

### **Project Title**

Joint Collaboration of Environmental Services (Linen Services) And Service Partner (ISS) For Improving Operation Efficiency, Productivity and Enhancing Staff Engagement

### **Project Lead and Members**

Project lead: Lynn Chen

Project members: Crystal Lim, Vincent Lee, Ranjana, Andy, Dhanu

### **Organisation(s) Involved**

Ng Teng Fong General Hospital, Jurong Community Hospital

### **Healthcare Family Group Involved in this Project**

Healthcare Administration

### **Specialty or Discipline**

Linen Services, Facilities Management

### **Project Period**

Start date: Mar-2017

Completed date: Mar-2018

### **Aims**

To review and design the current linen operation process by productive methods in deployment of existing manpower resources with the support from advanced technologies. The streamlining of work processes improve operation efficiency and productivity, as well as enhance staff engagement and collaboration with the users.

### **Background**

See poster appended / below

## **Methods**

See poster appended / below

## **Results**

See poster appended / below

## **Lessons Learnt**

Minimise activities and tasks by simplifying work processes to be efficient, effective and productive. Big changes start with small ideas.

## **Conclusion**

See poster appended / below

## **Project Category**

Care & Process Redesign, Quality Improvement, Workflow Redesign, Job Effectiveness, Value Based Care, Productivity, Time Saving, Cost Saving, Manhour Saving, Operational Management, Training & Education, Education Platform, Virtual Learning Platform

## **Keywords**

Warehouse Management System, Staff Engagement

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# JOINT COLLABORATION OF ENVIRONMENTAL SERVICES (LINEN SERVICES) AND SERVICE PARTNER (ISS) FOR IMPROVING OPERATION EFFICIENCY, PRODUCTIVITY AND ENHANCING STAFF ENGAGEMENT

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- SAFETY
- PRODUCTIVITY
- PATIENT EXPERIENCE
- QUALITY
- VALUE

## Define Problem, Set Aim

### Opportunity for Improvement

Quality linens and adequacy of linen items received in a timely manner are critical to each functions within healthcare sector. Conventional Linen Management Services in hospitals are labor and resource intensive.

In FY2016, manpower schedule was reviewed with a reduction of 7.75 FTEs for linen attendants. Hence, management of existing manpower to meet the increasing workload/needs is important in order to maintain the best quality of Linen Management Services in NTFGH & JCH.

### Aim

To review and design the current linen operation process by productive methods in deployment of existing manpower resources with the support from advanced technologies. The streamlining of work processes improve operation efficiency and productivity, as well as enhance staff engagement and collaboration with the users.

## Establish Measures

### Current Performance

Figure 1 presents the total number of linen supplied by Linen Department in NTFGH & JCH per month, including common linen items and OT linen. Due to the hospital ramp-up plan, the workload in FY16 increased with an average of 27% as compared to FY15; and an average of 13% increase in FY17 as compared to FY16.

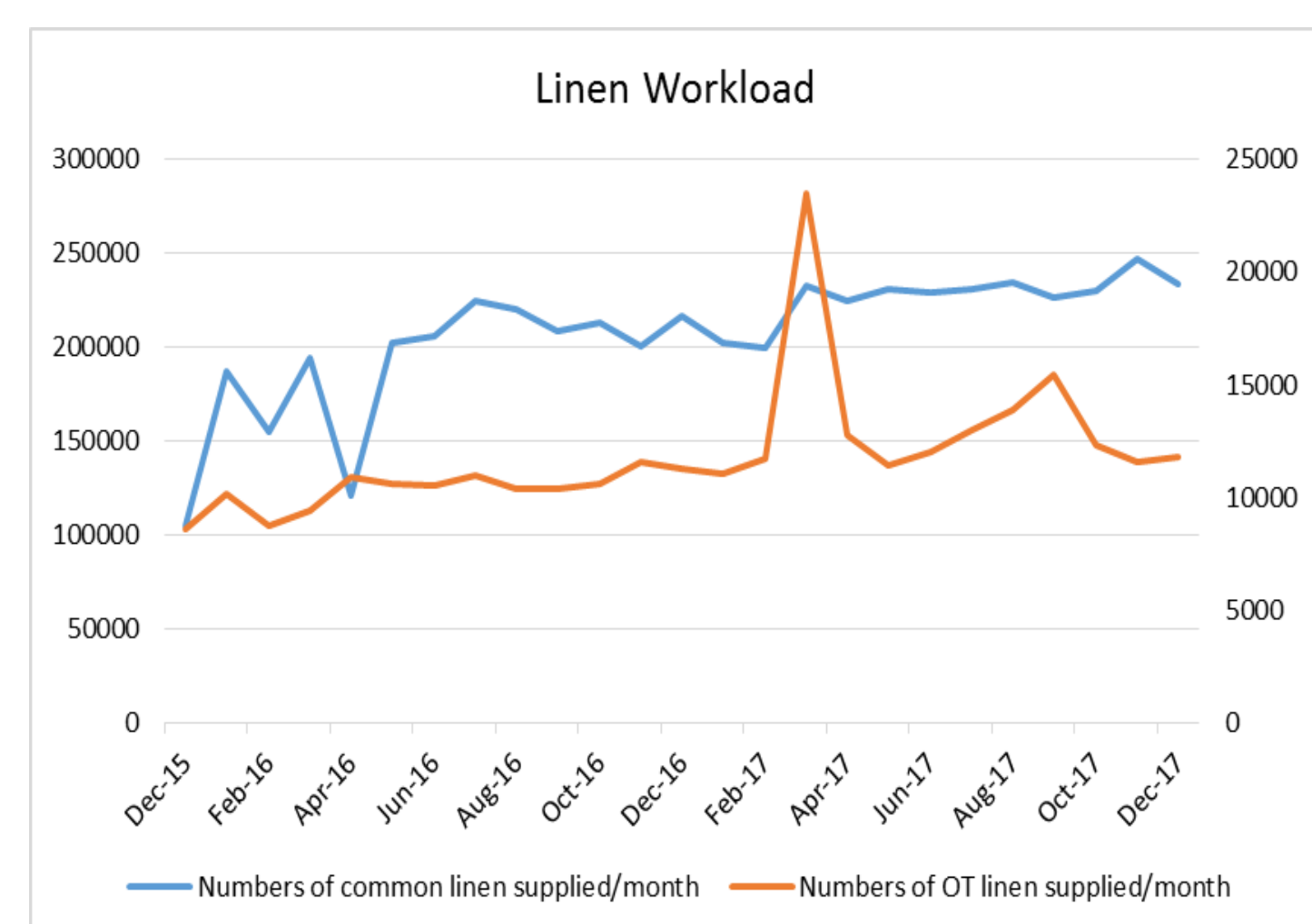
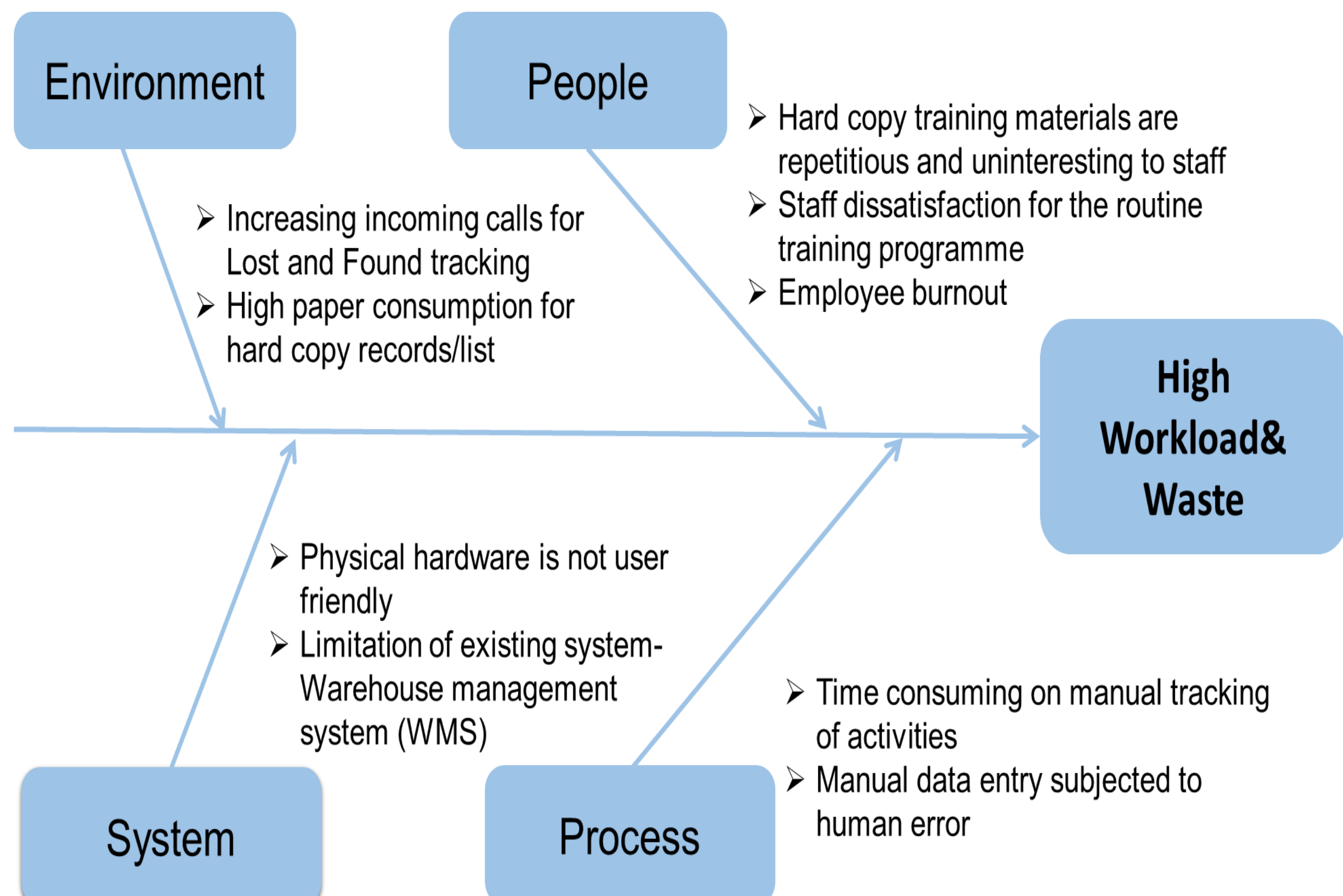


Figure 1: Number of linen supplied/month (Dec 2015 – Dec 2017)

In response to the manpower reduction, high workload and costs reduction, the processes were reviewed to reduce waste, improve operation efficiency and productivity. In addition, the staff training programme was designed for the purpose of increasing employees job performance and decreasing job complexity.

## Analyse Problem

### Probable Root Causes



## Select Changes

- Initiative 1** – Time saving for checking Lost & Found items, and improving user satisfaction, one accessible point (QR code) is implemented where users can access and self check for their misplace items and follow up with necessary actions to retrieve it.
- Initiative 2** – Increasing productivity and efficiency for daily linen top-up process, and reducing waste on hard copy lists, QR code is created for each service point to link to Warehouse Management System (WMS). It enables linen staff to perform linen picking process through smart phone.
- Initiatives 3** – Improving employee engagement and satisfaction, reducing waste on hard copy training materials/records, interactive online web-based training platform is design for linen staff training programme.

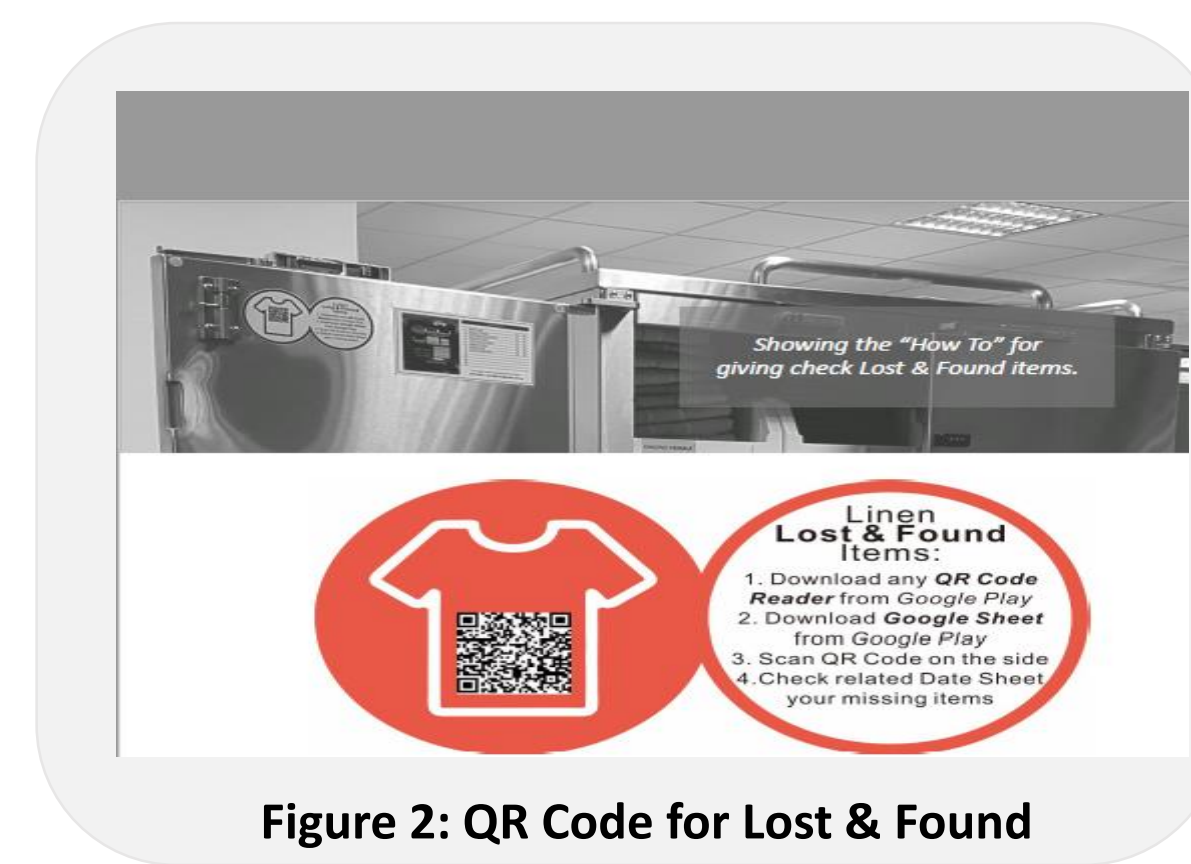


Figure 2: QR Code for Lost & Found

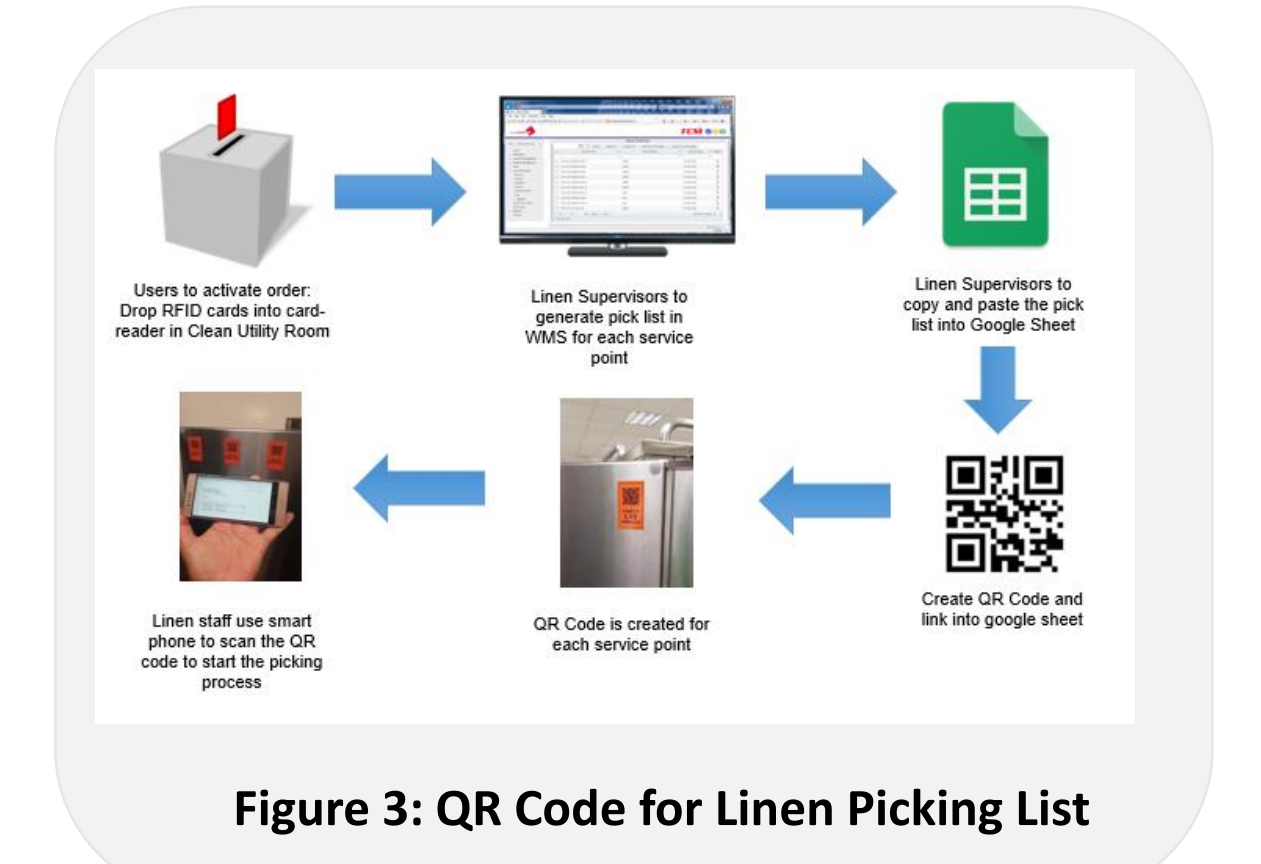


Figure 3: QR Code for Linen Picking List

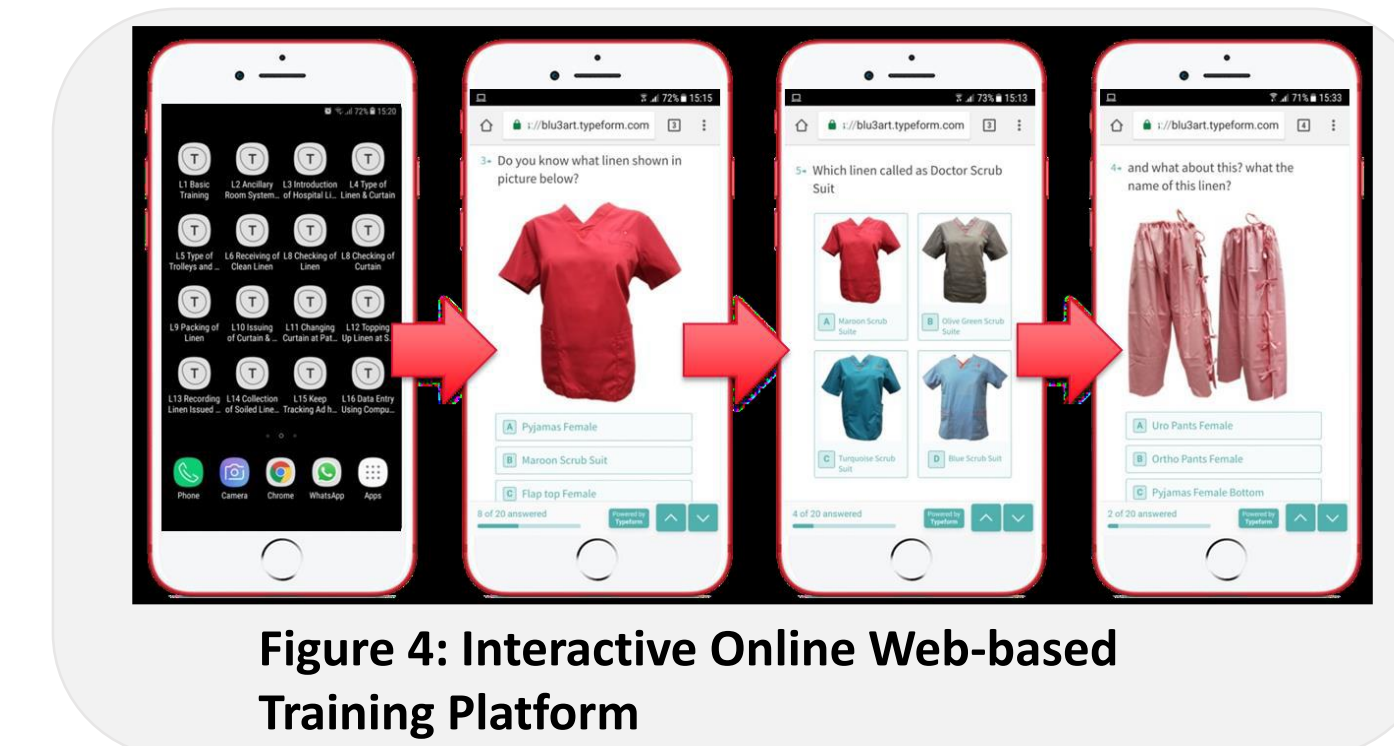


Figure 4: Interactive Online Web-based Training Platform

## Test & Implement Changes

### Results

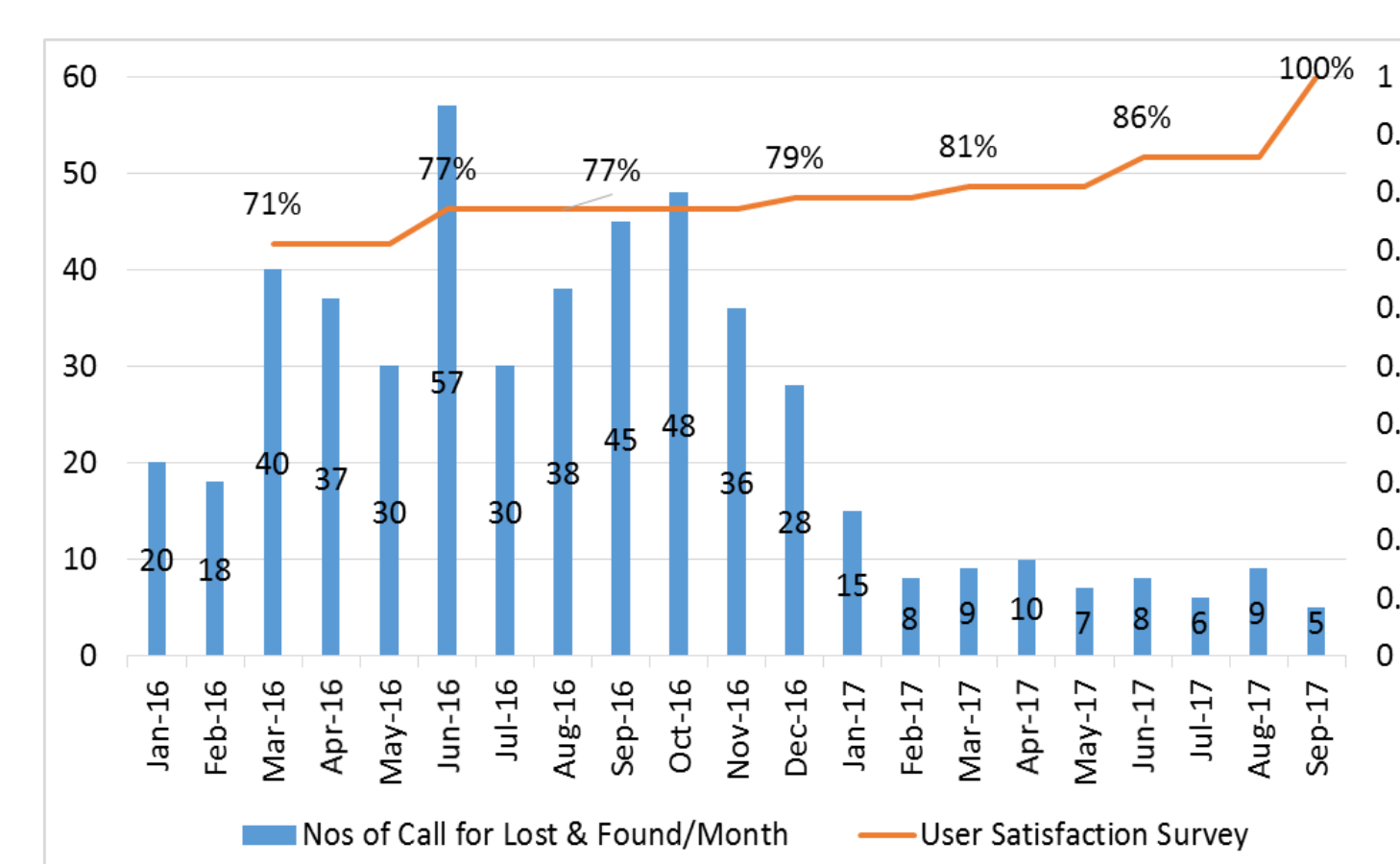


Figure 5: Number of incoming call for Lost & Found User satisfaction survey score (Jan 2016 – Sep 2017)

- Initiative 1** – Number of incoming calls received per month reduced significantly to below 10 calls, time saved for linen staff to focus on other activities while user satisfaction survey achieved 100% in Sep 2017.

### Initiative 2 & 3 :

- Total cost saving for paper consumption - \$720 per year
- Total cost saving for hard copy training materials - \$15 per year
- Improvement of staff satisfaction – Achieved 99.8%

Document	Before	After	Saving /Year
a) Linen Pick List	180 ream/Year	36 ream/Year	\$720.00
b) Training Materials/Records	4 ream/Year	1 ream/Year	\$15.00

Training Programme	Before	After
c) Staff Survey	26.1%	99.8%

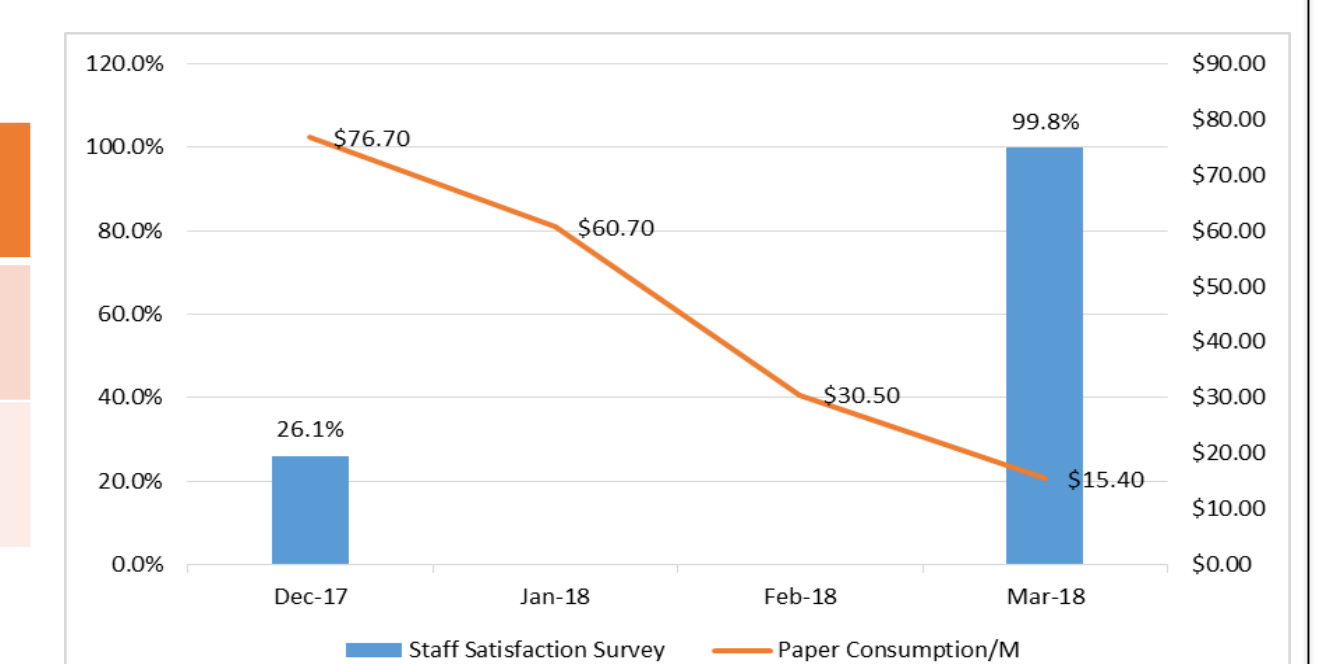


Figure 6: Staff satisfaction score & Paper consumption/month (Dec 2017 – Mar 2018)

## Spread Changes, Learning Points

- Minimize activities and tasks by simplifying the work process to be efficient, effective and productive.
- Big changes start with small ideas.