Future Trends - Automation

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Introduction to Robotic Process Automation

Robotic Process Automation (RPA) is a broad term used to describe tools that will operate within a user interact in the same manner that a Human would do so (Van der Aalst et al., 2018). Commercial RPA tools will allow a system to interact with multiple back-office systems whilst maintaining the business validation contained within the currently used software utility. The main intention of RPA tools is to reduce the overall burden of simple, repetitive tasks on employees within an organisation (Van der Aalst et al., 2018).

Benefits of RPA tools

Organisations that have successfully adopted RPA tools within their business, combined with optimised business processes have seen an increase in their (Syed et al., 2020):

- Strategic Goals
- Staff Productivity
- Customer Service

Drawbacks of RPA tools

Although RPA tools are in most cases to be beneficial to a business, they will require a business to optimise their processes and regularly maintain the tools. For example, if a software vendor updates the layout and behaviour of their application, the RPA tools will suddenly begin to fail or behave in an unexpected manner.

Examples of Commercial RPA tools

Microsoft have recently released a commercial RPA tool named Power Automate (Previously Flow), which aims to mimic the way in which a user would interact with a back office system. This will allow other back office systems to interact with closed-source CRM/Back Office systems where the software vendor hasn't made commercially available.

Other alternatives are available, including cloud based providers such as Automation Anywhere, which is used by some large organisations such as the NHS and Santander.

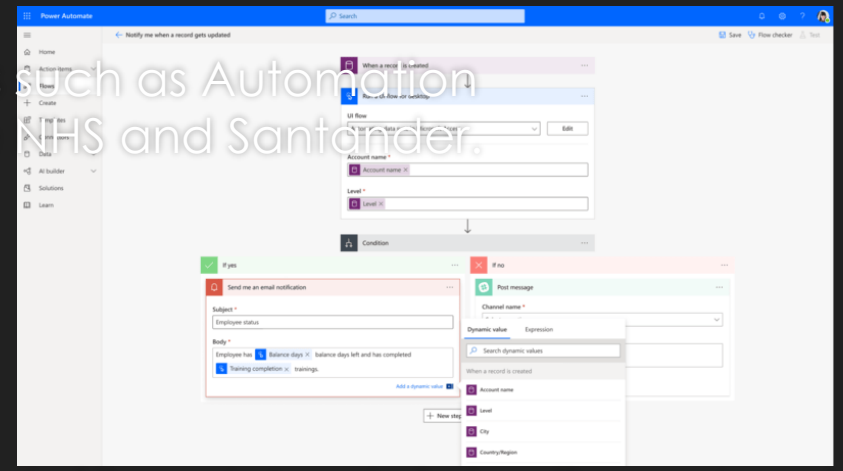

Figure 1: Screenshot of Power Automate System (Source: Asana)

References

- Syed, R. et al. (2020) Robotic Process Automation: Comtemporary themes and challenges. *Computers in Industry* 115:103-162
- Van der Aalst, W., Bichler, M. & Heinzl, A. (2018) Robotic Process Automation. *Business & Information Systems Engineering* 60: 269–272.