

Project Title

Automated Flu Vaccination Reminder to HOD's using UIPath

Project Lead and Members

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Organisation(s) Involved

Tan Tock Seng Hospital

Healthcare Family Group(s) Involved in this Project

Healthcare Administration

Applicable Specialty or Discipline

Operations, Workplace Health and Safety; Digital and Smart Health Office (DSHO)

Project Period

Start date: Feb 2023

Completed date: Jun 2023

Aims

To automate the manual and repetitive process of (a) preparing individual department's list of unvaccinated staff and (b) sending these individual lists to each of the HODs or designated Single Point of Contact (SPOCs)

Background

The Operations, Workplace Health and Safety, (Ops WSH) team oversees the monitoring of TTSH workforce's immunity against various diseases (e.g. measles, diphtheria, varicella), including influenza. The hospital strongly encourages its staff to

take both the Southern Hemisphere (SH) and Northern Hemisphere (NH) influenza vaccination every year to protect themselves and people around them from the flu. The team used to spend a large proportion of time, from monitoring the vaccination status of a workforce of more than 10k staff to sending individualized report and email notifications to HOD to nudge their staff to go for their vaccination.

The seasonal flu vaccination exercise takes place twice a year, and each exercise stretches over a period of 2-3 months. After the staff downloads and merges the report from the Staff Surveillance System (S3) and HR Nominal Roll, he/she has to manually split the masterlist of staff who did not receive their flu vaccination into individual excel files per Department (i.e. >100 individual depts involved). This process takes up about 8-12 man-hours, involving a lot of “copy” and “paste” actions before the individual files are then attached and sent out to the individual HOD/SPOC in customized emails. Besides the process being very time-consuming, there is risk of errors in the manual splitting of masterlist and email sending.

Methods

Ops WSH and DSHO collaborated to find a way to automate the most tedious parts of this process. Particularly, the splitting of the masterlist of unvaccinated staff into individual excel files for each Department’s HOD/SPOC and sending the customized emails and excel file to the respective HOD/SPOC. RPA also helped to provide an additional layer of data security by password-protecting each of the individual Excel file (containing the list of unvaccinated staff), which would otherwise have been very time-consuming as well.

The Ops WSH team still manually downloads the Staff Vaccination Report from S3 and updates the vaccination status. When the masterlist of unvaccinated staff is ready, the staff triggers the RPA bot in a laptop and the bot would ingest the input data of 9000+ staff across 110+ Departments and splits it into individual Excel file per Department, password-protect each file before sending the customized email notifications to each HOD/SPOC.

Results



Conclusion

In parallel of the development of this project, the Ops WSH team has invested in the purchase of licences and training (i.e. RPA Courses) for their staff who has been identified as a Citizen Developer. This project can be expanded into other vaccination like MMR and TDAP if the need arises. Besides the abovementioned use case, Ops WSH has identified other potential RPA projects that would help to reduce time spent on repetitive manual work, increasing overall productivity.

Project Category

Technology, Digitisation

Care & Process Redesign, Productivity

Keywords

Staff Vaccination, Automation, Error Avoidance

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Solution at a glance

Ops WSH Team performs a series of tasks **Manually**.



Ops WSH Team uses an **RPA script** to perform a series of tasks **Automatically**.

