Improving Quality and Efficiency of Tender Drawings Preparation **Singapore Healthcare** Management 2018



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Introduction / Background

Preparing for a procurement events for a renovation project is a tedious process. Besides developing the scope of works and technical specification, the Project Officer will also need to prepare many tender drawings including the detailing which can be daunting, especially for the new comers. To top it off, the quality of the tender drawings are also not consistent as the Project Officers have different methods in preparing them.

As a result, longer time was taken to complete the preparation of tender. Staff also feel frustrated in the process. As part of our continuous improvement effort, "DWG@yc" is form to address the difficulties and challenges faced by the colleagues. "DWG@yc" is an acronym of the team members' initial, which mean "Drawings at Your Convenience".

Objectives

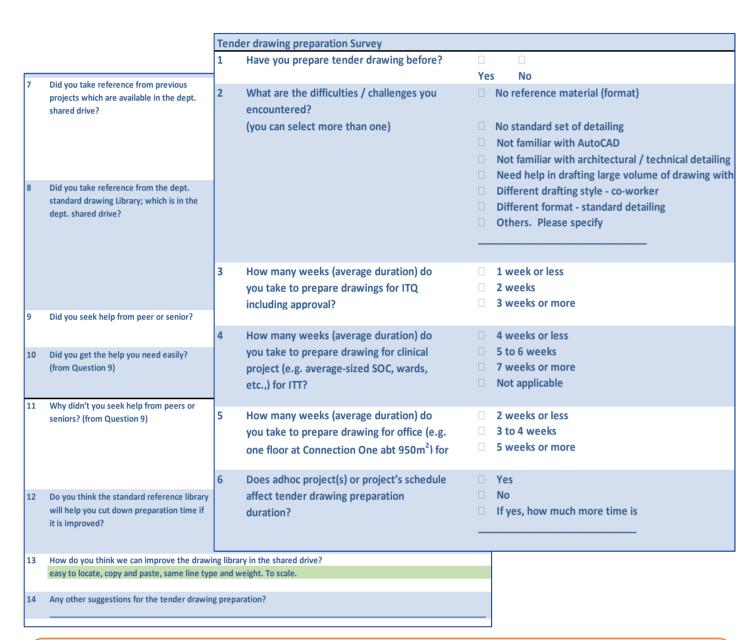
To improve the quality of tender drawings and to reduce the tender preparation time thus improving productivity of the project officers.

Methodology

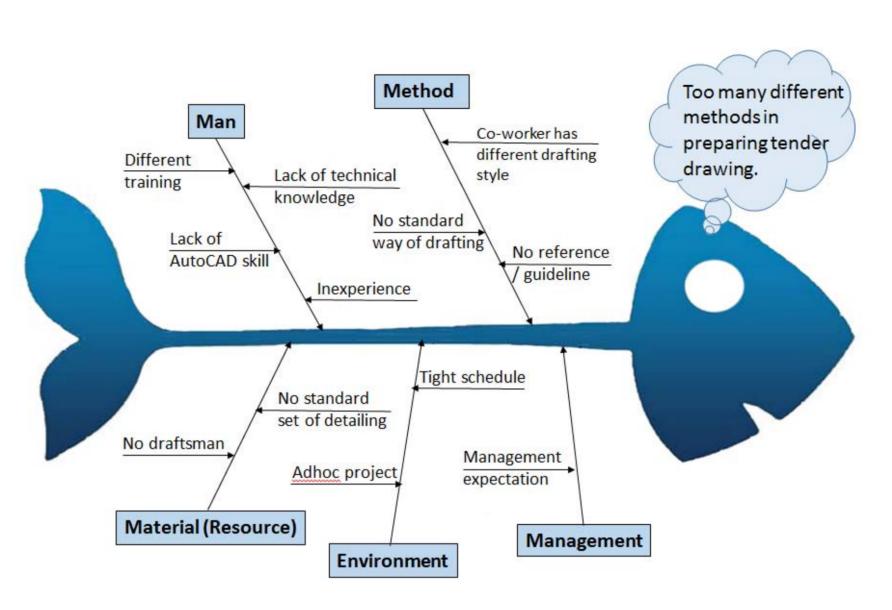
Survey

Cause Analysis

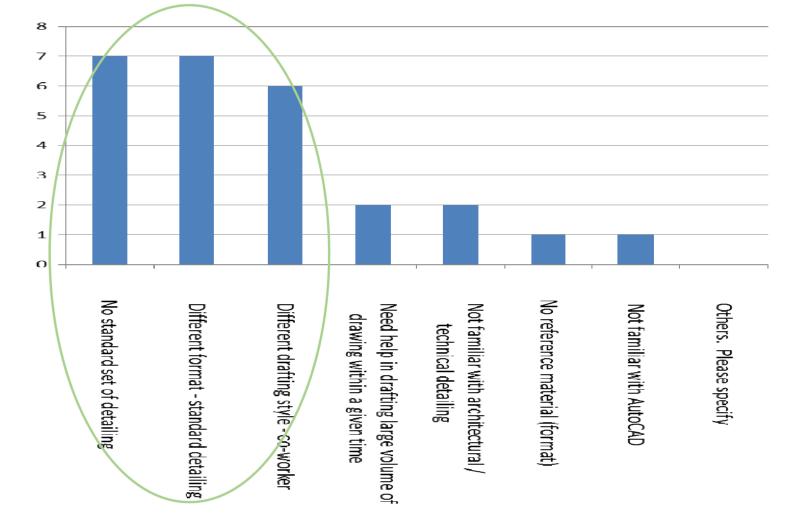
Probable Root Causes



The team develop a questionnaire and conducted survey on 9 staff who prepares tender drawings. Survey returns were then collated and analyzed.



Members then brainstormed for probable root causes using the Cause & Effect Diagram, aka Ishikawa Diagram



Having analyzed the survey results, the team identified that the key elements of "Method" are the probable root causes.

In the survey conducted, feedback was also sought on whether standard detailing library would help in reducing the preparation time of tender drawings. 100% of the staff surveyed responded with a resounding "Yes".

Develop Detailing



With the positive response, the team then proceed to develop the detailing as shown in the Flow Diagram

Implementation

The set of standard drawings were categorized and uploaded to the department shared drive.

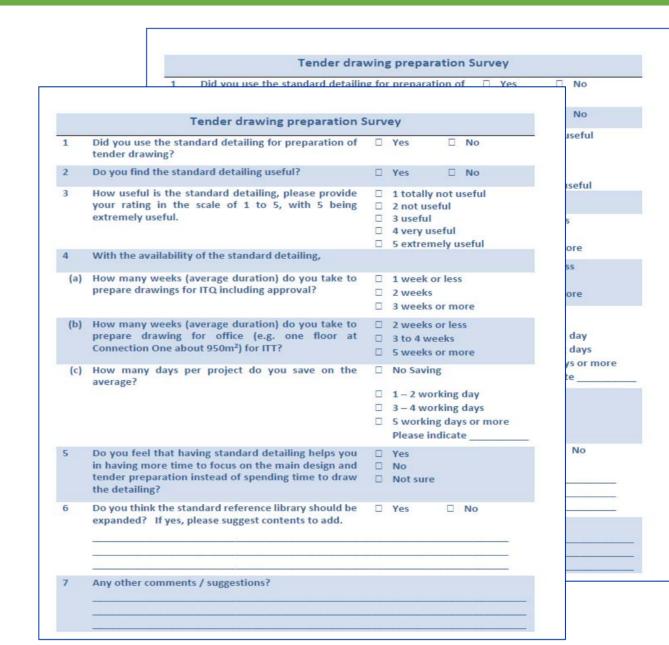
S/N	Description	Details
1	Cabinet	Full height, Top and Low, loose
2	Doors	Schedule including ironmongery & details
3	Partition Wall	GI Frame
4	Ceiling	Pelmet
5	Skirting	Timber, Stainless Steel, Vinyl
6	Toilets	Mirror, Vanity, Tap, Wall mounted WC,
		Cavity Wall, Floor, Tiling setting out
7	Meeting Room	Writing Board, Projector Screen, Table
8	Pantry	Sink, Cabinets, Water Dispenser

Staff were encouraged to use the detail drawings for all upcoming procurement events.

Post Survey were conducted to find out if the objective had been achieved.

Colleagues was informed on the availability of the new standards detailing

Post Survey



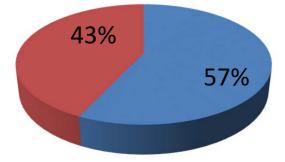
Post survey was conducted to find out if the objective had been achieved. 7 staff who have used the new standard detailing participated in the survey





Summary of the post survey results are as follows: 100% of the staff agreed that:

- ✓ The Standard Drawings are useful
- ✓ The Standard Detailing helps in reducing preparation time by 15%



- 1 to 2 Working Days per Project
- 3 to 4 Working Days per Project
- ✓ They are able to focus on the main design and tender preparation
- The standard reference library should be expanded to include detailing for Clinical Areas, such as Operating Theatre, Wards, etc.

Standardize Action Taken / Review

The team will continue to review and update the inventory of the standard detailing. All updates / revisions will be documented and made available in the shared folder for all staff to use.

As part of the department induction program, all new staff shall be briefed on the availability of such information.

Where applicable, the set of standard detailing would be extended to the colleagues from other member institutions as part of knowledge sharing.

Conclusion

The methodology in implementing continuous quality improvement enables the department to improve process effectively and efficiently. Besides reducing the preparation time for the procurement events, the project staff can better focus on the main design and preparation of the tender document rather than spending time drawing the details.

In addition, the quality of the tender drawings produced are of a consistent standard since the typical detailing are standardized.