

Project Title

Developing a Digital Ready Workforce using Experiential Learning Principles to Innovate Education Admin Processes in SGH Division of Medicine (DOM)

Project Lead and Members

- Gary Ong
- Nur Suhaila Bte Ishak
- Jeslyn Tay
- Siti Nurkiah Binte Mohd Amin
- Siti Munirah Binte Noraini
- Clasandra Hum
- Rachel Ho
- Cai Guorong
- Tan Shi Hwee
- Mona Seow

Organisation(s) Involved

Singapore General Hospital, Graduate Medical Education Office SingHealth

Healthcare Family Group(s) Involved in this Project

Healthcare administration

Applicable Specialty or Discipline

Medicine, medical education

Project Period

Start date: Jan 2020

Completed date: Mar 2022

Aim(s)

- To Implement an Educational Programme for SGH DOM Administrators Focusing on Quality Improvement (QI) and Technology to Improve Work Productivity; and
- To Improve Turnaround Time (TAT) for Education Admin Processes by 50% in 12 months' time in DOM.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Conclusion

See poster appended/ below

Project Category

Training & Education

Learning Theories & Framework, Kolb's Cycle Learning Theories, Learning Approach:
Collaborative Learning, Self-Directed Learning; Education Platform: Virtual Learning
Platform, Physical Learning Platform

Workforce Transformation

Workforce Performance, Workforce Productivity

Keywords

Digital Ready Workforce, Experiential Learning, Work Productivity, Administrative
Process

Name and Email of Project Contact Person(s)

Name: Gary Ong

Email: singaporehealthcaremanagement@singhealth.com.sg



Developing a Digital-Ready Workforce using Experiential Learning Principles to Innovate Education Admin Processes in SGH Division of Medicine (DOM)

Singapore Healthcare Management 2022

Gary Ong^[1], Nur Suhaila Bte Ishak^[1], Jeslyn Tay^[1], Siti Nurkiah Binte Mohd Amin^[1], Siti Munirah Binte Noraini^[1], Clasandra Hum^[2], Rachel Ho^[2], Cai Guorong^[2], Tan Shi Hwee^[2], Mona Seow^[2],

[1] Division of Medicine, SGH

[2] Graduate Medical Education Office, SingHealth



Singapore General Hospital
SingHealth



A. Introduction & Problem Statement

Education admin in DOM is diverse, ranging from Undergraduate, Residency, Exams, Faculty Development and Academic Appointment.

The admin processes are generally routine but voluminous, requiring significant amounts of time to coordinate, collate, compute and consolidate reports. Furthermore, the documentation-heavy nature resulted in substantial paper printing and files for storage purposes.

These posed tremendous pressures on the team's limited inventory space, rising consumables costs and need for quick turnaround time.

B. Objectives

The DOM Education Admin Leadership (DEAL) Team acknowledges the current inefficiencies in the admin processes and is committed to initiate a change programme, based on these 2 key thrusts:

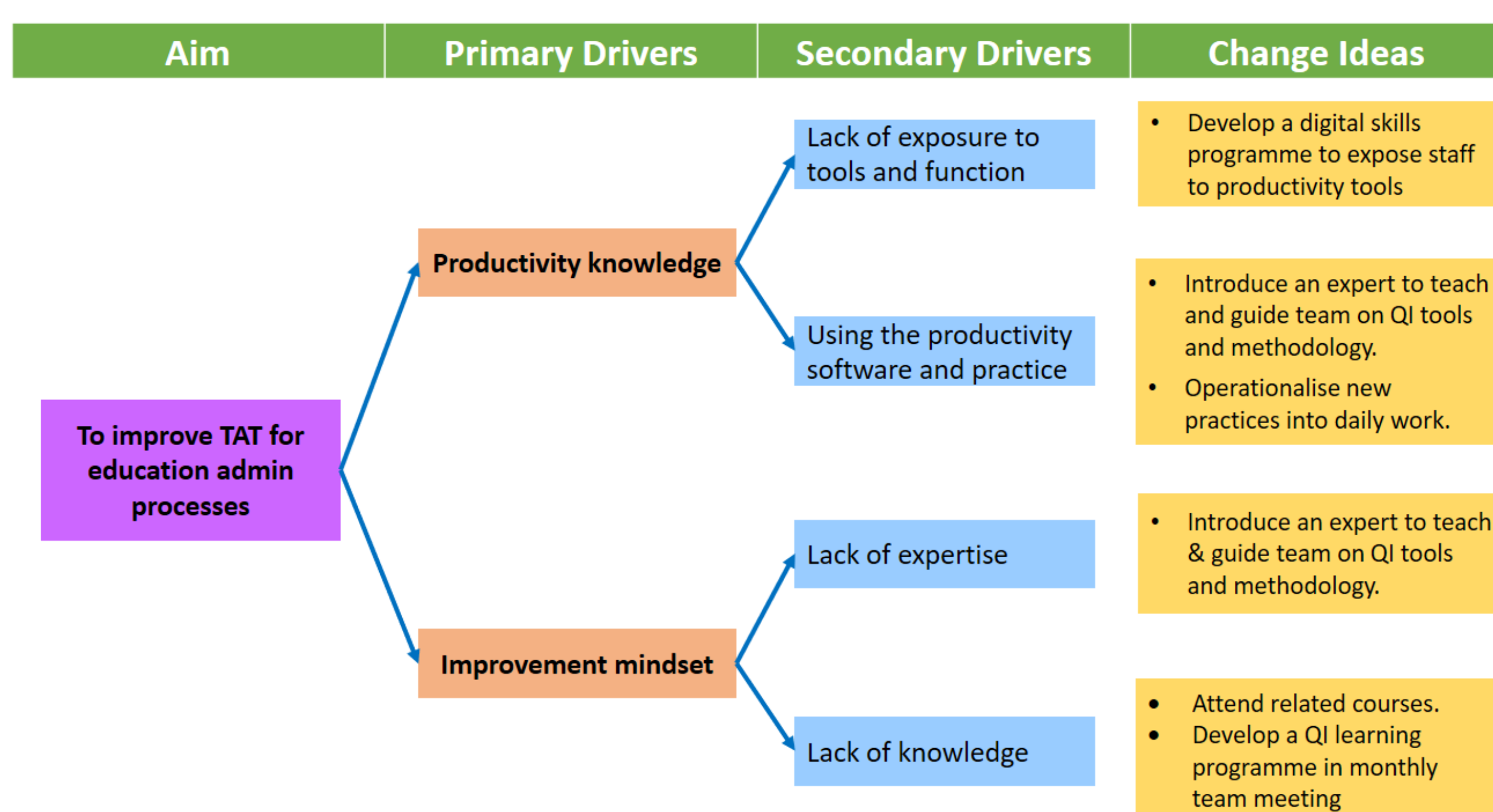
- To Implement an Educational Programme for SGH DOM Administrators Focusing on Quality Improvement (QI) and Technology to Improve Work Productivity; and
- To Improve Turnaround Time (TAT) for Education Admin Processes by 50% in 12 months' time in DOM.

C. Methodology

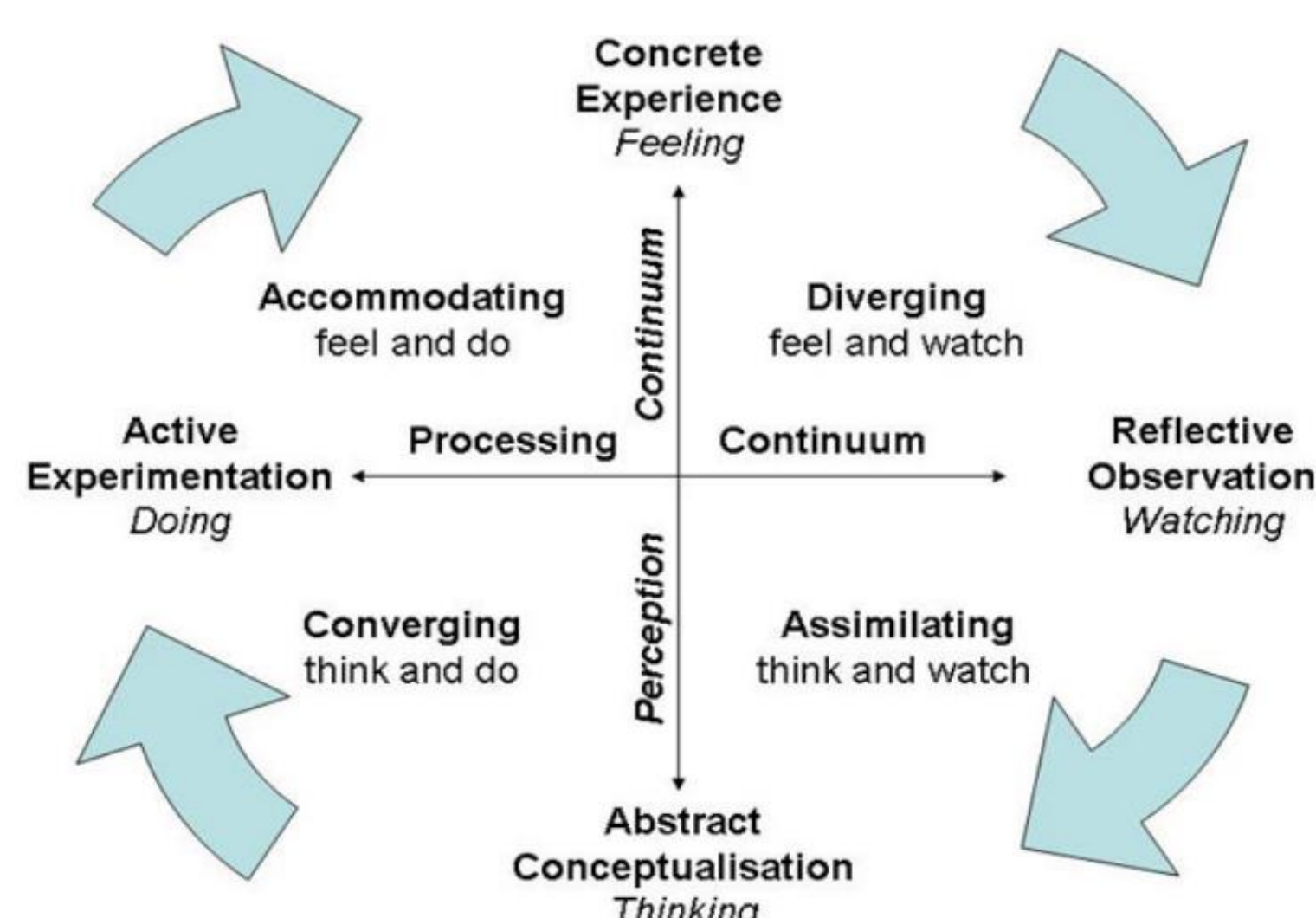
The team scanned through the existing workflows, identified and prioritised admin processes with high impact and low effort:

- Faculty Development Dashboard;
- Residency 360 Evaluation Process;
- Residency Protected Teaching Time (PTT); and
- Bedside Tutor Allocation for Medical Students Posting.

The 5 Why's tool was used to find the key root causes, which were the lack of (1) *Productivity Tools (aka Technology) Knowledge* and (2) *Quality Improvement Mindset*. Driver Diagram tool was then employed to develop potential change ideas to address challenges:



To ensure implementation effectiveness, the DEAL team anchored on the Kolb's Experiential Learning Cycle, where optimal learning involves Concrete Experience, Reflective Observation, Abstract Conceptualisation & Active Experimentation (aka learning by doing).



Kolb, D. A. (2014). Experiential learning: Experience as the source of learning and development. FT press.

Action Plans:

- 2 curriculum planning workgroups formed – DOM and Team levels.
- Formalised 4 teams to leverage QI and digital technologies like *R*^[1], *FormSG*^[2], *Zoom*^[3], *Python*^[4] to transform work processes.
- Quantitative and qualitative measures on programme outcomes and staff feedback were collected.

D. Results

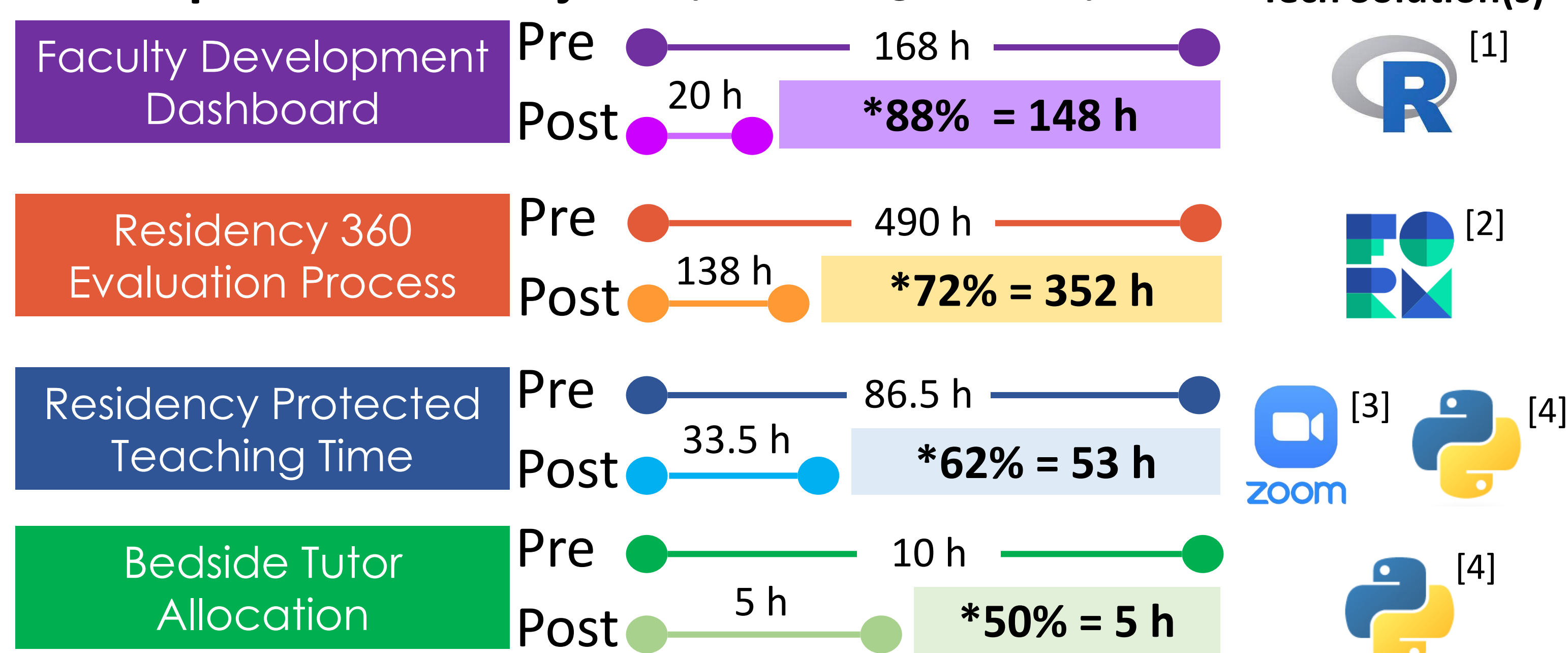
1. DOM Digital Skills Sharing Programme

- 13** sessions conducted from Jul 2020 to Mar 2022, focused on tech & digitalisation topics.
- 382** attendances in total.
- Satisfaction score of **4.32/5**.
- Videos were uploaded into intranet and clocked a total of **239** website visits.

2. DOM EDU Team Gamified Learning Programme

- QI and best practices themes injected into curriculum.
- Formed 3 rotating teams to present journal findings and share best work practices, with quizzing component. Highest scoring team is rewarded.
- 24** sessions completed between Jan 2020 to Mar 2022.

3. Improvement Projects (*TAT Savings Per Year)



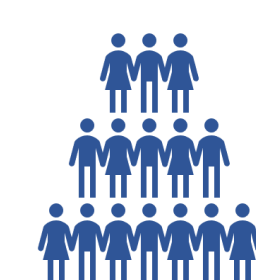
E. Sustainability & Conclusion



Continual emphasis on QI topics for team learning and deepen engagement of DOM admin staff to apply learned concepts at work.



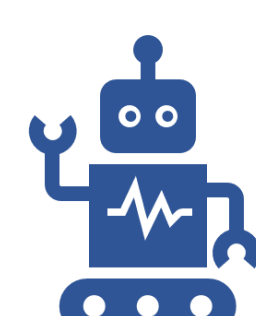
Better exposure through sharing platform at DOM Digital Skills Programme and appreciation of digital tools to improve productivity.



Video recordings are uploaded to intranet and e-learning system for asynchronous learning and spread, to benefit other departments.



Better staff morale with better productivity at work, acquire deeper domain knowledge and improve opportunities for staff development.



Work with team to discover, learn and spread innovative ways of working. The next identified area will be Robotic Process Automation (RPA).

