



**Singapore Healthcare
Management 2018**

Improving Effectiveness and Efficiency in Measuring and Reporting Training Evaluation

ADN Jonathan Sim Guan Hua¹, Ag ADN Chua Lee Kheng¹,
NC Zubaidah Bte Hassan¹, Mr Victor Effendie², SSN Fu Li Juan³,

SN Nur Iman Binte Sunario⁴, Ms Jess Tan Shin Huey¹ and Ms Joanna Peh Wei Fang¹

¹ Nursing Development Unit, ² Solution Integration & Data Analysis, ³ Cardiac Rehabilitation Unit, ⁴ Ward 44



**National Heart
Centre Singapore**
SingHealth

INTRODUCTION

With the increasing take up rate of nursing courses conducted in the Nurse Development Unit (NDU) the team had to look into streamlining the post training evaluation processes. The process includes manual sorting, data entry and report generation which is tedious and time consuming; the process is also prone to mistakes due to human errors. The project is initiated to enhance both participants and administrators' user experience with an improved streamlined process.

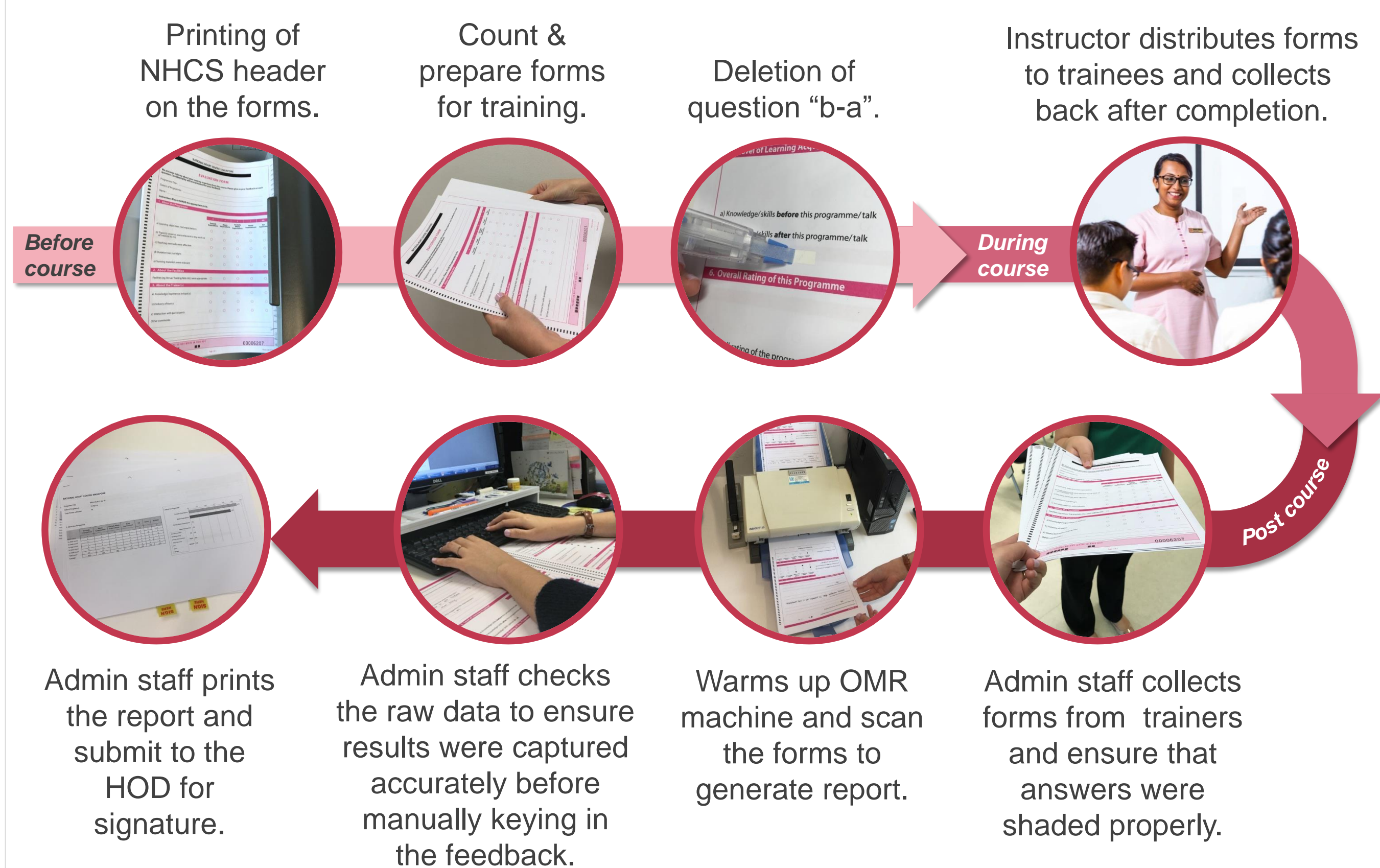


Project Aims

- To reduce the process time for reports by **50%.**
- To achieve **100%** on-time report submission **from 6 weeks to 3 weeks.**

PROBLEM

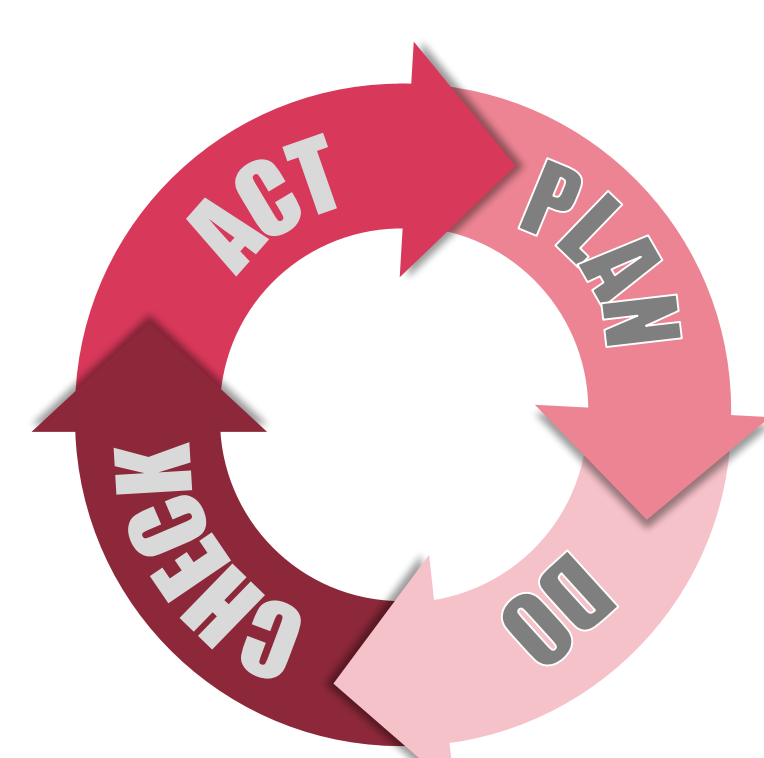
Prior to implementation of new training evaluation workflow:



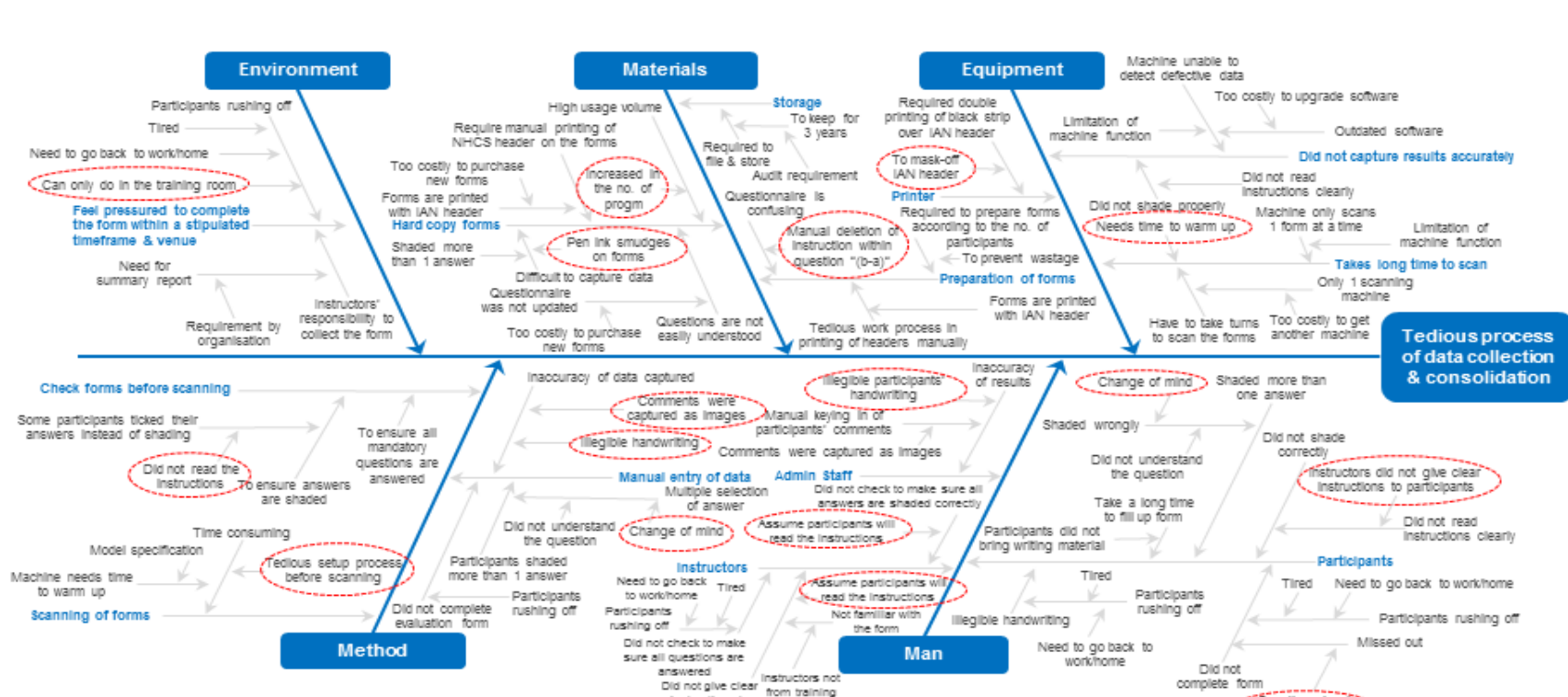
Current Challenges

- High scanner maintenance and upgrading cost
- Depleting forms due for bulk purchase
- Increase in operating & manpower costs

METHODOLOGY



PDCA Cycle



Cause and Effect Analysis Diagram

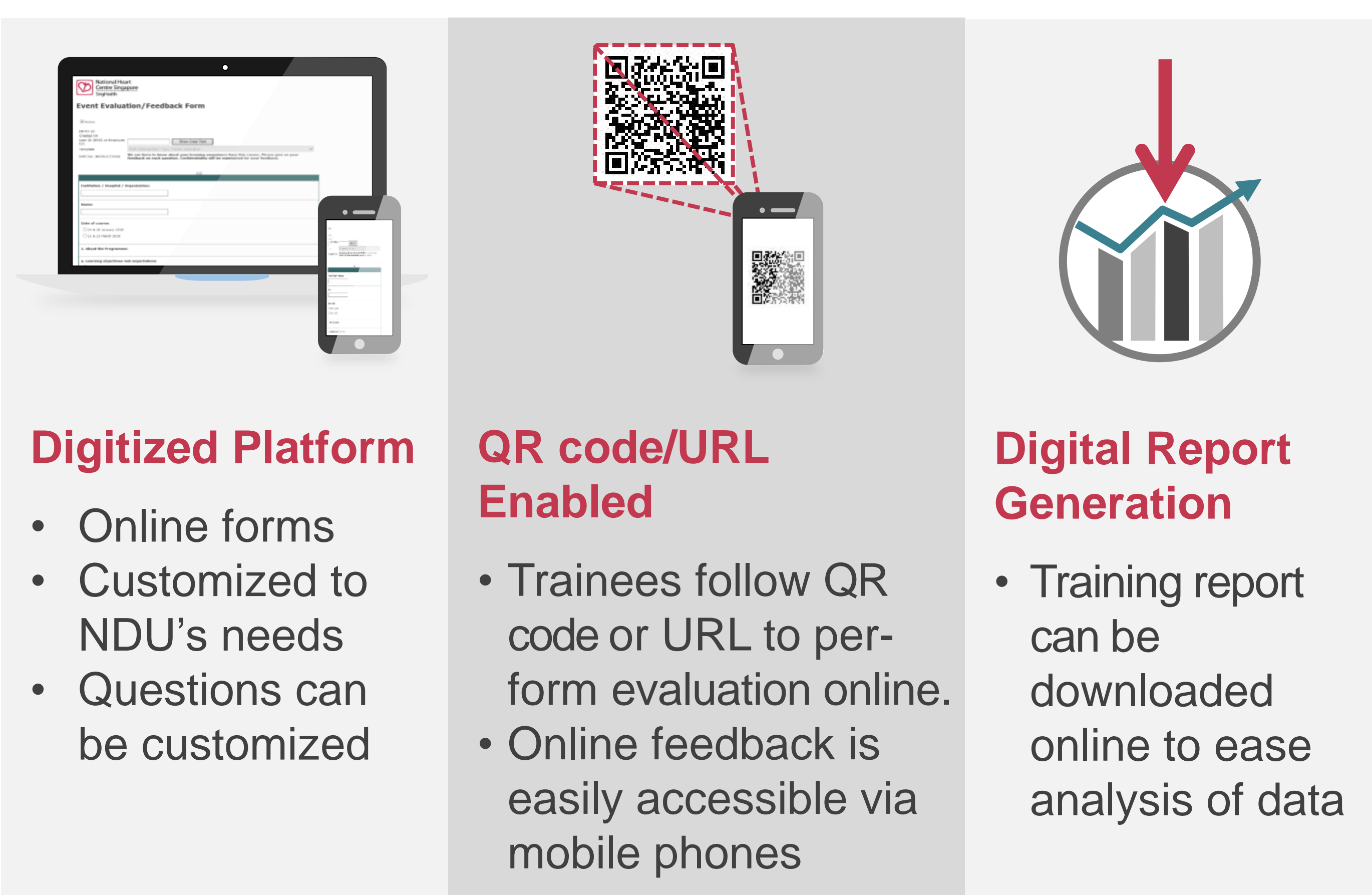
- The PDCA problem solving methodology was used for the continuous improvement effort.
- The Cause and Effect Analysis was used to identify the possible root causes.
- A decision matrix was used to verify and validate the final root causes.
- The team brainstormed and assessed the feasibility of various new evaluation platforms to address the root causes.

Final Root Causes

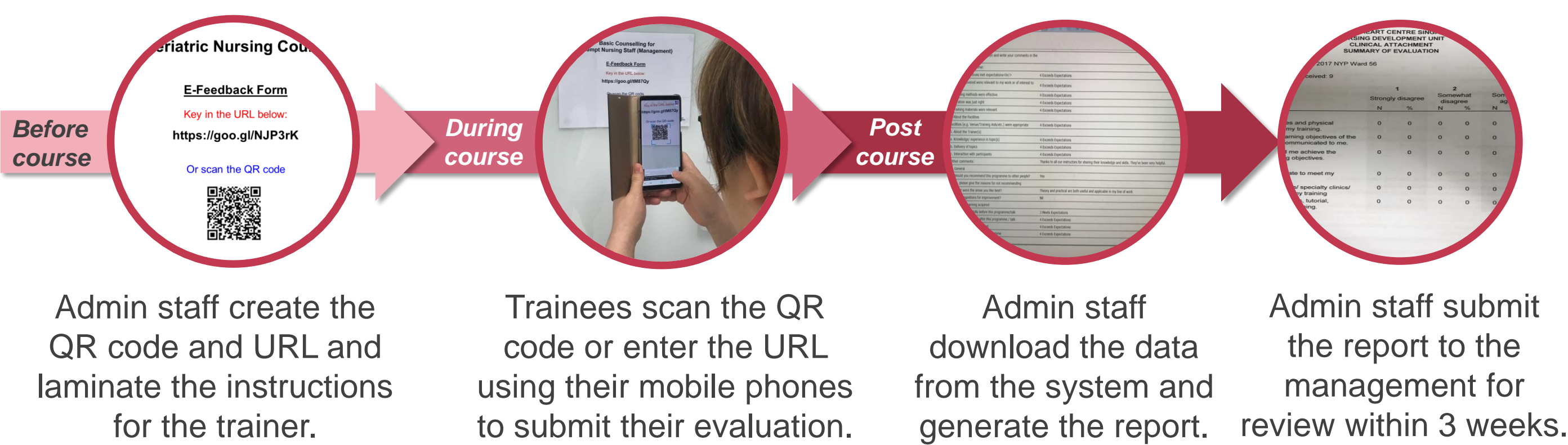
- Illegible handwriting
- Participants did not read instructions
- Pen ink smudges on forms
- Manual deletion of misleading instructions
- Printing of NHCS header

SOLUTIONS

Innovative Solutions

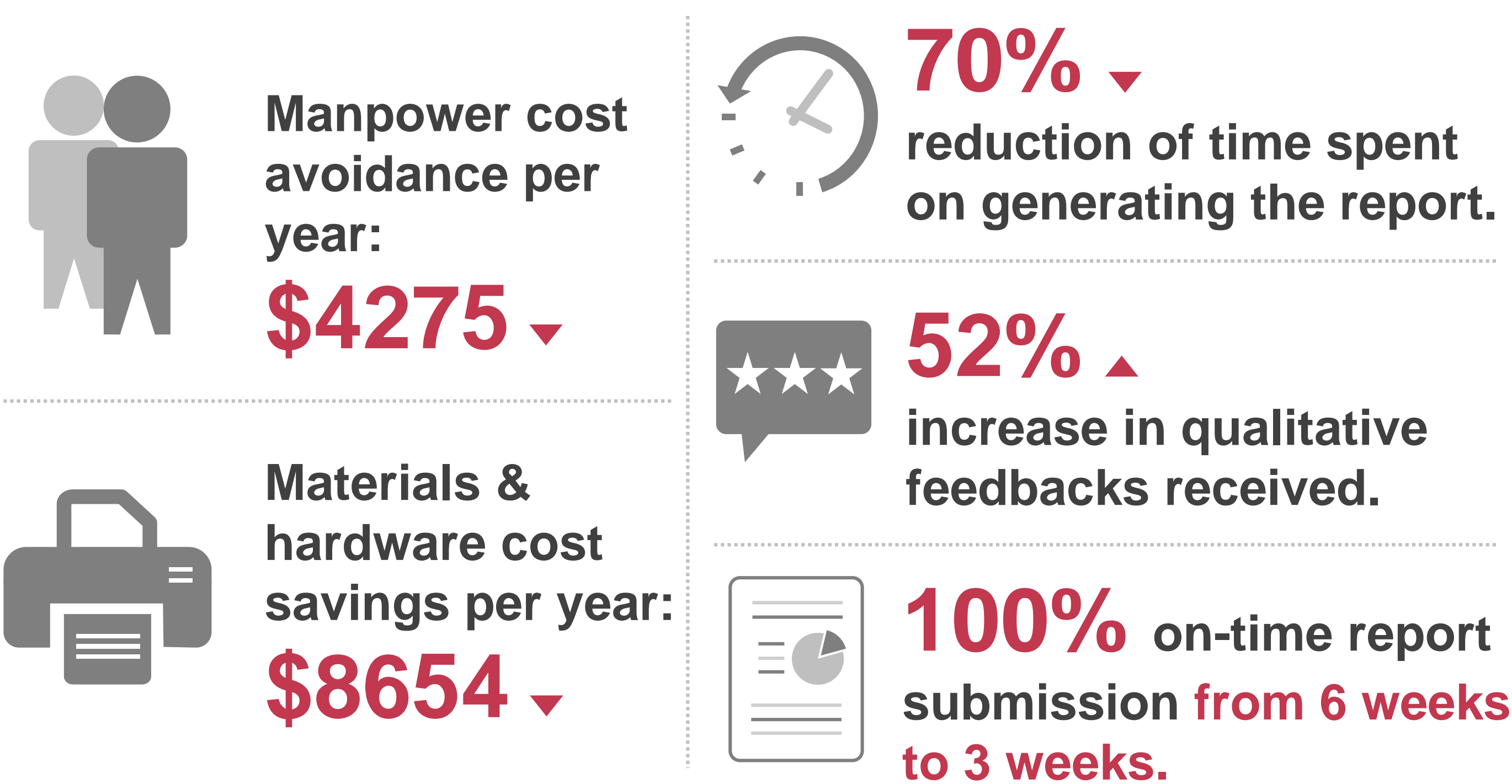


New improved workflow process



RESULTS

Tangible Results



Intangible Results

- Positive feedbacks from trainers and trainees
- Admin staff satisfaction with less time spent on documentation
- Met organisation's goal to be "paperless"
- Increase efficiency in workflow
- Frees up physical storage space
- Prevents erroneous data and reduce input errors

CONCLUSION

Through digitization of the evaluation system, the project has moved in tandem with NHCS' vision of becoming a Digital Hospital. Utilizing technology resulted in reduction of cost, environmentally friendly and improved the efficiency of workflow.