



Singapore Healthcare  
Management 2019

# Reduction of Outstanding Purchase Orders by > 40% In 6 Months

Ong Seok Peng, CSD/Pharmacy | Kenn Koh, CSD |  
Dr Deepthika, HPO | Shirley Ong, Facilities |  
Angie Goh, Nursing | Jason Lim, Finance |  
Debbie Pang, Corporate Communications |  
Tan Lay Kheng, Allied Health & Operations



ST. ANDREW'S  
COMMUNITY HOSPITAL

## Introduction

An average of 140 Purchase Orders (PO) are raised monthly in St Andrew's Community Hospital. Half of these are for non-stocks and services (eg medical equipment, repairs and etc). .

### Problem Statement

Some POs remain outstanding after expected delivery date for many months

Central Supplies Department (CSD) has to follow up

Time and Effort Spent



## Aim

A Quality Improvement group comprising staff members from 7 departments is formed to identify the causes of outstanding POs. **The aim is to reduce the number of electronic POs by 40% in six months.** This is a cross departmental collaboration reflecting the commitment of the 7 departments.



### Issue Identified

If the goods were sent directly to "Users" or to "Wrong Department" instead of CSD

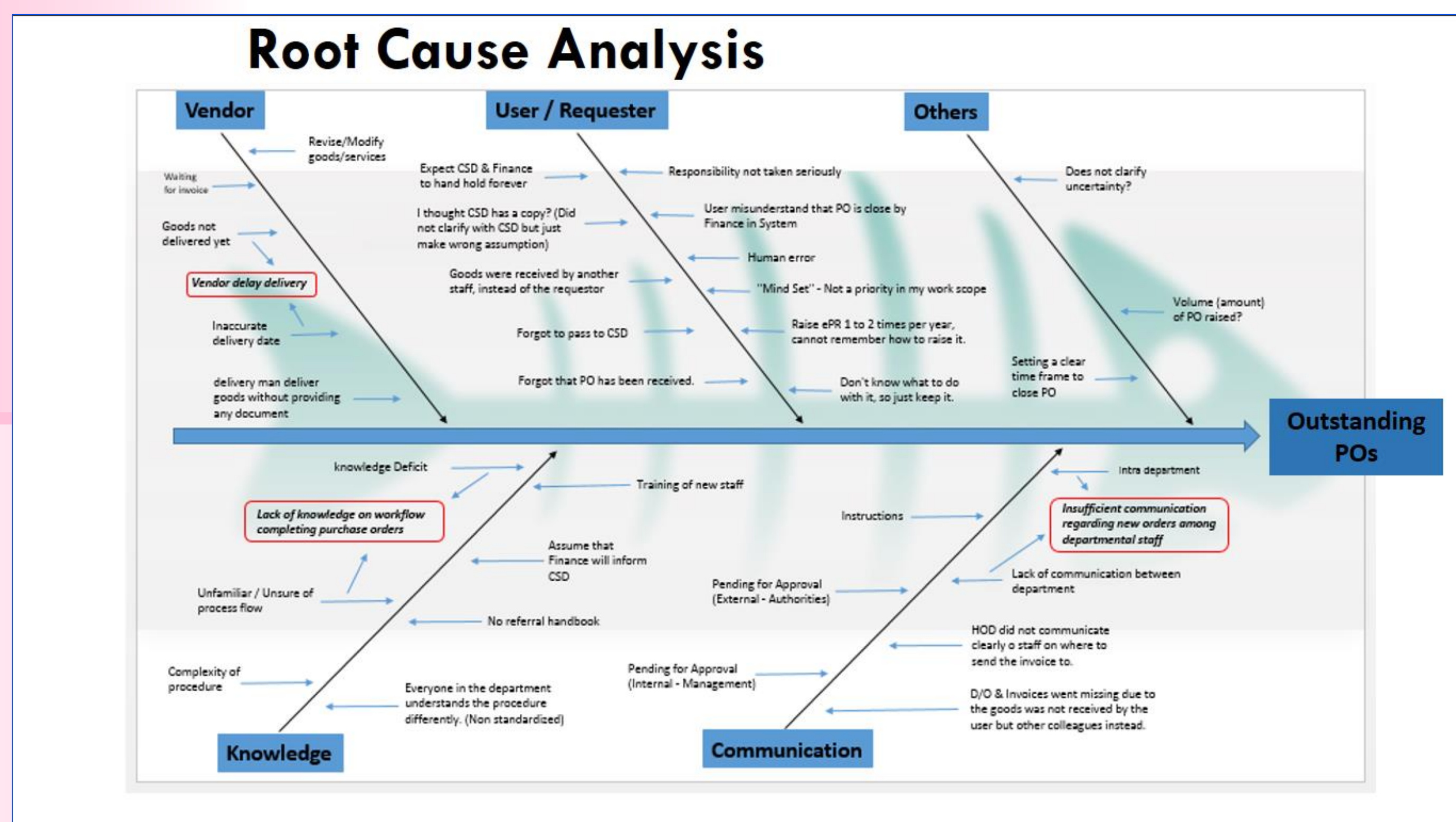


Users receive goods/services and forward all documents (eg. Delivery order, work order, service report and invoice) to Finance Department

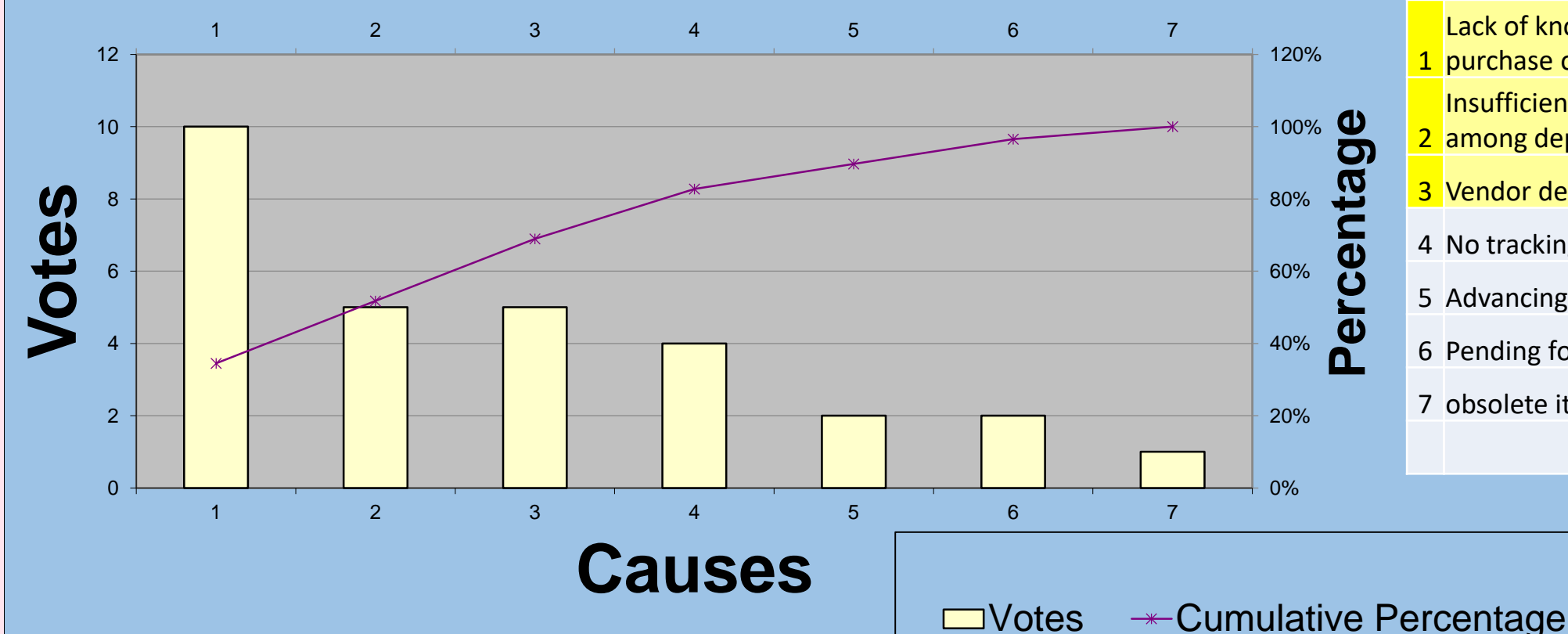
Wrong department receives goods/services and forwards all documents (eg. Delivery order, work order, service report and invoice) to Finance Department

## Root Cause Analysis

A Root Cause Analysis was done using Ishikawa diagram. A Pareto Chart was plotted to identify three key areas for improvement. They are vendor's delayed delivery, insufficient communication regarding new orders among department staff and **lack of knowledge** on the workflow of completing purchase orders.



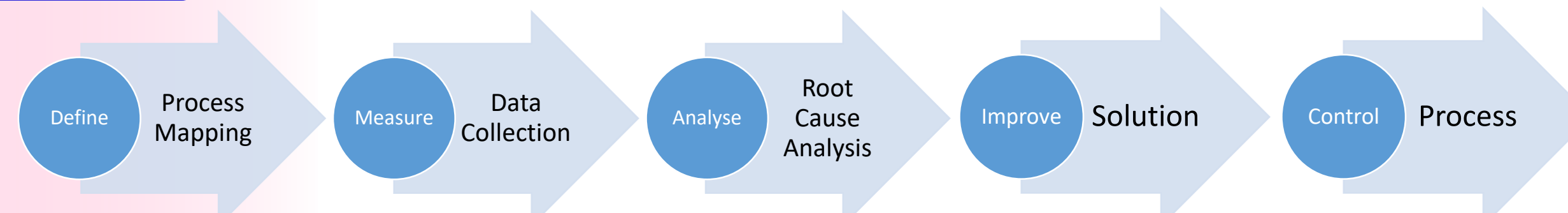
### Pareto Chart



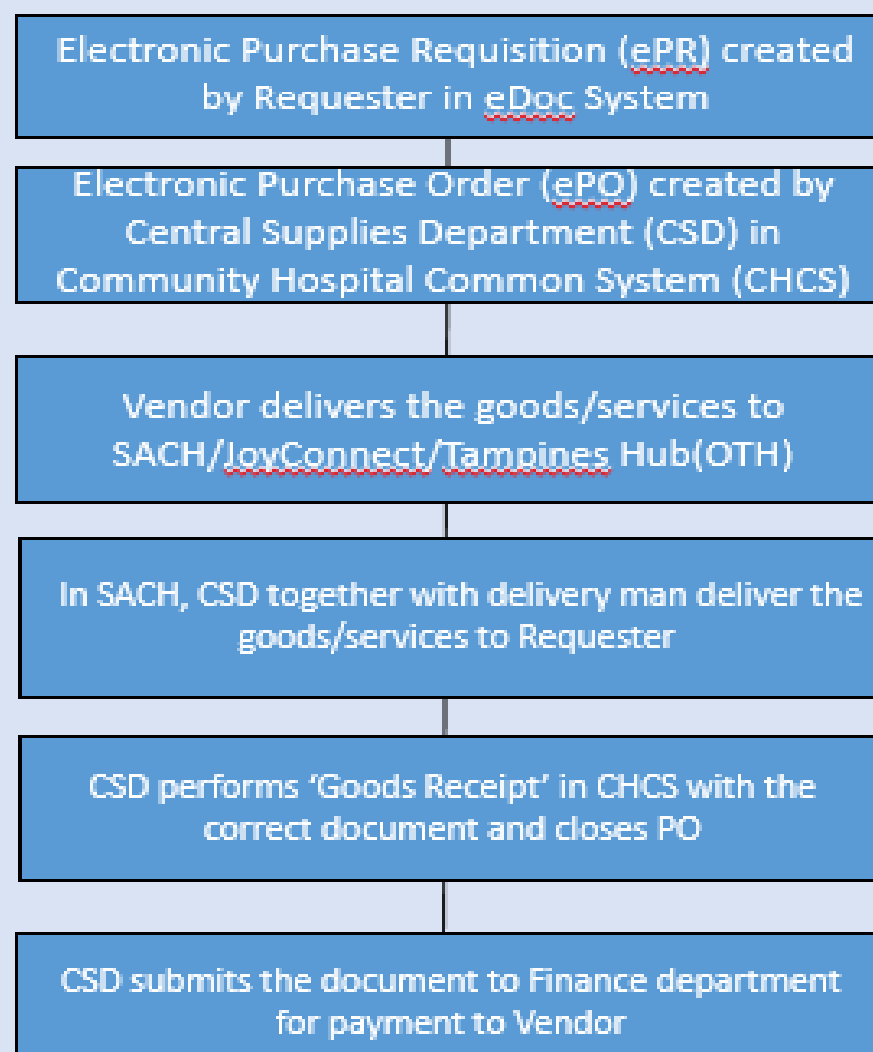
No	Cause	Votes	Cumulative Percentage
1	Lack of knowledge on work flow of completing purchase orders	10	34%
2	Insufficient communication regarding new orders among departmental staff	5	52%
3	Vendor delay delivery	5	69%
4	No tracking system	4	83%
5	Advancing technology	2	90%
6	Pending for vendor's finance to raise invoice.	2	97%
7	obsolete items from vendor	1	100%
		29	100

## Quality Improvement Methodology

### Process



#### Correct Workflow



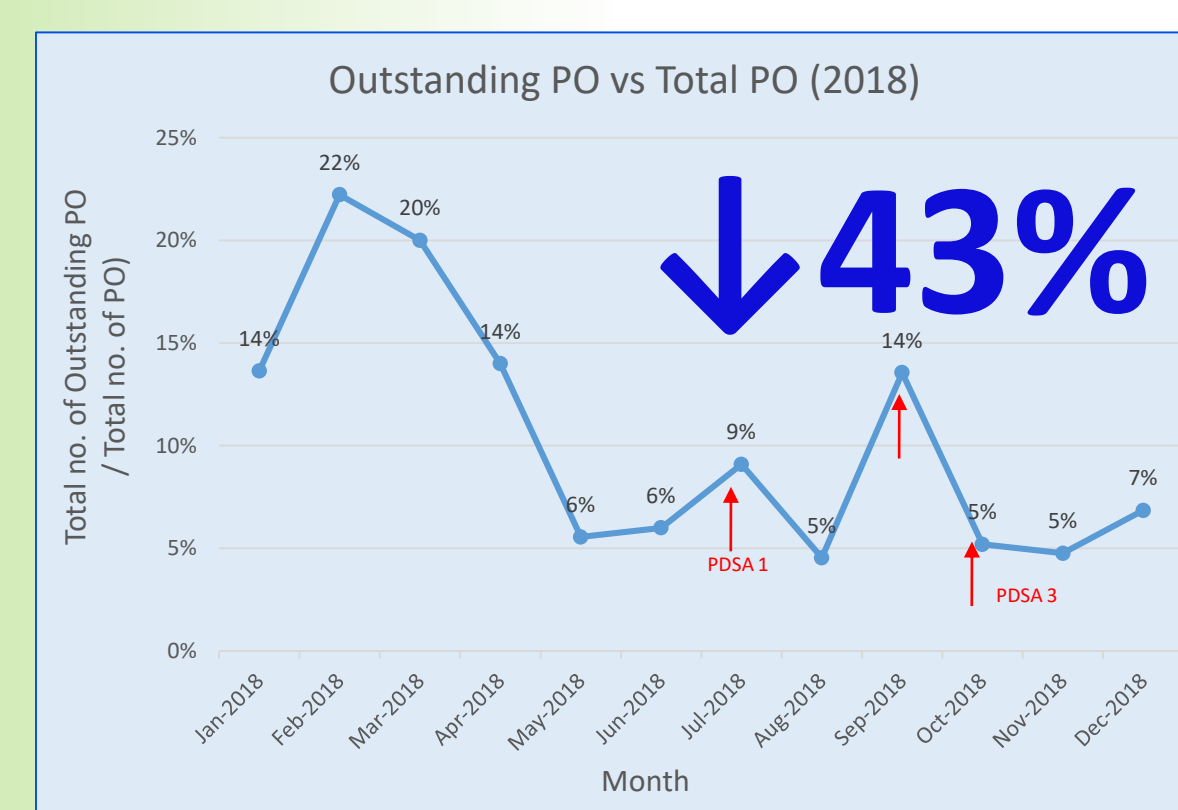
Training was conducted from July to December 2018 to more than 15 departments to create more awareness among the staff on the correct workflow.



## Results

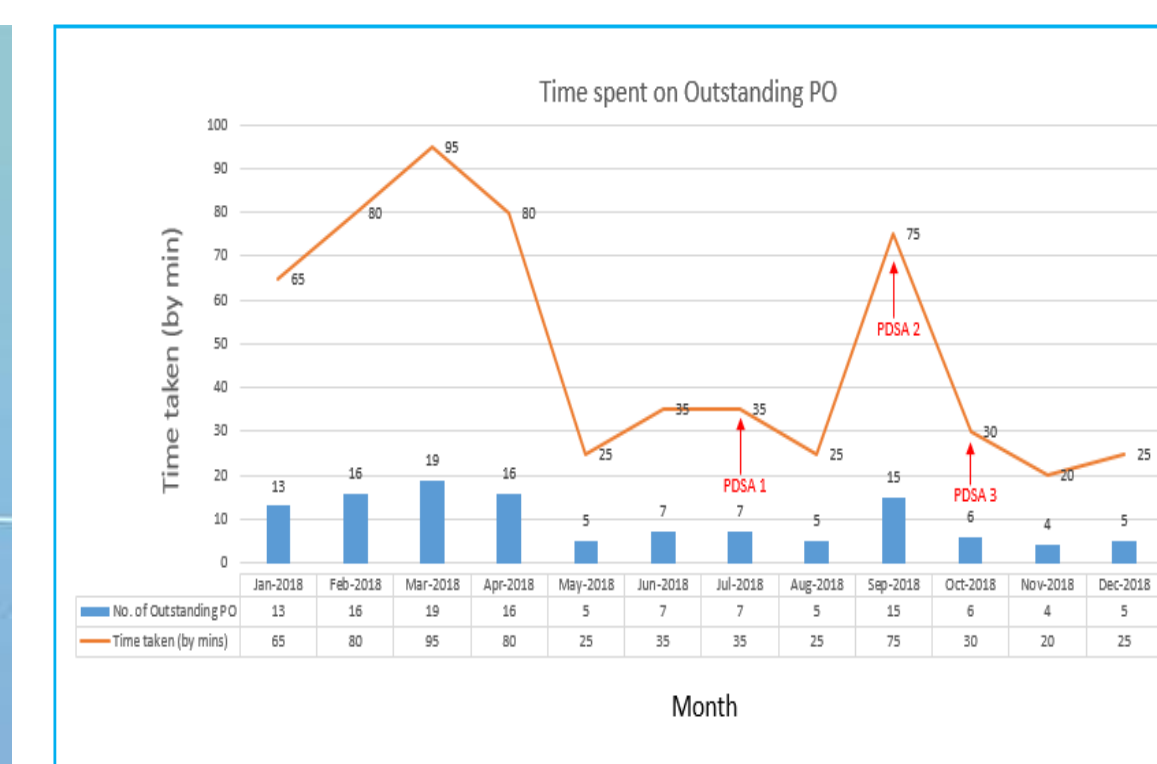
After the training and engagement with the staff, there was better understanding among stakeholders. A survey was carried out to find out the effectiveness of the training. The survey result showed that **86% of these staff understood the workflow.**

86%



The Plan-Do-Study-Act 1 (PDSA 1) training first started in July 2018, and continued for two more sessions in September (PDSA 2) and October (PDSA 3). Six months after the project, the **number of outstanding POs was reduced by 43%.** We also note that there was a 2% increase in outstanding POs in December 2018, which indicates that continuous training is key.

We observe clear productivity gains in the reduction of outstanding POs after the PDSA training was conducted. Before implementation, an average of 63 minutes a month was spent on the follow up of outstanding POs. After implementation, the time taken almost halved, falling to just 35 minutes a month. This is an **improvement of around 44%.**



## Conclusion

We have determined that through communication and training, staff have better knowledge of the work flow and this translates to improved productivity. The project has reduced the number of outstanding POs by ~43% and saved ~44% of the time spent on follow up, leading to better staff satisfaction. Even with the success from this initiative, we continue to follow-up and ensure that our staff have constant guidance on the appropriate work flow.

