Birmingham City Council
Report to Cabinet

14 May 2019

Subject:	**Update on the delivery of the Birmingham City Council Information and Communications Technology and Digital Strategy (2016-2021)**
Report of:	**Director of Digital and Customer Services**
Relevant Cabinet Member:	**Cllr Brigid Jones - Deputy Leader**
Relevant O &S Chair(s):	**Cllr Sir Albert Bore, Chair, Resources O&S Committee**
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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:	☐ 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   The purpose of this report is to update Cabinet on the progress made on the delivery of the Council's Information & Communications Technology and Digital Strategy (ICT&D Strategy 2016-2021).

1.2   It sets out progress made since the previous update report to Cabinet on 27 March 2018 and the future delivery plans and ambitions to exploit technology to deliver better services for the Citizens of Birmingham.

2   Recommendations

That Cabinet:-

2.1   Notes the progress made in delivering the ICT & Digital Strategy as set out in Appendix A.

2.2   Notes the plans and ambition for the continued development of the ICT & Digital Strategy set out in Appendix B.

3   Background

3.1   Technology is a key enabler that supports the Council to be the best it can be, with the delivery of the Council's ICT and Digital Strategy 2016-2021 providing the Council with effective, efficient and reliable services in support of the Councils vision. The Council has a clear approach to improving ICT and Digital service delivery to meet the increasing expectations of citizens as well as being able to emulate the current trends in digital interaction and communications.

3.2   The strategy and other portfolio documents form a Governance and Assurance framework for the design and implementation of ICT and will help ensure that there is an evidence based approach to the choice of technologies the Council can use. In October 2016 Cabinet approved the Council's ICT&D Strategy, which formed a new framework for ICT service operation around 6 key themes:

1. Integrated ICT and Digital Services - to deliver a reliable, flexible, integrated, secure, accessible and well managed service.
2. Digital facilitation - to enable our stakeholders to participate and fully contribute to the growth of the Digital Economy and Digital Society and create a Digital Culture.
3. Insight - to become more data centric – so we can create the capability to turn information into insight.
4. Commissioning - to deliver 'Value for Money' services through the commissioning of excellent ICTD.
5. Governance - to deliver the effective management of ICTD.
6. Innovation - to be innovative; to make changes to what's established, by introducing new methods, ideas, and solutions.

3.3   The strategy's overarching principles to "Simplify, Standardise and Share" ensures that the council maximises the benefits from investment in new technology and digital services by:

• **Simplify** – the way we operate, in order to add value and drive up efficiency.

• **Standardise** – the way we operate, emulating the best and enabling agility.

• **Share** – collaborate, innovate and inform

These design principles will ensure that we:

- Consolidate services and applications
- Re use and rationalise.
- Share with and learn from partners, internally and externally,
- Don't reinvent - learn from others and share.

3.4 The strategy has been linked together to form a number of key areas of focus:

- Improving the strategic use of data and information to drive better services via our new Information Management strategy e.g. data analytics, visualisation, intelligence, data quality

- Improving information assurance, maturity, risk management and safety of personal data

- Improving Manager and Employee agility, productivity and collaboration e.g. with the full adoption of O365, Skype, Yammer, Windows 10, new devices, improved wifi access etc.

- Improving how Managers and Employee's create, develop and manage employee and financial information e.g. HR & Finance Systems

- Implementing better self-service for customers re-engineering our service delivery to take maximum advantage of new technology e.g. Brum Account, Connect to Support and our website, to simplify how customer's access services 24/7.

- Implementing new service models that take advantage of digital developments e.g. artificial intelligence, social proscribing, integration of Health & Adult Social Care data to provide single view of patients and carers, the "internet of things" integrated into how we care for the most vulnerable etc.

- "Smart City 2.0" e.g. improving our digital infrastructure to support economic growth, 4G and 5G, digital inclusion and skills – working in partnership with the combined authority

- Deliver a new council-led Information, Technology and Digital Service taking us up to and beyond the end of the current partnership with Capita which ends in 2021.

3.5 Some of these improvements are already underway, some are in development stage and all will require new ways of working for our services improving outcomes for end customers. Appendix A gives a summary of the projects delivered in the last year across the 6 themes of the strategy. Key deliverables for this and the next financial year 2019/2020 include the following projects:

- Further deployment of Windows 10 and Office 365. This will support greater agile working across the Council and provide staff with access to the latest technology to support their service areas

- Delivery of the Information Management Strategy that will support the better use and control of data across the Council

- Finalisation of the Reference Architecture will provide the Council with a strong framework for commissioning and shaping ICT, preventing duplication and increasing standardisation and therefore value for money (and return on investment)

- Work will continue on maintaining the Council's software and hardware is up-to-date and secure

3.6 Progress to date has been wide ranging and has impacted a number of areas across the Council as demonstrated in the detailed performance in Appendix A. In October 2016 the strategy identified the following delivery timeframes, or iterations (which would be supported by detailed). They were:

- Iteration 1 – Foundation: (tactical) = now to 2017

- Iteration 2 – Developing: (medium-term) = 2017 to 2019

- Iteration 3 – Enabled: (strategic) = 2019 to 2021

It has been necessary to maintain a dynamic approach to the planning and prioritisation of the key deliverables envisaged in the strategy. Some elements have been re-prioritised, such as creating an Innovation lab and portal, as these would not deliver enough value for the Council at the time, while external factors, such as the "Future Council" initiative have been re-focussed as a new Council Plan came into operation in July 2018. The Contract transition also met with significant issues which impacted the anticipated roadmap of activity, as outlined in the Cabinet report of the 16th April, and an accelerated approach to this transition has now been agreed, which will see a significant proportion of the Capita contract return to the Council's control from the 1st August 2019. A new business led prioritisation criteria and approach is now in operation to ensure future initiatives are in line with the strategy.

3.7 A number of emerging technology trends continue to influence the Council's strategic plans going forward. These trends illustrate the point of maintaining a flexible and agile approach to the implementation of the strategy. Some of the key trends that will give the Council opportunity to improve outcomes for the Citizens of Birmingham are:

- **"Datafication" -** almost everything we do as individuals leaves a trail of data breadcrumbs and there has been an unprecedented explosion in data. Just in the average minute, Facebook receives 900,000 logins, more than 450,000 Tweets are posted, and 156 million emails and 15 million texts are sent. We are essentially doubling the amount of data created in the world roughly every two years. Harnessing data to drive better insight and improve how we manage services remains a key focus for the Council.

- **"Every day devices becoming SMART"** – not just your fridge, your doorbell or your central heating. This is having a profound impact in how we use devices to manage our lives and improve outcomes particularly for the vulnerable.

- **Artificial Intelligence (AI)** – computing that can now undertake more and more human tasks and learn is beginning to grow and develop as a technology.

- **Automation** - The more intelligent machines become, the more they can do for us. That means even more processes, decisions, functions and systems can be automated by using algorithms or robots.

- **Device Interaction** - organisations are gradually integrating their products with the likes of Siri, Alexa and Google Assistant. Estimates suggest that, by 2020, 50 percent of all searches will be voice searches, and around 30 percent will involve no screen whatsoever. As a result, all kinds of businesses are gradually integrating their products with the likes of Siri, Alexa and Google Assistant. These features could help in areas such as social isolation, dementia care and social proscribing.

- **Virtual reality and augmented reality** - representing the next huge leap in interface innovation, transforming how businesses interact with customers could be a big area of development for urban planning for example.

- **Everything connected –** fibre to the premise; 5G meaning faster connections and a richer experience in video and augmented reality which could be applied to autonomous vehicles or better health care.

- All of the above will change how we work. All enabled by more powerful computers, with computing power doubling at a rate of approximately every two and a half years, combined with different ways to re-package and consume technology services. However, introducing and keeping pace with technological advances, while essential, also needs to be balanced against getting the basics right and dealing with legacy issues.

3.8 The work to deliver the ICT&D Strategy will continue in the next financial year. A series of transformation maps included in this report (see Appendix B), show the high level plans and ambition for improved use of technology and digital across the Council. These have been developed collaboratively bringing forward innovation and new ways of working as appropriate.

4   Options considered and Recommended Proposal

4.1 Do nothing - It would be possible to continue without delivering the ICT & Digital Strategy however as ICT is a key enabler for the Council Plan, not delivering the key areas of the ICT&D Strategy would negatively impact on it success. There is an existing rolling programme of updates to, and replacement of ICT & Digital assets as the Council's ICT hardware and software reach the end of their service and support lives. The implications are that the investment needs to be delivered to ensure the Councils network functions effectively.

4.2 Deliver the ICT &D Strategy - As the Council has already approved the strategy and the associated technical refresh programme, and ICT is a key enabler for the future the work needs to continue and delivery the Strategy and its associated projects.

5   Consultation

5.1 Internal Consultation: The Cabinet Member for Finance and Resources, the Chair of Resources Overview and Scrutiny Committee, the member with responsibility

for ICT matters from the Conservative Group, Leader Liberal Democrat Group and the member with responsibility for ICT matters from the Liberal Democrat Group have been consulted regarding the contents of this report.

5.2   Extensive internal consultation has been undertaken across the Council to ensure the strategy remains aligned to the business plans of each directorate as well as highlighting new areas that could be exploited. These are summarised in Appendix B.

5.3   External Consultation: The ICT&D Strategy was subject to extensive external consultation when it was developed in 2016. This covered Citizens, Central Government Departments, Public Health England, NHS, West Midlands Police, West Midlands Fire & Rescue, WMCA, LEP and the Society of (Public Sector) IT Management (SocITM). The main findings from that consultation were:

- Ensuring more user-centred approach during testing and evaluation.

- Enabling our citizens and businesses to participate and fully contribute to the growth of   the Digital Economy and Digital Society.

- Ensuring that the benefits of co-operating with other local authorities in the region on data and systems will happen.

- The importance of data and ensuring exploitation at a neighbourhood level as well as service or directorate or whole council level.

- Ensuring that through the development of the Council's reference architecture and technology road map due consideration is given to areas such as Digital Leadership, Communication and Engagement (both internal and external), Council ways of working and behaviours and development of digital skills, the Cities Digital Infrastructure and Collaboration.

- There was a range of Citizen feedback via the Council's "Be Heard" platform (see https://www.birminghambeheard.org.uk/economy/birmingham-city-council-ict-digital-strategy-2016/) e.g. the quality of the Council's digital presence (website), the impact of austerity as it impacted the Council's ability to invest in things like digital inclusion, improving the in-House ICT Management etc.

- The feedback was included in the final strategy that was approved by Cabinet on the 18th October 2016.

6   Risk Management

6.1   There are a range of risks the service is managing as the strategic outcomes are delivered through the strategy. These are:

- Problems are experienced with programme funding which impact the realisable business benefits.

- The impact of the transition of services from Capita to BCC which may cause delays, increased costs, and/or poor quality delivery of the projects.

- The digital skills and culture change needs of the Council may demand far more effort than planned for and funded within the programme, but are essential to deliver the new ways of thinking and working necessary to exploit the opportunities enabled by the new technologies being implemented.

- Lack of suitably qualified and availability skills at the time they are need to implement the new technologies being delivered.

6.2 Appendix D highlights the key risks and mitigations associated with the implementation of the ICT & Digital Strategy.

7 Compliance Issues

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

7.1.1 The Council's objectives and priorities as detailed in the Council Plan, approved by Cabinet on the 26 June 2018 will be supported by the adoption of this proposal which is consistent with the ICT & Digital Strategy (2016 - 2021) approved by Cabinet in October 2016.

7.1.2 The Council Plan approved by Cabinet in June 2018 stated that the Council must:

- Have greater integration between our services/functions
- Make much better use of customer insight and business intelligence to ensure we make informed decisions and deploy all our resources appropriately
- Be leaner and more agile, with fewer layers of management and increased spans of control.
- Work more collaboratively as 'One Council'.
- Further consolidation of support services to realise efficiencies

All of which are supported by the Councils ICT & Digital Strategy (2016-2021).

7.2 Legal Implications

7.2.1 The Council is under a duty under Section 3 of the Local Government Act 1999 to make arrangements to secure continuous improvement in the way in which its functions are exercised, having regard to a combination of economy, efficiency and effectiveness

7.2.2 The City Council will carry out this work under the General Powers of Competence Section 1 of the Localism Act 2011.

7.3 Financial Implications

7.3.1 In October 2016 Cabinet approved the budget for the implementation of the ICT & Digital strategy. The indicative cost of the total programme over a five year period at that time was estimated to be £41.690m. The initial tranche of proposed projects would incur expenditure of £35.420m for projects that

was anticipated to be initiated within the first 18-month period of the programme.

7.3.2 In March 2018 Cabinet approved a re-profile of the expenditure associated with the implementation of the strategy that took into account the approach to transition and transformation agreed at that time to take back control of the Council's ICT Service from Capita.
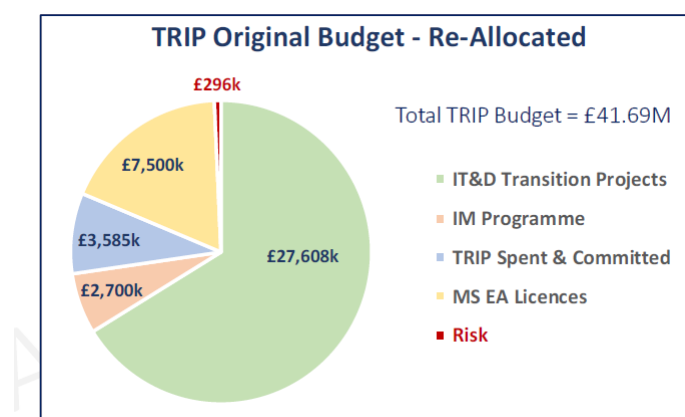

Figure 1: Original Technical Refresh and Implementation Programme (TRIP) – Re-allocated

7.3.3 A summary of the capital and revenue spend to date and going forward is shown below in Table 2.

ICT & D Programmes		To 2018/19 £'m	Y.E 2019/20 £'m	Y.E 2020/21 £'m	Forecast Total £'m	Original TRIP £'m		Change £'m
ICT & D Strategy Programme	Revenue	2.567	8.422	3.750	14.739	16.889		(2.150)
ICT & D Strategy Programme	Capital	0.996	7.070	3.394	11.460	10.719		0.741
Information Management Strategy	Revenue		0.233	1.391	1.624	1.624		0.000
Information Management Strategy	Capital			1.074	1.074	1.074		0.000
Spend to date TRIP	Capital	1.760			1.760	2.271		(0.511)
BRUM Account (committed TRIP scheme)	Capital	0.848	0.466		1.314	1.314		0.000
Microsoft Licenses	Revenue	4.809	2.473	2.473	9.755	7.500		2.255
Microsoft Licenses 4th year not in £41.687m	Revenue			(2.473)	(2.473)	0.000		(2.473)
Risk				0.296	0.296	0.296		0.000
Totals		10.980	18.664	9.905	39.549	41.687		(2.138)

Table 2: ICT & Digital Strategy Investment Summary (to 2020/2021)

7.3.4 Table 2 above shows that to 2018/2019 £10.980m has been spent delivering the ICT & D investment programme. A further £18.664m in 2019/2020 and £9.905m in 2020/2021 is forecast to be spent. The original budget of £41.687m over a three year period to 2019/2021 is shown in the second column with the change between the current forecast and the original TRIP shown in the last column named "Change". The major change is to reduce revenue spend to £14.739m from £16.889m, a reduction of £2.150m, whilst the capital forecast spend has increased by £0.741m to

£11.460m. The programme has been reduced to support the funding of the transition of the IT services back in house. Individual full business cases are being developed to support the delivery of these projects. The Information Management Strategy is anticipated to start in 2019/2020 with full delivery by 2020/2021 of the total £2.7m programme (capital £1.074m and revenue of £1.624m). Spend to date on approved projects and the BRUM Account, including the investment in Members' devices is forecast to spend less than original forecast with an anticipated savings against budget of £0.511m. Microsoft licenses to year end 2018/2019 have cost £4.759m with further costs of £2.473m expected in years 2019/2020 and 2020/2021 respectively. The original investment programme set aside £7.5m for a three year period to 2019/2020 against which there is an anticipated saving of £0.216m. However, further due diligence will be required to understand any changes in Microsoft licences as the Council changes. The fourth year of license fees which are funded from revenue have been deducted in the table above to enable comparison. Also, the Council will need to monitor the financial impact of moving to consumption based service models of delivery, as opposed to more traditional capital intensive delivery.

7.3.5   The Strategy aims to deliver £19.026m savings over the 5-year period to 2023/24 which involves the following example activities:

- Simplifying the Council's wide area network reducing core contract costs of service and increase flexibility in service offering removing the dependency on our property portfolio

- Simplifying the Council's voice network removing our reliance on old technology.

- Rationalisation of the datacentre hosting environment simplifying the technology used and reducing the number of datacentres in use.

- Reducing the number of applications the Council uses and reducing the overall software costs through the adoption of a more pay-as-you use charging scheme and centralised software licencing.

- Simplification of a managed mobile environment reducing complexity cost and improving agility.

Detailed business cases are currently being developed for this work.

7.3.6   The cost of capital and revenue consequences to afford the ICT & D Programme as shown in Table 2, will total £36.224m, as shown below in

Table 3, which will be funded by flexible use of capital receipt of £8.577m and IT base revenue budget of £27.647m (shown as prudential borrowing budget). This provides a surplus of £13.268m against (prudential borrowing) budgets over the period to 2025/26 (see Table 3). This analysis excludes the Microsoft licences

Prudential Borrowing funding of revenue and capital elements of ICT & D Strategic Programmes	19/20 £'m	20/21 £'m	21/22 £'m	22/23 £'m	23/24 £'m	24/25 £'m	25/26 £'m	Total £'m
On going capital charges, and 18/19 Capital	4.218	2.685	2.043	0.334	0.334	0.000	0.000	9.613
19/20 Capital element of Programmes		1.608	1.608	1.608	1.608	1.608	0.000	8.041
20/21 Capital element of Programmes			0.955	0.955	0.955	0.955	0.955	4.774
Sub Total of Capital Programmes charges	4.218	4.293	4.606	2.897	2.897	2.563	0.955	22.428
Revenue impact of Programmes	8.655	5.141						13.796
Total future cost of Programme	12.873	9.434	4.606	2.897	2.897	2.563	0.955	36.224
Flexible use of Capital Receipt	(5.764)	(2.813)						(8.577)
Net Spend	7.109	6.621	4.606	2.897	2.897	2.563	0.955	27.647
Prudential Borrowing Budget in LTFP to afford Programmes	(7.193)	(6.364)	(5.967)	(6.838)	(5.171)	(4.420)	(4.962)	(40.915)
(Surplus)Deficit against LTFP budget	(0.084)	0.257	(1.361)	(3.941)	(2.274)	(1.857)	(4.007)	(13.268)

Table 3: Prudential borrowing funding of the strategy programmes.

7.3.7 The Total ICT & D strategic investment programme forecast costs and profiling, as shown in Table 2, have been refined from that reported to Cabinet in April for Transition. The differences to the impact on LTFP budgets are shown below in Table 4. Surpluses against the LTFP budgets are being used to balance budgets and repay Invest to Save funds in the periods to 2022/23. The additional cost is £1.116m over a five year period to 2024/25. The additional cost of £0.223m in years 2020/21 and 2021/22, will affect the repayments previously profiled and this will need to be managed. Later years do not have an impact to repayment to the Invest to Save Reserve or funding delivery within long term financial plan budgets.

Surplus Deficit against LTFP budget	19/20 £'m	20/21 £'m	21/22 £'m	22/23 £'m	23/24 £'m	24/25 £'m	25/26 £'m	Total £'m
(Surplus)Deficit against LTFP budget as per Table 3	(0.084)	0.257	(1.361)	(3.941)	(2.274)	(1.857)	(4.007)	(13.268)
(Surplus)Deficit against LTFP budget reported in April Cabinet Report	(0.000)	0.034	(1.585)	(4.164)	(2.497)	(2.164)	(4.007)	(14.384)
Additional Cost/ (savings) from previously reported	(0.084)	0.223	0.223	0.223	0.223	0.307	0.000	1.116

Table 4: Additional revenue impact of Capital and Revenue Programmes.

7.3.8 All the above are in line with the Council's ICT&D Strategy approved by Cabinet in October 2016

7.4   Public Sector Equality Duty

7.4.1   On 18th October 2016, Birmingham City Council Cabinet approved the ICT & Digital Strategy (2016-2021). The work to implement the strategy has two major projects:

- An Investment Programme - implementing replacement and new, enabling ICT assets in line with the strategy and in support of the Council's new business architecture.
- An ICT Transition Programme - to take BCC up to and beyond the end of the Service Birmingham partnership with Capita and the ending of the joint venture with Service Birmingham Ltd.

7.4.2   An Equality Analysis was completed during the development of the ICT & Digital Strategy (2016-2021). There has been no change to that analysis.

8   Appendices

- Appendix A - Highlights of what has been achieved and is in progress

- Appendix B - Highlights of what is planned

- Appendix C - Equality Impact Analysis

- Appendix D – Risk Log

9   Background Documents

- Report to Cabinet 18th October 2016 - Birmingham City Council Information & Communications Technology & Digital Strategy (2016 - 2021)

- Report to Cabinet 18th October 2016 - Birmingham City Council Strategic ICT & Digital Investment Programme (2016 - 2021)ICT and Digital Strategy (2016 – 2021)

- Report to Cabinet of 27th June 2017 - Delivery of Savings against Service Birmingham ICT Contract

- Report to Cabinet of 14th November 2017 - Budget savings proposals, ending the Joint Venture (JV) with Capita for Service Birmingham and proposing new contractual arrangements up to 2020 / 2021

- Report to Cabinet of 27th March 2018 - Outcome of final stage negotiations between BCC and Capita - proposed IT and Digital Service Transition Roadmap to 2020/21, with associated investments and benefits (appendix 2 gives a summary of performance against the strategy)

- Report to Cabinet of 16th April 2019 - Capita ICT Service Transition update