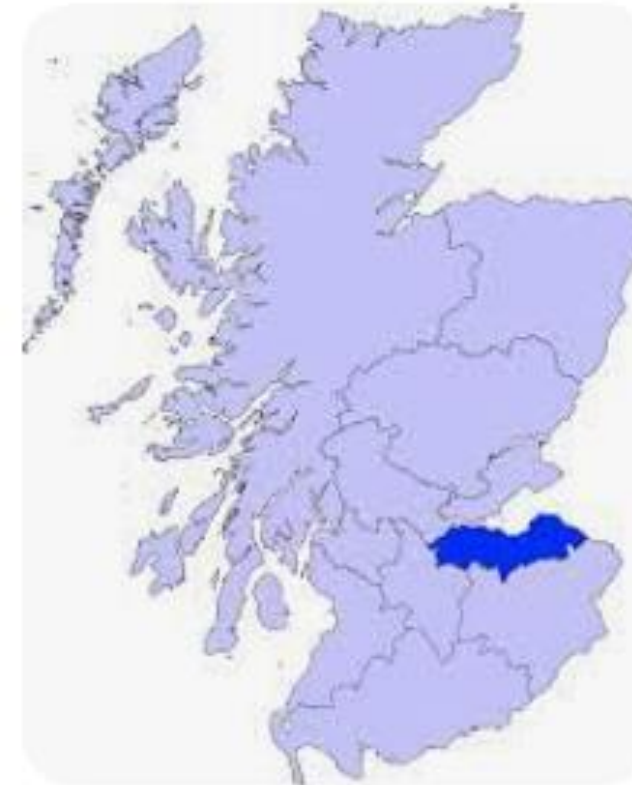


The Rise of the 'Bots' and the automation of administrative tasks

Paul Schofield – Head of Digital Innovation

Who am I? Where do I work?

Head of Digital Innovation, Digital (eHealth) Department, NHS Lothian



Primary, Community & Acute Hospital Services

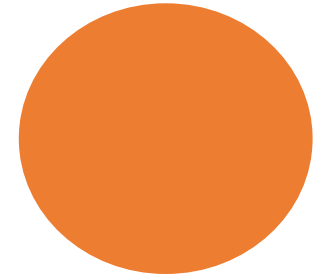
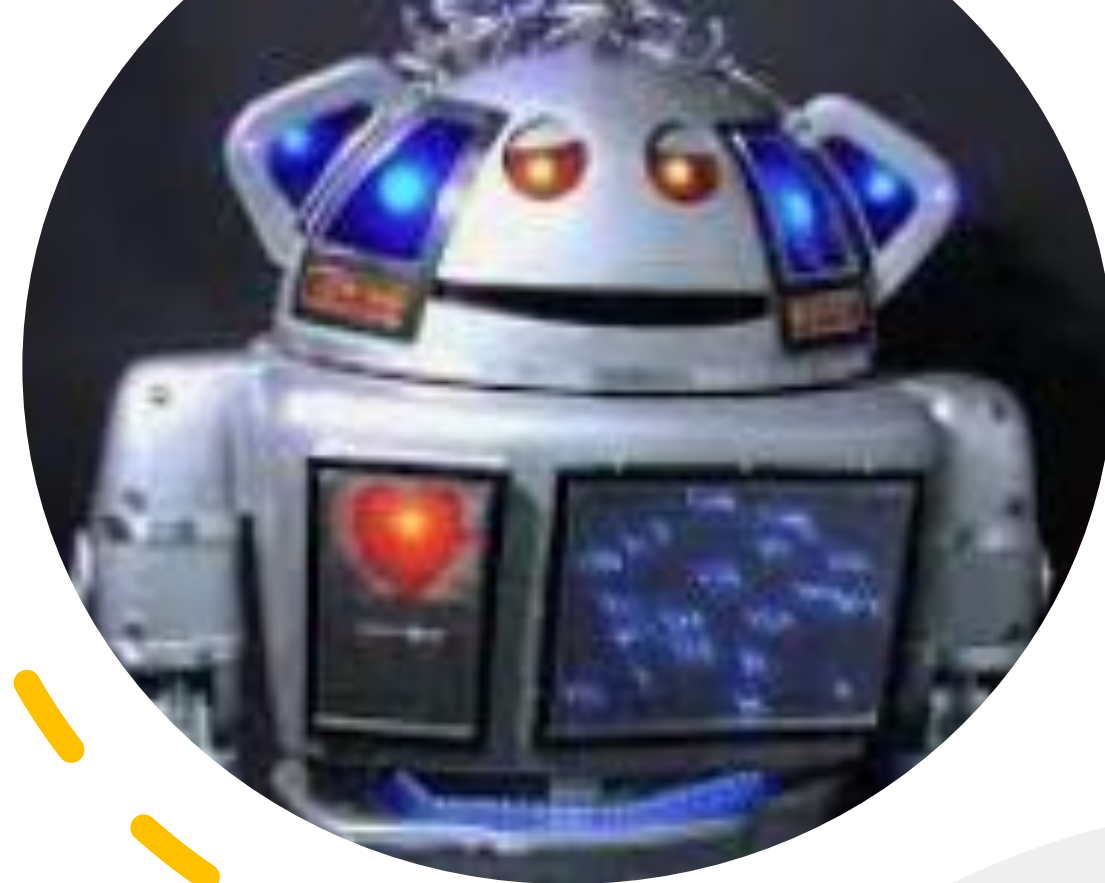
NHS Lothian provides a comprehensive range of primary, community-based and acute hospital services for the second largest residential population in Scotland (more than 850,000 people), covering Edinburgh, Midlothian, East Lothian and West Lothian.

- History Graduate, MSc in Health and Public Leadership
- Joined NHS in 2009
- Not technical
- No interests to declare

- Edinburgh and the Lothians
- 4 Main Hospital Sites (Royal Infirmary, Western General, St John's and RHCYP)
- 4 Local Authorities (Edinburgh, East, Mid and West Lothian)
- Similar pressures – Clinical and Financial

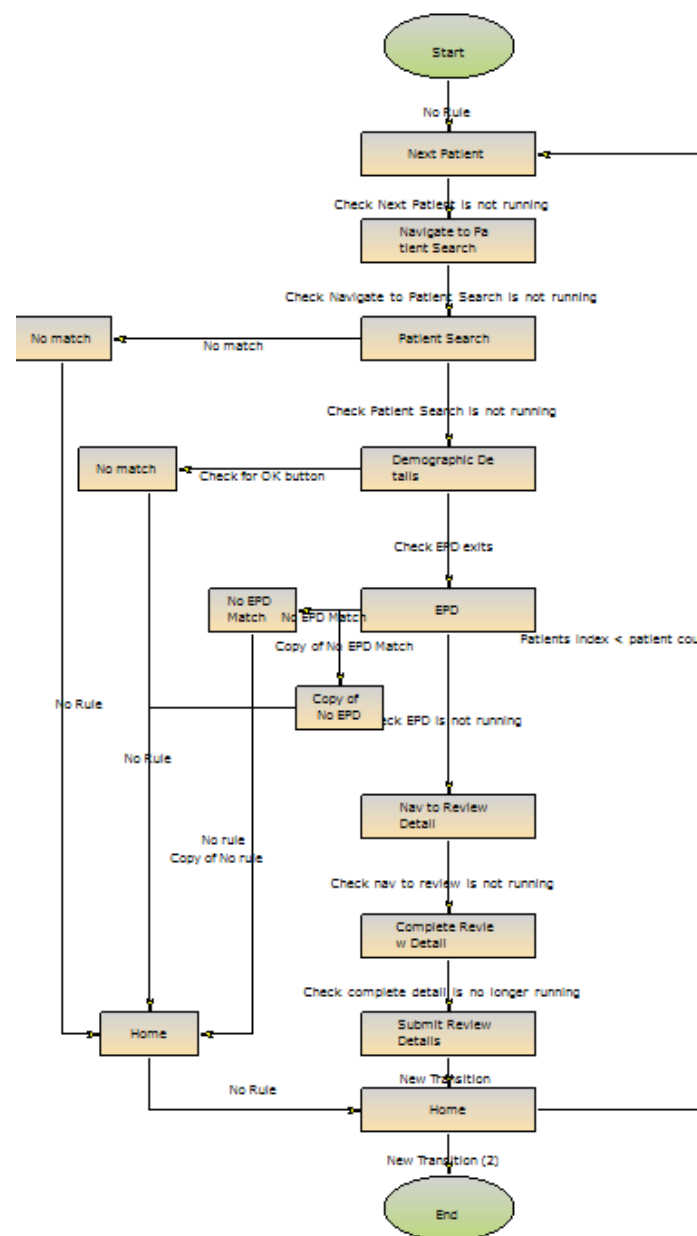
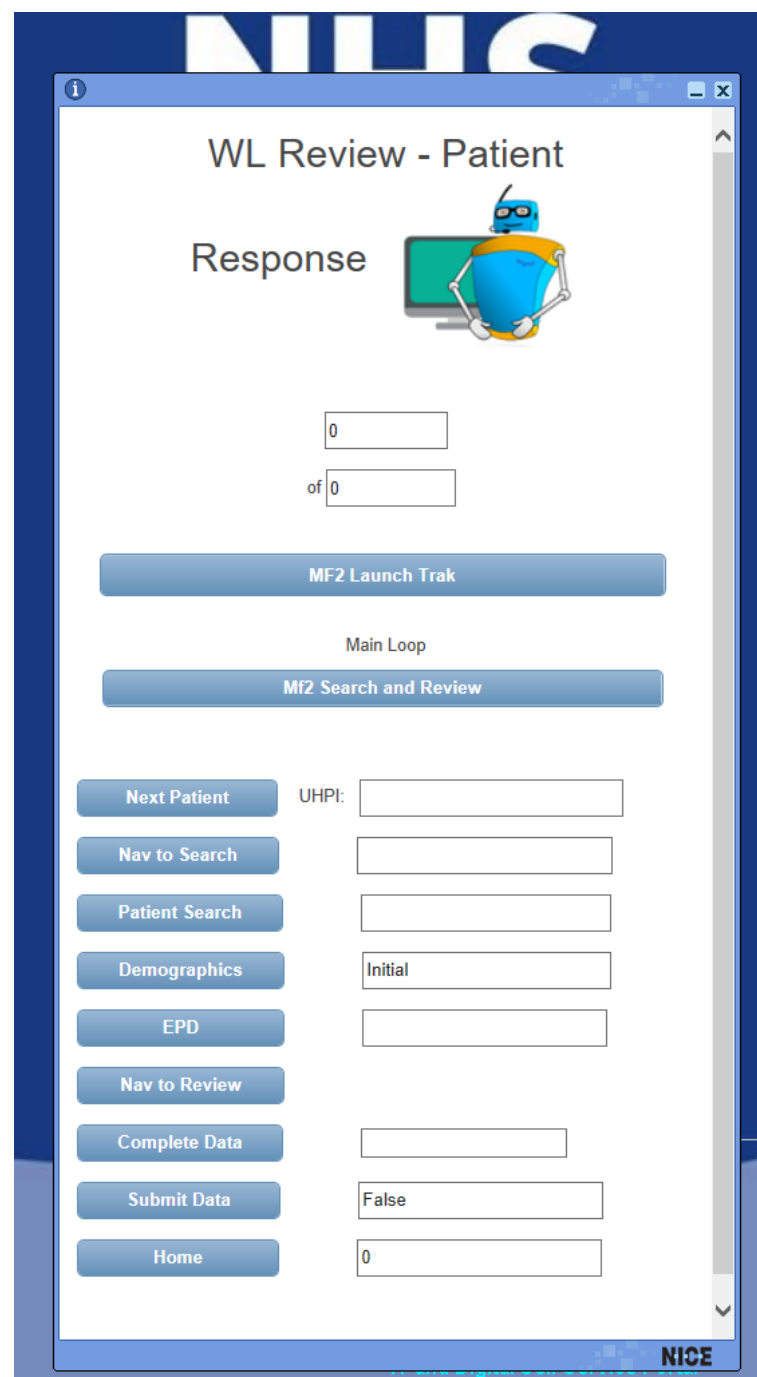
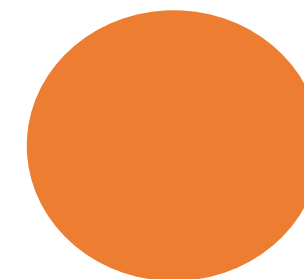
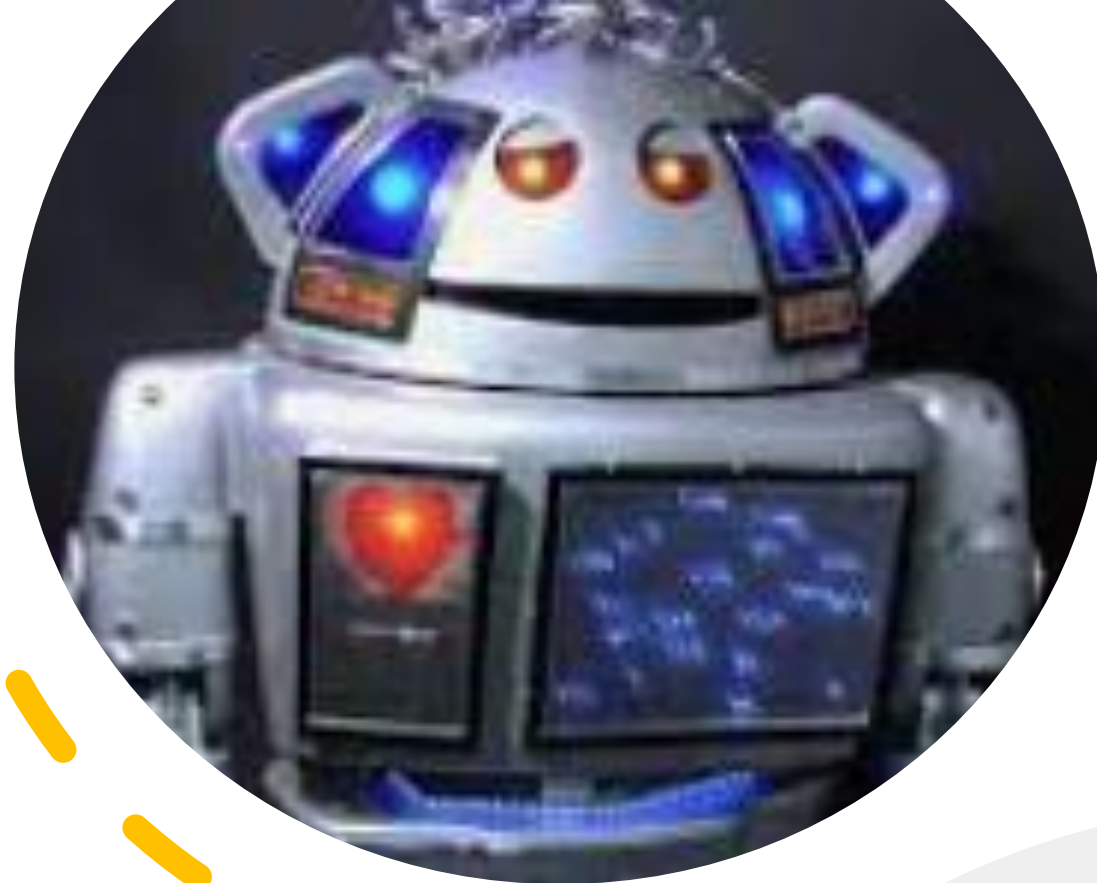
What is a Bot? What is not a Bot?

- Robotic Process Automation



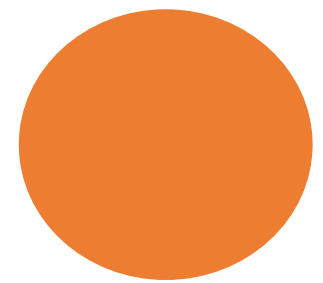
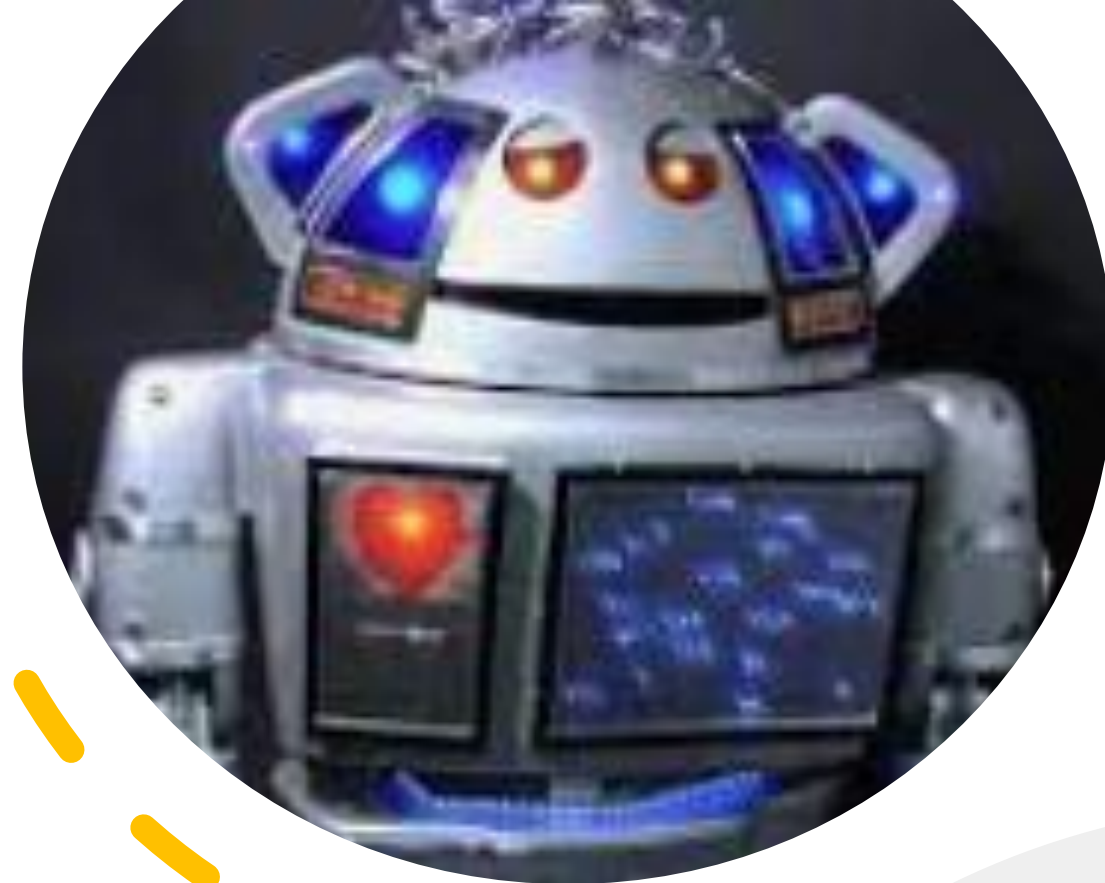
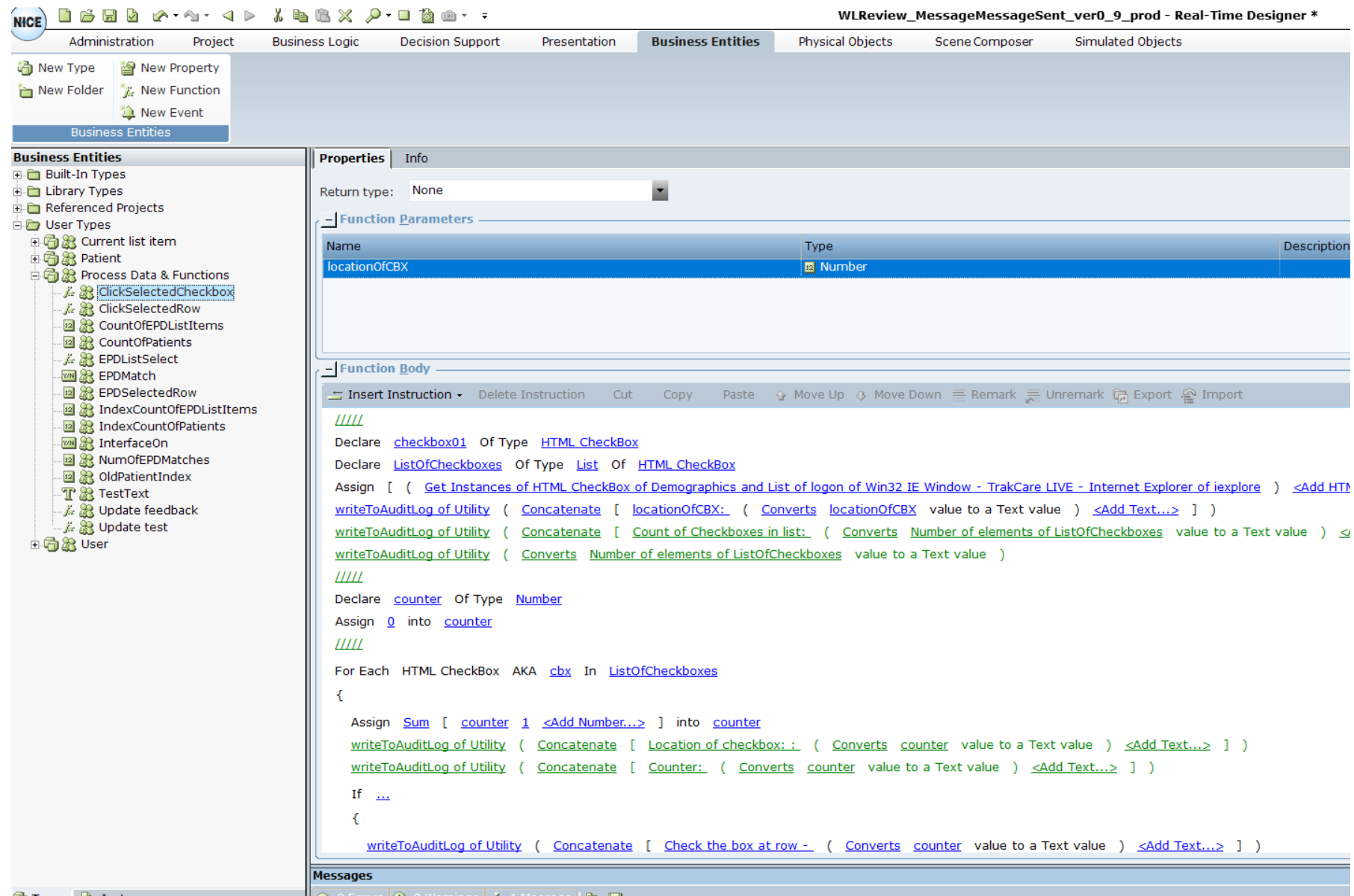
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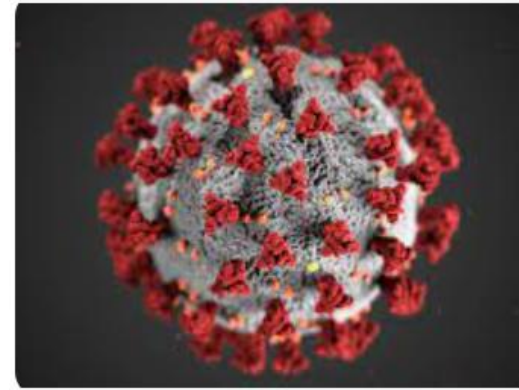
- Not Artificial Intelligence



NHS Lothian's Journey

New Digital Innovation Service started in January 2020

- 3 Pillars
 - Robotic Process Automation
 - Micro Projects
 - Health Data Exchange
- Why Robotic Process Automation?
 - Pressures
 - Clinical, Administrative, Financial
 - Recruitment
 - Retaining and recruiting
- Is Robotic Process Automation a way of taking on the burden of new tasks, relieving the burden of others?



Centre of Excellence - NICE

Analysis of market leading software

NICE

- Coached project, learning as we do
- Support triage clinicians with 'Advice back to GPs'
- Centre of Excellence achieved
- Focus back on TRAK functionality



NHS Lothian Projects

Focus to date has been one off tasks

- Return Waiting List Bot
- Waiting List Validation Bots (Initial and Response)
- Access Database Bot
- Re-triage Bot

- Power Automate – individual productivity

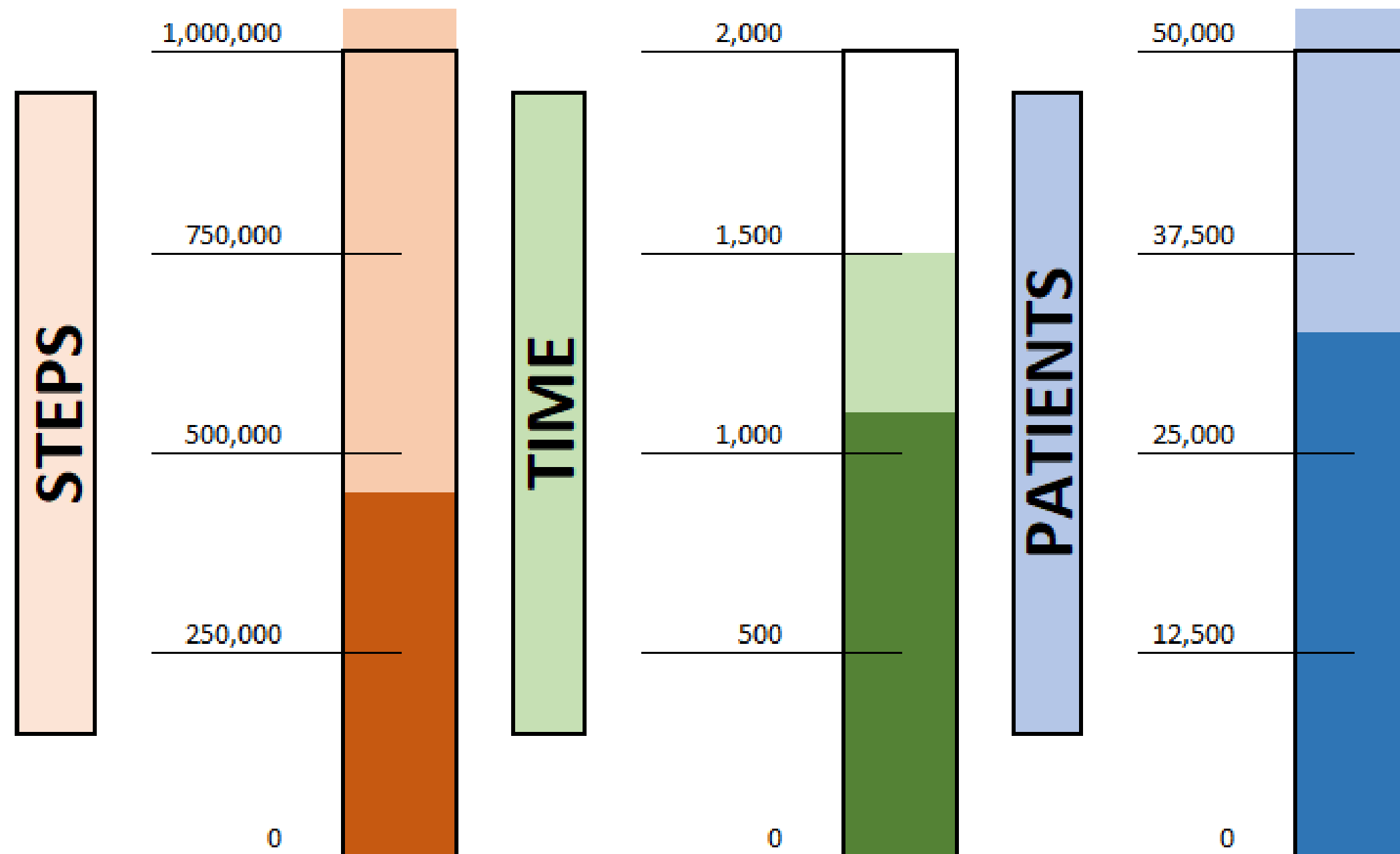
Next projects – Change of focus to BAU Tasks

- Long Covid Bot
- Finance Bot



Benefits

- Focus on three areas – Time Saved, Number of Clicks and Patients Processed

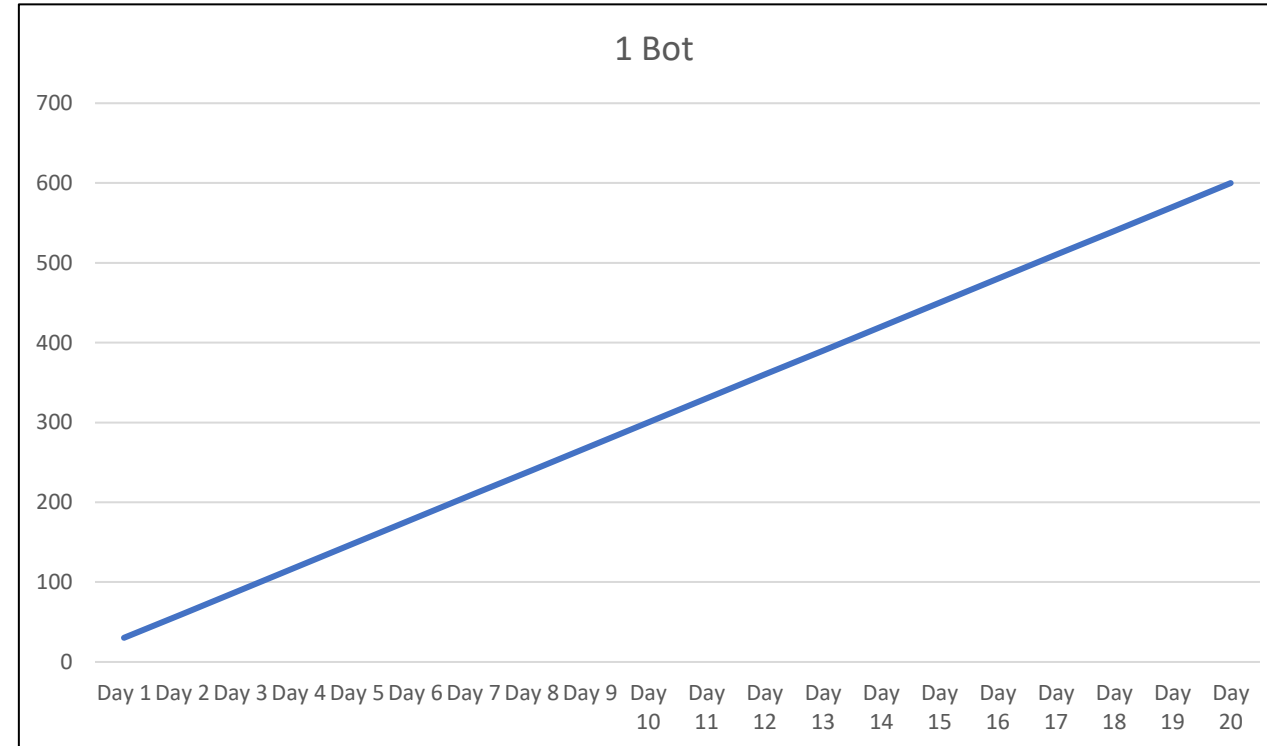


- Wider Benefits
 - Mundane tasks
 - Data Quality
 - Reduced patient risk
 - Improved demand management

Benefits

- Focus on three areas – Time Saved, Number of Clicks and Patients Processed

Day	Time
Day 1	30
Day 2	60
Day 3	90
Day 4	120
Day 5	150
Day 6	180
Day 7	210
Day 8	240
Day 9	270
Day 10	300
Day 11	330
Day 12	360
Day 13	390
Day 14	420
Day 15	450
Day 16	480
Day 17	510
Day 18	540
Day 19	570
Day 20	600

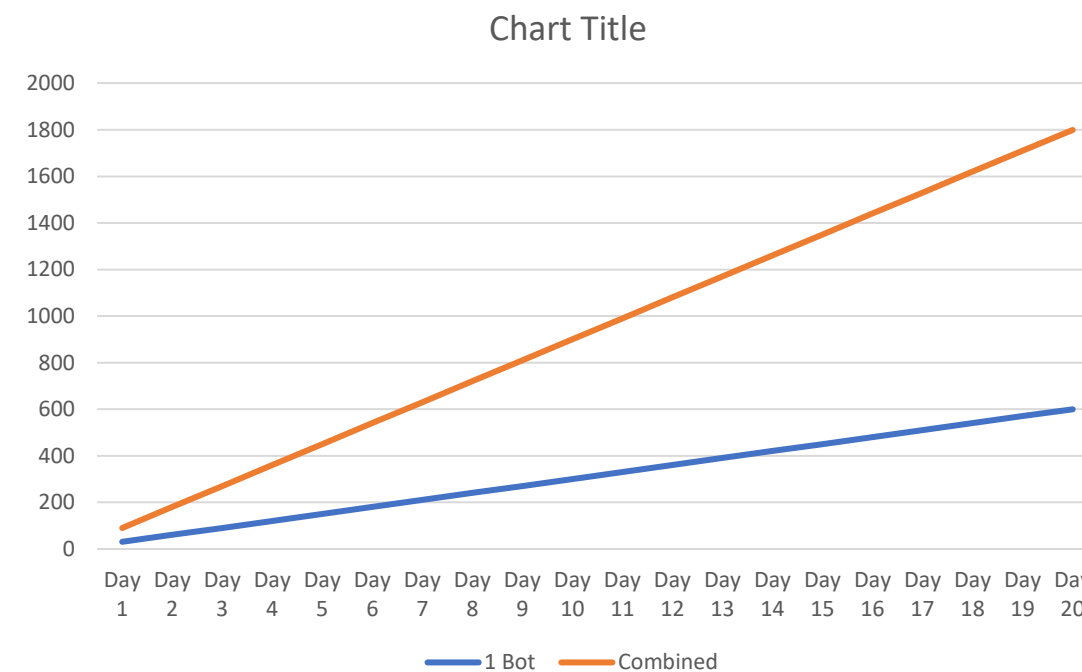


- BAU Task

Benefits

- Focus on three areas – Time Saved, Number of Clicks and Patients Processed

	BOT 1	BOT 2	BOT 3
Day	Time	Time	Time
Day 1	30	30	30
Day 2	60	60	60
Day 3	90	90	90
Day 4	120	120	120
Day 5	150	150	150
Day 6	180	180	180
Day 7	210	210	210
Day 8	240	240	240
Day 9	270	270	270
Day 10	300	300	300
Day 11	330	330	330
Day 12	360	360	360
Day 13	390	390	390
Day 14	420	420	420
Day 15	450	450	450
Day 16	480	480	480
Day 17	510	510	510
Day 18	540	540	540
Day 19	570	570	570
Day 20	600	600	600

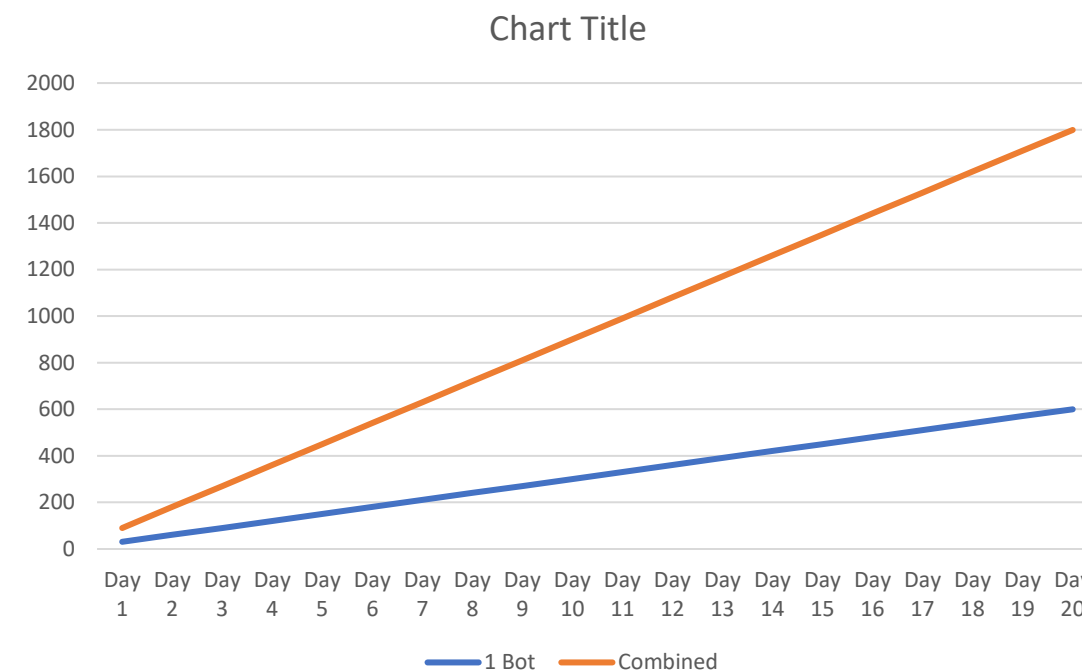


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- BAU Task
- Power Automate

Issues

Warts and all

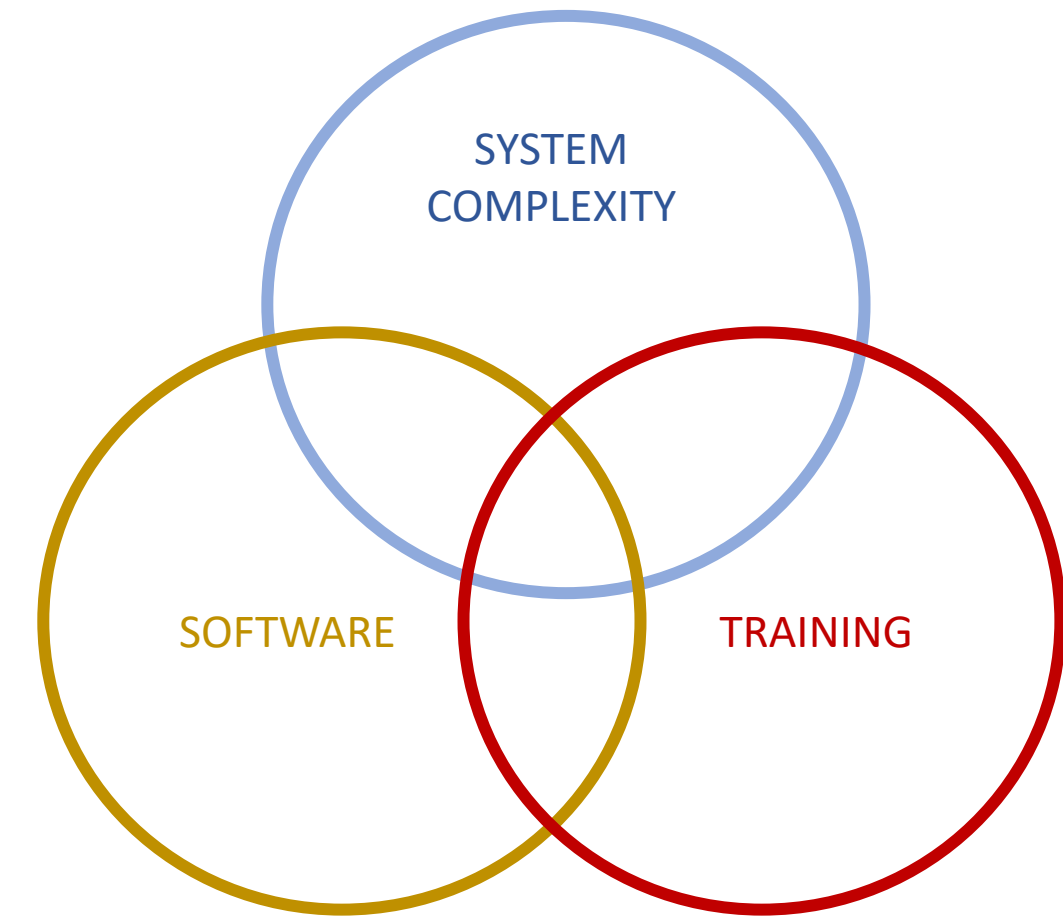
- Bots working one minute, then not the next, performance
- Bots work in test environment and fail in live
- Bots working on one machine but not another
- Bots unable to deal with something unforeseen
- Limited training
- Limited online community



Issues

Warts and all

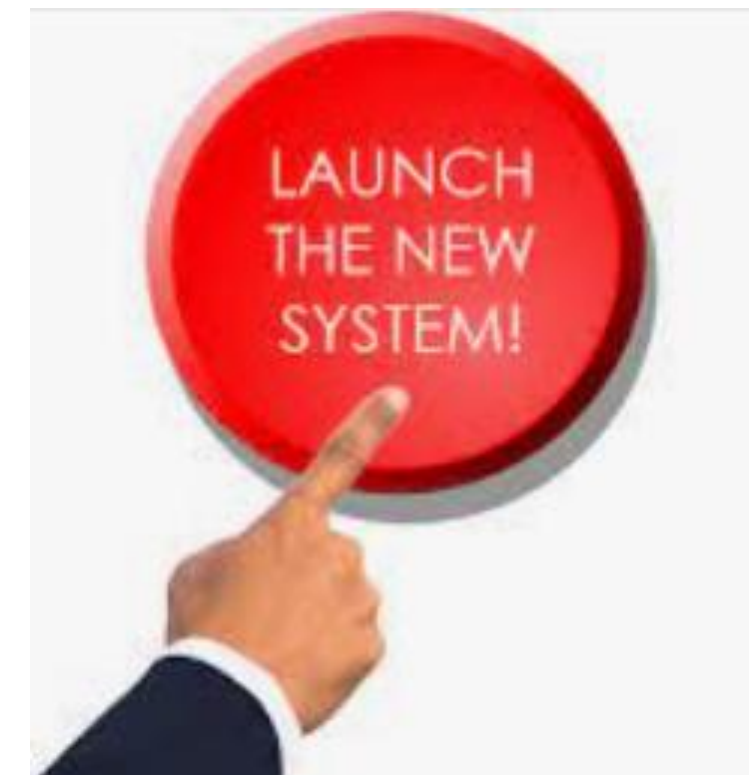
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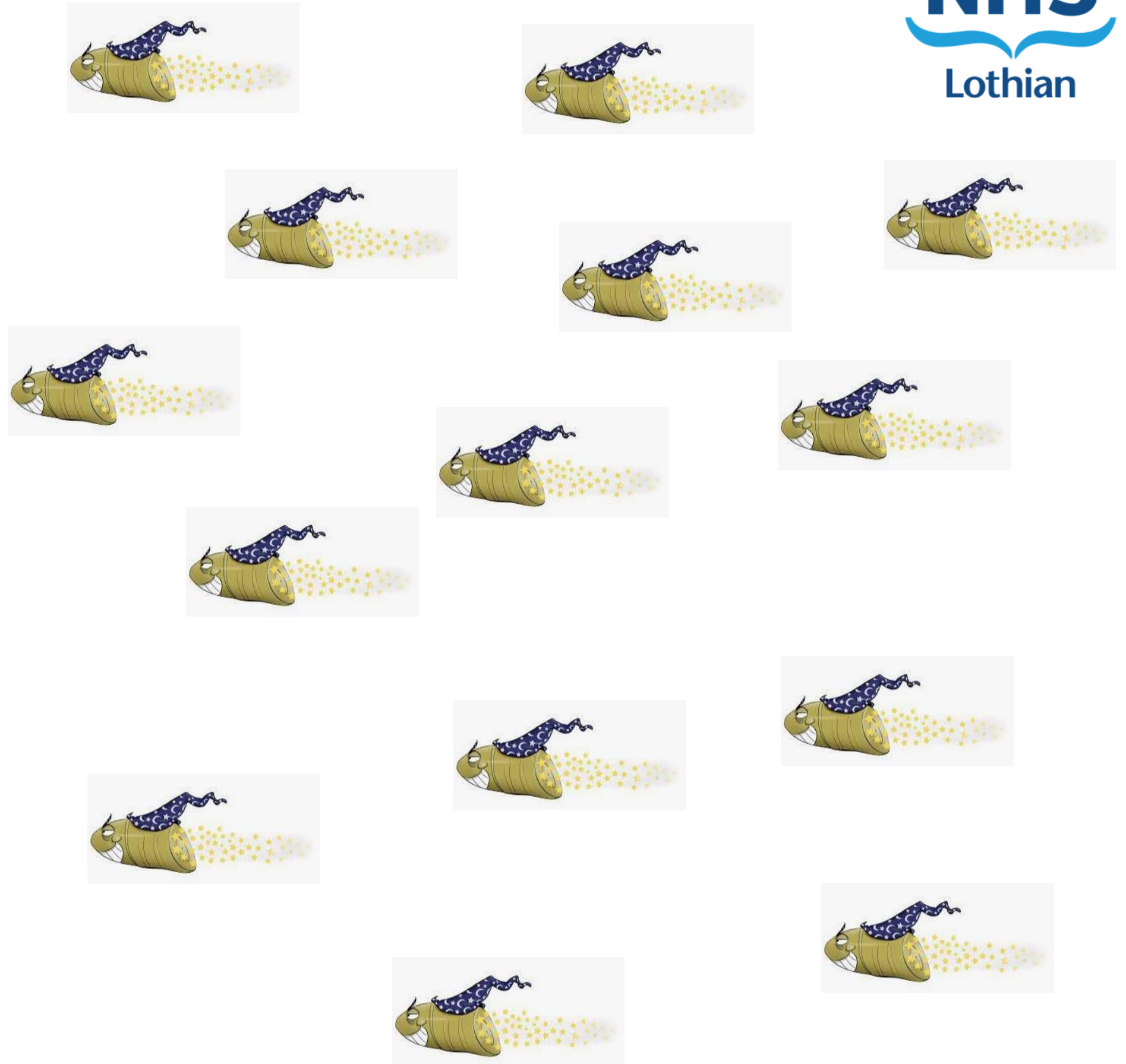
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Conclusions

Place for Robotic Process Automation

- Identify the correct use case
- Help meet some of the challenges
- Not a magic bullet



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Place for Robotic Process Automation

- Identify the correct use case
- Help meet some of the challenges
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RETURN
ON
INVESTMENT





Questions?