Project Title

Streamline Asset Management with Fixed Asset Tracking System

Project Lead and Members

Project lead: Chan Chai Lee

Project members: Kevin Wong, Leslie Chiang, Serene Lim, Juliette Lim

Organisation(s) Involved

St Luke's Hospital

Healthcare Family Group(s) Involved in this Project

Healthcare Administration, Medical

Applicable Specialty or Discipline

Patient Service Associate, Medical & Laboratory Technology

Project Period

Start date: not indicated

Completed date: not indicated

Aims

An automated solution which is capable of monitoring location of fixed assets within the Hospital, enhancing stewardship of assets.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Conclusion

See poster appended/ below

Project Category

Technology

Digitalisation, Automation

Care & Process Redesign

Productivity, Time Saving

Keywords

Medical equipment, fixed asset, Asset Management system, Operational efficiency, Inventory

Name and Email of Project Contact Person(s)

Name: Eunice Lam

Email: eunicelam@stluke.org.sg

# Streamline Asset Management with Fixed Asset Tracking System
St Luke's Hospital

Chan Chai Lee, Kevin Wong, Leslie Chiang , Serene Lim, Juliette Lim

BACKGROUND

The fixed assets in the Hospital include medical equipment, IT hardware and software, furniture and fittings, security devices, office equipment and kitchen equipment. Each fixed asset was previously tagged with an adhesive sticker, indicating its fixed asset number.

The medical and IT equipment are shared and hence, moved around daily between wards. Patient Service Associates ("PSA") had to manually monitor the movements via transfer forms. This manual recording was tedious due to the following factors:

o Difficulty locating assets with missing or illegible adhesive stickers due to wear and tear over time

o Frequent movement of assets resulted in inefficient use of PSA's time to fill up multiple transfer forms
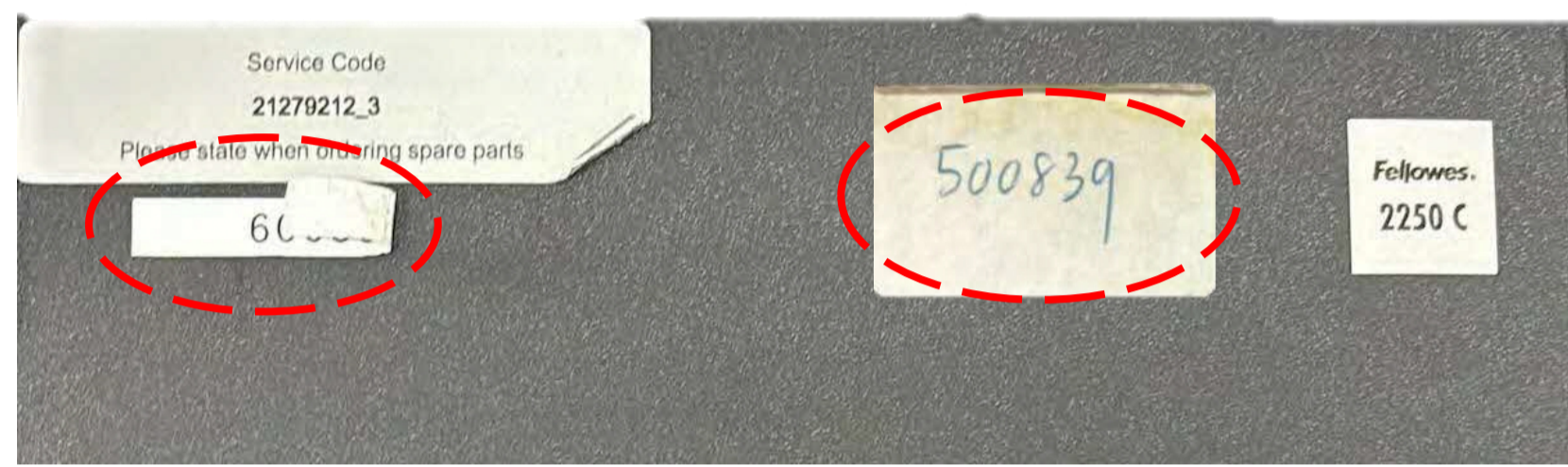
OBJECTIVE

An automated solution which is capable of monitoring location of fixed assets within the Hospital, enhancing stewardship of assets.

PROBLEM ANALYSIS
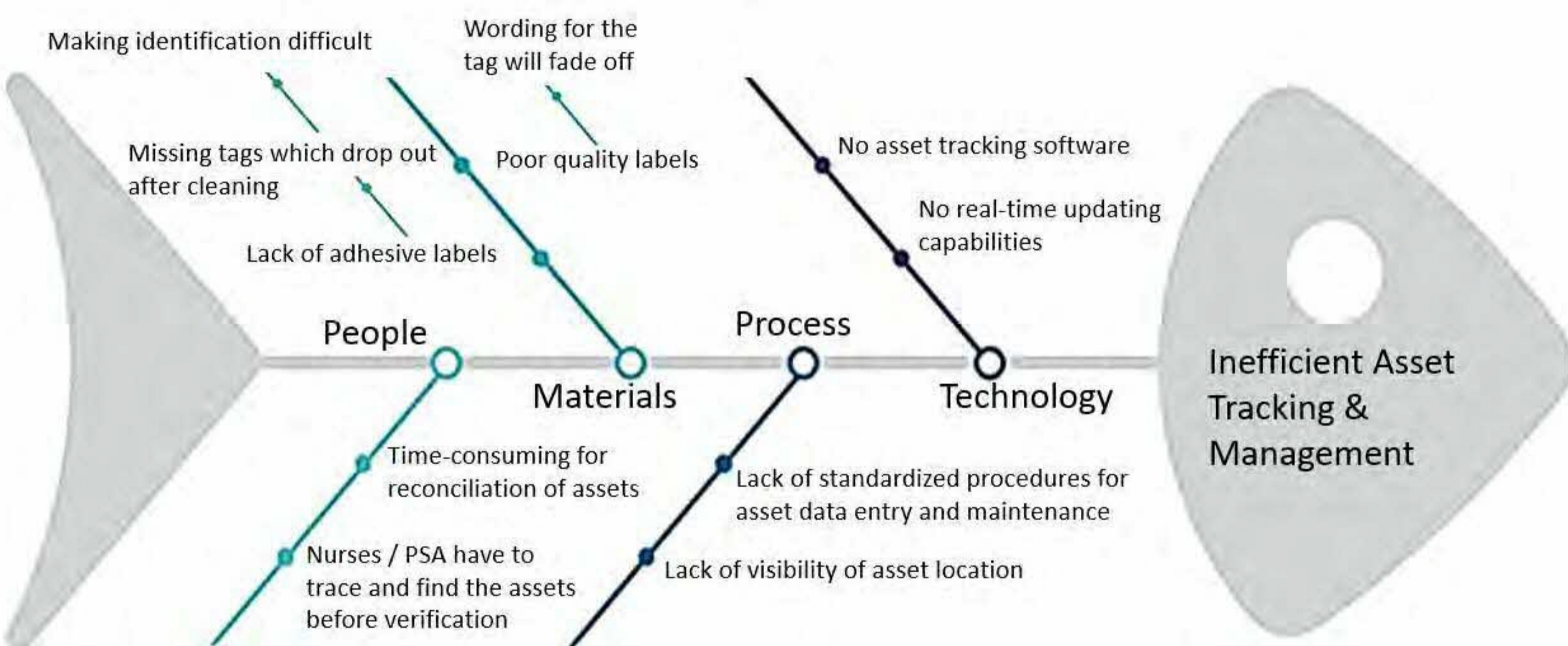
A fish-bone diagram depicting this process is shown above to identify the key pain points and challenges we faced.

IMPLEMENTATION PLAN

➢ A centralised asset management system was set up to streamline asset management and allow us to improve visibility of high-value asset positioning across all the departments.

CENTRALIZED Fixed Asset Register

Information distributed across different locations and departments are hard to access and keep consistent.
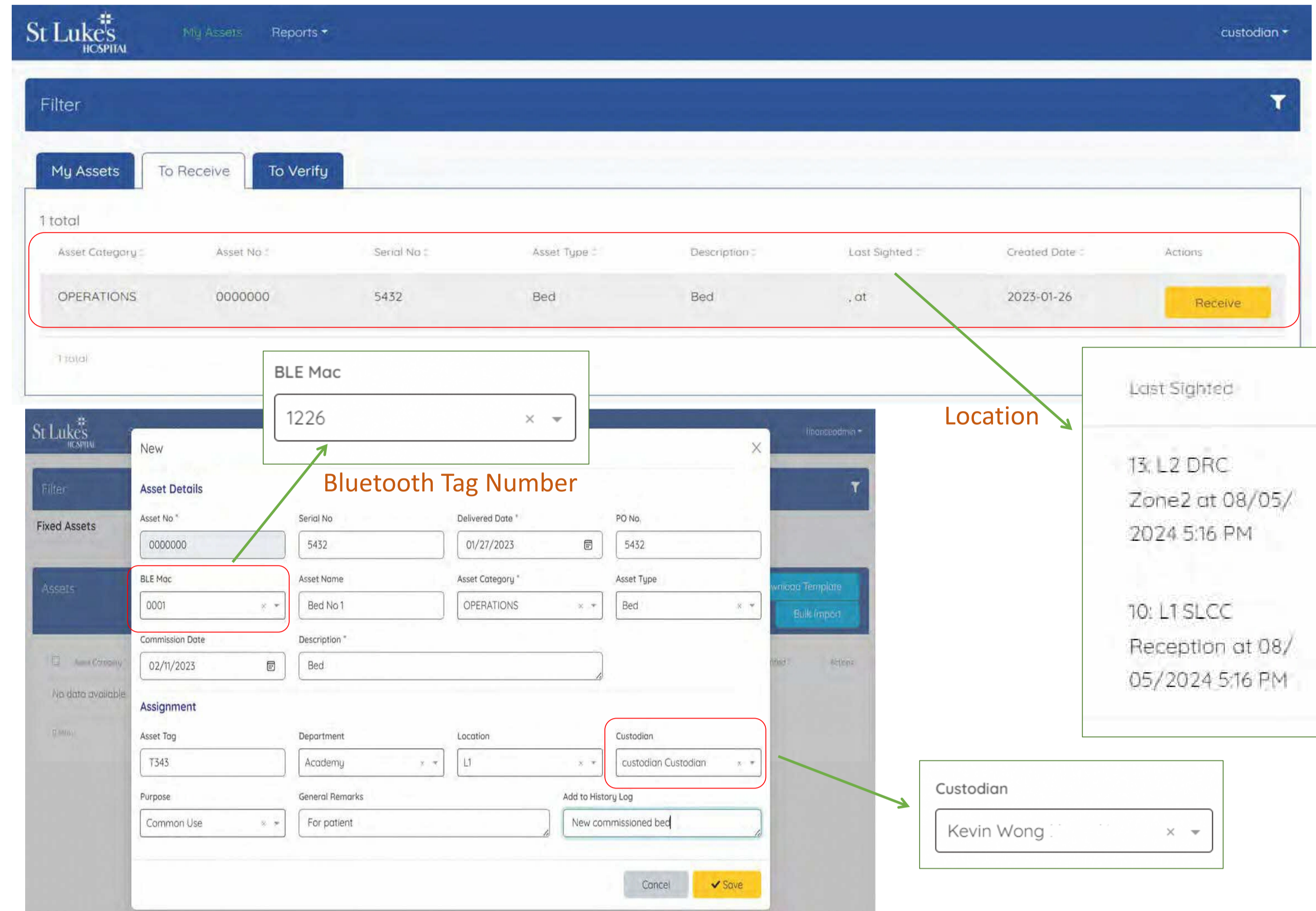
Central asset repository **lets us know immediately** about the **location** and condition of assets along with **who has possession of the items**.

➢ Replacement of adhesive sticker with Bluetooth-technology tags provides real-time monitoring and effectively eliminates the laborious process of locating assets physically

Bluetooth Tag Sample

Base Stations installed around SLH premises

RESULTS

Through this project, we are able to enhance operational efficiency and security in asset management. This Bluetooth-based solution minimises the time spent on manual search of fixed assets and consequently, nurses and PSAs could focus on patient care.

Process Flow Comparison (Before & After) for Daily Tracking

BEFORE	AFTER
1. PSAs write transfer of hospital equipment on log book 2. When clinicians need to use a particular hospital equipment, PSA or ward nurses would look through log book and also search for the equipment in other wards.	1. PSA would search the system for the equipment's exact location.

Time Taken by staff — 3hrs — ½hrs

Process Flow Comparison (Before & After) for Annual Tracking

BEFORE	AFTER
Step1. Nurses/PSA receive a list of fixed asset from Finance (SAP). Based on the list, they confirm the existence of the assets by indicating assets in wards but not in list. Those assets in list but not found will also be highlighted. Nurse Manager will concurrent the fixed asset list for the respective 10 wards.	**Step1.** The data can be retrieved in the application database. Finance will match the data from this database to SAP record and perform reconciliation (if any)
Step 2. The fixed asset list will be passed back to Finance. Finance reconciles the assets among 10 wards and prepare a list of proposed assets written off for missing assets after reconciliations. For the transfer of fixed assets, finance updates the cost centre in SAP	**Step2.** A list of fixed asset will be sent to all wards for confirmation and signatures. Nurse/PSA perform verification of fixed asset and confirm the list.
Step 3. Finance passes back the fixed asset list together with proposed assets written down list to 10 wards for their confirmations. HODs verify and sign on the lists.	**Step3.** A list of fixed asset will be sent to IT for confirmation and signatures.
Step 4. IT receives a list of fixed asset from Finance (SAP). Based on the list, IT Support Staff will physically confirm the existence of all IT assets deployed throughout the hospital. Assets not in the list or not sighted will be documented.	**Step4.** A list of fixed asset will be sent to Outpatient, Day Rehab Centre, Home Care and Operations for confirmation and signatures.
Step 5. Outpatient, Day Rehab Centre, Home Care and Operations receive lists of fixed asset to be confirmed. They indicate assets not in the list and highlight assets not found.	**Step5.** A list of fixed asset will be sent to 6 other departments for confirmation and signatures.
Step 6. Another 6 departments verify the fixed asset lists	**Step 6.** Finance updates cost centre if applicable
Step 7. Finance reconciles and update cost centre of the fixed assets for IT, Outpatient, Day Rehab Centre, Home Care, Operations and another 6 departments and generate a list of fixed asset with proposed assets written off for these departments' confirmations.	

906hrs — 115hrs — 87% — Time Saved – 791hrs

SUSTAINABILITY & REFLECTIONS

Overall, the implementation of automated tracking of assets using technologies like Bluetooth connectivity enable us to gain real-time visibility into our asset inventory.

This allows for better decision-making, as information like asset location, status and utilization are up-to-date and easily accessible via the system, thus improving productivity through optimized resource allocation.