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Citizen Automation

Driving the automation of processes

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This deck is an adaptation of a presentation I gave at the Process Excellence & Business Improvement Conference on 9 February 2023 in London.

I've added text to the slides to reflect the verbal information I presented in my talk.

If you have any questions, advice, or feedback, please do contact me:

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Time spent on repetitive tasks

- Many processes rely on manual interventions. Especially to:
 - Distribute information
 - Gather and chase information
 - Request and chase decisions
 - Shift data from one platform to another



Process lead times

- Many processes have excessive lead times, often due to the time taken to make and process decisions, and other manual interventions



Right first-time rates

- Teams often work across multiple systems and are reliant on manually transferring data. This is a common source of errors creeping into data and processes

One of the solutions to these problems is automation.

However.....

IT teams are often very busy working on strategically important projects and don't have the capacity, or remit, to automate small workflows for individuals and teams.

How do you automate processes without IT assistance?





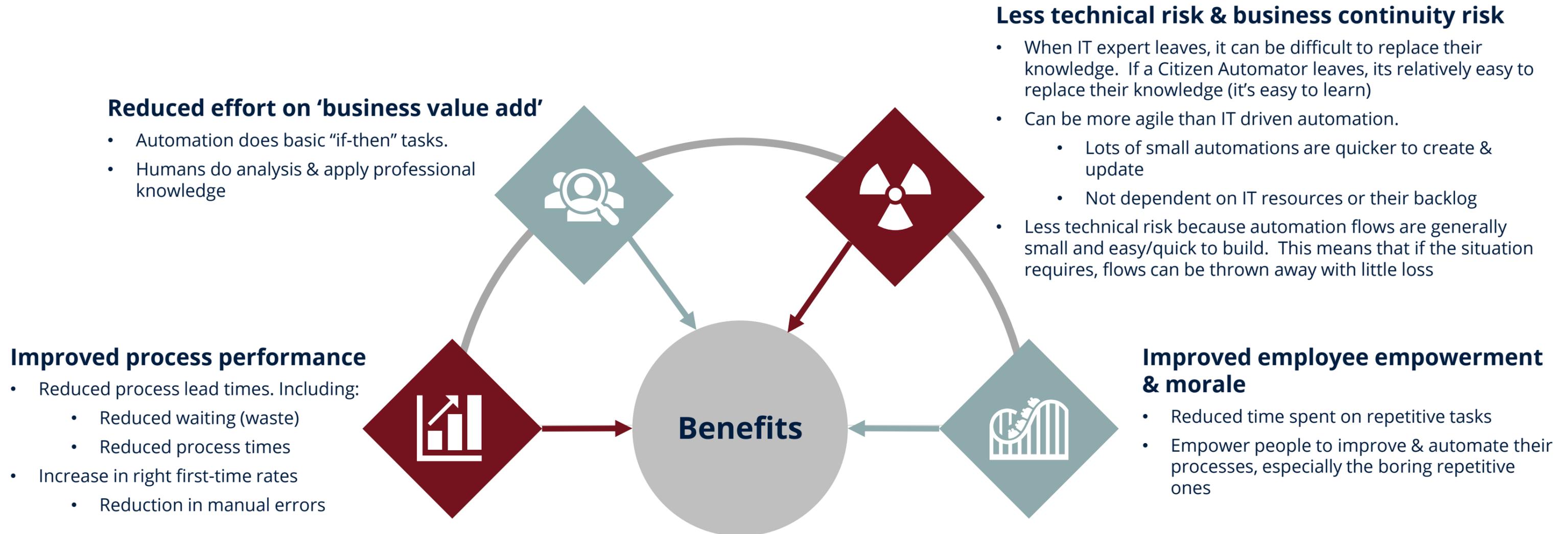
Modern no-code / low-code automation software makes it possible for anyone to automate processes.

- We use Microsoft's Power Automate, but others are available



Citizen Automators/Developers

- People anywhere in the business - not IT specialists
- Not a new concept – citizen developers have built Access databases & Excel macros for years
- People across the business know their processes and are seeking to improve their processes. We provide them with training, coaching, and tools to improve their processes
- We now want to provide them with the tools to automate their own processes



Case Study 1: Balance Sheet Reviews

Problem

Balance sheet reviews need to be carried out by 33 business entities across OUP every 6 months. Currently the process is very labour intensive for the Finance teams and the stakeholders in the business entities eg sending and responding to multiple email conversations.

Countermeasure

Automate the administration of the balance sheet review process – see diagram.

Predicted Benefits

- Save Group Finance approximately **4 days a year** of repetitive administrative work.
- Save business entities 2-6 hours a year re-designing/administering the process.
- Provide Group Finance with increased visibility of the process across OUP to satisfy audit requirements.
- Improve the quality & consistency of the reviews by introducing a common process, template, and guidelines.
- Introduce a predictable and measurable process lead time (time to complete the process).

Future

There are multiple other financial processes that are similar in nature to the balance sheet review i.e. triggering work and gathering information. The automation flows designed for this process can easily and quickly be adapted to support other financial processes, saving yet more time and effort.

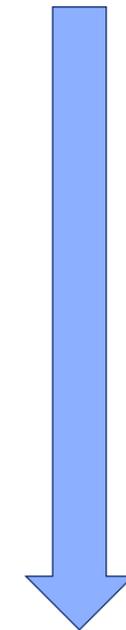


Power Automate automatically initiates the process at a predetermined time

- Creates a blank balance sheet template for each Entity to conduct their review in
- Uses a chat bot in Teams to message each financial Entity Lead with details of the review, a link to their review template, and instructions for the review



Financial Entity Lead & Stakeholders conduct the balance sheet review



At predetermined times, **Power Automate** uses a chat bot in Teams to remind Entity Leads of what they need to be doing in the process and to ask for, and retrieve, information from the Entity Leads.

It uses the information to automatically update the tracker.



Group Finance monitor the review process & chase outcomes if required



| BS File Name | Entity | Div/Group | Entity Lead | Fin SSC Lead | Balance Sheet | Review Booked? | Review Completed? | Review Actions Completed? |
|--------------|--------|-----------|-------------|--------------|---------------|----------------|-------------------|---------------------------|
| | | | | | | No | Yes | No |
| | | | | | | Yes ✓ | No | Yes |
| | | | | | | Yes ✓ | Yes | No |
| | | | | | | Yes ✓ | Yes | No |

Case Study 2: Operational Improvement Academy

Problem

The Operational Improvement Academy delivers Continuous Improvement Foundation training to teams (the team comes on the course as a group). Administration for the training (eg creating and sending calendar invites, sending pre-work requirements) was taking approximately 2 hours per course (spread over several weeks). The course runs once a week.

There are several significant obstacles to using OUP's LMS for this course.

This repetitive administration work was getting in the way of value adding work and was detrimental to morale (it's repetitive & dull!).

Countermeasure

Automate the administration of the Foundation course – see diagram

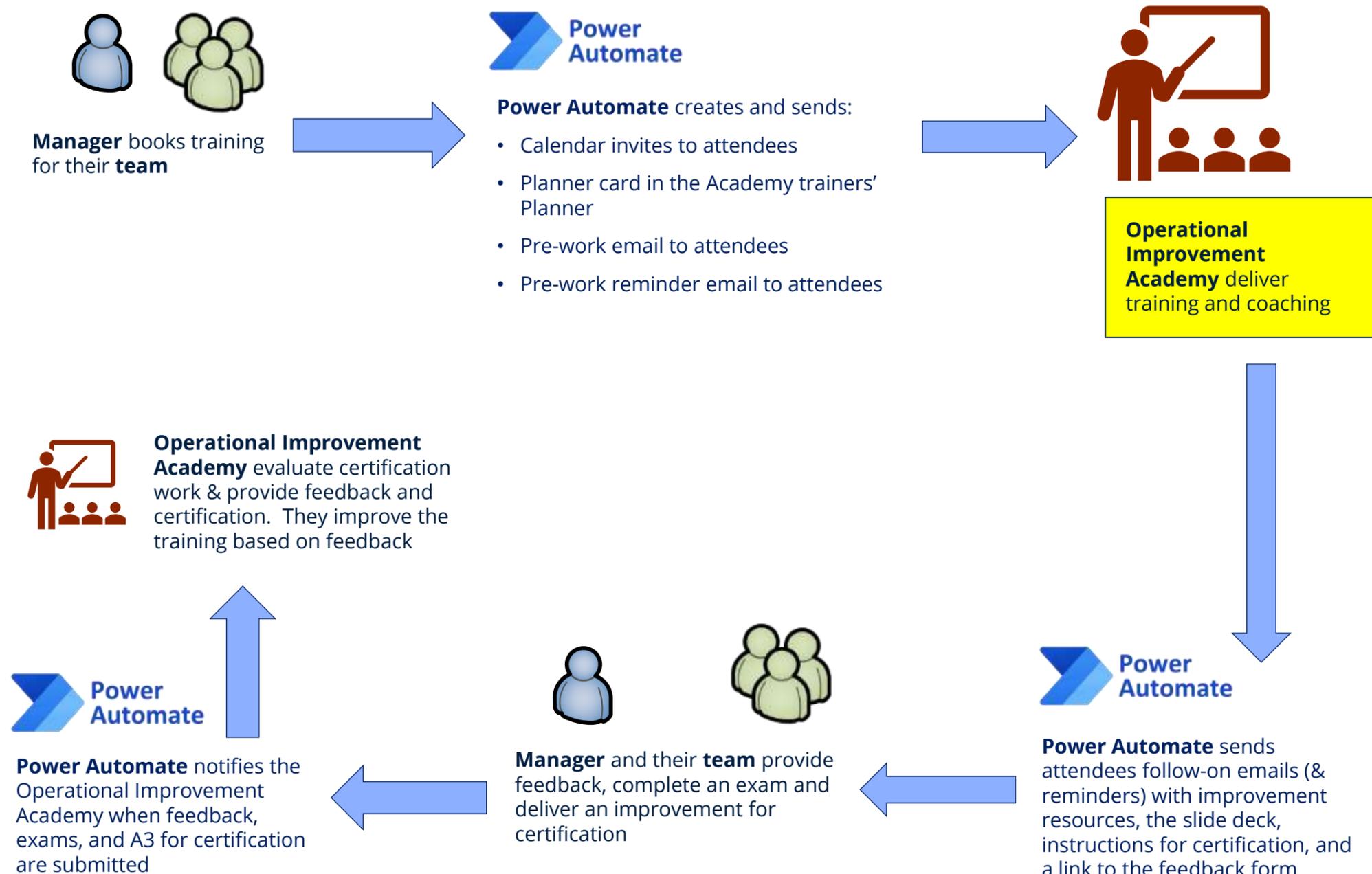
Realized Benefits

- **Reduction in process time:** saved the Operational Improvement Team approximately 80 hours of work a year.
- **Improvement in quality (right first-time rate):** eliminated human error from the administration (eg missing people from emails, not sending emails in time, sending the wrong Whiteboard link) improves service to the Academy's customers and reduces re-work (resending emails/links/invites).

Future

Some of the parts of the flow were recycled into the balance sheet review automation (see Case Study 1). This recycling of flows makes each subsequent automation faster and easier to deliver.

When the Continuous Improvement Practitioner course launches, its administration can be automated as well.



Case Study 3: Approving Documents

Problem

Some documents need to be approved by multiple people. Currently the document is emailed from originator to the first approver. The approver opens the doc, adds their name to the relevant box, & resaves the doc. They then email the doc to the next approver.

Resaving and attaching docs to emails often takes longer than the actual approval.

Alternatively, the approval trail is hidden throughout an email trail which is inefficient and can create problems with an audit trail.

The originator has no visibility of the progress of the approval and has to chase up delays manually.

If actual documents are being sent rather than links, you end up with multiple versions of the truth.

Countermeasure

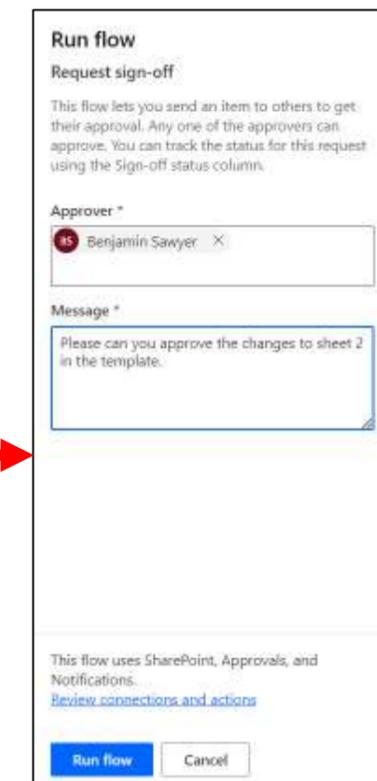
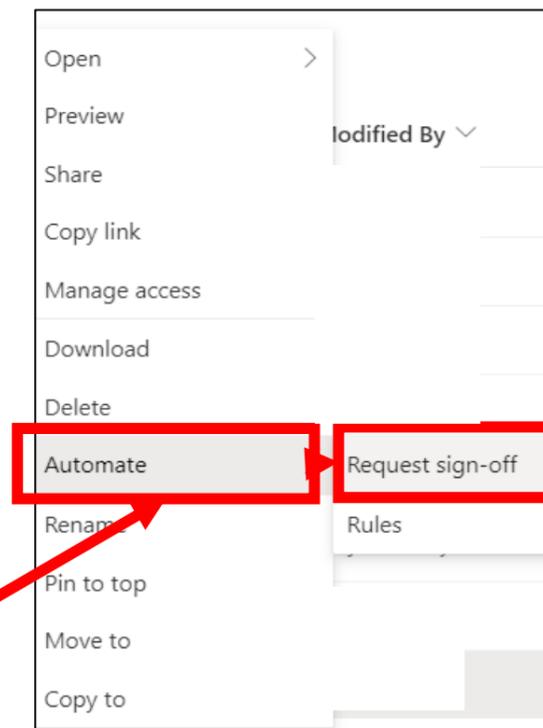
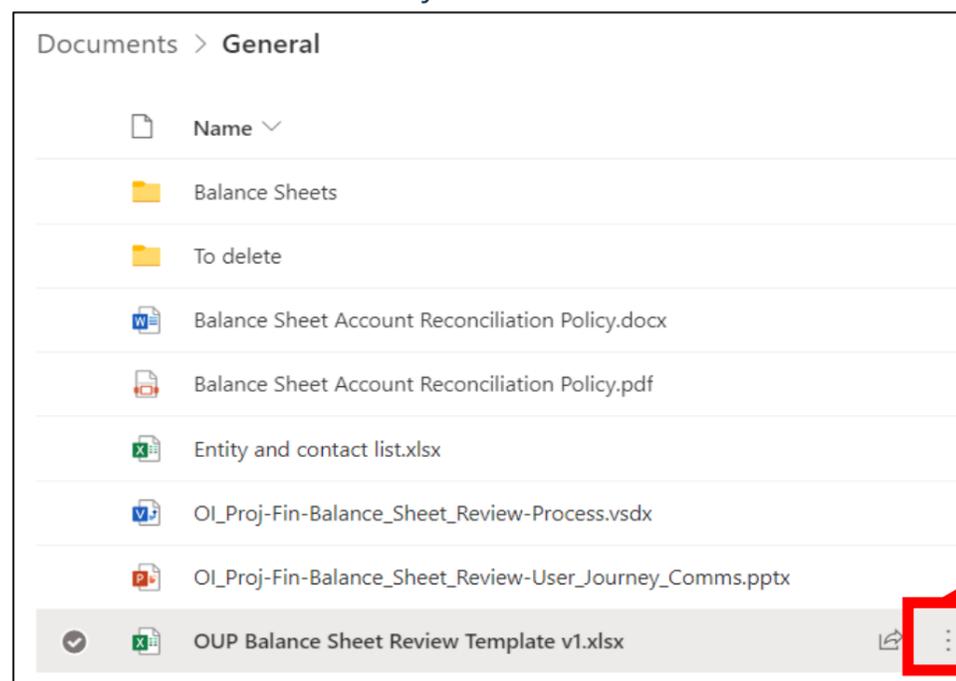
1. Remove non-value adding approvals!
2. Then, use Teams Approvals and Power Automate to make the approvals faster and more visible (see diagram)

Potential Benefits

Dependent on the specific approval, number of approvers, & specific personalities. Benefits include:

- Reduction in process lead time (time to complete the process)
 - This can be a significant reduction because approvers are more likely to respond instantly to an approval request if they can do so with a single click. If the approval requires opening & resaving attachments, writing emails etc, it's quite likely that the approval will be set aside for 'later' and will drift down their email inbox – out of sight & out of mind.
 - It's also easy to automate reminders so the originator doesn't have to chase.
- Reduction in process time (time spent working on the process)
- **Reduction in levels of frustration**

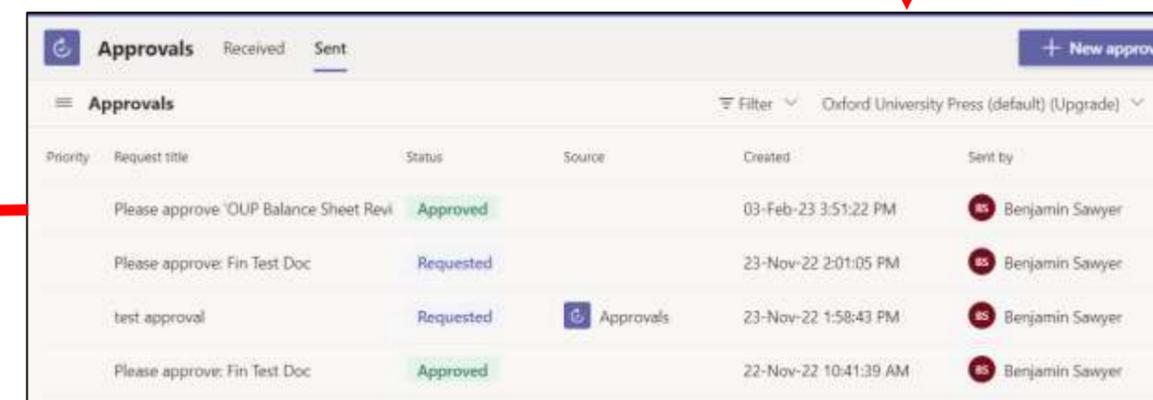
SharePoint Document Library



SharePoint Document libraries have Power Automate templates built into them. The Power Automate template for 'Request Sign-Off' triggers an approvals flow in Teams Approvals.



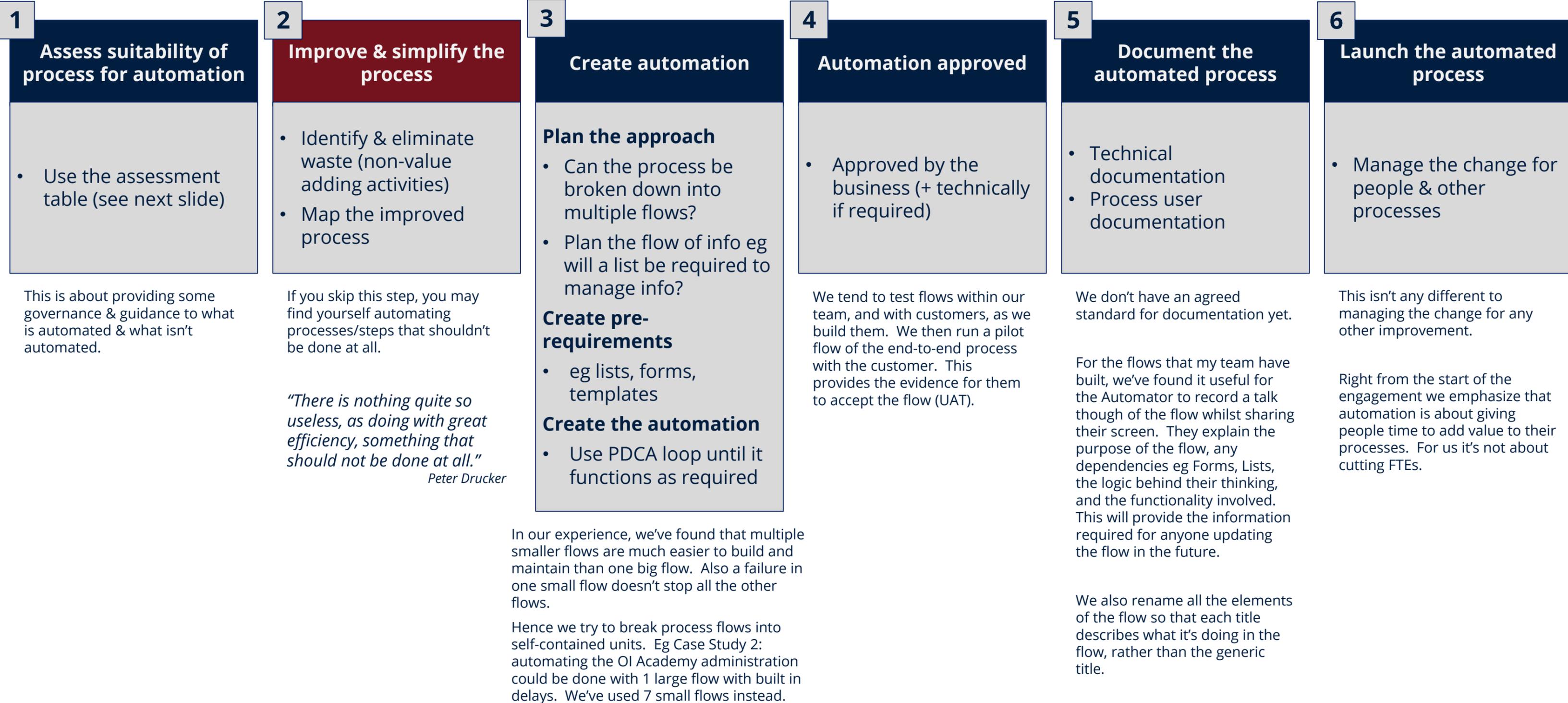
When the document is approved, it's metadata is updated to reflect the approval. It's very easy to update the document library & the Power Automate flow to add more metadata eg who approved it, when they approved it, any comments they made.



The Approver(s) get a notification in Teams that an approval is required. The approval card provides all the information about the approval and a link to the document.

The Approver(s) can reject, approve, or request more information. Their responses go to the originator via Teams Approvals.

The originator, and approvers, can see the progress of each approval in Teams Approvals

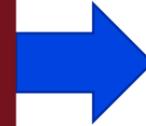


The Automation Process: Assessment Table

| | Suitable for Citizen Automation without consulting further | May be suitable for Citizen Automation But further consultation is required first | Should probably not be automated by a Citizen Automator |
|---|--|--|---|
| Does the process add value for our customers or the business? (ie don't automate wasteful activities) | Yes | - | No (eliminate wasteful processes/activities first, then reconsider) |
| Does the process involve subject matter judgment calls? | No | Yes (consider automating parts of the process that don't involve judgement calls or how to involve human input during the process) | |
| Does the process have high repeatability? (i.e. is the same process run repeated frequently?) | Yes | - | No |
| Is the process documented and stable? | Yes | - | No (may be suitable for automation once the process is documented & stable) |
| Is the automation focused predominantly on helping you (and your immediate team)? | Yes | No (check licensing requirements before progressing) | |
| Does the process have low complexity? | Yes | No | |
| Does the process interact with systems outside of O365 environment? | No | Yes | |
| Can the process be broken down into logical unambiguous rules? (basic if-then relationships) | Yes | No | |
| Does the process involve direct interaction with OUP customers? | No | Yes (consult with owner of customer interaction before progressing) | |
| Does the process handle sensitive data? eg personal data protected by GDPR, business sensitive information | No | Yes (consult with ISDP before progressing) | |
| Is the process governed by regulatory bodies? eg some tax or pension processes | No | Yes (consult with appropriate owners of the relationship with the regulatory body before progressing) | |

Get Buy-In

- Aim is to get buy-in from relevant senior leaders/stakeholders (IT, Architecture, etc) to create and launch a framework
- Need a group of 'Innovators' to self-train and develop automations in their areas
 - *'Better to beg forgiveness than to ask permission'*
- Capture case studies and benefits to build a body of evidence



Create a Framework

Governance

- Prevent 'Shadow IT'
- Control what can be/should be automated
 - Who decides & how?
- What documentation is required for each automation?

Training

- What is the requirement? Shouldn't be too onerous – want grass-roots innovation
- Lots of online training available
- Learn incrementally by doing
- People need access to technical advice when required
- Community of practice
 - Peer-to-peer learning
 - Access to case studies (what other teams are doing and how)

Recruitment

- Self-selecting? Those who are interested and have an aptitude will tend to come forward – early adopters.
- What recognition can you provide for Citizen Automators