



WELCOME TO

The NHS RPA Live Conference



THE TIME FOR CHANGE

Headlined By **ss&c** | blueprism

Check Out Our
Agenda Here...



SCAN ME

10th November 2022- 08:00am – 15:30pm – Hatfields Conference Centre

Conference hosted by Convenzis Group Limited

A background image showing several hands of different skin tones cupping dark soil and small green seedlings, symbolizing environmental care and growth.

Our Commitment to the Planet

For Each Delegate Attending Our In-Person Event Today, we will be planting 1 tree with our Key Sustainability Partner



PLAY IT GREEN



Slido

Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.

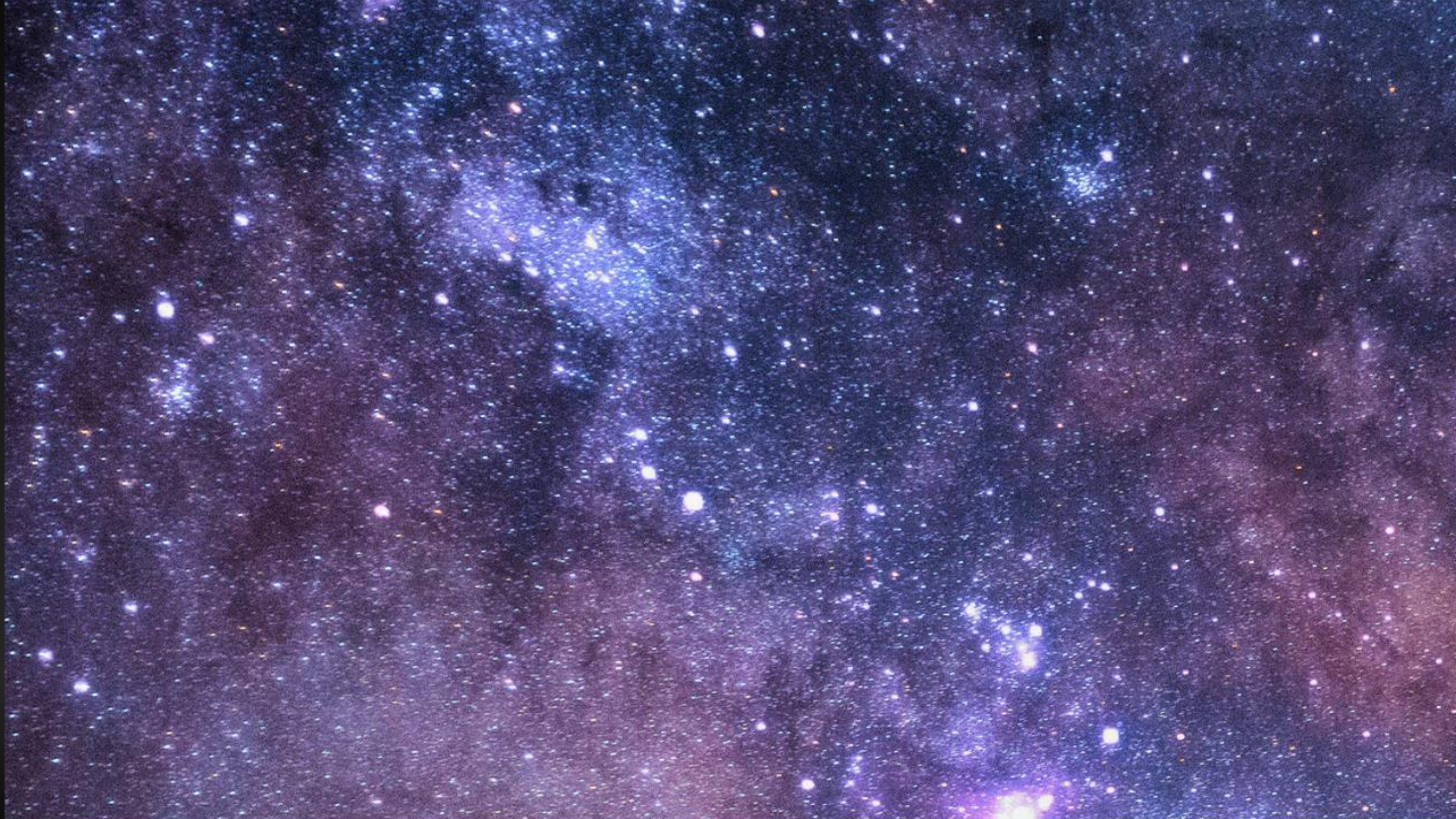


THE TIME FOR CHANGE

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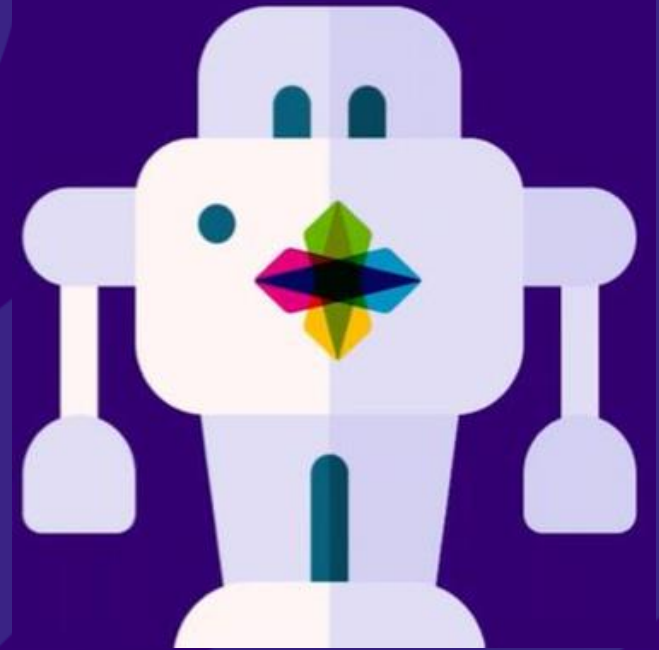


10th November 2022- 08:00am – 15:30pm – Hatfields Conference Centre
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Welcome!

NHS RPA Live!
#NHSRPALIVE



Darren Atkins
Chief Technology Officer



Innovation and
Intelligent Automation

The Future of Automation



Innovation and
Intelligent Automation

NHS RPA Live!
#NHSRPALIVE

The NHS should standardise on a common RPA platform to encourage collaboration and sharing, and accelerate the adoption and scaling of processes using NHS talent.

By the NHS for the NHS



**Innovation and
Intelligent Automation**

- Darren Atkins 2016

The Automation Reset

- RPA isn't a magic wand to fix all problems
- Take a step back from the UI
- Work in partnership with Digital Strategy
- Create realistic business cases for RPA
- Many bot platforms are not delivering value
- Virtual smartcards for RPA
- Capability gap in the NHS / Citizen Devs

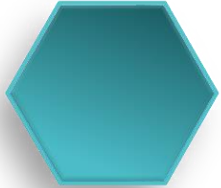


An Evolving Toolset

- Hyperautomation & IA
- IDP, Chatbots, NLP, do we need these?
- AI and machine learning
- Process mining
- The Two Layer Strategy
- Rapid changing market – best of breed?



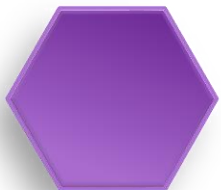
RPA v2.0 The Reset



Black Box processes – no cost of entry, centrally hosted, pay per transaction, common inputs and outputs



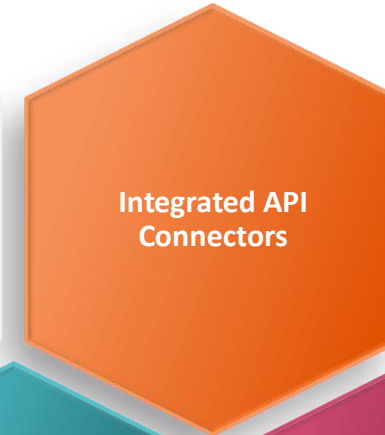
A library of integrated APIs with supporting RPA code. Speeds up automation, reduces bot usage by up to 95%, requires less operational support



Pre-built, user triggered automation macros for common tasks and activities across a range of clinical applications



Evaluating process flows, resource usage and efficiency savings linked to patient flows



**Utility
Based RPA**



Process Mining



Attended RPA

Questions?



Innovation and Intelligent
Automation

INNOVATION BY THE NHS FOR THE NHS

With Special Guest
James Davis – Chief Innovation Officer
The Royal Free London



NHS RPA Live!



Innovation and
Intelligent Automation

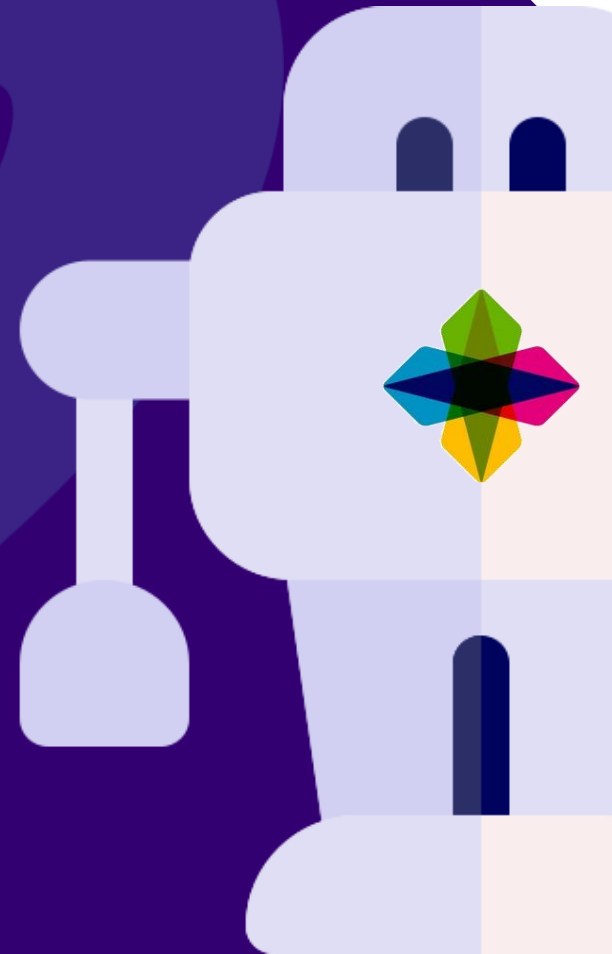


RPA Live Session “In The Trenches”

James Davies
RPA Product Manager
The Royal Free London



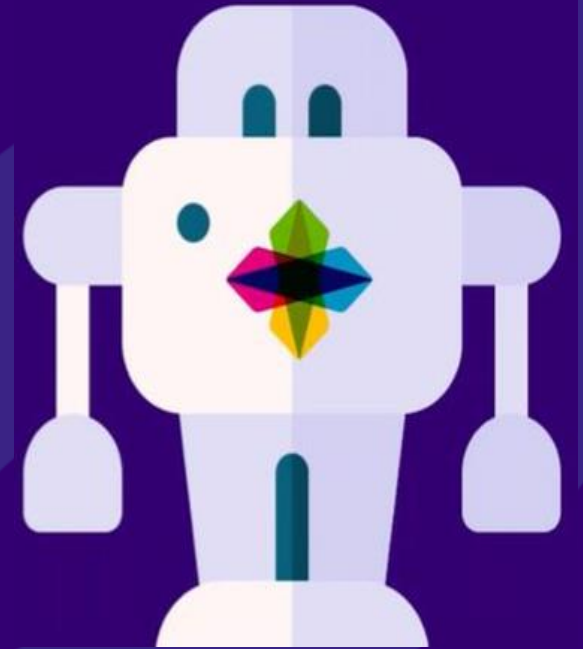
**Innovation and
Intelligent Automation**



Automation in the real world!

NHS RPA Live!

#NHSRPALIVE



Innovation and
Intelligent Automation

James Davies
RPA Product Manager

Topics for discussion



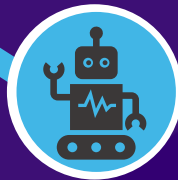
INTRODUCTION

My reflections on automation, its easy right?



SECTOR CHALLENGES

Who faces what and why?



BEYOND THE TECHNOLOGY

What key components are required to achieve success?



THE ROAD AHEAD

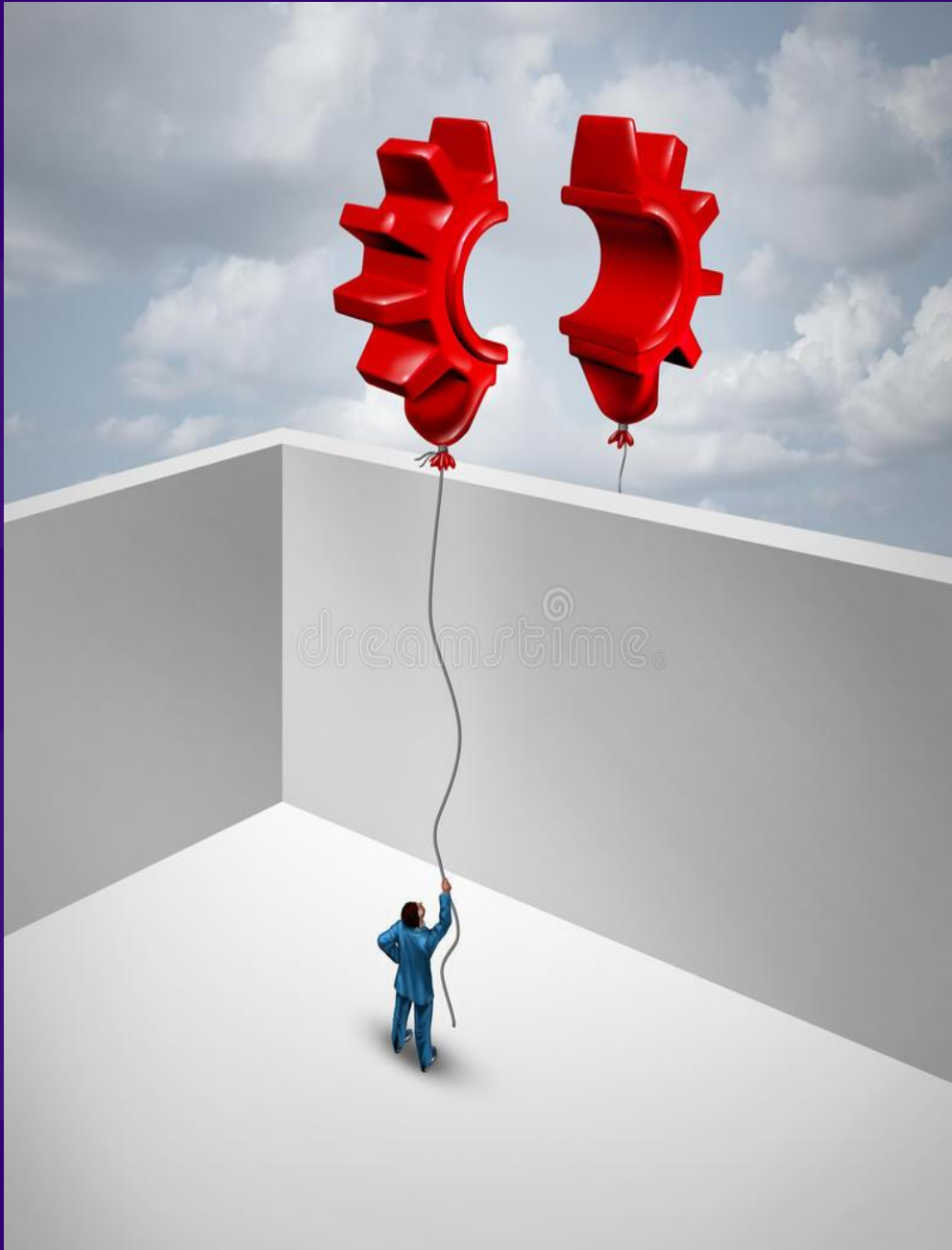
Help is available, the power of collaboration.



Automation is easy!!!

- So why so much delay in getting a process up and running?
- Why are RPA projects stagnating and not delivering against the business case assumptions?
- Why isn't everyone doing it?

The truth is automation is complex, uncertain and often demanding.



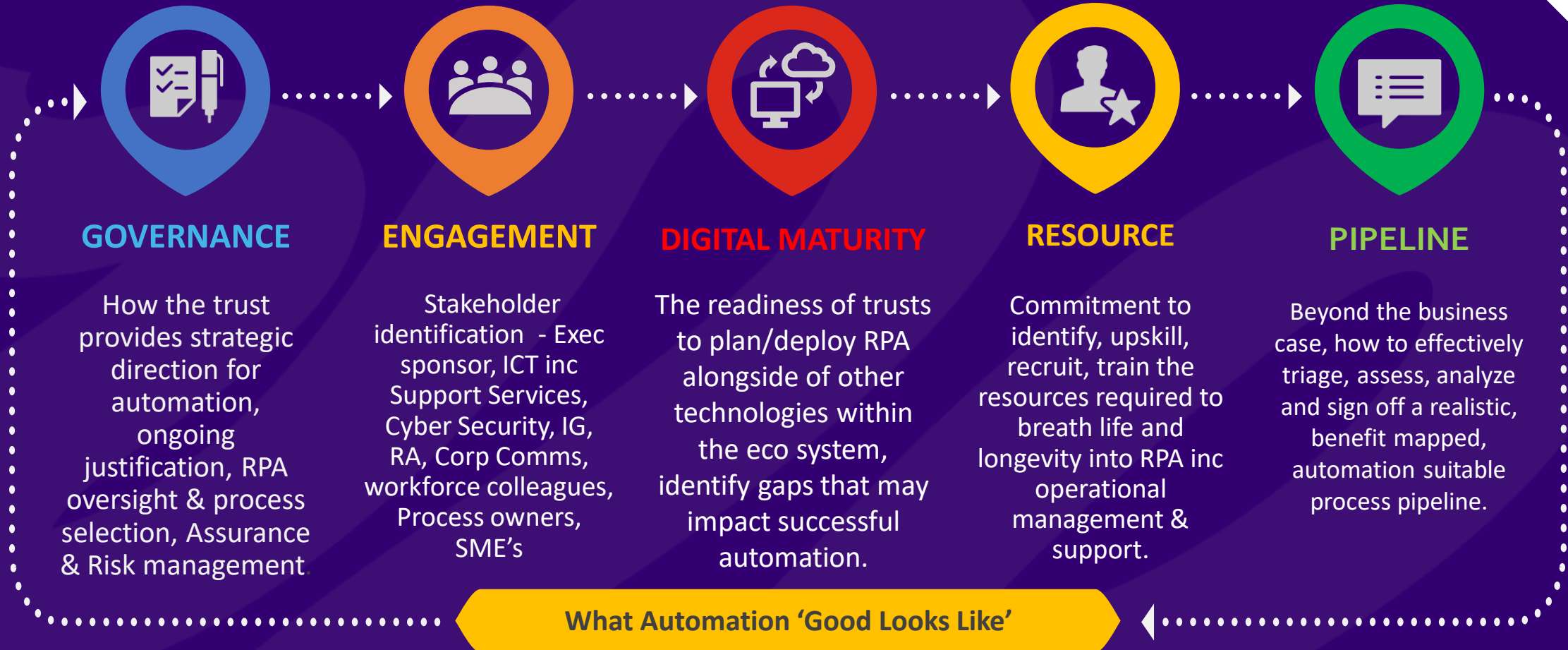
SECTOR CHALLENGES?

Under the
magnifying glass...

- ICS/ICB
- Primary Care
- Secondary Care
inc: Acutes,
community
providers,
Ambulance



Beyond the Technology.....



Help is on hand

- Two NHSX CoE's plus other trusts exemplifying RPA
- National RPA forum on NHS futures
- NHS TD Digital Productivity Team
- NHSD RPA Guidance

Thank you

James.davies28@nhs.net



THE NHS RPA LIVE CONFERENCE 2022



UP NEXT...

ss&c | blueprism®

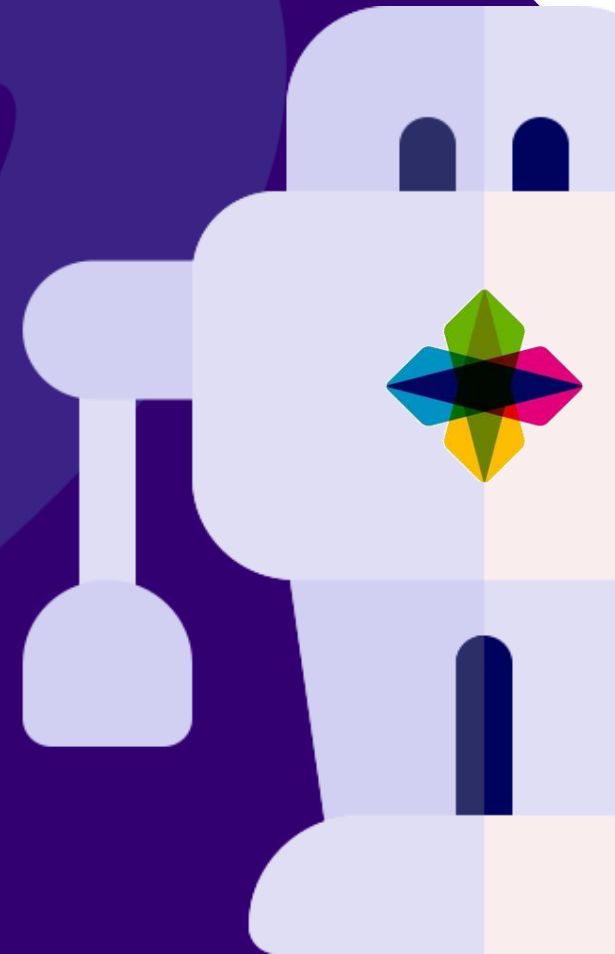


Our sponsors SS&C Blue Prism

Karen Gorman
Account Director



**Innovation and
Intelligent Automation**



DELIVERING OUTCOMES AND SUSTAINABILITY

With Blue Prism Cloud

Karen Gorman – Account Director, Healthcare
Rich Bennett – Solutions Consultant



5 Reasons to Choose Blue Prism Cloud

FACT 1

Cloud Services
in our DNA



FACT 2

A Fully Managed
Platform



FACT 3

Dedicated platform that
is Secure – sometimes
you don't want to share
infrastructure



FACT 4

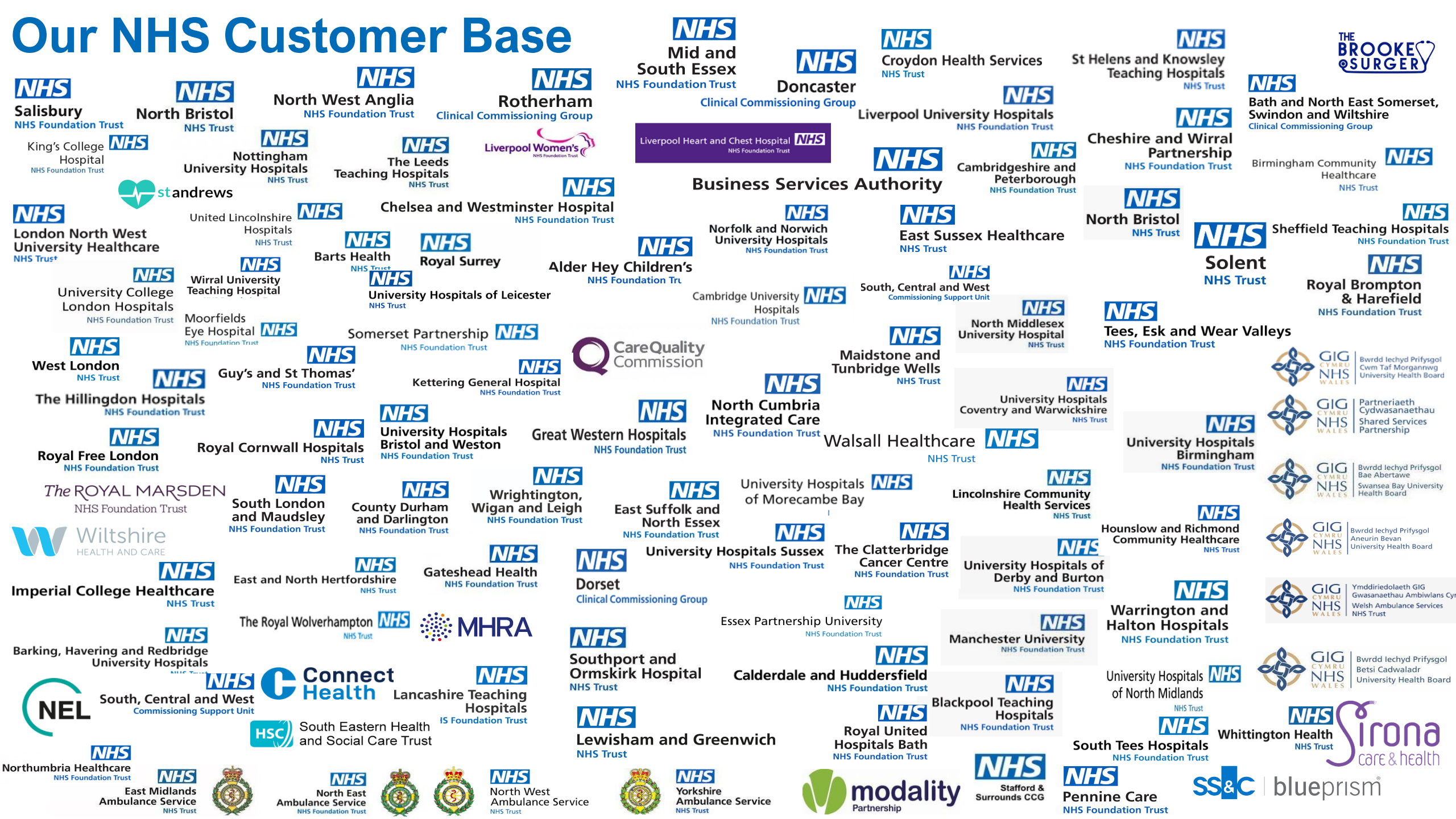
Regulated
Industries Trust Us

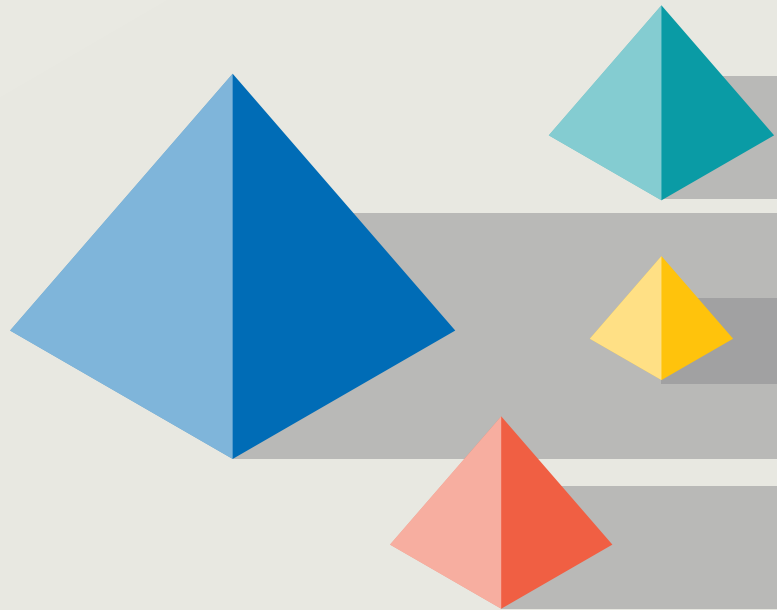


FACT 5

Everything you need
for Automation



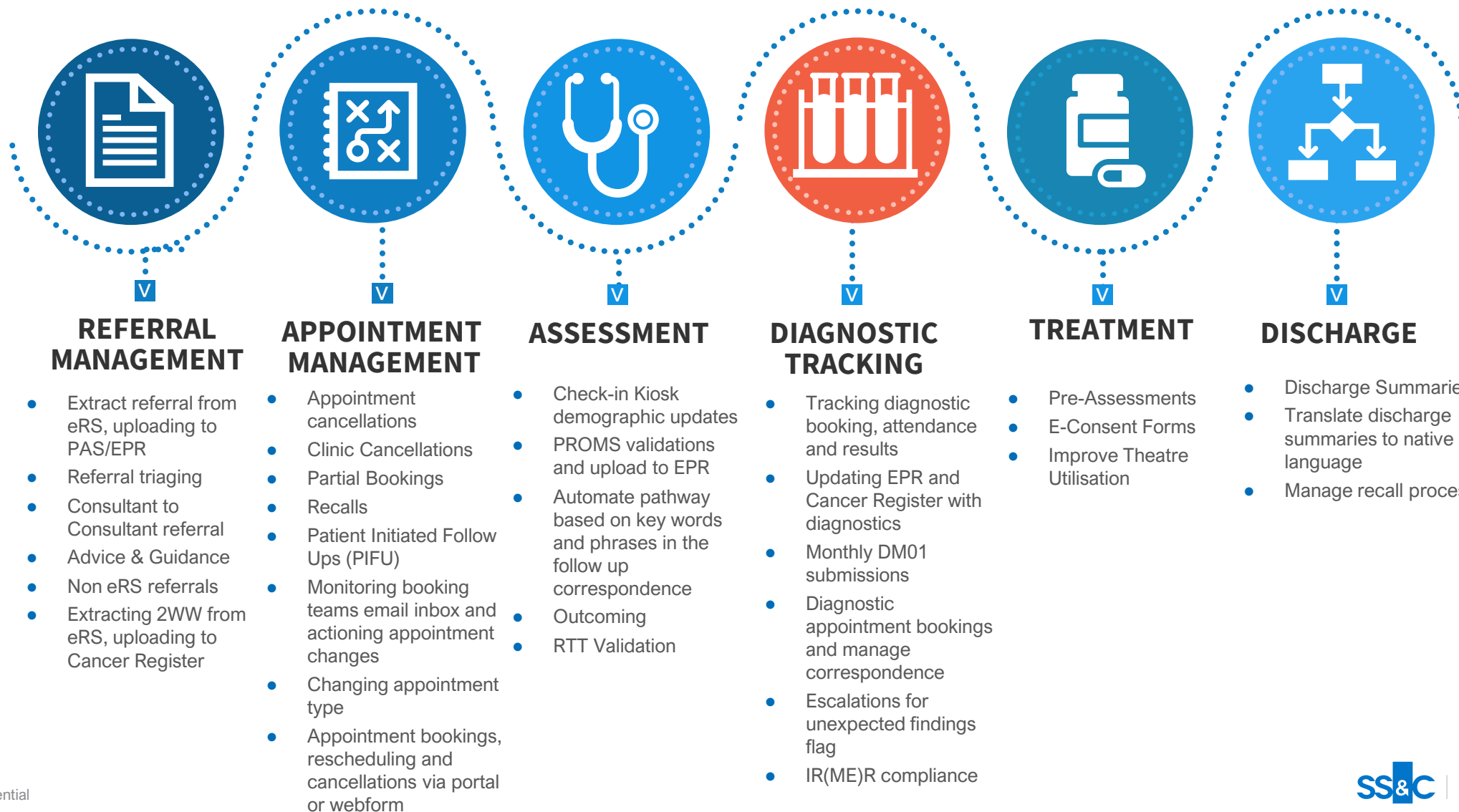
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DELIVERING OUTCOMES

Enabling Outpatient Transformation

Providing the digital technology to support Elective Recovery



OUTPATIENTS

Referrals, Triage and Advice & Guidance



The Problem

Frimley were undertaking a huge digital transformation with the implementation of EPIC. With no integration between the eRS and EPIC, the medical records team will still be required to manually extract over 182,000 referrals and upload to EPIC. A&G are currently submitted only on eRS and do not form part of the clinical record



The Solution

Digital Workers extract the referrals and attachments, register them in EPIC and upload the pdf. Triage comments from EPIC are extracted and transposed back to eRS. Advice & Guidance extracted and uploaded into the patient record.



The Benefits

- Saved 24,570 hours per year **equivalent of 15 WTE**
- Improved Referral to Treatment (RTT) by uploading referrals in near real-time
- Remove the necessity for clinicians to log in to eRS
- Improve data quality, identify duplicates and remove the need for re-work
- Reduce clinical risk of patient referrals being missed
- Digital workers migrated all referrals for the EPIC go live, avoiding hiring 90+ temp staff

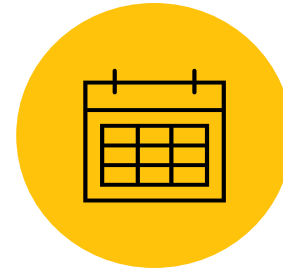
The Challenge



They currently see over 440,000 patients per year for an Outpatient Appointment



Covid-19 has created a backlog which means they need to see an additional 20% over the next couple of years (an extra 100,000 appointments per annum)



We actually make about 700,000 appointments per year, but many are cancelled / re-arranged or the patient Does Not Attend



Aside to the clinical challenge, the administrative burden is huge, taking 15 minutes to book a patient appointment and send a letter

Appointment Self-Booking Automation

Appointment Booking

Royal Lancaster Infirmary, Westmorland General Hospital, Furness General Hospital

University Hospitals of
Morecambe Bay
NHS Foundation Trust

Welcome Rosemary

About your Appointment

Your Specialty is : ENDOCRINOLOGY
 You will be Seen by a Member of the Clinical Team
 Your Waiting List Name is : RLI FU LIPID ENDOC TELEMED CPCC
 Your appointment will last approximately 15 minutes
 This appointment will be a Telephone appointment

I Want to Book an Appointment

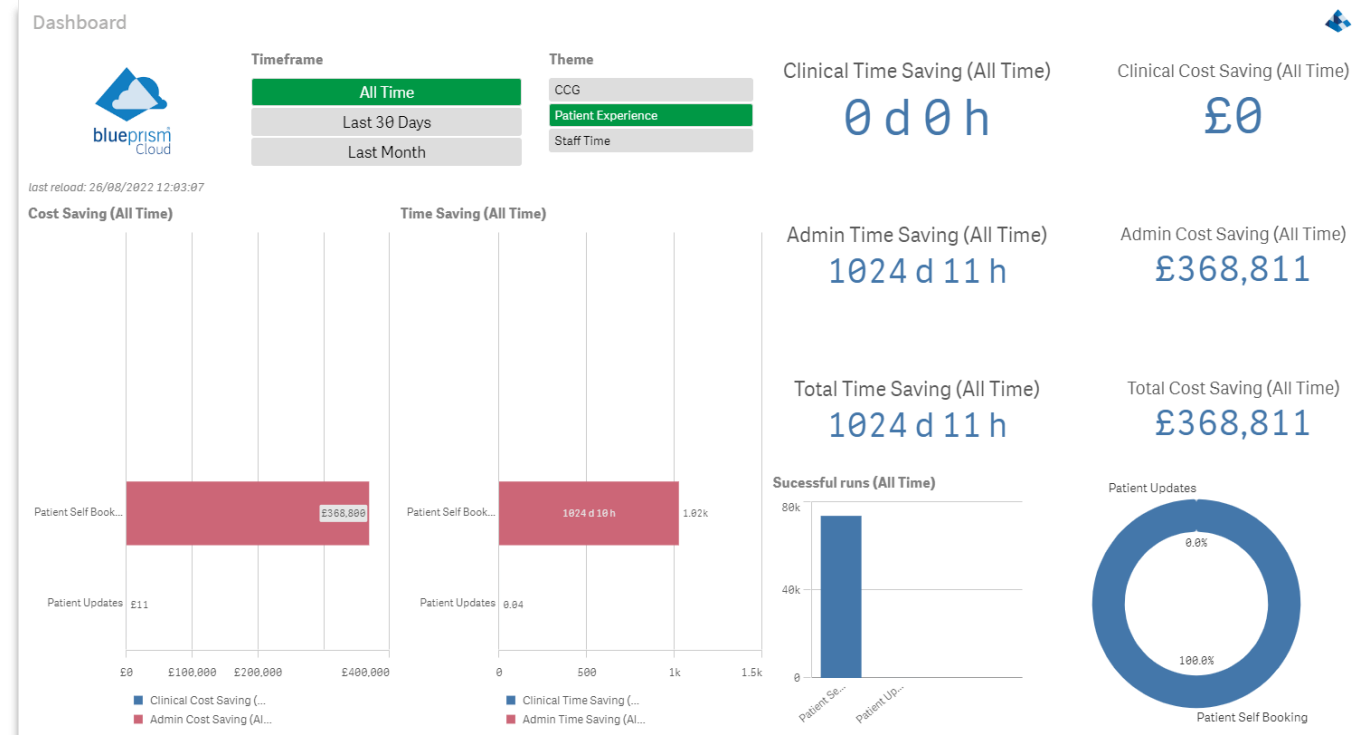
I Don't Require an Appointment

When Would You Like Your Appointment? *

Choose a Date *

Select Time *

Book This Appointment



Aneurin Bevan University Health Board

- Accounts for Agency Nurses
- Accounts for Health Care Support Workers
- New Starter Account Requests
- COVID 19 Vaccination Records
- Language Translation (Ukrainian, Welsh, Bengali)
- Routine Referrals
- Bank Worker Annual Leave Request and Claims
- Agency Invoices
- Oracle FMS Vacation Rule Review
- Daily Finance Reports
- Oracle FMS User Maintenance
- Purchase Order Close
- Clinical Coding of Endoscopies, Cataracts, Carpal Tunnel episodes
- Gastroenterology referrals
- Audiology Data Cleansing and Maintenance
- Transcribing Radiology Requests
- COVID 19 Public Inquiry

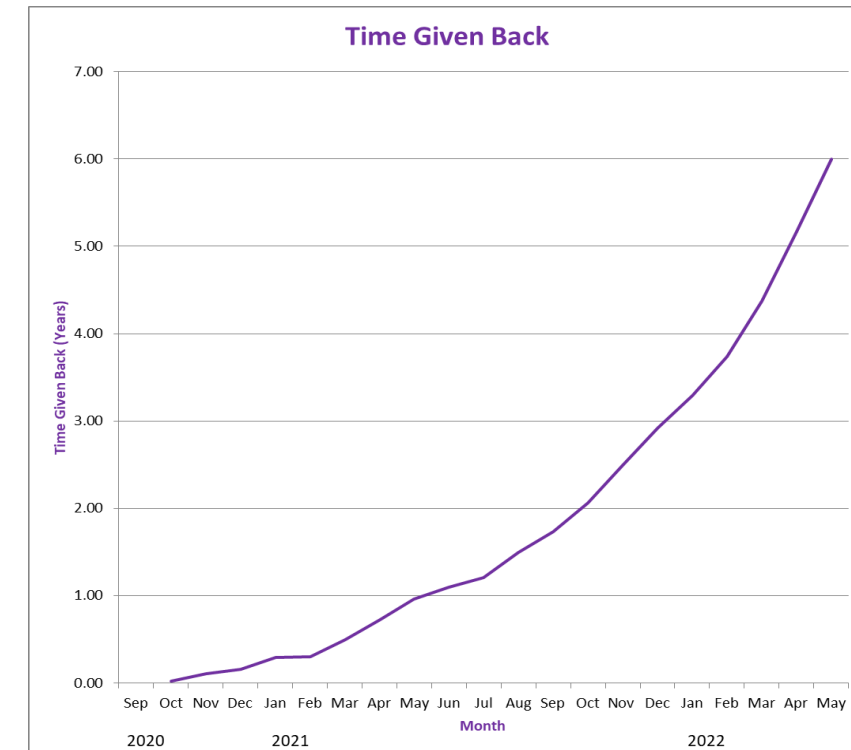
Saved 28.7 WTE of effort, saving £691K per annum
26 new processes in the pipeline, saving £900K

Automation journey to date

Live
In Build/Test
to start

OutPatients CSU	RBS	GP Routine referrals
		GP Urgent referrals
		Fast Track referrals
		Telederm referrals
		KS midwife referrals
	Admin	Clinic preparation
	All OP areas	Text cancellations
		On-line cancellations
		Opt out of text and voice
		Short notice cancellations
Clinical CSUs	Cancer MDT	PPM1 registration
		Phase 2 to PPM1 registration
		Radiology #alert cancer
		First seen
		FIT positive
	LDI	Routine referrals
		Creating Case Note Number for Dental
		Email referrals
	Oncology	Radiology clock stops
Support CSUs	Finance	Invoices to Web Centre
	Therapies	Registrations from PPM+
		Clinic preparation
	Radiology	Radiotherapy rejection email
Regional	YAS	Vehicle assurance checks
	Primary Care	Appointment results

The Benefit to date



‘In the 21 months we’ve had live processes, we’ve given the team 6 years back’

Richard Moyes, GM for Outpatients

Alder Hey Children's Hospital



The Problem

Alder Hey had 6,400 patients with historic open referrals in their Meditech PAS. The team needed to contact each patient to find out whether they were happy to be discharged or still needed to come to the hospital for treatment. They needed the most up to date demographic information so that they can contact them to ask.



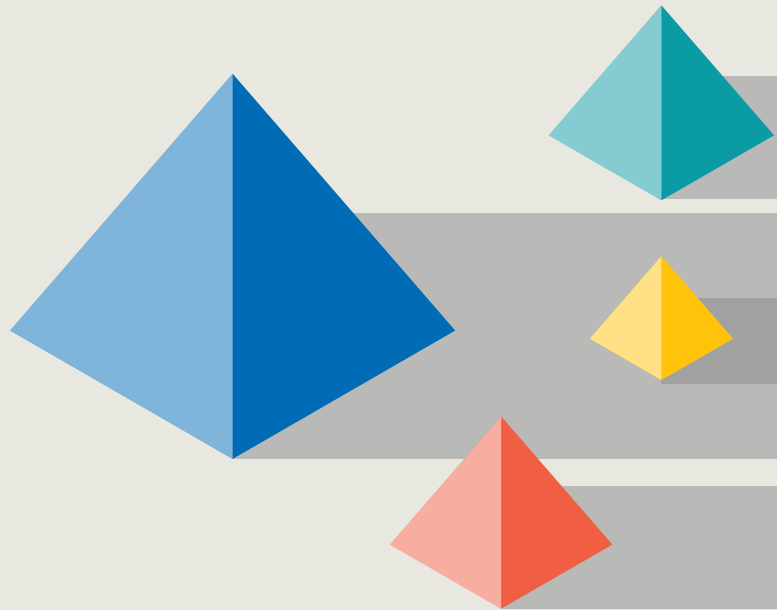
The Solution

Alder Hey built an automation so their Digital Workers downloaded and collated the latest demographic and GP information from the Spine and created a report to send to the validation team.



The Benefits

On average a member of the validation team went through 45 patients a day. The digital workers did this in 5 days which saved 143 days of the teams time and improved data quality.



SCALING

Blue Prism Cloud Delivers Transformational Value

Plan



Process Intelligence



Automation Lifecycle Management



Capture

Build



Design Studio

Enhance



AI/Machine Learning



Optical Character Recognition (OCR)



Interact – Digital Worker Collaboration

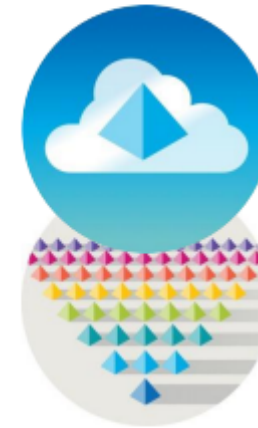


Communication Skills



More on the Digital Exchange

Scale



Digital Workers On Cloud

Control & Monitor



Control Room



IADA Orchestration

Fully Hosted, Managed, Monitored, and Secured on Blue Prism Cloud

Accelerating Time-to-Value

Fast, accurate and impactful

blueprism

Process Intelligence

powered by ABBYY Timeline



Traditional & Process Mining Methods are resource intensive, slow and inaccurate



Accelerate Time to Insight & Optimization

Process & Task Information converted to Facts and Answers

- Out of the box, no coding
- Auto populated - available immediately
- Visualize YOUR reality in multiple dimensions
- Expand across all business process boundaries
- Drive fact-based decisions
- Accelerates Transformation



Removing barriers to entry and eliminating risk

with a compelling customer offering



Easy to get started Deliver value quickly

No-risk Starter Package
included with Support.
Cloud Hosted



The entire suite of Process Intelligence

Process & Task mining,
analysis and monitoring, one
license, easy to buy and
expand across the enterprise



One team Ensuring your success

Delivery & support through Blue
Prism and our certified Engage
Partners. Backed by ABBYY
globally

Introducing Blue Prism Capture

Capture enables **anyone** to **accurately record**
a process and **rapidly generate an**
automation prototype.

It's easy to use

Empower process owners to record their own demonstrations with minimal support

It's accurate and optimized

The process can be easily edited to correct mistakes and remove redundant steps

It's the ideal starting point

Go from process recording to automation in no time, as Capture provides developers with everything they need to build the automation (including application modeler data)

blueprism®
Capture



Reduce time to automation by up to 75%

How can Capture help you?

Accurate recording

- Intelligent computer vision designed to reduce errors
- Auto password censoring to maintain security and compliance

Customizable user experience

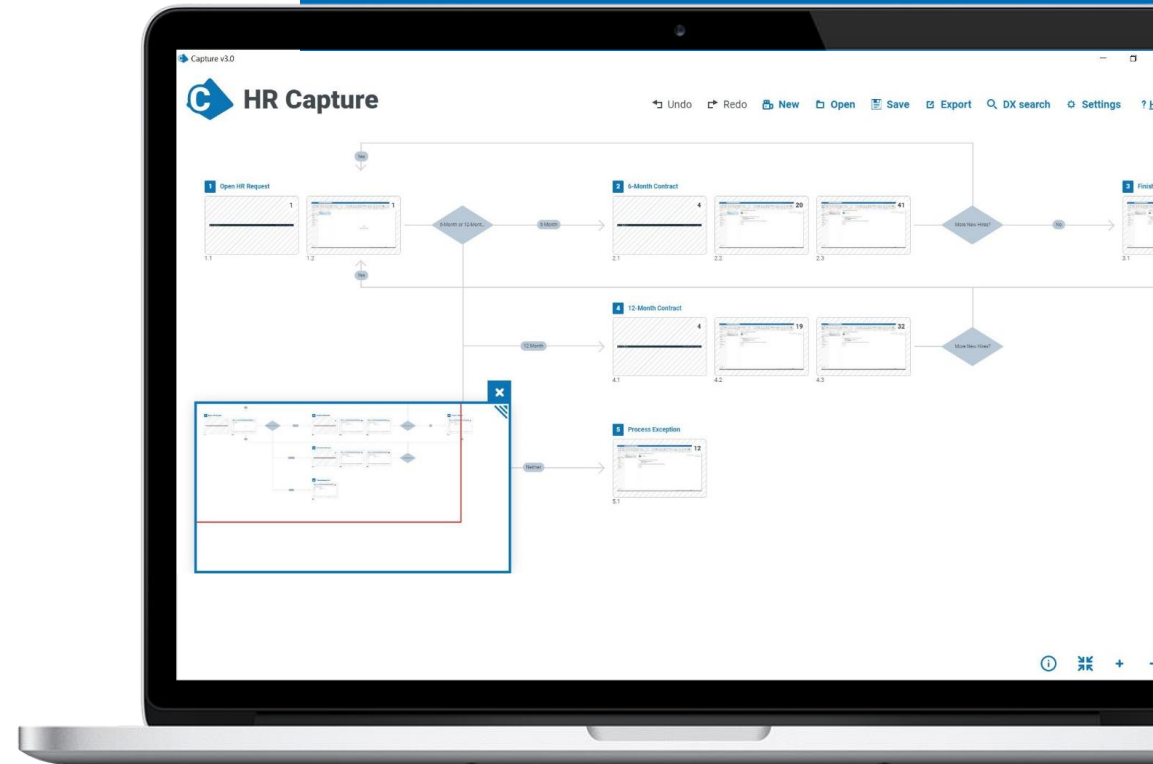
- Tailored, pre-built asset recommendations from our Digital Exchange — based on the process you're automating
- Customize PDD templates with your own branding

Unheralded speed

- Process owners can record their own processes
- Developers receive an auto-generated process containing everything they need to build the automation — including application modeler data



blueprism®
Capture



How are digital workers helping the NHS?

2.2m

hours saved

For the NHS in the last year
by automating key processes

1million

Vaccine updates

Migrated to the clinical
workstation, so nurses and
doctors can validate records
and manage risk of incoming
patients

2 mins

Reduced from 4 days

Reporting test results from
secondary to primary care
providers, allowing GPs to
issue oximetry monitors to
high risk patients

£1m

Saved in 18 months

With ROI being achieved
within the first 2 months



GIG
CYMRU
NHS
WALES
Bwrdd Iechyd Prifysgol
Aneurin Bevan
University Health Board



Dorset

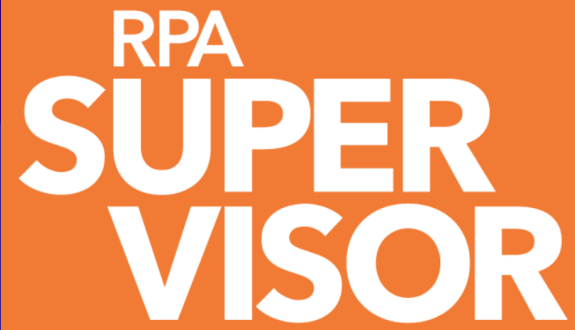
Clinical Commissioning Group

University Hospitals 
of Morecambe Bay
NHS Foundation Trust

Rich Bennett Rich.Bennett@blueprism.com

Karen Gorman Karen.Gorman@blueprism.com



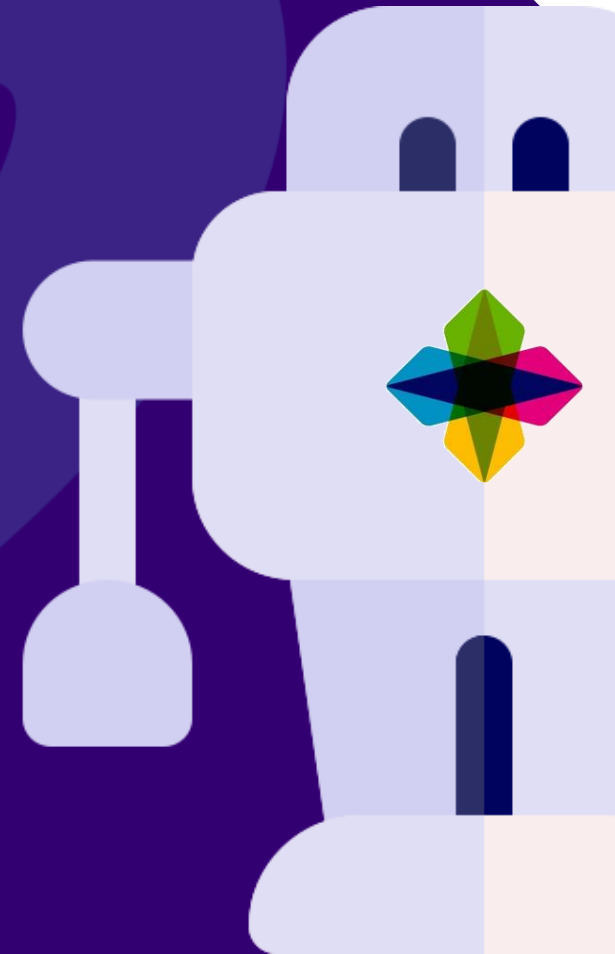


Our sponsors RPA Supervisor

Oliver Fulljames
Enterprise Sales Director



**Innovation and
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MORNING BREAK, NETWORKING & REFRESHMENTS

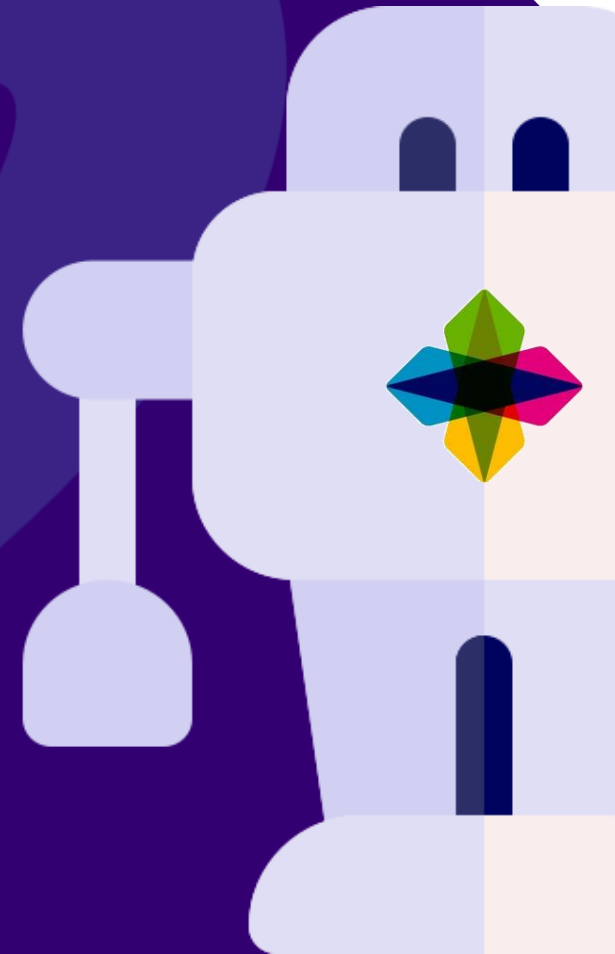


Our sponsors Pega Systems

Francis Carden
VP Intelligent Automation and
Robotics



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Intelligent Automation



RPA Live Session

Process mining and optimisation for outpatient clinical pathways



Simon Nichols



Prathamesh
Bhingarde



Anand Argade



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Intelligent Automation

FUTUROOT®

Process Intelligence Simplified



INTRODUCING

FUTUROOT[®]

Process Intelligence Simplified

Your Team today.



Anand



Prathamesh



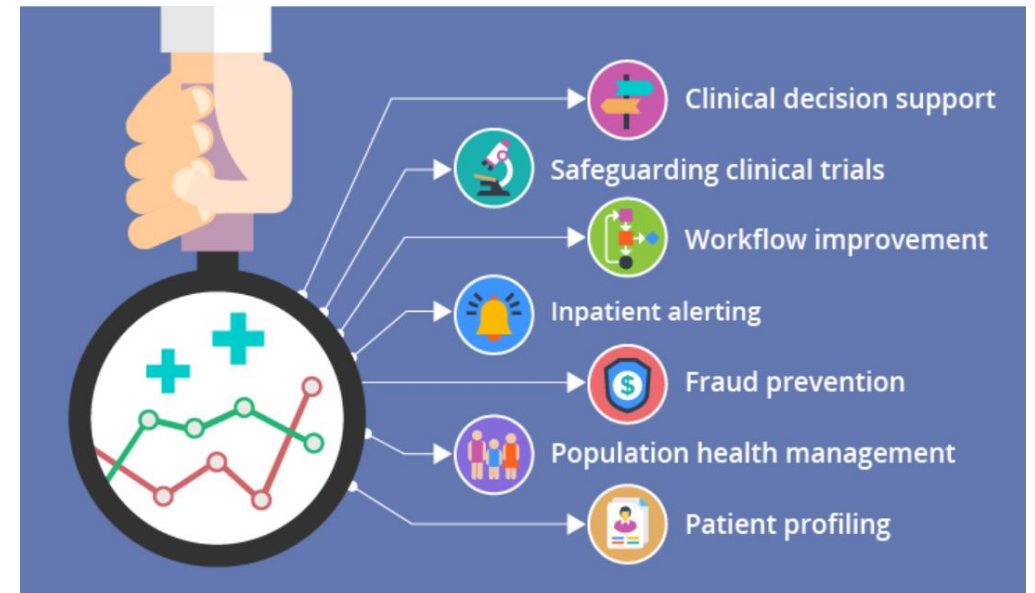
Simon

Healthcare Analytics

Data Sources

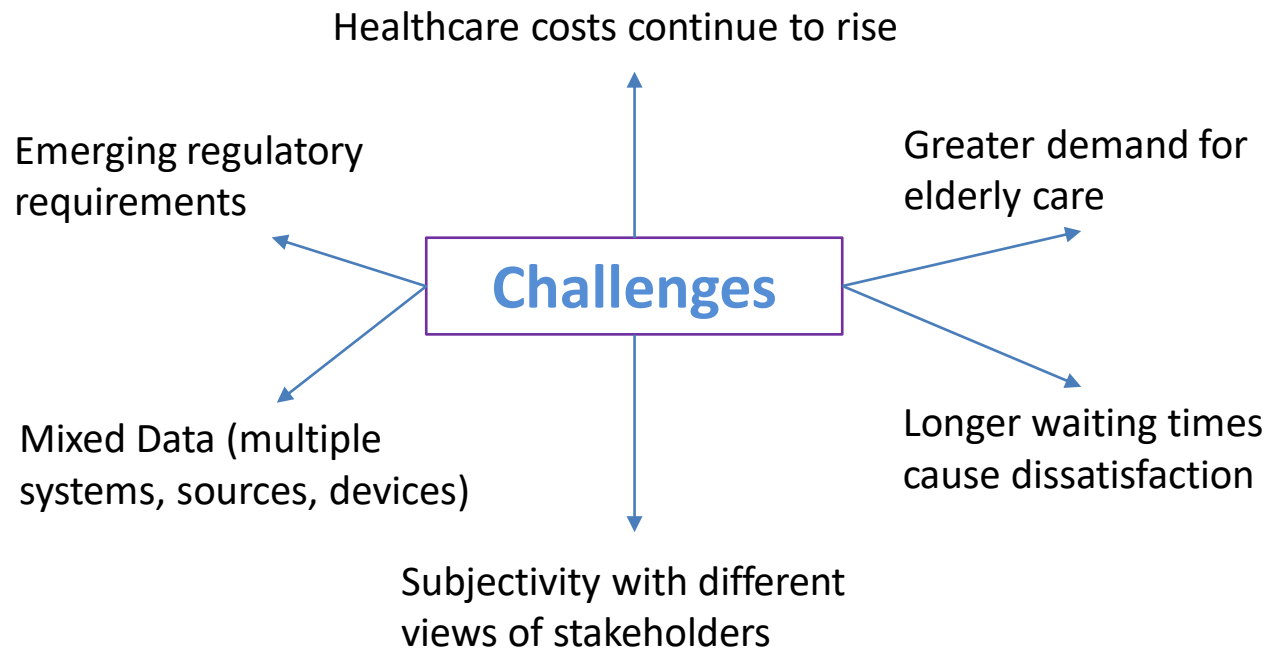


Why Analytics?



***Source : <https://www.scnsoft.com/blog/health-data-analytics-overview> - Blog on Healthcare IT

Current challenges & opportunities

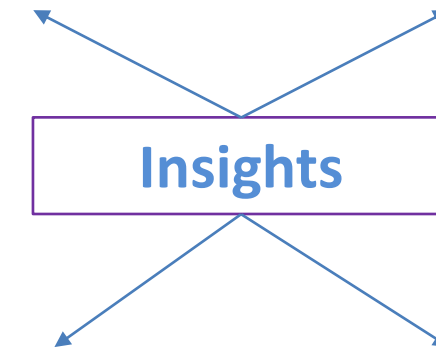


What happened?

- What is the typical treatment of patients with acuity needs
- What is the typical working day of a surgeon?

Why did it happen?

- What caused the unusual amount of incidents in the department
- Why did people stop using the telehealth system



What will happen?

- When will this patient be dismissed
- Is it possible to handle these five new cases in time

What is best than can happen?

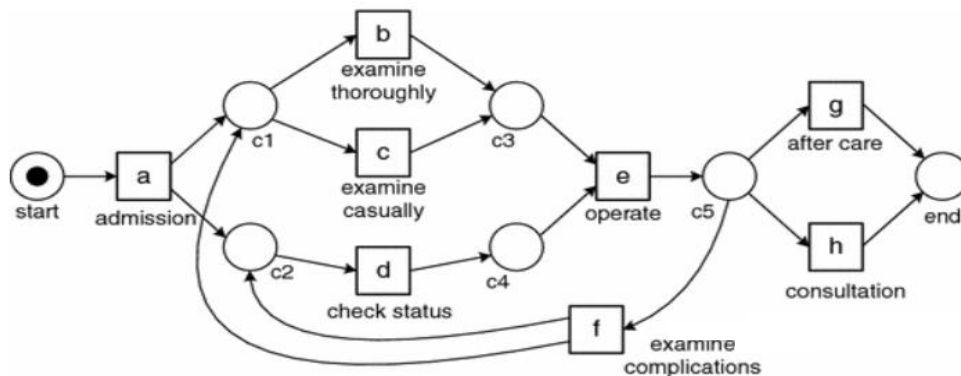
- How many physicians are needed to reduce the waiting list by 50%
- How to redistribute the workload over the three surgeons

***Source : *Process Mining in Healthcare* by Ronny Mans, Will van der Aalst, Rob Vanwersch

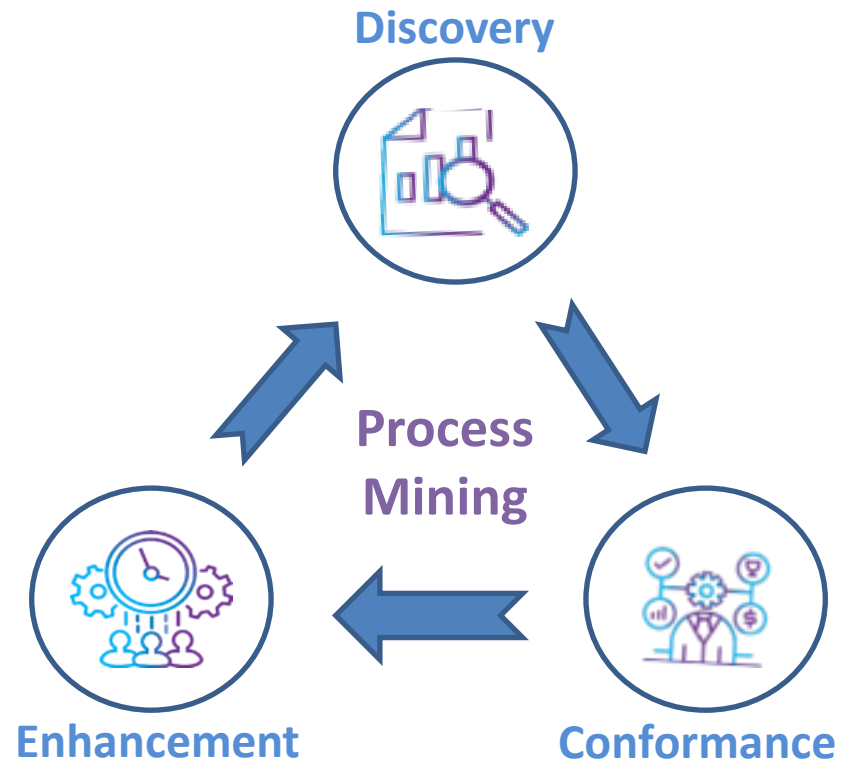
Process Mining for Healthcare

Event Log

Case ID	Activity	Date	Time	NHS ID	Clinic Code	Attendee Name	Age Group	Nationality	Primary Language
APP00001	Admission	01-10-2022	09:00:00	NHS0001	CC0001	Becky	>17	English	English
APP00001	Examine Casually	01-10-2022	09:10:00	NHS0001	CC0001	Becky	>17	English	English
APP00001	Operate	01-10-2022	09:12:00	NHS0001	CC0001	Becky	>17	English	English
APP00001	After Care	01-10-2022	09:30:00	NHS0001	CC0001	Chris	>17	English	English
APP00002	Admission	01-10-2022	12:00:00	NHS0003	CC0002	David	<17	Indian	English
APP00002	Check Status	01-10-2022	12:15:00	NHS0003	CC0002	David	<17	Indian	English
APP00002	Operate	01-10-2022	12:20:00	NHS0003	CC0002	David	<17	Indian	English
APP00002	Consultation	01-10-2022	13:45:00	NHS0003	CC0002	John	<17	Indian	English

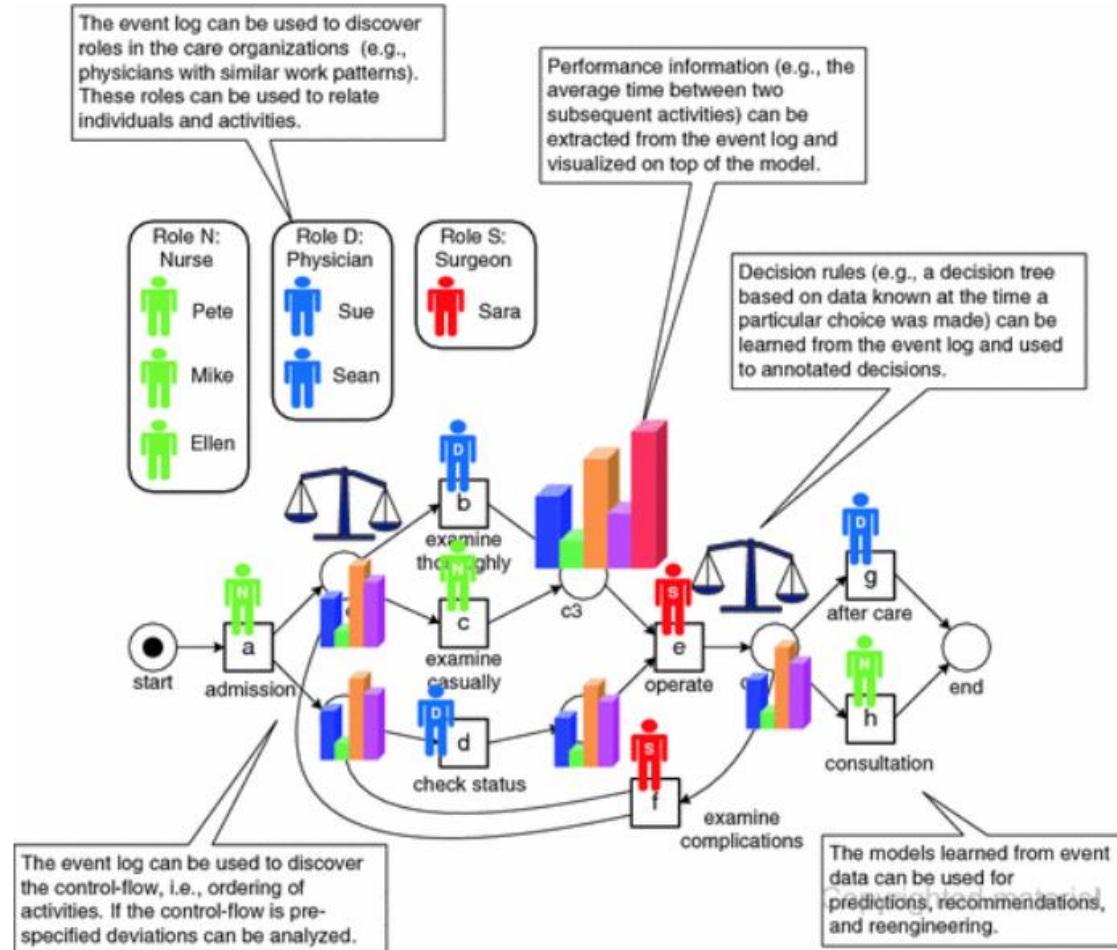


Process Model



***Source : Process Mining in Healthcare by Ronny Mans,
Will van der Aalst, Rob Vanwersch

Process Mining in Action




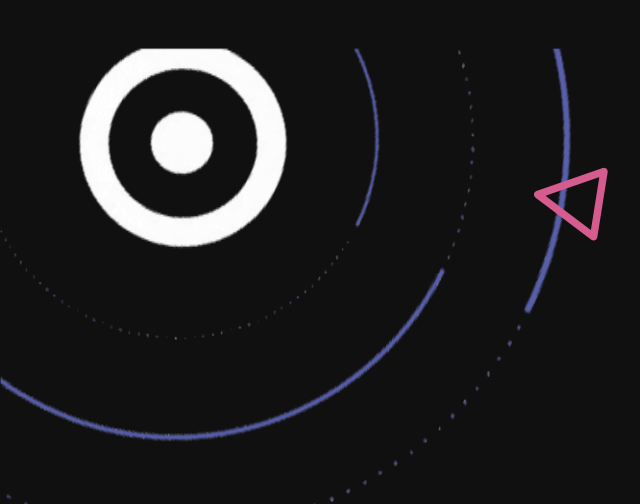
Process Intelligence with Futuroot (Use Case)

- Process Visualization and Analytics for Patient case service process at a NHS trust
- Process conformity checks based on clinical guidelines and analytics around patient waiting time

Select Business Use Cases

- ❖ Detailed analytics around Waiting time and predicting service times for critical departments like A&E
- ❖ Analysing workforce dynamics between the healthcare professionals and getting insights to streamline the process
- ❖ Process conformity checks using standard operating procedures build using clinical practice guidelines
- ❖ Measuring impact of Covid-19 on hospital care pathways for various departments & operations

***Do visit our Booth for more details

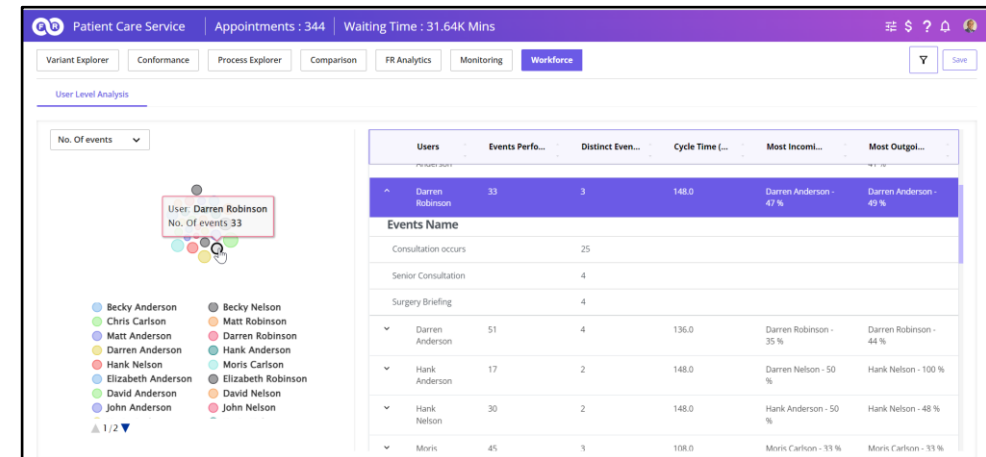
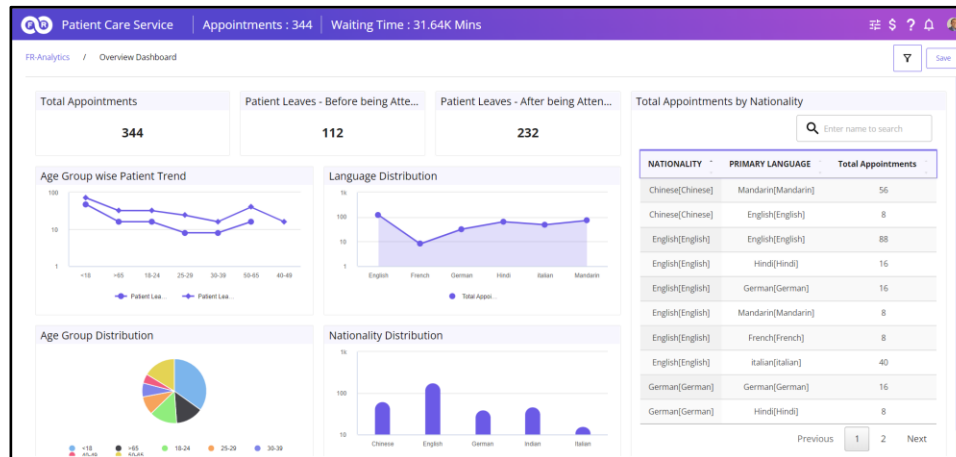
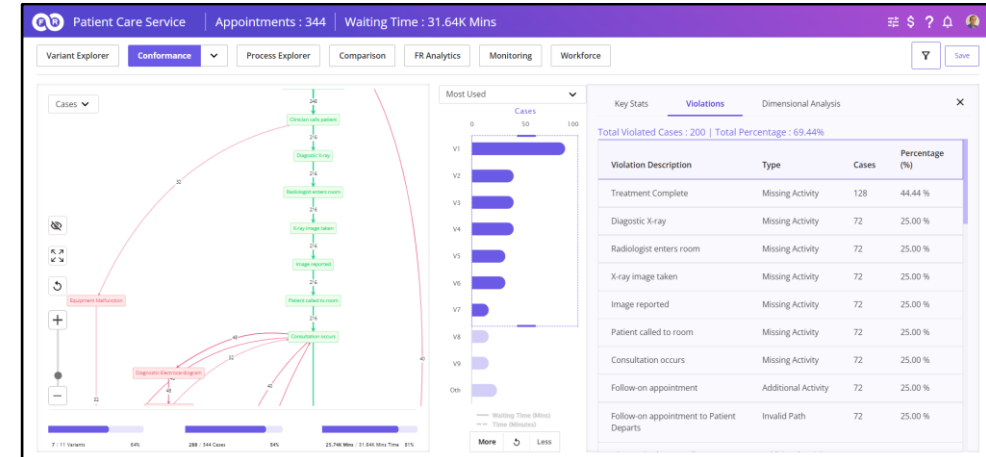
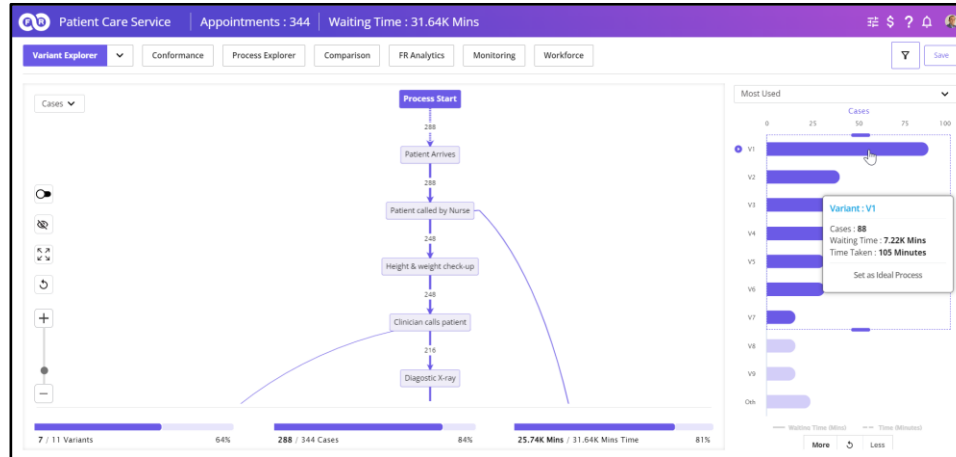


The Future is now. The Future is Futuroot.

FUTUROOT[®]



Futuroot – Process Intelligence Simplified



***Do visit our Booth for more details

RPA Live Session

Scaling workforce automation across 10 London Trusts



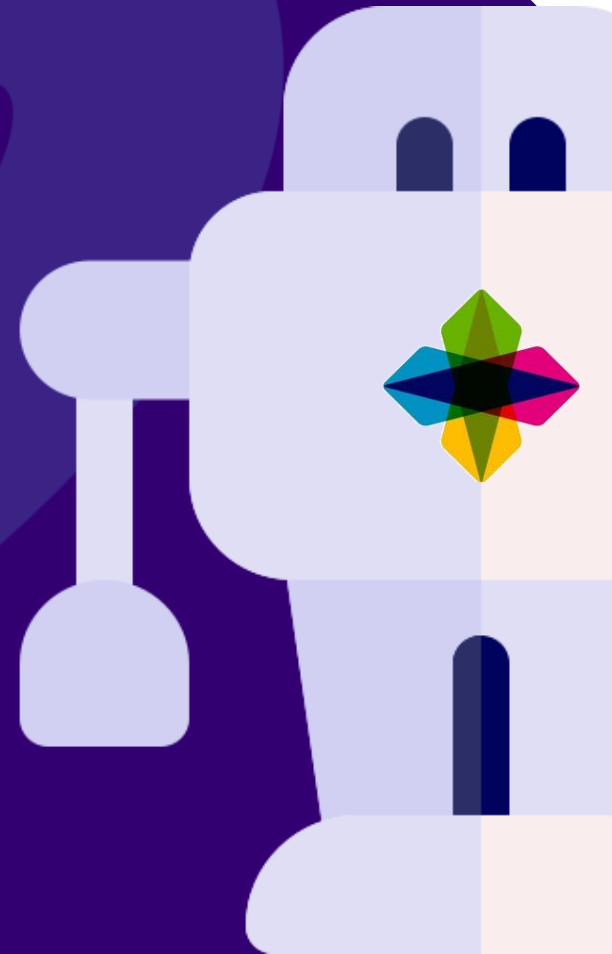
Sylwia Misko



North London Partners
Shared Services



Innovation and
Intelligent Automation



RPA Live Session

Our automation journey



Alice Morrissey



Innovation and
Intelligent Automation

Developing a Centre for Automation at Guy's & St Thomas' NHS Foundation Trust

Alice Morrissey - Automation Programme Manager
November 2022

1	GSTT Automation programme vision and current position
2	Idea development
3	Process development
4	Monitoring and evaluation
5	What next

What is Automation?

Robotic Process Automation and Healthcare

RPA: Software that uses virtual workers (robots) to perform and automate repetitive administrative tasks

- Suitable tasks: high volume, repetitive, rules based, low variance and labour intensive
- Each 'bot' can work 24/7, 365 days a year to process tasks

Benefits of RPA:



Productivity by releasing staff from repetitive, low complexity tasks



Accuracy of data and outputs



Consistency of process



Low technical barrier to implementation



Morale improved by reducing the tedium of some roles

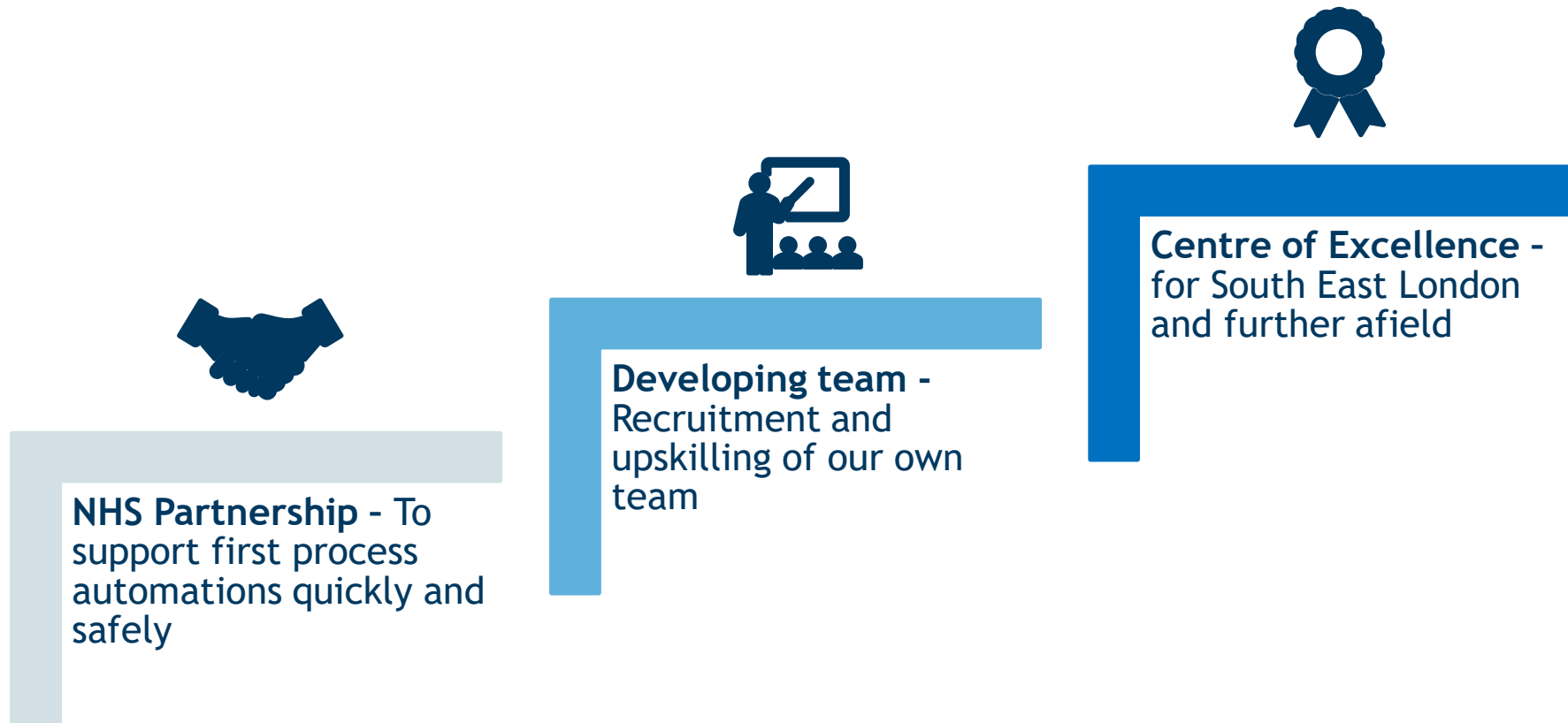


Compliance of security and governance

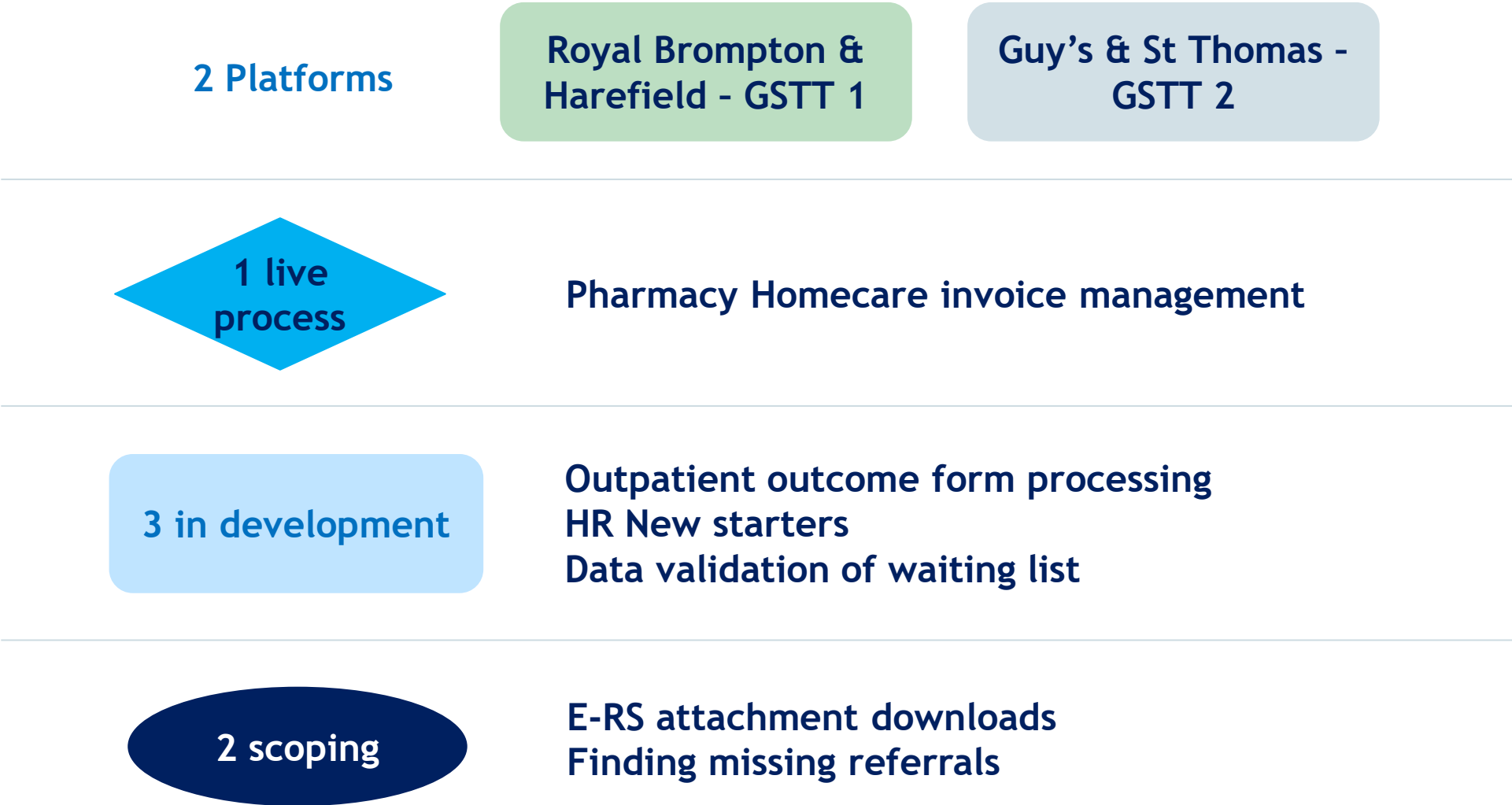
Our Automation programme

Our longer term vision

Our ultimate ambition is to **develop a centre of excellence** in the Trust and across South East London. Our **staged approach** will enable us to **identify a return on investment quickly** as well as **building sustainability** by developing our own internal capability.



Current position

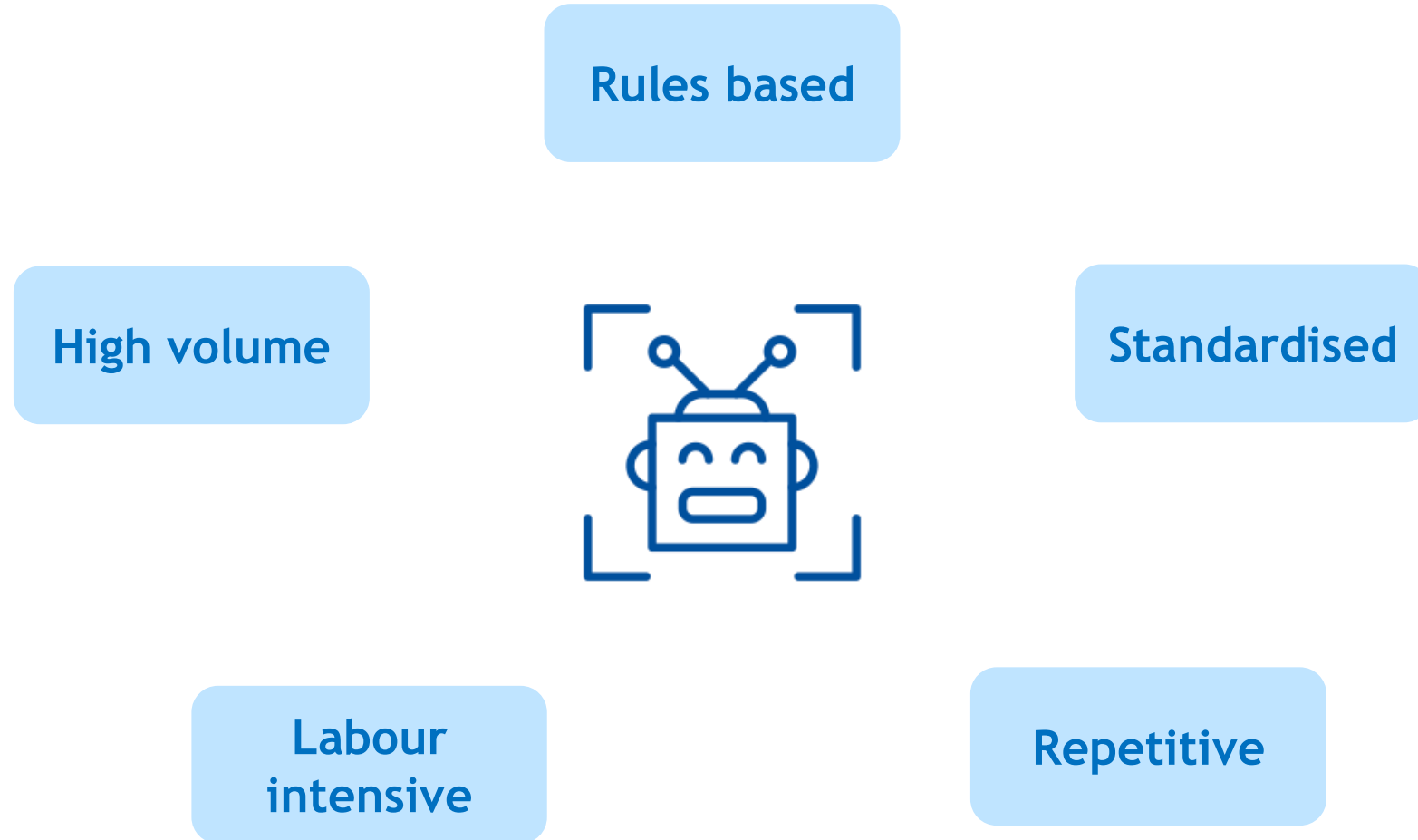


Process pipeline

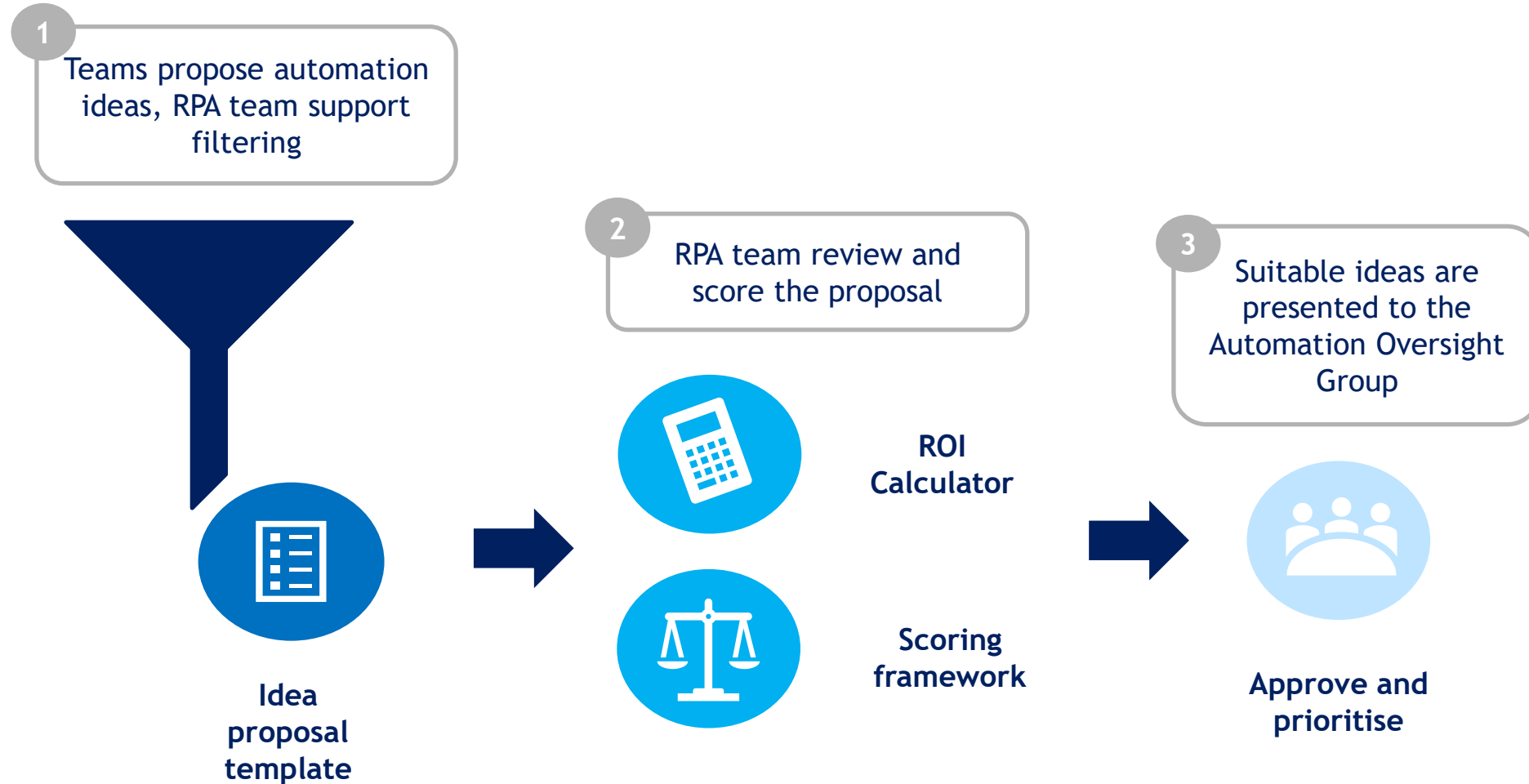
Site	Process Name	Scoping	Workshop	Oversight group Sign off	PDD analysis	Development	Test	Live
RBHH	Pharmacy Homecare Invoicing							
GSTT	HR New Starters							
RBHH	Outpatients clinic cash up							
GSTT	Data validation elective recovery							
ALL	Epic - e-RS Save Attachments							
GSTT	Cardiology diagnostic referrals							
GSTT	Dental - finding missing referrals							

1. Idea generation

What makes a good RPA process?



Proposing automation ideas



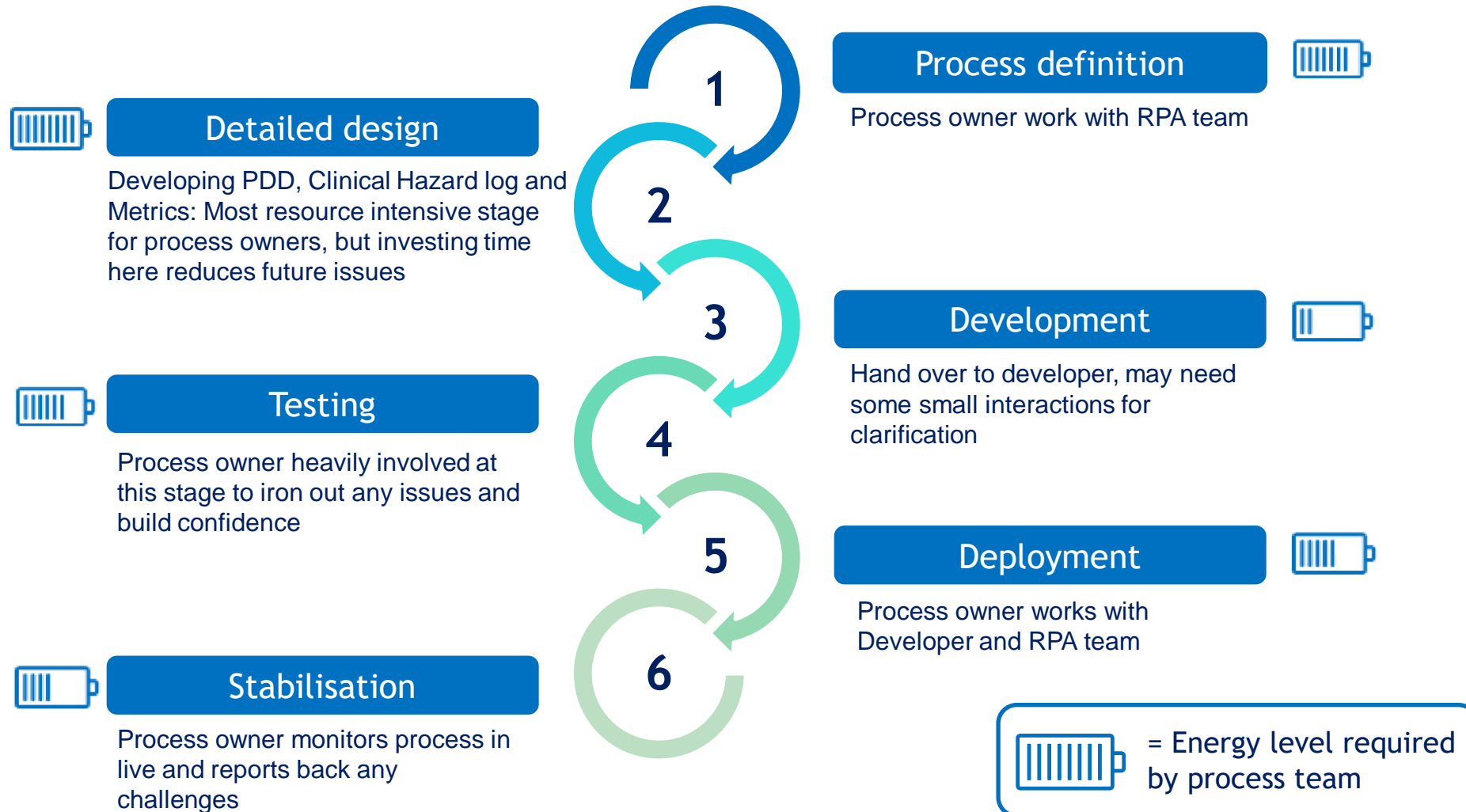
Reflections on developing governance framework

	Business case - incremental funding vs big bang
	First use cases - space to learn and engage stakeholders
	Demonstrating value - steep learning curve
	Scoring framework & ROI calculator - robust/high barrier to entry
	Prioritisation - may leave some people disappointed
	Transparency in scoring and costs
	Moving to demand led ideas from the organisation - but comms!

2. Development process

Development of process

To build a successful automation with minimal exceptions, the process owner and team need to be engaged in the build process. We outline here what to expect:



Identifying clinical hazards in the design stage to build in mitigations to the process



DCB0129: Clinical Risk Management: its Application in the Manufacture of Health IT Systems

NHS Digital Standard



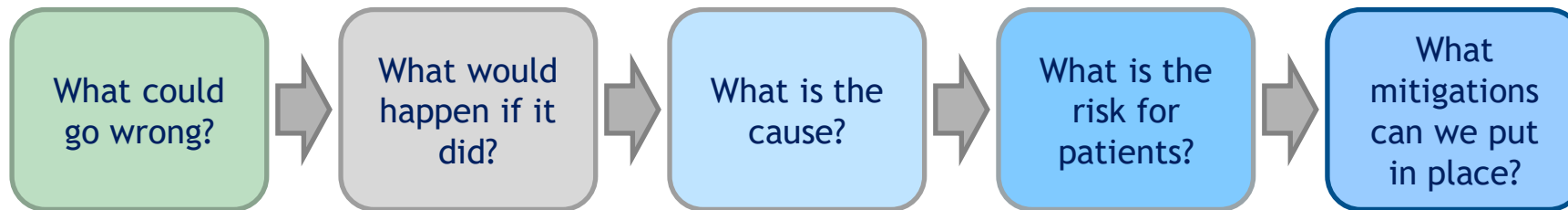
DCB0160: Clinical Risk Management: its Application in the Deployment and Use of Health IT Systems

NHS Digital Standard

“A Health IT System is defined as a product used to provide electronic information for health or social care purposes where the product may include hardware, software. or a combination of both.”

Proactively Controlling Risk

Starting the discussion - SWIFT analysis



*Wrong data
collected?*

*Data
manipulation
fails?*

*Unplanned RPA
Downtime?*

*Process is too
slow?*

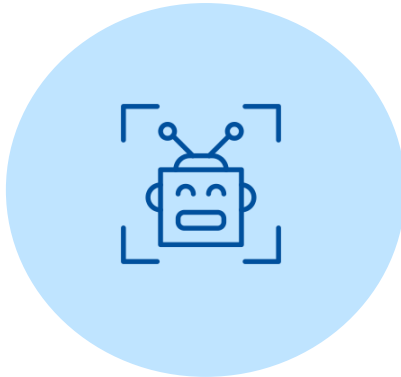
*Tigger for process
fails ?*

Reflections from development process

	Clinical hazards log - value in design stage
	Early Developer input - feasibility and suitability are different
	Design stage timeline - agreement with process owner?
	Consideration of development time in ROI calculations
	Testing - involving process owners and managing expectations

Monitoring and evaluation

Business as usual monitoring



Monitoring

- RPA team monitor dashboard of bots
- Process owner monitor frequency of exceptions and identify opportunities for improvements



Issue resolution

- Support model developed to outline
- RPA team are first point of contact
- Escalations not resolved internally are escalated



Evaluation of benefits

- ROI tracked by RPA team
- Power BI dashboard will display key KPIs
- NHS X funding requires metrics tracking

Evaluation methodology

Indicator Type	Description	Definition
RPA Indicators (compulsory)	Hours saved	Total time spent by staff members to complete a process e.g time taken for human- time taken for human to deal with corrections)
	Cycle time	Time taken to complete a single iteration of the process
	Frequency	Capacity to accomplish routine tasks more often, 24/7 and consistently without breaks (holidays, sickness, etc.).
	Accuracy	Processes are completed with increased accuracy. Error rate determined by baseline error rate, quality of the automation development and level of accepted errors (i.e. human interaction errors).
	Compliance	Processes complete with no compliance issues (e.g. GDPR rules built into RPA).
Return on investment indicators (as relevant)	Cost reduction	Reduced overall budget required by removing posts
	Cost avoidance	Amount of spend avoided e.g on overtime, bank/agency
	Income generating	Amount of income generated by a process e.g. ability to take more referrals
Quality Improvement indicators (as relevant)	Staff satisfaction	Satisfaction levels of directly affected employees regarding workload, pressures, process, etc. before and after automation.
	Scalability	Whether the automation can be utilised across other services
	Strategic benefit	Contribution to strategic goals
	Operational benefit	Improvements in operational efficiency
	Patient experience benefit	Improvements in patient experience
	Clinical benefit	Provides a clinical benefit e.g. clinical outcomes, length of stay, clinical safety
	Statutory/regulatory compliance	Improves the Trust's position on statutory or regulatory compliance
Other benefits		Any other department/service specific benefits which are not covered above

Pharmacy Homecare Invoicing Process Update

RBHH Pharmacy - The Homecare service requires significant amount of human resource to process invoices for medications supplied to patients at home. The service has >5000 registered patients.



Went live in March 2022



Bot completes ~**85% of invoices!**

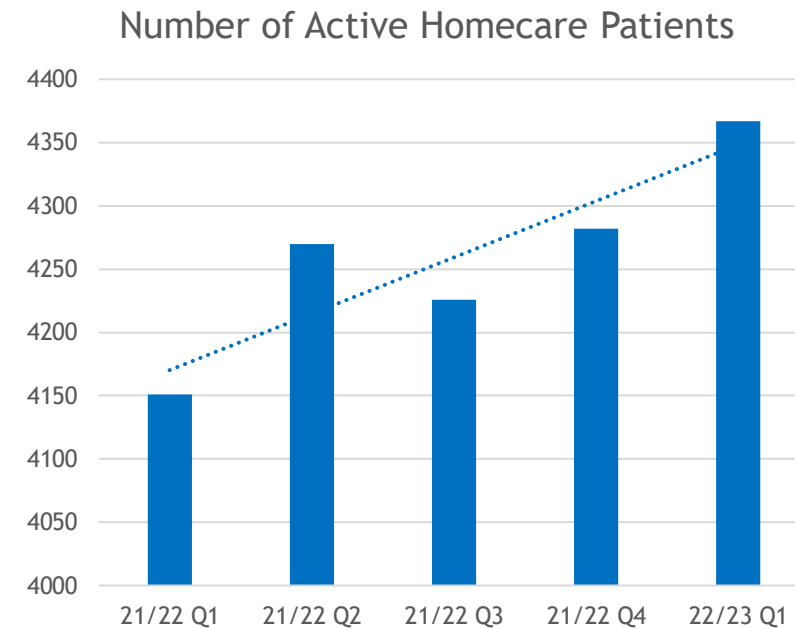


~**3 min** per bot invoice vs 7 mins for a **human**

20 hours per week saved

Pharmacy Homecare Invoicing Process Update

- **Processes Completed** - ~260 processes per week
- **Exceptions** - 40 exceptions per week
- **Incidents** - 1 minor incident
- **Operational Benefits** - Team able to manage with increased demand on the service
- **Staff Satisfaction** - Initial feedback has been positive and minor increase in staff satisfaction scores
- **Patient Benefits** - The team have been able to increase the number of resolved 'no-contact' calls to ensure medication is delivered to patients




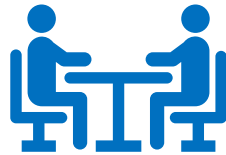
Reflections from monitoring and evaluation

	In house capability - little fixes
	Not just dev skills - whole host of IT sagas!
	IT support model
	Plan to communicate and enact BCP plans
	Sharing info on metrics - dashboard development
	Managing expectations on metrics

What next?

What next?

- 
- Developing the pipeline
 - Sorting up governance and documentation
 - Creating a GSTT way for delivery - best practice and learning from colleagues
 - Contributing to the ecosystem - started a weekly dev call from a conversation at a conference to support the community
 - Collaboration with colleagues, especially across SEL ICS



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THE NHS RPA LIVE CONFERENCE 2022



Q&A PANEL

NETWORKING & LUNCH

Event Chair – Afternoon Address



Darren Atkins

Chief Technology Officer - Intelligent
Automation

The Royal Free London NHS Trust

RPA Live Session

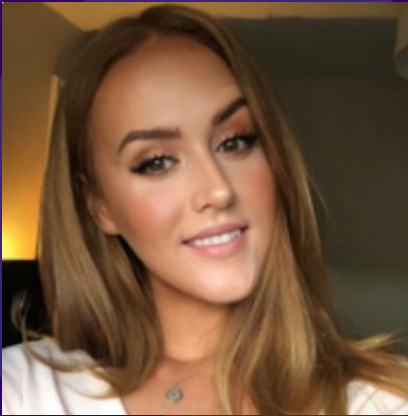
Hyper Automation – hype or a new phase?



Mark Tinnion



Prathamesh
Bhingarde



Isobel George



Adam Lawrence



Oliver Fulljames



Innovation and
Intelligent Automation



RPA Live Session

Automation Lifecycle – Q&A



Mark Tinnion



Jonathan Holt



Isobel George



Molly Toward



Innovation and
Intelligent Automation

SPEAKING NOW



Hamish Tonkin

Head of IA
O2 Virgin

I will be discussing...

“Accelerating from RPA to
Hyperautomation &
Beyond”

Event Chair – Closing Comments



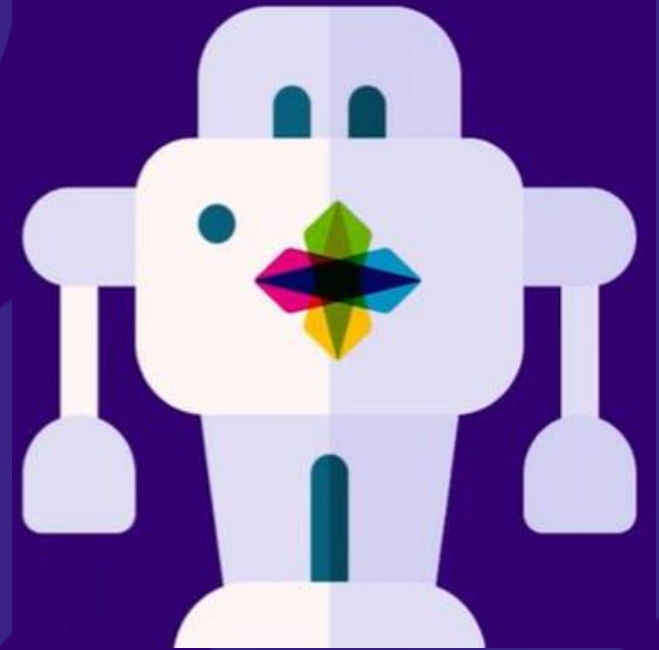
Darren Atkins

Chief Technology Officer - Intelligent
Automation

The Royal Free London NHS Trust

Goodbye!

NHS RPA Live!
#NHSRPALIVE



Darren Atkins
Chief Technology Officer



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