

TPXimpact

Making automation reusable

Ian Roddis, Digital Director, Buckinghamshire
Healthcare NHS Trust

Holly Hall Hare-Scott, Senior Partner, TPXimpact

November 2022



Contents

Use Case: RPA @ KGH	01
RPA@KGH: Show the thing	02
RPA@KGH: Learnings	03
RPA@KGH: What next?	04
A bit about TPXimpact	05
Some more use cases	06
Next Steps	07

01 RPA @ KGH

An issue, and an opportunity



/The Issue

Covid brought with it significant reporting requirements to help understand the daily situation in the hospital and to feed into the national position

- We needed to report every day at 11am the Covid status of staff and patients, and the general state of the 'patient flow' and bed status within the hospital
- This was a moderately complex reporting process drawing data for staff systems, patient systems and general BI reporting tools
- This took many hours of staff time each week...

/The Opportunity

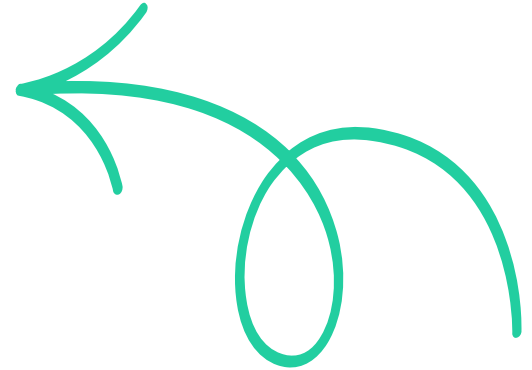
Presented itself...

- Through Covid times, the NHSX AI Lab was looking to see what processes could be automated across the NHS
- The AI Lab asked TPXimpact to suggest some pilots, and they reached out to Trusts...
- ... and Kettering General Hospital said yes!
- We scoped a number of processes
- For obvious reasons NHSx supported automation of the Covid Sitrep reporting process

/If you don't know what RPA is...

Robotic Process Automation (RPA) is the process of automating business operations with the help of **digital workers** to reduce human intervention

- There are no physical workers/robots – simply **software processes**. Digital workers just do things a human does e.g. logging into ESR, MS Teams, sending emails, extracting data, mashing data together. They do it faster, 24x7, and with reduced error
- Any business-rules-driven, **repeatable process** qualifies for automation
- RPA (usually) uses a cloud based **platform** and payment by the **number of digital workers**



Children's
Emergency
Department →

MAIN ENTRANCE

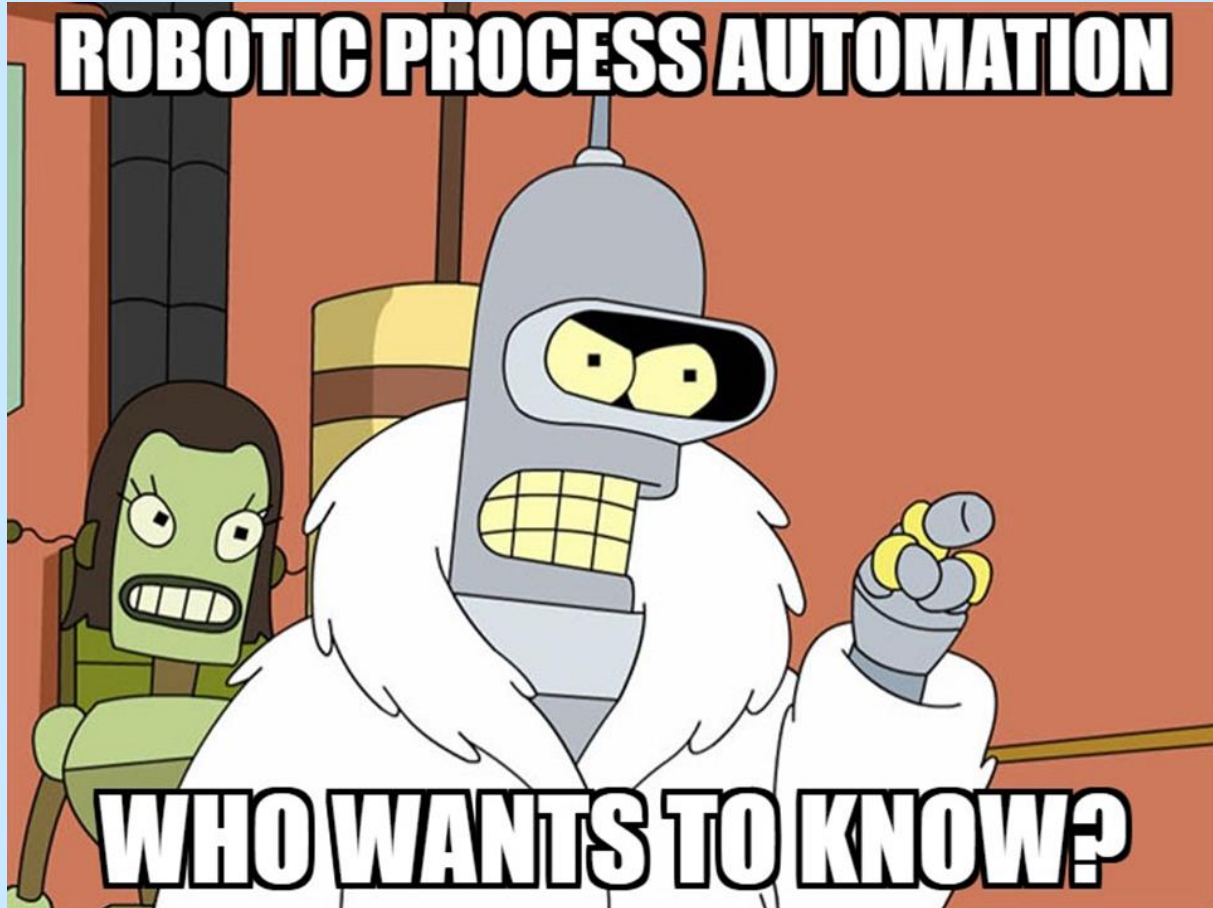
Kettering General Hospital

MAIN ENTRANCE

07976 188127
D

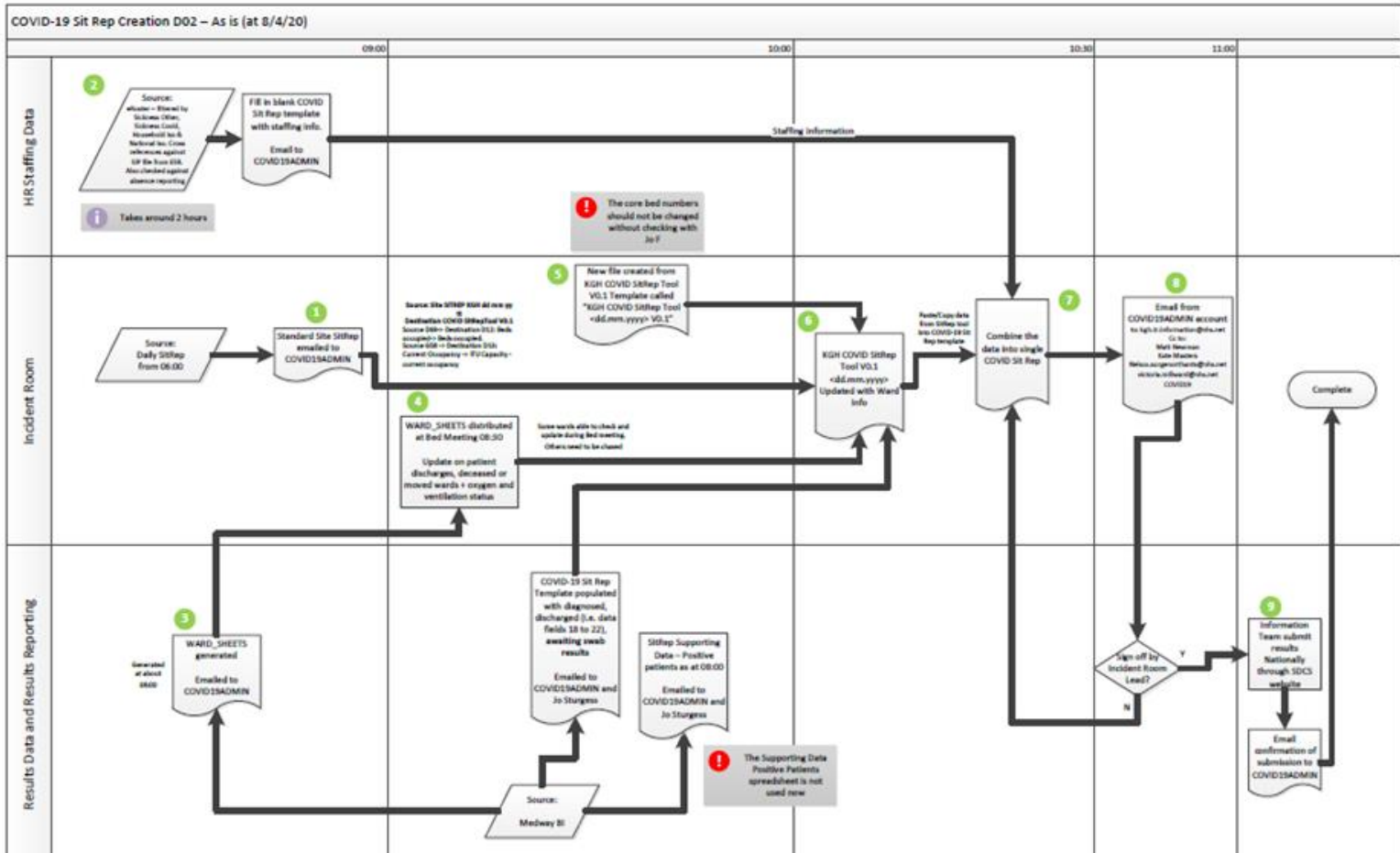
PPCI





02 Show the thing!





Meet Mary.Bot@nhs.net



03 Learnings

Some key takeaways



/Learnings

Things we discovered

- Cost Time savings can be significant (*at least on paper*), we need to build the **benefits case** over time (and show how time is freed up)
- And build the case on **quality** and reducing **risk/errors** in reporting
- We need to map **processes** that have not been mapped before
- We need a new **skill set** in Trusts or re-train developers / analysts / 'integration people' (for development & support)
- RPA (and IA) may create some challenges for **IG and privacy** (can you put a digital worker in jail or discipline them?)
- RPA could help us with some **interop issues** in the short term in advance of our systems moving to open standards (*which would be preferable*)

04 What next?

Looking ahead



What next?

KGH has just signed a 2 year deal with Blue Prism and TPXimpact

We've highlighted 5 additional focus areas where RPA could help with outpatients/Reset - these are:

- Register Patient and Admit to ED on Medway PAS
- Patient Call Reminder - outpatient appointments
- Antibody Testing
- Managing COVID Pathology Results
- SNOMED CT **Clinical Coding** (HSJ Award Winners!)

“

We believe having a digital workforce will help KGH face Reset and winter pressures.

”

Thank you!

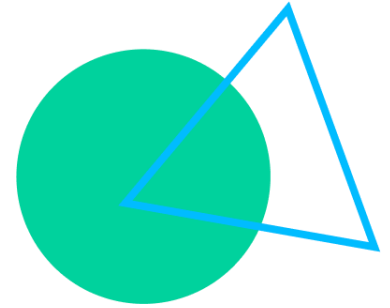
Ian Roddis, Deputy CDIO at Kettering, @ianroddis

05 A bit about TPXimpact

What is TPXimpact Intelligent
Automation?

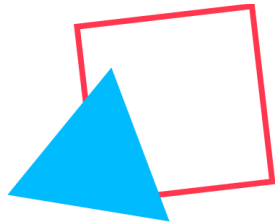


TPXimpact



TPXimpact partners with organisations to deliver transformative change with precision and pace.

We are trusted by health, central government, education, finance and industry to design and implement digital change programmes based on modern IA applications and platforms.



Automation focuses on:

- Augmenting humans not replacing them
- Technical recycling across Trusts
- Upskilling internal teams
- People and Change management over technology
- Applying our unique sector experience
- Coupling Service Design with Automation
- Cloud hosted or on-premise

Working in partnership with the UK's leading Automation providers:



/ Expertise across all areas

Working in partnership to deliver impactful change

Our vision is to deliver impactful, sustainable digital outcomes that make a positive difference to how individuals and society experience the world. Over the past 14+ years we've worked with hundreds of public, third sector and not for profit organisations to support and deliver complex products, projects and programmes.

This includes work across a diverse range of clients and causes, from start ups to global organisations, with a focus on the following sectors:

- Health and care
- Local government
- Not for profit
- Housing
- Central government



Health Care Data Trends...

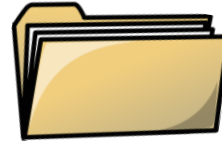
Electronic
Health
Record (EHR)



Patient
generated
data



Patient data
from
Clinicians



Overwhelming
amount of data =
High Processing &
Storage Cost

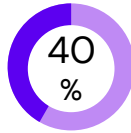
Data Standards – Health Data Interoperability – Cyber Security – Patient Authentication

Benefits of Intelligent Automation

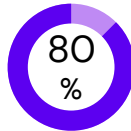
No
human error



24/7 availability



Average processing
time reduction



Processing cost
reduction up to



Improved compliance



Decoupling of business
volume from workforce
capacity



43%

Increase staff
satisfaction

Empowered staff
through elimination of
repetitive tasks

Rapid Return on Investment through the reuse of bots and processes

06 Use Cases

What we've delivered for our clients





Swansea Bay University Health Board

Prescription checking



Challenge:

Pharmacist shortage in Wales. Highly-skilled Pharmacists were too busy with paperwork and not finding enough time to spend with those in their care

Our Approach:

Automating parts of the invoice processing and prescription processes. Pharmacists dealt with exceptions in their first phase of implementation as they built trust in the bot.

Impact:

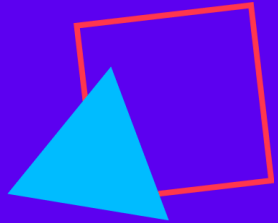
Pharmacists have gained **66% of their time** back and are able to contact service users more regularly.

The success of their project and others like it has led to the development of a **nationwide Cloud Automation Initiative** for NHS Wales.



Clatterbridge Cancer Centre

Chemotherapy



Challenge:

Operational resiliency. The critically sensitive process of scheduling chemotherapy appointments and the associated medication ordering were underpinned (and frequently delayed) by a series of highly manual processes, leading to severe and often fatal backlogs.

Our Approach:

To automate parts of their chemotherapy ordering processes and provide ongoing support and development services to identify further areas of opportunity and build out automations to maximise returns from their Digital Worker Platform

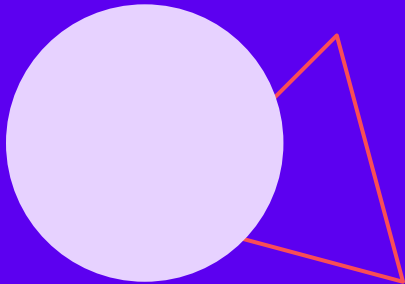
Impact:

We are still in the build phase for this project, so far so good. As well as building processes, we will produce a costed delivery plan (complete with ROIs) for all additional processes scoped. This process is also being reviewed by multiple trusts for adoption and replication.



NHS Wales

Therapy Audit Automaton Process



Challenge:

Managers are required to collect, compile and report on how 'accurate' Therapy Documentation is being completed by Team Leads and Individuals (self audit). A form containing 50+ questions has to be filled in multiple times per year by Team Leads.

Our Approach:

Using Microsoft Power Automate, the teams can now at a click of a button, start the automated process of contacting the stakeholders to;

Verify that they are still required to provide the submissions

Complete the submissions until all that are required are provided

Send reminders for outstanding verifications and submissions

Compile all data into a single SharePoint list

Refresh a Power BI dashboard showing the current status of all submissions

Impact:

The overall impact of introducing Power Automate to this single team means a saving of 363 days per year across 220 therapist. This now enables them to redirect this effort to patient facing activities.

It has also introduced a saving of 409 days per year across the 57 line managers in terms of collating and reporting on the data.

TPXimpact developed the solution that is repeatable for other teams across NHS Wales who are required to conduct the same level of reporting, which will result in these savings being multiplied Nationally.

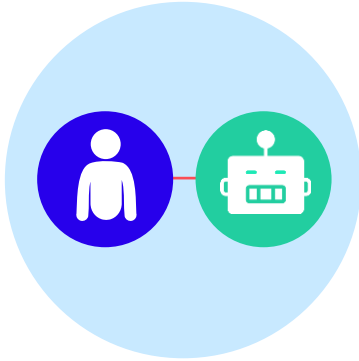
07 Next Steps

What should you start thinking about?



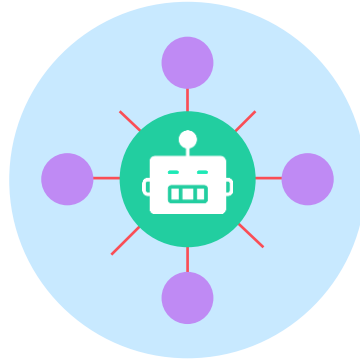
Automation Applications: Next Class

Mimic human like actions in analysing unstructured data



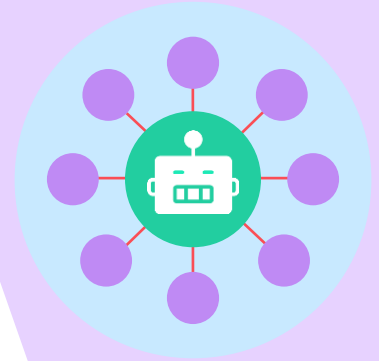
Use of Computer Vision, OCR, Natural Language Processing to read and understand complex documents (scanned documents, handwritten data, logos, stamps...)

Learn from observation



“Over the shoulder” observation of knowledge workers to verify compliance or document current processes

Improve over time



Use machine learning to group and classify processes and grow their capabilities over time

What to think about at this stage..



How to align with your Strategy?

- Automation well suited to high volume, repetitive, mundane processes
- Freeing up your precious staff time and energy
- Bite-sized Innovation practice



Partner for you

- Support your current business journey and tech ecosystem
- Meeting your staff where they are at, and bringing them to the same starting point for process automation



How do we maximise your ROI?

- Business Casing
- RPA or Low Code Readiness Assessment
- Building key performance indicators of ROI together
- Measurable efficiency gains



Impact for you

- Raise curiosity, leading to fruitful innovation culture
- Capacity building & learning new skills
- Future-proofing

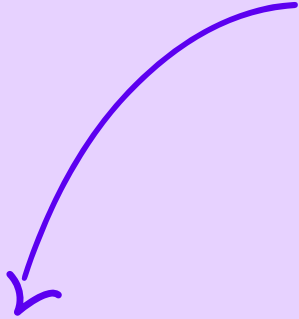

Our experience says it pays to focus on...

The Strategy and Business case and how it's created.



ROI needs to include the benefits of improved customer services, increased processing times, revenue generation opportunities etc.

Having a systematic approach to gathering requirements, calculating ROI and realising benefits



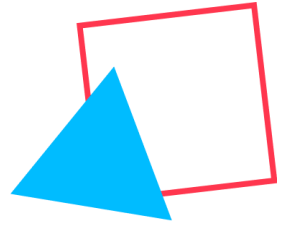
Selecting the right technical platform based on your requirements and leveraging the groups size to get value for money from the licences

What you can expect from TPXimpact Intelligent Automation

We will empower your organisation.

Our experts will....

- Create your Intelligent Automation strategy, ensuring it meets your business objectives
- Produce a business case for Intelligent Automation within the business
- Develop a context-driven roadmap for rapid wins
- Partner with your people to enhance their value to the business
- End to end process automations



// We would love to talk

We're excited at the prospect of partnering with you on this journey.

As transformation specialists, we're motivated by our work with impact driven organisations and this brief would provide a great opportunity for us to share our experiences and expertise with you and your team.

We welcome any questions that you may have.



Holly Hall Hare-Scott

Senior Partner for Health & Central Government

✉ holly.hare-scott@tpximpact.com



Iain O'Neil

Managing Partner for Health

✉ iain.oneil@tpximpact.com



Milly Price

Automation Account Executive
07535911318

✉ milly.price@tpximpact.com

Thank you

follow us on



Want to know more...

hello@tpximpact.com

TPXimpact