Birmingham City Council
Report to Cabinet

27th June 2023

Subject:	Digitally Enabled Council: Robotic Process Automation
Report of:	Peter Bishop, Director, Digital and Customer Services
Relevant Cabinet Member:	Councillor Saima Suleman, Digital, Culture, Heritage and Tourism
Relevant O &S Chair(s):	Councillor Jack Deakin, Finance and Resources Overview & Scrutiny Committee
Report author:	James Gregory, Head of ICT Programmes, DTS
	james.e.gregory@birmingham.gov.uk or 07920569220

Are specific wards affected? If yes, name(s) of ward(s):	☐ Yes	☒ No – All wards affected
Is this a key decision? If relevant, add Forward Plan Reference: 011397/2023	☒ Yes	☐ No
Is the decision eligible for call-in?	☒ Yes	☐ No
Does the report contain confidential or exempt information?	☐ Yes	☒ No

1. Executive Summary

1.1   This report to Cabinet provides further detail on the Robotic Process Automation Programme that has previously been to cabinet contained within both the 2023/24 Budget and the Digital Strategy Year 1 Update and Review.

1.2   In line with the 2023/24 Budget approved by Cabinet, allocation has been approved for funding for the increased adoption of Robotic Process Automation (RPA) along with associated savings targets already agreed in the budget.

1.3   RPA uses automation technologies to mimic back-office tasks of human workers, such as extracting data, filling in forms, copying information from spreadsheet to line of business systems, moving files etc and through its introduction can both reduce manual intervention and speed up the delivery of mundane and repetitive tasks, enabling staff to focus on higher value tasks.

1.4   RPA is used across many industries and has been used historically within Digital and Technology Services and more recently within the wider organisation.

1.5   In order to contribute to the wider savings targets of the council, it has been identified during the 2023/ 24 budget preparations, that scaling at pace the level of RPA within the council will assist in balancing the overall financial position

1.6   Building on the success of previous RPA projects within the council, while also taking into account the lessons learned from these projects that a top down approach would have been beneficial to increasing both pace and level of savings achieved, it is proposed that in the region of 90 process are targeted for automation across 18 Service Areas, yielding an anticipated saving of circa £60K per annum per process and targeting a £5.495m annual saving by financial year 25/26.

1.7   In order to reduce risk to the overall programme, this will not be a large-scale IT implementation and will build on the foundations already in place within the new Digital & Technology Service. The processes targeted will be largely independent of one another and so the delivery method will create a series of "mini" projects run in an agile manner, with each process demonstrating a return on investment before build begins.

1.8   Each service area will run through a discovery exercise of circa 20 processes in order to select the 5 with the best return on investment to move to implementation. With associated benefits agreed by the Service area Director and Head of Service who will then be responsible for working with their HR partner to release the benefit from the area.

1.9   Provision for increased licencing for the UI Path product has been made in the business case of scaling to £0.234m per annum by 25/26 and will be assessed during the course of the programme to minimise spend against this figure.

2   Recommendations

That Cabinet approve the following:

2.1   Notes the approach to the programme set out in section 3.3, that expands on the update in the Digital Strategy Year 1 Update and Review previously provided to Cabinet in May 2023.

2.2   Note that £1.476m has been allocated from Flexible Use of Capital Receipts in the 2023/24 budget, authorises the procurement and investment request from this to

fund for the delivery of the programme and provides delegated authority to the Director of Digital and Customer Services for the spend.

2.3 Notes an approval of 20% contingency on the £1.476m in line with industry best practice. If and once contingency requirement is known approval to be sought from Flexible Use of Capital Receipts that will be managed by the programme board to deliver best value. As the programme will be managed in an Agile manner work will be prioritised based on return on investment to mitigate the use of contingency funding.

2.4 Note that there is a possible redundancy cost of up to £1.996m that will need to be funded from Corporate Reserves.

2.5 Delegates authority to the Director Digital & Customer Services, with agreement with the Strategic Director Council Management (or delegate) and The Monitoring Officer (or delegate) to agree any contracts to give effect to the above recommendations.

3   Background

3.1   Robotic Process Automation

3.1.1 Robotic Process Automation (RPA), uses automation technologies to mimic back-office tasks of human workers, such as extracting data, filling in forms, copying information from spreadsheet to line of business systems, moving files etc. It combines user interface (UI) interactions and technical integrations to perform repetitive tasks between line of business applications, cross cutting enterprise systems and everyday productivity applications (such as spreadsheets). These processes are scripted and configured to create a "robot" that can process the activities at high volume and speed to free up staff from mundane and repetitive activities to focus on value adding complex activities.

3.1.2 Robotic Process automation has a presence across many business functions in most industries and its usage has accelerated over recent times as organisations look to drive efficiencies and reduce waste in business operations. Gartner site RPA growth at 63.1% in 2018.

3.2   Robotic Process Automation within BCC

3.2.1 Birmingham City Council have utilised RPA in within Digital & Customer Services for over 10 years in order to support internal functions.

3.2.2 Driven by the Digital Strategy which aims to give "our council teams the right digital tools to do their jobs" and "build the best technology and infrastructure to support council services," during 2021/22 the council delivered an initial project to expand the RPA offering (utilising the UI Path platform) to wider areas of the business outside of Digital & Customer Services.

3.2.3 The project delivered 30 automated processes, both proving the viability of the technology and providing valuable technical and business engagement lessons to fed into future works. These were in areas such as:

- Benefits – Rent Increase

- Benefits – Council Tax Write Offs and Write Ons

- Citizen Access Benefits Management

- Empty Property Exemption Review

3.2.4 The project took a bottom-up approach with service areas coming to Digital & Technology Services (DTS) with processes that they had identified would benefit from RPA. This resulted in challenges in terms of harnessing the full potential of RPA at scale and also driving cashable benefits from the service areas.

3.3 Financial Sustainability Programme - Robotic Process Automation Programme

3.3.1 As part of the 2023+ Budget, consultants were commissioned to identify opportunities to meet the Councils budgetary and savings targets through to 2026/27.

3.3.2 Three business cases were identified under the Digitally Enabled Council theme, one of which was Robotic Process Automation.

3.3.3 The business case targets savings driven through the application of RPA across 18 services covering 90 processes. The opportunity applies RPA to reduce effort currently spent on delivering manual, repetitive processes and has been informed through successful case studies at other Local Authorities.

3.3.4 In contrast to the original BCC roll out of automation outside of Digital & Customer Services, the approach taken is a "Top Down" one, as opposed to the previous "Bottom Up" approach, strategically targeting service areas that are most suitable for automation combined with the necessary mandate, resource and focus on benefits realisation.

3.3.5 The scope focuses on services with a salary spend of £3m+ a year in order to focus on services with the highest possible benefit. Those services with the highest salary spend are prioritised in order to release benefit as early in the programme as possible.

3.3.6 Contained within the 2023/ 24 Budget presented to Cabinet and approved in February 2023 the delivery costs for the programme have been secured from Flexible Use of Capital Receipts to provide funding in line with the business case estimate of £1.476m.

3.3.7 As referenced in the 2023/ 24 Budget the savings targets for each directorate have been removed from their base budget in line with the forecast in the business case.

The RPA programme will then work with the service areas to identify candidate processes that deliver the saving and implement the process automation. The Service areas, working in conjunction with their HR business partners, will then be responsible for the release of resource to meet the revised budget and any associated service redesign activities to enable this. The total annual saving identified and factored into the MTFS is £5.495m by 25/26.

3.4 Approach to Delivery

3.4.1 In order to deliver at the pace required, a Delivery Partner for the UI Path automation platform is required to provide capacity and lead on the initial delivery to build on best practices already established through previous automation work by DTS. The procurement of the delivery partner is currently being finalised based on the PPAR that was submitted and approved in the February 2023 Cabinet.

3.4.2 The following approach will be taken in order to reduce risk on the overall deployment and ensure that value for money is obtained from the supplier. This is outline below in Figure 1 – Indicative Timeline.

- The programme will be run across 4 tranches to split the delivery into manageable workloads and provide the focus required. This will broadly take the form of a 4-month delivery window for each tranche, with 4 service areas in each tranche over a 15-16 month time horizon.

- Each service area within a tranche will undertake a 1 month discovery exercise to identify circa 20 processes that are candidates for automation. From these it is expected that 5 will be selected that will yield a saving of circa £60k per annum per process. The Directors and Heads of Service will agree the processes with the programme board to then move into specification and build based on the return on investment to ensure that effort and monies are appropriately targeted. As the work is split out to a non-interdependent process level, each process represents its own "mini" project to allow both pace of delivery and reduced financial risk compared to larger interdependent technical programmes.

- Build will be conducted in an agile manner, with frequent playbacks to the service area to ensure that expectations and technical outputs are constantly aligned. If there is a deviation from the estimates or technical challenges that cannot easily be overcome are identified, then the build can be halted (in line with the agile principle of "fail fast") in order to reduce risk of overspend or non-delivery at an overall programme level.

- Once complete the new automations will be tested and operationalised with appropriate sign off from the Director/ Head of Service at the programme board before being made live.

- The Director and Head of Service will then be responsible (if required) for any service restructure to enable the savings.

Figure 1 – Indicative Timeline

Tranche	Service Area	Months 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	T1: Digital & Customer Services = minimum 5 Automation / T1: Assistance Director Delivery = minimum 5 Automation / T1: StreetScene = minimum 5 Automation / T1: City Housing Management = minimum 5 Automation	Discovery	Implement: Design, Build, Test, Deploy														
2	T2: Regulation and Enforcement = minimum 5 Automation / T2: Skills & Employability = minimum 5 Automation / T2: Planning, Transport and Sustainability = minimum 5 Automation / T2: Inclusion and SEND = minimum 5 Automation				Discovery	Implement: Design, Build, Test, Deploy											
3	T3: Development and Commercial = minimum 5 Automation / T3: City Housing Services and Support = minimum 5 Automation / T3: Service Finance = minimum 5 Automation / T3: Neighbourhoods Division = minimum 5 Automation							Discovery	Implement: Design, Build, Test, Deploy								
4	T4: Legal and Democratic Services = minimum 5 Automation / T4: Education & Early Years = minimum 5 Automation / 15. T4: Highway and Infrastructure = minimum 5 Automation / 16. T4: Commissioning = minimum 5 Automation / 17. T5: Birmingham Property Services = minimum 5 Automation / 18. T5: Public Health Division = minimum 5 Automation										Discovery	Implement: Design, Build, Test, Deploy		Discovery	Implement: Design, Build, Test, Deploy		

NB: Service order within Tranches subject to change

3.4.3 In order to further reduce risk on the deployment, the programme will be phased from a resource perspective so that BCC DTS resource are part of a combined delivery team lead by the supplier initially. Over the course of the programme tranches the BCC team will begin by initially taking on more junior roles in the team and move to leading the process as the tranches progress. This reduces the overall cost of the programme from the outset, but also provides a mitigation that lower cost resource (already in DTS base budget) become trained to a senior level so not to create a long-term dependence on the delivery partner.

3.4.4 This approach is also supported by the wider DTS restructure which is building additional long-term capacity into the existing development team to support and expand on not only RPA, but wider development and automation capabilities that can be provided.

3.4.5 It should also be noted that given the nature of the non-interdependent processes and tranches, if return on investment is not being extracted from the work undertaken, the programme board can halt the programme or reshape as there are minimal/ no sunk costs on future tranches.

4 Options considered and Recommended Proposal

4.1 Do Nothing – Do Not Proceed with "Top Down" Robotic Process Automation

4.1.1 Do nothing has been ruled out as it is not a viable option.

- BCC will not be able to meet its forecast savings targets against automation as held within 2023+ financial forecast.

- Processes that are candidates for automation will remain undelivered, leaving inefficient manual working practices in these areas

4.2   Proceed with "Top Down" Robotic Process Automation Utilising Internal Resource Only

   4.2.1   While an automation capability exits within DTS, there is insufficient capacity within the team to deliver at the pace and scale required to meet the savings targets against RPA within the 2023+ budget.

   4.2.2   DTS also does not have the experience of running RPA programmes at the scale required to meet the savings targets and so requires additional input at the early stages to build this capability.

4.3   **Recommended Option**: Proceed with "Top Down" Robotic Process Automation utilising a Delivery Partner

4.3.1   In line with the analysis from the external consultancy it is recommended that council procures a delivery partner to provide capacity and lead on the initial implementation of RPA, in line with the approach set out in section 3.3, to create the pace required to meet the committed savings targets.

4.3.2   This is estimated to cost £1.476m over a 16 month time horizon in delivery

4.3.3   A potential increase in licencing of the UI Path Product of £0.771m over the period to 26/27 has been identified.

4.3.4   Over a 4 year period it is expected that the programme will release £5.495m in savings back to the council through staff efficiencies, with a one-off cost of £1.9m for potential redundancy payments.

5 Consultation

5.1   The business case has been produced for the Task and Finish Group and the Financial Sustainability Board.

5.2   The programme definition documents have been agreed by the Financial Sustainability board and will be further briefed to affected heads of service as part of programme set up.

5.3   Financial costs and savings have been signed off by cabinet in the 2023/ 24 Budget with approval to remove savings given as part of this process.

5.4   The Cabinet Member for Digital, Culture, Heritage and Tourism and Chair of Resources O&S have also been briefed.

6   Risk Management

6.1   While the technical delivery of the programme represents a significant capital investment by the council on delivery resource, several steps have been taken to ensure the overall risk of the programme is managed as outlined below:

6.2   The technical solution for automation (UI Path) has been proven through its use in Digital & Customer Services historically and more recently within the service areas from internal projects that are being run with service areas. As such this avoids many of the risks with the introduction of new technology onto the estate, with valuable lessons already having been learnt on its implementation against individual processes.

6.3   The programme is structured so that benefits are delivered at a process level, in effect breaking it to 90 mini projects enabling greater levels of spend control and granularity on Return of Investment.

6.4   The structure of the programme enables lower/ already costed in base budget resource to scale up over the course of the projects to taper spend on external consultancy.

6.4   Provision for redundancy has been made, however given the level of saving against each individual service area it is expected that on further analysis these roles will mainly be taken from vacant posts or temporary staff.

6.5   We will engage with the Trade Unions throughout the programme and will consult with them wherever there is a change to staff conditions and structure that is identified from the output of Discovery and Design phases.

6.6   As the savings are removed at a directorate/ service level the programme becomes an enabler for the directorate to meet the challenge and so encourages buy in for the overall success of the "mini projects".

7   Compliance Issues:

7.1   How are the recommended decisions consistent with the City Council's priorities, plans and strategies?

- Supports the council's signed off 2023/ 24 budget and MTFS and is a key enabler for delivering savings by 2024/25.

- It supports the delivery of the DTS Digital Strategy approved by Cabinet Committee March 2022 by providing our employees with the right digital tools to do their job.

- Contributes towards Everyone's Battle Everyone's Business Equality Action Plan 2022-23:
  -       Section 4.2 - Deliver responsive services and customer care that is accessible, inclusive to individual's needs and respects faith, beliefs, and cultural differences.
  -       Section 4.2 - Encourage and build a skilled and diverse workforce to build a culture of equity and inclusion in everything we do.

7.2 Legal Implications

7.2.1   The actions proposed in this report are within the Council's general power of competence as conferred on it by S.1 Localism Act 2012. The council is under a delivery to deliver Best Value under S.3 Local Government Act 1999 (as amended).

7.3 Financial Implications

7.3.1   The delivery costs of the programme totalling an estimated £1.476m have been factored into the plans for Flexible use of Capital Receipts as part of the 2023/ 24 budget signed off by Cabinet. This report seeks approval to draw down the £1.476m to progress implementation works.

7.3.2   It is also requested that a provisional allocation of 20% contingency, equating to £0.295m, is set aside in line with industry best practice to manage the risk of unforeseen costs. Should the need to draw on contingency arise, approval will be sought from Flexible Use of Capital Receipts and that will be managed by the programme board in conjunction with the Capital Board. As the programme will be managed in an Agile manner work will be prioritised based on minimum viable product and return on investment to mitigate the use of contingency funding.

7.3.3   The potential increase to UI Path Licencing has been scaled into the model at a cost of £0.234m ongoing by 25/26 and will be assessed through the course of the programme and added to the DTS 3rd Party budget. This will need to be approved through the normal budget process via a growth bid.

7.3.4   There are likely to be redundancy costs associated with delivering these savings, these are currently estimated at £1.996m and will need to be funded from corporate reserves.

7.4 Procurement Implications

7.4.1   UI Path Delivery Partner

7.4.1.1   The use of a Delivery Partner is required to add scale and capacity to the DTS team in order to deliver the programme at the pace required.

7.4.1.2   A PPAR for the Delivery Partner has been approved by Cabinet in February 2023 for the procurement of a UI Path Delivery Partner.

7.4.1.3   The procurement is concluded against the DOS5 framework with a delivery partner selected. Spend against this contract will only be undertaken once this cabinet report is approved.

7.4.2   UI Path Licencing

7.4.2.1 Licencing for UI Path is currently contracted and will be assessed throughout the Discovery and Implementation stages. If a licencing increase is required, this will be addressed via a contract variation where applicable or compliant procurement route via a national or regional framework

7.5 Human Resources Implications (if required)

7.5.1 It is expected that service areas will be provided with capacity through the implementation of RPA. At the end of each discovery phase for a service area the impact of the processes' automation will be assessed in conjunction with the director and head of service as part of the RPA Programme Board. The Head of Service will then work with their HR people partner if wider re-organisations are required to release benefit.

7.5.2 We will engage with the Trade Unions throughout the programme and will consult with them where ever there is a change to staff conditions and structure.

7.5.3 If redundancy is required the final funding required will be subject to:

- Anticipation of 10% natural wastage due to retirement/ resignation
- The council to offer training in the wider service areas as a whole, providing upskilling and knowledge transfer opportunities
- Use of effective succession planning
- Offering any vacancies across the wider teams, to those at risk.

7.6 Public Sector Equality Duty

7.6.1 An initial screening for an Equality Analysis (EA) has been undertaken by the CPMO for this programme. It is expected that at the end of each discovery exercise with a service area an updated EA will be undertaken/updated once the process for automation are selected to move into delivery to identify any adverse impacts on the protected groups and characteristics under the Equality Act 2010. The reference number of the EA is EQUA1069.

7.7 Environmental and Sustainability Implications

7.7.1 The automation of services will support more efficient working practices which in turn helps to contribute to potential reductions in travel, power usage and wider property rationalisation objectives.

8   Appendices

A – Request for Funding – Savings Programme – RPA

B – Environmental and Sustainability Impact Assessment

C – Equalities Impact Assessment

9 Background Documents

- Report to Cabinet of March 2022: Digital Strategy 2022 – 2025

- Report to Cabinet of 14th February 2023 PPAR – UI Path Delivery Partner (Key Decision Mar-May+Awards Oct-Dec 22)

- Report to Council of February 2023 Budget 23/24

- Report to Cabinet of May 2023: Digital Strategy Year 1 Update & Review

10 Text References