarking, continuous process improvement and root cause analysis. This is done through optimised surgical instrument tracking and management.

OUTCOME

Management of healthcare facilities see the enormous benefit that the IoT software platform provides for accurate tray assembly, with a system that is intuitive and user friendly. Instant OR (operating room) efficiency and infection control are now perfectly aligned and the healthcare facility is working towards improved patient safety and profitability.