

# DIGITALIZATION OF HAND HYGIENE AUDIT FORM

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- SAFETY
- QUALITY
- PATIENT EXPERIENCE
- PRODUCTIVITY
- COST

## Define Problem, Set Aim

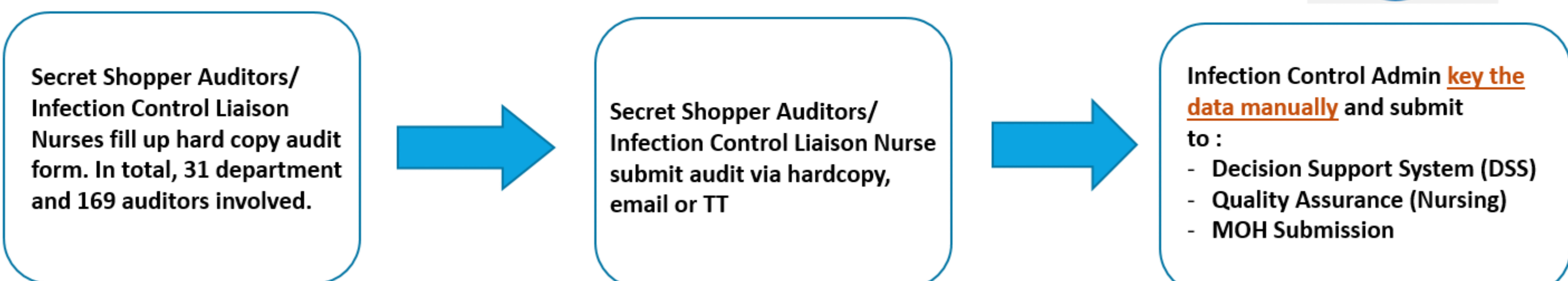
### Problem/Opportunity for Improvement

Hand Hygiene audit is conducted through observational inspection of handwashing technique by infection control nurse/ liaison nurses and secret shoppers. It is one of Infection Control core programme and hospital KPI. Data collected will be submitted to MOH half yearly. Data are collected via hardcopy which is time consuming and laborious.

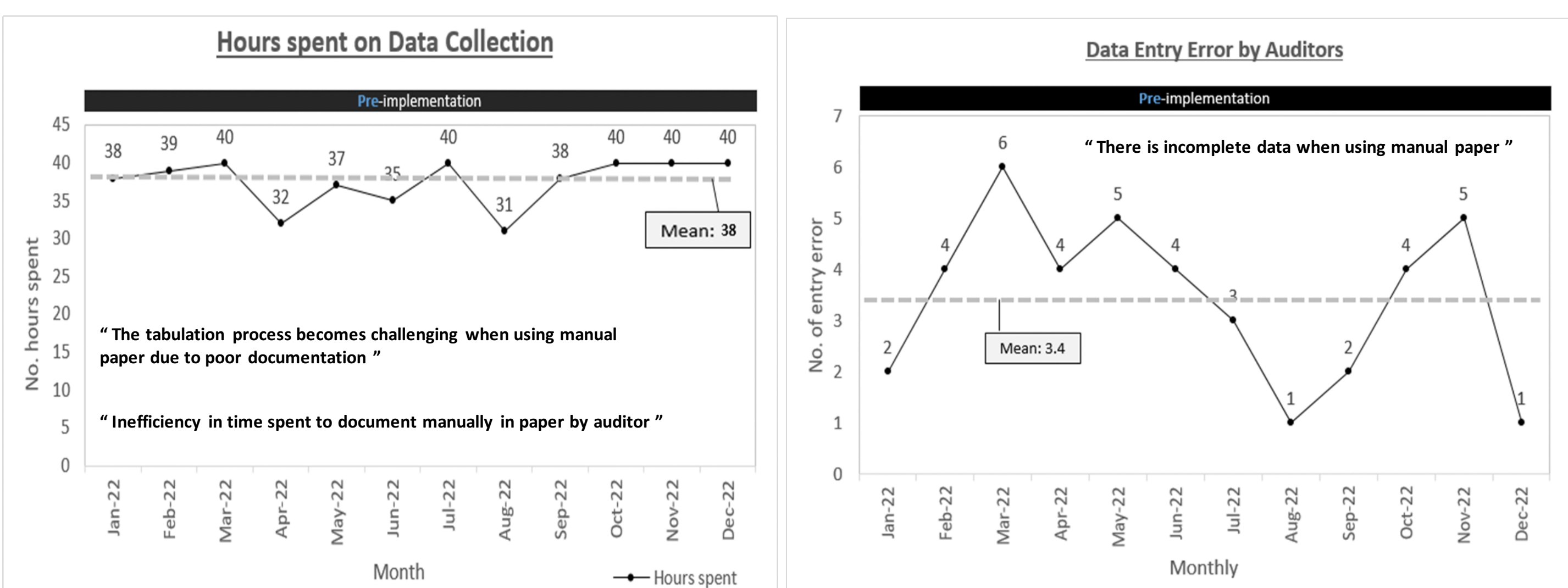
### Aim

- To reduce the time spent on data collection to an average of 50% by July 2023.
- To improve the efficiency and effectiveness of Hand Hygiene data collation and extraction.
- To provide accurate and timely Hand Hygiene data to management dashboard and MOH
- To improve staff morale

### Current Workflow (Only Inpatient wards)



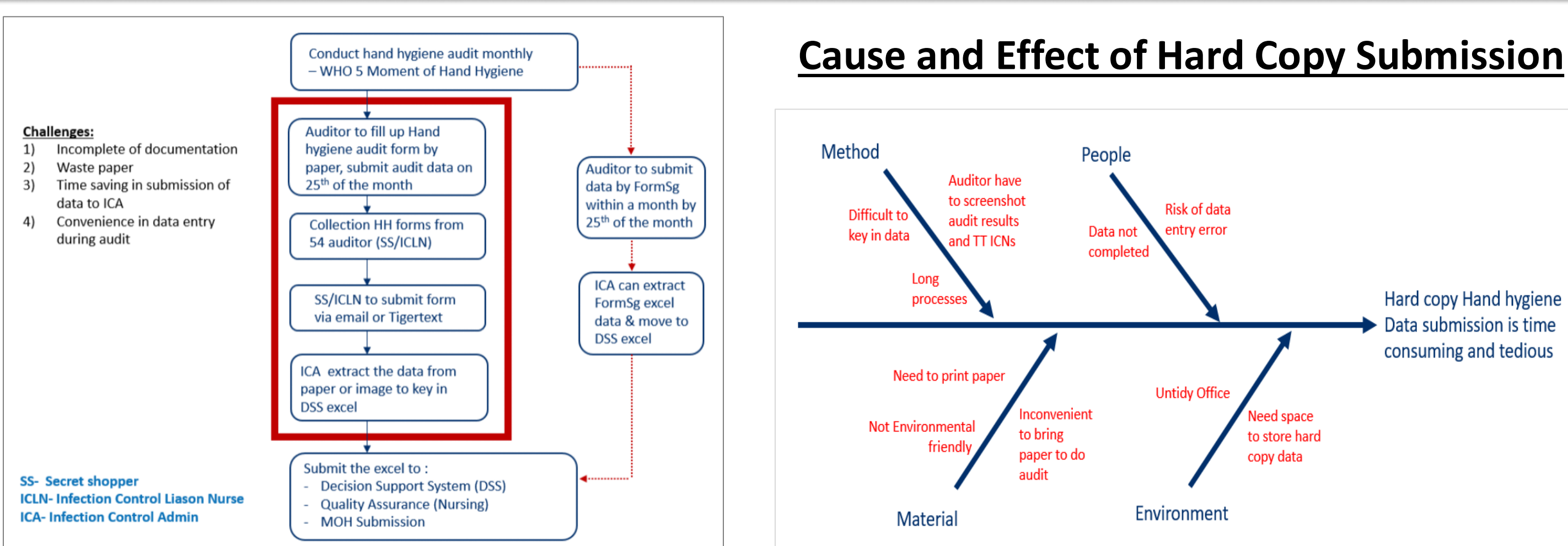
## Establish Measures



### Key measurements

- On average of 38 hours per month spent on collation and data entry by 169 Hand Hygiene auditors within 31 areas.
- On average of 3 incomplete data entry submitted by auditors per month. This leads to time spent on clarifications

## Analyse Problem

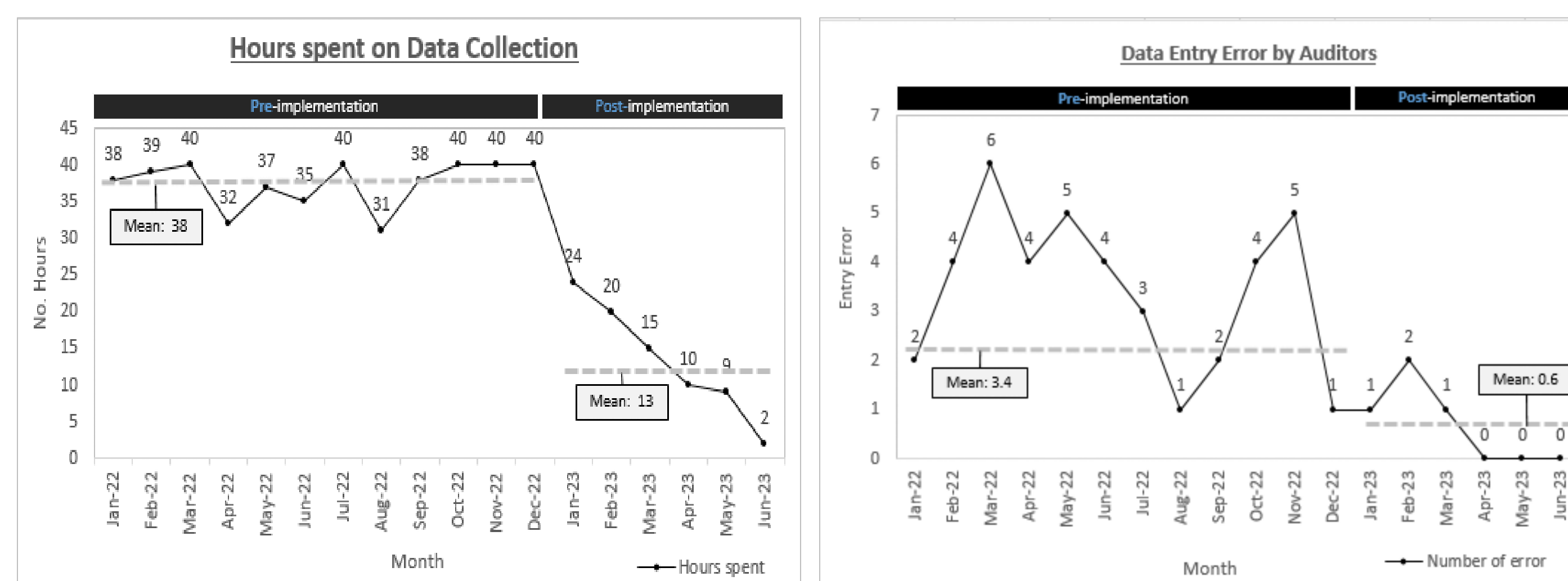
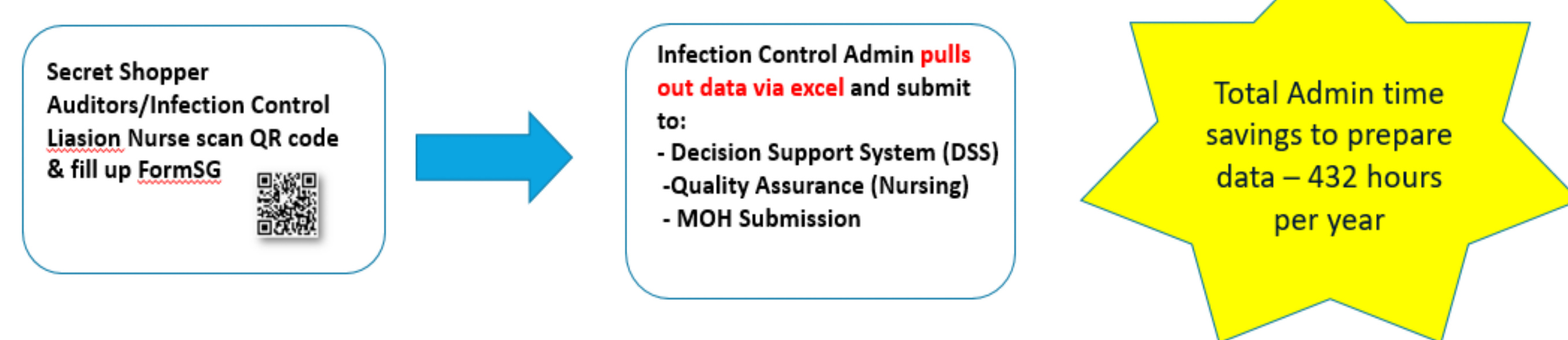


## Implement Changes

CYCLE	PLAN	DO	STUDY	ACT
1 (Jan 2023)	<ul style="list-style-type: none"> <li>IC members created hand hygiene audit form via FormSG with minimum knowledge on FormSG instead of using hard copy Hand hygiene audit forms.</li> <li>Pilot to a small group auditors</li> </ul>	<ul style="list-style-type: none"> <li>Communicate changes to secret shopper</li> <li>Educate secret shoppers</li> <li>Started trial to JCH secret shoppers Online submission for 5 opportunities in 1 form, auditors have to submit a few times to met 20 opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>Auditors feedback that it is not user friendly and need frequent submission to complete 20 opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>As it is time consuming to key in the data, IC members relooked into revamping the FormSG to suits auditor feedback.</li> </ul>
1.1 (Feb 2023)	<ul style="list-style-type: none"> <li>Revised to hand hygiene audit FormSG to allow options of 5 to 20 opportunities submissions</li> </ul>	<ul style="list-style-type: none"> <li>Started trial to JCH secret shoppers with options to submit 20 opportunities in one online form.</li> </ul>	<ul style="list-style-type: none"> <li>No other feedback from auditors</li> </ul>	<ul style="list-style-type: none"> <li>Roll out to ICLNs</li> </ul>
1.2 (Apr 2023)	<ul style="list-style-type: none"> <li>Go live to JCH campus</li> </ul>	<ul style="list-style-type: none"> <li>Communicate changes and educate ICLNs</li> <li>Post implementation survey conducted</li> <li>Roll out to SOC</li> </ul>	<ul style="list-style-type: none"> <li>Staff satisfied with the new implementation</li> </ul>	<ul style="list-style-type: none"> <li>Adopt the changes in cycle</li> <li>Roll out to SOC</li> </ul>

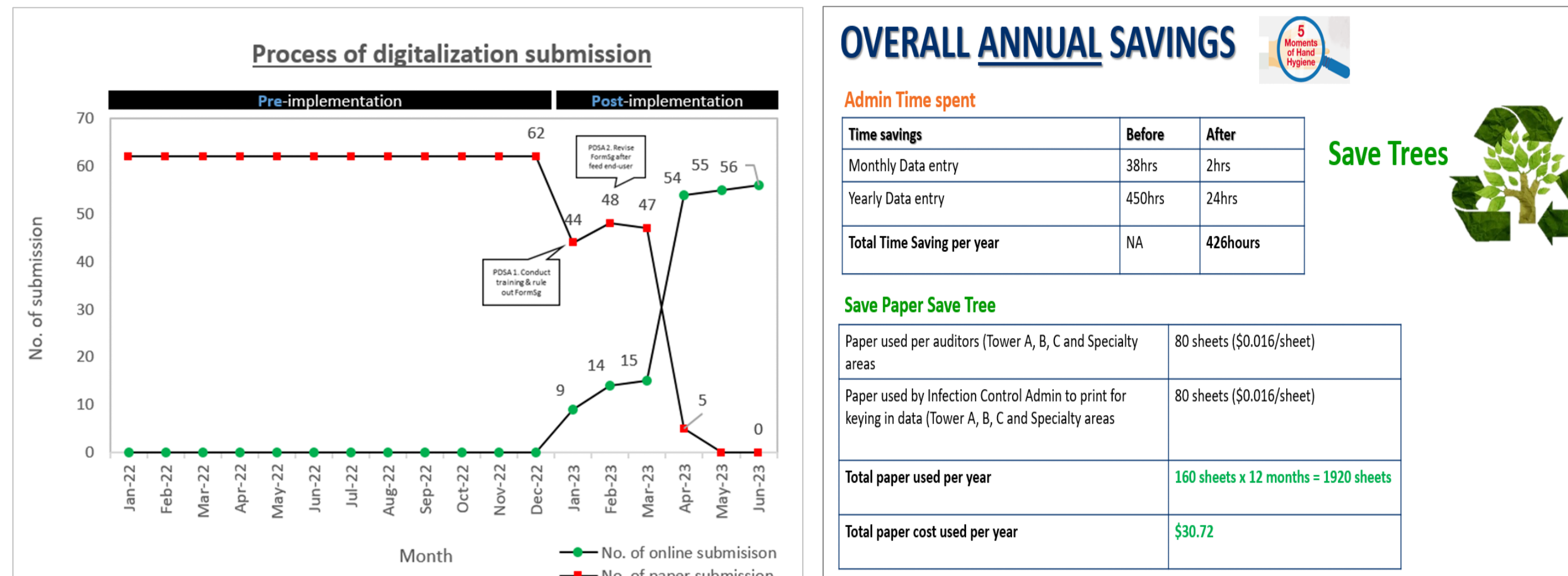
## Results

### New Workflow (Inpatient Wards)



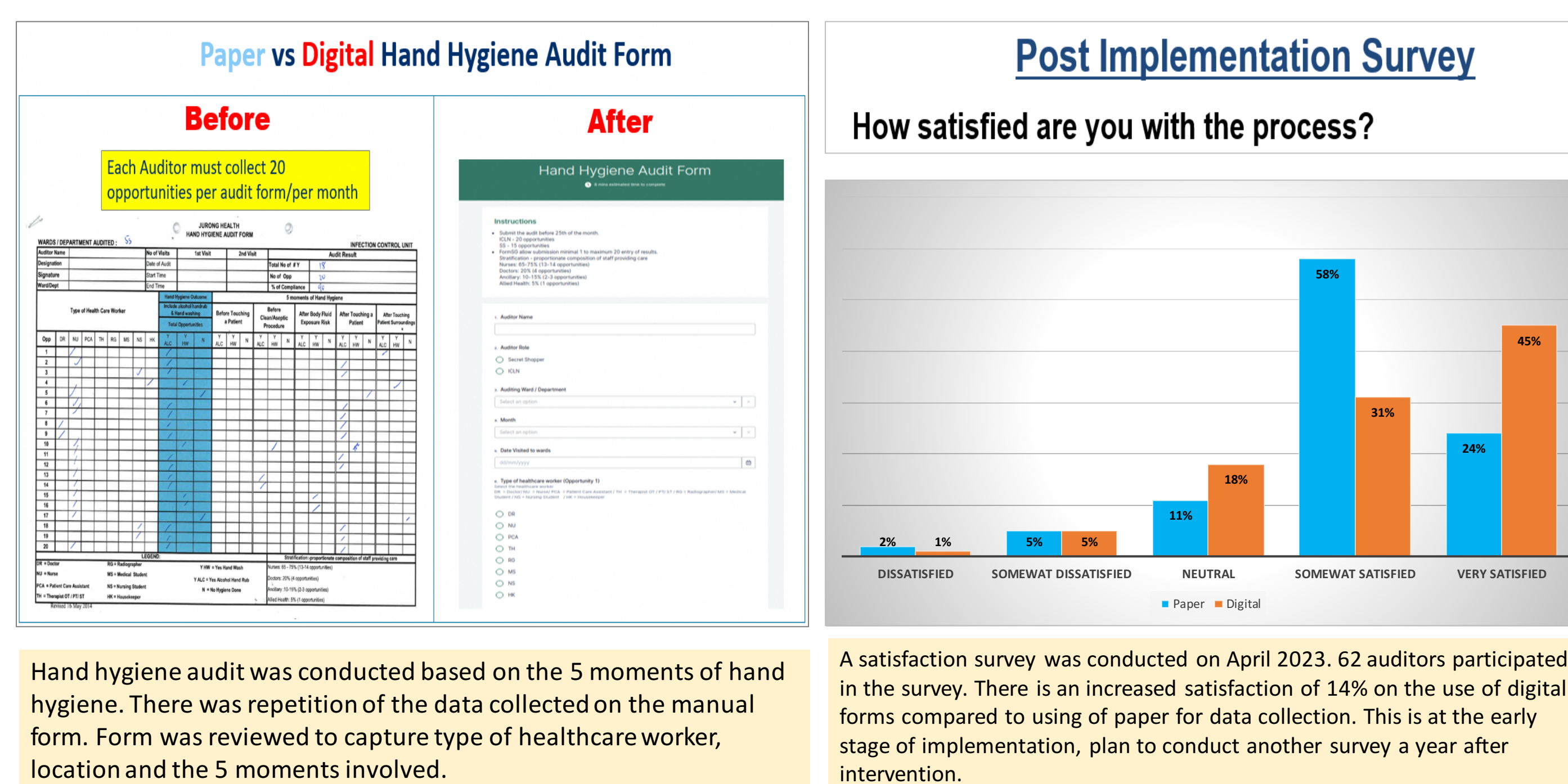
A minimum of 2 hours spent per month for digital data entry and extraction.

The data received had incomplete documentation. Risk of data entry errors submission by auditors were reduced significantly when submitted electronically.



This graph shows the number of submission process of digitalization from paper submission to online FormSG submission.

Over all, precious time utilize for data collation and entry were reduced tremendously. Thus, contributed to the reduction of paper usage.



## Spread Changes, Learning Points

At the initial stage of planning, we were required to have a change of mindset and gain buy-in from various auditors. Digitalization was not embraced by all, including some of our team members.

Fortunately, we learned and successfully spread this change across the organization. Digitalization allowed us to troubleshoot the online form and diligently solve the issue. Additionally, we managed to implement this change in the SOC, enabling all data to be collected on one platform.

The flexibility of the digitalization of the hand hygiene audit form allow auditors to easily access the online form thus saving their precious time and allow more time for patient care. Data collection method is now fast and effective for a better data accuracy.

This change enabled us to promote green environment and contribute to the reduction of paper usage.