

# A 12-person food bank cuts packing time by almost 36%: Sales and customer service

NONPROFIT AND EDUCATION

SMALL

SALES AND CUSTOMER SERVICE

**-36%**

PACKING TIME [1]

**-33.3%**

VOLUNTEERS REQUIRED [1]

**12**

STAFF MEMBERS [1]

## PROBLEM

Three volunteers used an inconsistent packing flow with excess movement and local decisions. Variation in roles and replenishment made each packing cycle harder to predict and supervise.

## SOLUTION

University researchers used DMAIC, customer analysis, process-value analysis, a spaghetti diagram, and 5S in a live pilot. The team clarified roles, reduced travel, and tested the revised flow under operating conditions.

## RESULT

Packing time fell by almost 36%. Required labor fell from three volunteers to two while the supervisor gained clearer process control.

## BUSINESS LENS

Process economics: a small team increased service capacity through flow and role changes, not added labor.

## ASSUMPTIONS AND LIMITS

One pilot at the Toa Payoh Food Pantry 2.0 site. Long-term control results were not available.

## DEPARTMENT APPLICATION

### SALES AND CUSTOMER SERVICE

Customer preferences informed replenishment.

Application analysis based on the cited source. It is not a separate measured result.

**Prepared by Ocmulgee Business Process Solutions from the cited independent source. This is not an Ocmulgee client engagement or an original Ocmulgee result.**

### SOURCE [1]

See and Tay, 2021. Application of Lean Six Sigma to Improve The Food Bank Singapore's Vending Machine Replenishment Process. <https://doi.org/10.46254/AN11.20210619>

Reviewed IEOM university conference case | Size basis: The Food Bank Singapore's 2021 annual report names 12 staff members.

The Food Bank Singapore 2021 annual report: [https://foodbank.sg/wp-content/uploads/2023/06/FoodBank\\_AnnualReport2021.pdf](https://foodbank.sg/wp-content/uploads/2023/06/FoodBank_AnnualReport2021.pdf)