



Classification	Item No.
Open	

Meeting:	Cabinet
Meeting date:	24 th March 2021
Title of report:	IT Capital Programme: Cloud Migration Programme
Report by:	Councillor Tahir Rafiq, Cabinet Member for Corporate Affairs and HR
Decision Type:	Cabinet Key Decision
Ward(s) to which report relates	All

Executive Summary:

The ICT Capital Programme was approved by Full Council in February 2019 to support the modernisation of the Council's IT estate and to facilitate the delivery of a new programme of investment in technology and digital services to support future transformation.

Of the £9 million agreed in 2019, just over £2m has been spent on essential remedial work to improve the security and stability of our ICT infrastructure. An additional £1.3 million was committed last year to a three year Microsoft Enterprise Agreement.

This Key Decision is to allow the transformation plan to progress to the next phase of our Cloud Migration Programme through the appointment of a delivery partner to undertake the build phase of the project, including the development of our Microsoft Azure tenancy to maximise the value we can gain from our Enterprise Agreement. The business benefits will include greater resilience through a cloud-based data recovery model and improved business intelligence through investment in data management.

Recommendation(s)

That:

Cabinet approves the decision to use the ICT Capital Programme to fund the build phase of the Cloud Migration programme through appropriate procurement routes.

Key considerations

When the ICT Capital Programme was agreed at Full Council in February 2019 it was done based on a recognition of the importance of the council having a modern and resilient IT estate that would enable agile working and transformation of services. It established a four-year programme of work to upgrade and reshape the IT & Digital footprint of the council. This was designed to underpin the emerging commitments to changing ways of working by taking a digital first approach to the delivery of services.

Despite the fact that ensuring business continuity was one of the reasons for undertaking this programme of investment, no one at the time could have predicted the events to come in 2020. The rapid response to Covid-19 which saw all council offices closed and the majority of council services delivered remotely happened practically overnight at the end of March 2020 and massively changed the speed and delivery of the council's digital programme.

Due to the investment already agreed through the capital programme fortunately the majority of council employees had been upgraded to Windows 10 devices and were already using laptops and mobile devices which allowed them to connect to council networks remotely. Through a combination of our Citrix environment and our virtual private network (VPN) we went from having approximately 100 users logging on remotely to council networks per day, to over 1000 users a day in less than three weeks.

In March 2019 we had already initiated an infrastructure refresh programme to ensure our servers were upgraded to current versions and fully supported. Again, this work was accelerated in 2020 to provide extra resilience to the council and its employees. Overall connectivity has been stable and secure throughout the last twelve months despite different ways of working, two floods in the data centre and various other challenges caused by remote working.

As a result of signing a three year Microsoft Enterprise Agreement at Cabinet in February 2020 we were able to accelerate the roll out Microsoft Teams and Office 365 (now M365) to council employees and elected members. This was a hugely challenging process, especially as it had to be done remotely, and the support provided by our IT Team was exceptional. The pressure put on our Service Desk and Tech Support was immense and for a time we offered a 24/7 response service to ensure that people could access systems and each other at all times during the early stages of the response to the pandemic.

It was with great pride that we were able to support the first virtual Full Council meeting in May 2020, live streamed, and with all of our Elected Councillors able to fulfil their democratic duties. We have facilitated a full programme of democratic activity throughout the pandemic including Scrutiny Committees, Appeals Panels, Recruitment Panels, Emergency Powers Group Meetings, Cabinet and Full Council meetings.

In terms of getting value from Year One of the Enterprise Agreement, at the start of March 202, 820 users had been migrated from Office 2013 to Microsoft 365, despite the challenges of remote implementation. These 800 users have formed a pilot for testing the approach to using M365 before accelerating the roll out to our remaining staff. In addition to this just under 650 staff have had their e-mails migrated to Exchange Online. Making use of the E3 licences purchased last year we now have almost 2000 staff using Microsoft Teams, over 25,000 meetings organised in the last three months alone.

Despite the global pandemic other work has not been paused. The IT Team have also lead on the implementation of a new telephony system in July 2020, a system which required installing a completely new operating system across all council phones; switching all of our call centres over to a new contact management system and re-installing replacement soft phones for all remote users. It also included bringing forward a planned move from ISDN phones lines to SIP trunks ahead of the 2022/23 deadline. This project was three years in the planning and as a result when the porting date came on the 4th July loss of service to the Council's phone lines was kept to a minimum of three hours and all users were migrated successfully in less than 24 hours.

In November 2020 the move to a new Customer Relationship Management (CRM) System was completed. This was a long term project which has involved complicated work to move from an outdated legacy system with complex links to other council systems, including work flow software and payment systems. We have now migrated to a more modern CRM environment which will allow us to exploit more efficient ways of working and offer better experience to our residents through more joined-up working across the various contact points we have in the organisation.

The end of the year was marked with another significant project, the move of our HR system from on-premise servers to a cloud-hosted environment. This work had to be done within a very short period to avoid disruption to the payroll systems of the council and our external clients, including schools. The migration team were set an ambitious challenge of completing the design, test, build and delivery within twelve weeks, the shortest timescale the supplier had ever been involved with. This was achieved and the January payroll was successful completed via the hosted environment. This now permits the implementation of a similarly ambitious programme of modernisation of the HR system, to install new self-serve modules for employees and managers which will further support agile working and improve productivity.

This key decision paper relates to another key programme of work within the IT Digital Programme, Cloud Migration. In March 2020 a Strategic Business Partner, the ANS Group, was appointed to undertake the detailed design work required to scope the cloud environment required to replace our current on-premise, physical data

centre. Working alongside our internal team this has been a thorough and time consuming process however we are pleased to be able to bring forward this Key Decision to seek permission for the next stage of the programme.

Current Proposal

In February 2020 Bury Council procured specialist consultancy from an Information Technology Service Provider, the ANS Group, experienced in working with Local Government and the NHS, to deliver the planning and design phase for cloud migration in terms of our current IT estate, including disaster recovery. The tender specifically referred to the Planning and Design Phase of the work required to establish overarching migration strategy, migration assessment, Azure Consumption estimate and cloud architecture review, resulting in a clear and costed transition plan.

The purpose of this decision is to support an application for the funding required to deploy a Microsoft Azure Cloud Platform which is needed to underpin the council's new approach to Information Technology and Digital Strategy delivery. This next 'Phase 2' Investment will see a new Microsoft Azure Public Cloud Platform being deployed so the council can begin the process of replacing its ageing, inflexible, legacy systems and facilities with a next generation digital platform that will support the transformation of its public services, alleviating the current risks that the council faces:

- The current Town Hall Data Centre facilities being unsafe and at a high risk of failure;
- Critical Applications needing to be migrated from the existing legacy platforms into the resilient Cloud platform at pace to mitigate the risk of loss of service due to the Town Hall building suitability;
- Mitigation of risk of failure with a documented and tested failover data recovery plan;
- These critical applications will now be under a governed and secure Managed Service.

The completion of Phases 1 & 2 will deliver the following outcomes:

- A solid foundation for the council's new approach to a modern Digital Strategy.
- Appropriate Back Up and Disaster Recovery capability will be delivered.
- The platform will enable the Council to build new business models and deliver new revenue streams whilst enabling better ways to engage with its citizens.
- The ability to leverage the Platform in the future to provide better insight and use of data through the use of a new common data platform.
- Easier integration with the CCG.

Funding Model:

It has been recognised that to deliver the transformation required, at the pace which is needed, we must invest in our systems and infrastructure and create an environment which enables us to utilise the benefits of new technology and the most up-to-date ways of working. To achieve this in February 2019 the ICT Capital Programme was agreed at Full Council, resulting in £9.6m capital fund to transform

and upgrade our infrastructure and delivery models. Since the original decision to approve an ICT Capital Fund was taken, just over £4m has been spent on improving the security of our ICT estate and upgrading the hardware and software used by our staff and services. Broad headings for this work are as follows:

- Infrastructure Development and Replacement of Core Components
- Network Coverage Improvement
- End of Life User Hardware Replacement
- End of Life Central Hardware Replacement
- Software and Licences Maintenance and Upgrades
- A 3 year Enterprise Agreement with Microsoft

The value of the contracts issued to date have been within the limits set by the Scheme of Delegation for sign-off by the Cabinet Member for Corporate Affairs and HR. A separate key decision form was approved by Cabinet in March 2020 for the approval of the capital funding required for the Microsoft Enterprise Agreement.

This paper requests permission to access the next phase of funding from the Capital Programme to cover the implementation costs associated with the build phase of the Cloud Migration work.

Current Request and Return on Investment:

The table below shows the costs of running the current data centre in Bury compared with relocating to the Microsoft Azure Cloud data centres. Some computing power has to be retained locally for networking, printing and communicating with the cloud data centres but would come to represent 5% of the original total. Staying with an 'on premise' arrangement will cost the Council £3.1m over the next 5 years of which there is a requirement or some initial investment in 2021/22.

The proposed approach will cost £2.8m over the same 5-year period resulting in a savings overall of c£0.3m of which £41k will be achieved on an ongoing basis. In addition to cost reductions, it means the council has greater flexibility in the way it manages its assets.

Project Year	2021/22	2022/23	2023/24	2024/25	2025/26	5 Year Total
As Is						
Bury On Premise Data Centres	(inc. Citrix licenses, server costs, storage, software and utilities)					
Total	£1,424,601	£426,801	£426,801	£426,801	£426,801	£3,131,805

To Be						
Azure Cloud Costs	(inc. Service and equipment costs, Azure hosting and on-premise residual costs)					
Total Cloud Costs	£847,118	£410,678	£385,678	£385,678	£385,678	£2,414,829
Migration Project Costs	(inc. Additional internal capacity to manage transition, additional costs for applications to be deprovisioned or re-developed, archive storage)					
Total Migration Project Costs	£260,000	£130,000	£0	£0	£0	£390,000
Total Cloud Migration Costs	£1,107,118	£540,678	£385,678	£385,678	£385,678	£2,804,829

Recommendation:

It is recommended that Bury Council proceeds with the relocating its IT equipment into the Cloud via a procurement exercise to be run through G-Cloud. This will allow a faster implementation of the next phases, allowing us to fully realise the benefits of Microsoft 365 Applications and the other aspects of our existing Microsoft Enterprise Agreement including improved telephony services, file sharing and remote working.

Specifically, in the short term this will include £1.7m in 2021/22 from the ICT Capital Programme to undertake the implementation of the Phase 2 of the Cloud Migration Programme. The availability of this funding was confirmed at the ICT Capital Gateway Board on Friday 22nd January 2021 subject to a full business case being developed as outlined above.

The costs of this project are front loaded costs due the initial work required to deliver the secure setup of Bury Council's specific tenant in Microsoft Azure, then subsequently moving the Council's systems from the existing local data centres to the Microsoft Data Centre. Equally, there is time required to setup the specific requirements around Disaster Recovery and Backup as per the requirements detailed in the Phase 1 design work. Once this work has been completed, there will be a consistent on-going Microsoft Azure hosting cost.

The additional costs in Year One that are not in the subsequent years are project transition costs and include the extra capacity required to maintain exiting set-up, undertaking required training to create a Cloud Competency Centre within Bury's internal ICT Function and to migration the data and applications as per the agreed statement of works. The costs also include three years of upfront hosting costs to allow for the transformation of the Council's data centre. Future years will be funded from the revenue budget.

Other alternative options considered:

Alternative options would be to continue to invest in our on-premise data centre which is high risk due to the age of the hardware and infrastructure. It would also not bring the business benefits of having data stored in a cloud environment where we can benefit from improved data management to support the delivery of high-quality business intelligence.

Alternative cost models to move to another physical data centre have also been explored and remain under consideration for some of the servers and systems where there is not a suitable cloud hosted alternative.

In order to ensure the efficacy of this approach and the validity of the costing model the Phase 1 design work has been independently reviewed by Business Analysts from Gartner, our Executive Support Partner who have been appointed to peer-review the IT Digital programme. Gartner is the world's leading information technology research and advisory company who offer technology-related insight necessary for organisations to make best informed technology related decisions. The design work from Phase 1 has been reviewed by a Gartner Business Analyst and endorsed as conforming to current industry best practice and in line with Microsoft Gold Partner standards.

Community impact/links with Community Strategy

Equality Impact and considerations:

Under section 149 of the Equality Act 2010, the 'general duty' on public authorities is set out as follows:

A public authority must, in the exercise of its functions, have due regard to the need to -

- (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;*
- (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;*
- (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.*

The public sector equality duty (specific duty) requires us to consider how we can positively contribute to the advancement of equality and good relations, and demonstrate that we are paying 'due regard' in our decision making in the design of policies and in the delivery of services.

Equality Analysis	<i>Please provide a written explanation of the outcome(s) of either conducting an initial or full EA.</i>
None	

**Please note: Approval of a cabinet report is paused when the 'Equality/Diversity implications' section is left blank and approval will only be considered when this section is completed.*

Assessment of Risk:

The following risks apply to the decision:

Risk / opportunity	Mitigation
<p>Failure to invest in the modernisation of the Council's data centre infrastructure could result in a loss of functionality and data which would affect all council services and represent a significant security risk.</p>	<p>Should this decision not be approved the Council will need to build an alternative investment case to upgrade the on-premise data centre which would be more expensive and not offer the full business benefits.</p> <p>Other mitigation would be including physically relocating the data centre however moving our current server room would introduce significant risks to continuity of service.</p> <p>A further alternative would be to re-commission the design phase to provide alternative costings however this would replicate the work already undertaken with no guarantee of a different outcome in terms of recommendations and costs.</p>

Consultation:

Legal Implications:

There are no legal implications arising from the report and recommendations. The procurement has been undertaken in accordance with the Council's Contract Procedure Rules and to comply with the Council's duty to achieve best value using the G-Cloud Framework, part of the Crown Commercial Services Digital Marketplace for public sector procurement.

Financial Implications:

The cost of the proposal can be met from the ICT reserve and from the revenue budgets. It is proposed that ICT budgets will be centralised so ensure that ongoing savings can be identified and delivered.

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Background papers:

N/A

Please include a glossary of terms, abbreviations and acronyms used in this report.

Term	Meaning