

Efficiencies at scale in course administration using Power Automate

Situation

Context - Business discontinuity triggered by COVID-19

With business as usual at the start of 2020, students applied to do the Thesis Program through filling in a PDF and emailing it to an academic / staff for approval. Overseas students also followed the same process for Thesis A – which is a distance option (Thesis B/C are lab dependent and therefore not the preferred option for COVID-19 affected students).

Issue – The prospect of having to process 20-50 forms (as opposed to the usual 5) for approval from overseas students via PDF/email with its concomitant issues to do with volume processing, accuracy, manual tracking, and data security was not desirable.

Task

With the rapid pivot to online remote learning, we needed to ensure appropriate supervision for all honours and PG thesis students, including overseas students, within the School of Chemical Engineering.

Concern was that there would be a large volume of email related to up to 250 expected applications, and that there was a risk that applications would get missed or not attended to in a timely fashion.

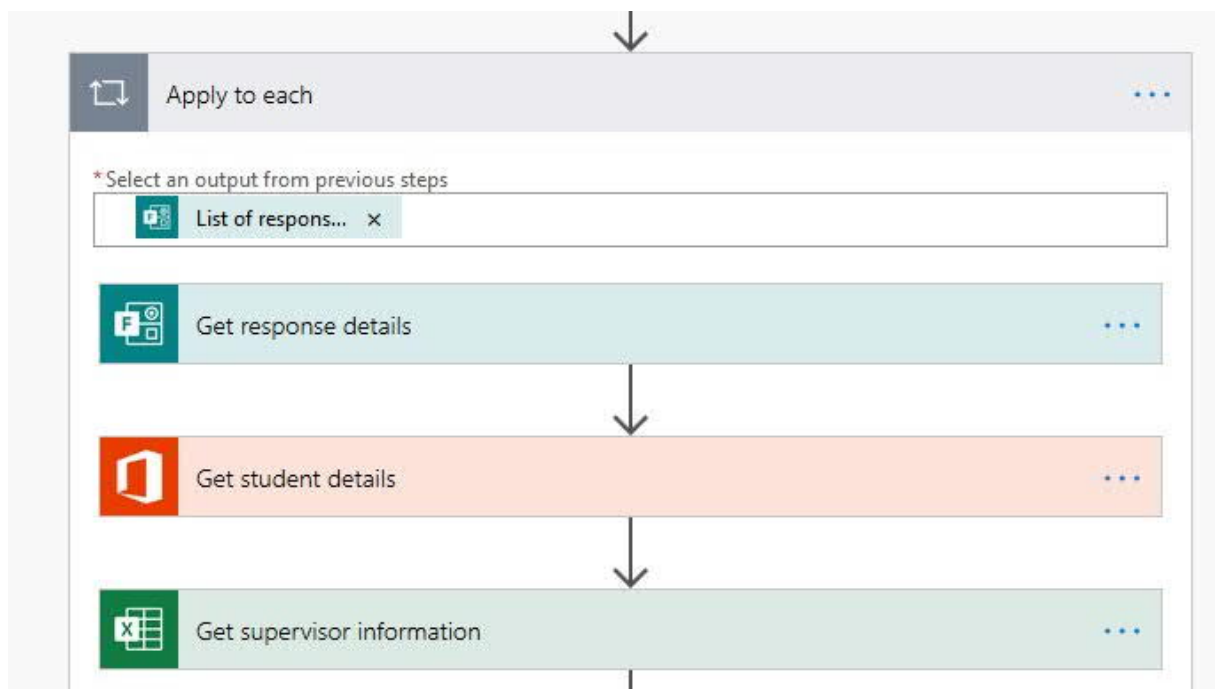
Scale: 200-250 applications for one Thesis Coordinator.

Action

Solution was to develop a processing and tracking Thesis Program approval process using Microsoft Power Automate which would capture overseas applicant data, as well as streamline the approval process:

1. Developed a flow which would collect a student's thesis application
2. Checked that the supervisor had signed off on the application
3. Created a record in an application spreadsheet
4. Sent the application to Thesis Coordinator for final approval
5. Notified both student and supervisor of the outcome (approval or non-approval).

Illustration of key steps in Power Automate



Result

Benefits of using Power Automate for this process:

- Easy to check which students had or hadn't received thesis approval;
- Creation of automated application and tracking tool (spreadsheet) which populates from the completed MS Form;
- Academic/staff in charge benefit – reduce email load; maintenance of accurate student records; academics can provide resources to students as required;
- Thesis students are provided with adequate and appropriate supervision;
- Benefits to students, especially those impacted overseas – faster response; more secure; ensures accurate form input data;
- Reduced response times to student inquiries.

More generally, Lee Sellen writing at Rencore¹ says

'Those who experience using Power Automate (Flow) say it helps them optimize everyday communication and organization for them to work better within the modern workplace. Setting up a personal workflow that automates a simple process can help the delivery of automated emails, point individuals to the correct content, funnel notifications into one single place making organization easier'.

¹ <https://rencore.com/blog/office-365-flow-beyond/> accessed 30/09/2020.

Peter Neal is a member of the Scaling Education Community of Practice (CoP). To find out more about the CoP, contact the EF Team: EF@UNSW.edu.au

Costs of using Power Automate

The time to create a Power Automate Flow can take from a few minutes to several days. The amount of time depends on the complexity of the Flow and user experience. This application took about a day to develop. However, the Flow has now been operational for three terms with little need for additional work. Therefore, time invested has yielded significant time savings over the year.

Advice

In developing a Flow it is important to:

1. Map the purpose, requirements and structure of the Flow ahead of time as it will simplify the development stage, and
2. Test the Flow and all it's possible inputs and outcomes – perhaps enlist an interested colleague to be your tester or test subject.

If you do encounter an error while the Flow is live, you can rerun any job after you've corrected the issue.

Recommendations

Personally, I have also developed Flows to handle

- Expressions of Interest from students to potential thesis supervisors
- The collection and processing of marks for poster sessions and seminars
- Collecting attendee information for COVID Safe events
- Adding students to Teams groups, based on their Moodle groups (via a PLD triggered email).

My colleagues in the Faculty of Engineering, Dr Michael Stevens and Prof. Tracie Barber have developed Flows that include

- Managing the submission of Thesis manuscripts to a central file repository
- Assignment of markers and facilitating their responses using Microsoft Forms and Planner.

Further information

Peter Neal, Senior Lecturer School of Chemical Engineering, Faculty of Engineering.

Twitter thread documenting the Distance Study approval Flow,

<https://twitter.com/elementalish/status/1241169858353459201?s=20>

UNSW Flow Champions (on Teams),

<https://teams.microsoft.com/l/team/19%3a8c45cc7df2ce488d8ceee493ec7b022c%40thread.skype/conversations?groupId=c25b02f7-574e-4948-8943-57eece5c82a4&tenantId=3ff6cfa4-e715-48db-b8e1-0867b9f9fba3>

Use Power Automate to Increase Productivity (Microsoft Education course)

<https://education.microsoft.com/en-us/course/02c53b0c/overview>

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