North Lanarkshire Council
Report

Transformation and Digitisation Committee

☒approval ☐noting **Ref** KH/LJ/DG **Date** 13/11/19

DigitalNL Intelligent Automation - Proof of Concept

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Executive Summary

Contained within the DigitalNL transformation programme and illustrative work packages for the first year of the programme approved in March 2019, work package 3 'Productivity improvement through Intelligent Automation' (Robotic Process Automation) identified the potential for the development of a "Proof of Concept" (PoC) project to assess the impact of automation technology.

This report provides committee with an update regarding the work package activity for the Intelligent Automation PoC and outlines the steps taken to develop the bot and move the PoC to live status.

Recommendations

It is recommended that the Committee:

(1) Note the implementation of the first bot within the Revenues and Benefits function.
(2) Endorse the next steps outlined within the report.

The Plan for North Lanarkshire

Priority	All priorities
Ambition statement	(21) Continue to identify and access opportunities to leverage additional resources to support our ambitions
	(23) Build a workforce for the future capable of delivering on our priorities and shared ambition
	(24) Review and design services around people, communities, and shared resources
	(25) Ensure intelligent use of data and information to support fully evidence based decision making and future planning

1. Background

1.1 Members will recall the progress report on the first year of Digital NL submitted to the Transformation and Digitisation Committee in September 2019. The report contained information on Intelligent Automation and outlined the assessment of business processes likely to benefit from automation.

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2. Report

2.1 As members are aware the Transformation and Digitisation Committee of September 2019, approved an Intelligent Automation proof of concept project (previously referred to as Robotic Process Automation). This would establish the feasibility and effectiveness of the application of software robot technology within the council, as a means to automate repetitive tasks within the council operations.

2.2 Intelligent Automation will enable many of the current manual and repetitive processes to be completed though the use of a software robot. The ability to replicate the activity currently undertaken by staff on a council system means that staff will be able to focus effort on areas which require more intensive support.

2.3 Proving the technology within the complex council technology landscape will allow an objective assessment to be undertaken to determine how applicable the Intelligent Automation technology is. It is not service specific and it is anticipated that given the success of the PoC, further opportunities for automation will be identified across council services.

2.4 Following a review of Robotic Process Automation (RPA) technology market leaders, UiPath was chosen as the preferred technology as it offers the most suitable cloud hosting, support and additional services including the provision of real time dashboards as well as the ability to produce performance reports on request. UiPath also provides assurance that staff have the highest level of security vetting (Developed Vetting (DV) certification).

Stakeholder Engagement

2.5 Engagement with various stakeholders; services, ICT staff and leadership teams was undertaken to identify suitable processes for automation. This included:

- An Intelligent Automation awareness session held with the DigitalNL Programme Board to increase understanding of the technology. Based on the requirements for the PoC the robot software selected was UiPath. The selection was made on GOV.UK's digital marketplace and the parameters used were:
    - Ability to install software locally
    - Free licence for development purposes
    - Provision of support through different channels (e.g., webchat, email etc.)
- Process assessment workshops were held with teams from the Employee Service Centre, Revenues and Benefits and Music Tuition to walk through candidate (potential) processes and understand their suitability for automation.

Selection of the Proof of Concept

2.6 Further detailed assessment of the candidate processes identified the BACS Lists Updates process within Revenue and Benefits, as the most appropriate for automation as part of the proof of concept. This selection was based on the following criteria:

- Business rules documented
- Process is not “broken” and is well understood
- Repetitive process with over 1,000 instances being recorded per month.

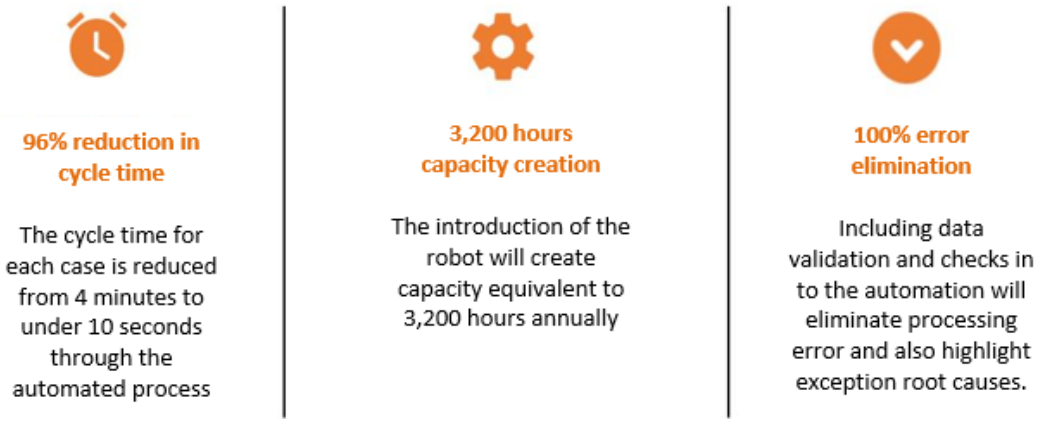
Following this approval, work commenced to construct and configure the “bot”.

Development and Benefits Realisation of Proof of Concept (PoC)

2.7 The design and development of the Intelligent Automation PoC to automate the BACS List Updates for Council tax direct debits was complete at the end of October, 2019. During the development phase the bot tested 500 cases in a secure environment allowing direct debits to be processed automatically on to the Civica Open Revenues system working on the multiple systems involved in the direct debit updates and providing detailed feedback to the team.

2.8 Until now this has been a manually intensive task with over 1500 updates to apply each month with each update taking 4 minutes. Application of the bot has brought this down to under 10 seconds, saving around 3200 hours per year, or a 96% reduction in overall processing time.

2.9 Positive engagement with teams within the Revenue and Benefits function and their input into the design, build and test process has enabled just two iterations of the process to get it right. The bot is now implanted and already realising process benefits**.**



2.10 Following the success of this robot, we are working with teams across Housing, Social Care and Revenues and Benefits to find the next "candidate processes" for automation.

Next Steps

2.11 On completion of the PoC project the next steps are to further assess and categorise identified processes to create a suitable backlog of opportunities for Intelligent Automation. This will include the following activities:

- Technical design of infrastructure required to support the robot software
- Implementation and non-functional testing of the robot software

- Further workshops to identify candidate processes for inclusion into a backlog of opportunities
- Exercise to prioritise the opportunities in terms of benefit for the council
- To release the robot into the live production environment, several 'go-live' activities are required to ensure that the robot will perform and realise the benefits as expected.
- Working with the Revenue and Benefits team, additional functionality will be added to the robot to ensure that all process steps are automated, maximising the benefits. The robot will be optimised for its new environment, maximising throughput, accuracy and reduced error rate.

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3. Equality and Diversity

3.1 Fairer Scotland Duty

There are no requirements for an assessment under the Fairer Scotland duty arising from this report, however, members should be assured that The Fairer Scotland assessment process will be undertaken as appropriate when designing services for customers, businesses and residents.

3.2 Equality Impact Assessment

Specific equality impact assessments will be undertaken by council services, as appropriate, when developing the phased implementation programme.

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4. Implications

4.1 Financial Impact

The year one budget for the Programme is now agreed and built into the council's overall budget monitoring processes and controls. The estimated budget for this element of individual work packages 3 and 4 is approximately £160K.

Further information and costings in respect of the programme will be submitted to committee as projects progress, with the full financial impact duly considered within the council's future short and longer-term financial planning assumptions.

4.2 HR/Policy/Legislative Impact

There will be changes to some employee roles as a result of the DigitalNL programme. The DigitalNL team continues to collaborate with the People and Organisational Development (POD) Team regarding early stakeholder engagement and consultation, as these are key to the successful implementation and delivery of the HR related aspects of this iterative transformation programme. With a view to taking this forward, detailed plans are presently being drafted in respect of the initial implementation releases.

4.3 Environmental Impact

Environmental impacts will be identified as appropriate when designing services for customers, businesses and residents.

4.4 Risk Impact

Effective identification and management of risk is considered critical to the success of this programme. A comprehensive risk assessment and Risk and Issue Log (RAIDE) is being managed and monitored throughout the programme with high level risks and all programme level issues being reported to the SRO and Delivery Board on a monthly basis.

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5. Measures of success

5.1 Success will be evidenced through savings (in time, quality and cost) due to the deployment of automation technology.

5.2 Specific measures of success will be identified and evidenced as The Plan for North Lanarkshire and all Programmes of Work (including DigitalNL) progress.

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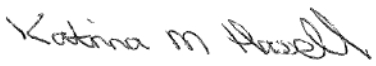
6. Supporting documents

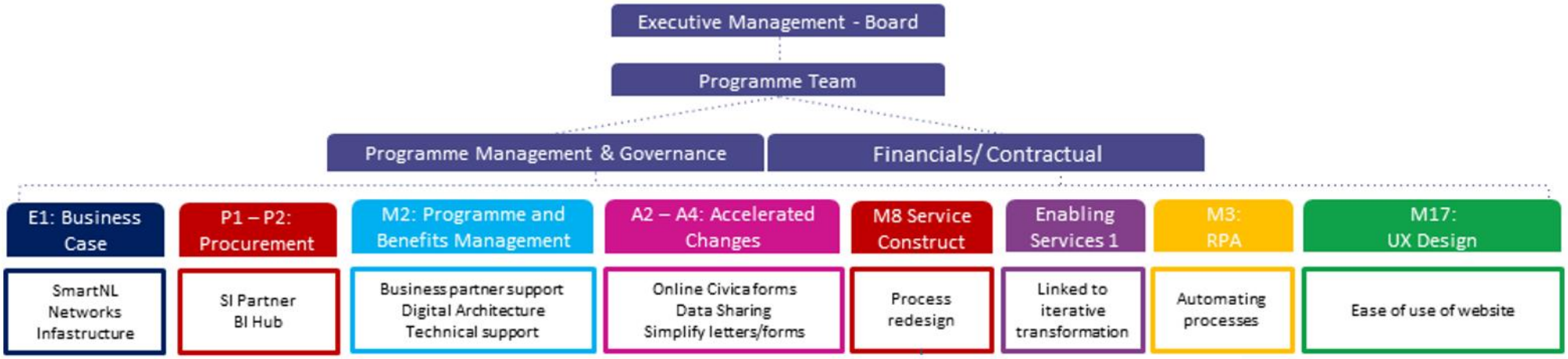
6.1 Appendix 1 – Year One – Work Packages & Governance



Head of Business Solutions

Appendix 1

Year One – Work Packages & Governance



- **BI Hub**
- **Data Strategy**
- **Payment Options**
- **Integration Strategy**