

Open Report on behalf of James Drury, Executive Director - Commercial

Report to:	Councillor R G Davies, Executive Councillor for Highways, Transport and IT
Date:	Between 07 - 21 January 2020
Subject:	Azure Migration
Decision Reference:	I019272
Key decision?	Yes

Summary:

Approval is sought to proceed with a project through the Council's contract with Serco to migrate the Council's servers, applications and data from the existing remote hosting locations to Microsoft Azure and approve expenditure of £790k in 2020/21 to be funded through the Information Management and Technology (IMT) Capital Budget.

The detailed Business Case attached was prepared by Serco in support of its proposal to undertake this work, and details a Return on Investment Breakeven point during 2022 through the Revenue Budget savings generated from a reduction in the Council's IMT Infrastructure hosting costs.

Recommendation(s):

That the Executive Councillor:

- (1) Approves the commissioning of the Azure migration project as detailed in the detailed Business case attached at Appendix A.
- (2) Delegates to the Executive Director - Commercial, in consultation with the Executive Councillor for Highways, Transport and IT, authority to take all decisions and approve the entering into all such contracts as are necessary to give effect to the above decision.

Alternatives Considered:

- | | |
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| 1. | To continue current hosting arrangements. |
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Reasons for Recommendation:

There is a strong financial case providing break even during 2022 and resulting in a saving in subsequent years of £897k per annum thereafter (at current consumption levels and at today's prices).

Extended warranty is available for the large number of Windows 2008 servers reducing both cost and urgency of the required work to upgrade these servers due to end of support early next year.

Our prime Service Provider Serco has partnered with a sector leading specialist and together they form a strong proposition to undertake this work effectively.

Microsoft has invested significantly in "State of the Art" monitoring for Cyber security and cost control potentially allowing further offset cost to be delivered.

Pursuing this strategy will provide additional opportunities to further reduce our footprint in Lincoln's Orchard House Data Centre and provide further savings through reduced power and cooling levels.

1. Background

Prior to 2015 the Council hosted much of its Data Centre (DC) infrastructure onsite and while appropriate at the time of implementation, by 2014 the technology platform had become outdated, prone to failure, and presented the Council with significant risks such as a lack of resilience and disaster recovery capability. The options for the Council were limited, involving either refreshing the legacy estate at significant cost, or moving with the market and making use of the Infrastructure as a service (IAAS) market. Essentially IAAS based hosting means using offsite data centres that are managed by third parties, and buying capacity rather than physical equipment. The Serco bid proposed that it delivers the IMT Services through the transformation of the existing Lincolnshire County Council (LCC) DC estate by moving it into a private cloud IAAS, and assumed that most of the workload would be migrated to its preferred private cloud hosting partner Sungard.

This migration activity was a significant undertaking and resulted in the migration of roughly 65% of the Council's DC infrastructure, some 300 Virtual Machines (VM), while 35% of the Council's DC infrastructure still sits within LCC's Orchard House DC.

Since 2015 the DC market has continued to mature and the existing private cloud model is now considered by Serco and the Council to be sub-optimal for the meeting by Serco of the Council's requirements because it requires additional maintenance effort when compared with newer technology options, and due to those new services it is no longer the most efficient or cost effective way for Serco to provide DC capacity. It is now more efficient to obtain such services from a public cloud, such as Microsoft Azure, which enables a more efficient use of the DC and provides some additional benefits identified below.

The main difference of interest between a public cloud and a private cloud is that in a private cloud the purchaser buys the capacity that it believes it needs, in advance via a fixed fee. In contrast, within a public cloud the infrastructure can be scaled immediately on demand. Scaling on demand means that the purchaser only uses and pays for what it needs when it needs it, and its capacity profile can flex up and

down ensuring the purchaser only pays for capacity it actually uses, rather than what it estimates it might need.

In addition, the Microsoft Azure Cloud service can deliver resilient services natively without having to duplicate systems at LCC's cost allowing a large number of servers to be removed over time. The service can be consumed from another Microsoft DC in the event a whole DC becomes unavailable and the services can be reinstated far more quickly than at present, improving both resilience and availability for LCC's day to day software applications.

Under the Serco contract, Serco is responsible for making available to the Council the functionality of its software applications. In order to do this it must provide or contract for the provision and ongoing management of an infrastructure solution capable of hosting the software.

At present Serco delivers this service through a combination of managing servers at the Council's own Data Centre in Orchard House and sub-contracting hosting services to Sungard who host a number of Council applications. Under the proposal Azure would become the solution for the third party hosting element of this service.

In order to facilitate an easy and smooth exit from the arrangements in the event that the Serco contract comes to an end, the Council will have a direct contract with Microsoft Azure which is an improvement on the existing sub-contract arrangement which requires complex step-in arrangements to ensure continuity of provision if the Serco contract comes to an end. This may in turn require amendment to the Serco contract to ensure Serco can continue to deliver its services to the same standards.

This is therefore a development of the existing contract rather than a new contract and is closely related to Serco's contractual obligations.

It is therefore appropriate to implement the project through the existing project provisions of the Serco contract which provide for the development and delivery of IT projects during the term of the contract with suitable provisions for determining what payments may be appropriate to reflect the fact that the basis of the contract is being changed and to reflect the work involved in that change being made.

2. Legal Issues:

Equality Act 2010

Under section 149 of the Equality Act 2010, the Council must, in the exercise of its functions, have due regard to the need to:

- * Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Act
- * Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it

* Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The relevant protected characteristics are age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex; and sexual orientation

Having due regard to the need to advance equality of opportunity involves having due regard, in particular, to the need to:

* Remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic

* Take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it

* Encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low

The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities

Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to tackle prejudice, and promote understanding

Compliance with the duties in section 149 may involve treating some persons more favourably than others

The duty cannot be delegated and must be discharged by the decision-maker. To discharge the statutory duty the decision-maker must analyse all the relevant material with the specific statutory obligations in mind. If a risk of adverse impact is identified consideration must be given to measures to avoid that impact as part of the decision making process

There are not considered to be any direct impacts of the decision in relation to people with a protected characteristic.

The Council provides a range of solutions and makes suitable adjustments to enable people with a disability to access the software through their end user devices and this decision does not materially change any aspect of that provision.

Joint Strategic Needs Analysis (JSNA) and the Joint Health and Wellbeing Strategy (JHWS)

The Council must have regard to the Joint Strategic Needs Assessment (JSNA) and the Joint Health & Well Being Strategy (JHWS) in coming to a decision

There are not considered to be any implications of this decision for the themes of the JSNA and JHWS.

Crime and Disorder

Under section 17 of the Crime and Disorder Act 1998, the Council must exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent crime and disorder in its area (including anti-social and other behaviour adversely affecting the local environment), the misuse of drugs, alcohol and other substances in its area and re-offending in its area

There are not considered to be any implications of this decision for crime and disorder matters.

3. Conclusion

There is a clear financial business case to proceed with this project given it delivers sizable revenue savings when complete. That is even before the significant strategic advantages that flow from the ability to leverage other Microsoft technologies most especially in the area of data analysis, business intelligence, knowledge management and artificial intelligence.

LCC will continue to have a hybrid strategy as we also leverage Amazon services where we see financial or technical advantages and currently our Web services are increasingly hosted with that provider.

4. Legal Comments:

The Council has the power to enter into the arrangements proposed.

The legal issues to be taken into account in reaching a decision are set out in the body of the Report.

The decision is consistent with the Policy Framework and within the remit of the Executive.

5. Resource Comments:

The 2019/20 IMT revenue budget includes £373k to fund phases 1 and 2 of the Azure implementation as detailed in the attached business case. The expenditure of £790k proposed in this paper to be funded from the 2020/21 Capital Programme, will enable completion of the third and final phase resulting in revenue budget savings of £897k per annum following completion based on current consumption levels. This equates to a payback period of 16 months (measured against the full cost of all 3 phases).

6. Consultation

a) Has Local Member Been Consulted?

n/a

b) Has Executive Councillor Been Consulted?

Yes

c) Scrutiny Comments

The decision will be considered by the Overview and Scrutiny Management Board at its meeting on 19 December 2019 and the comments of the Board will be reported to the Executive Councillor.

d) Have Risks and Impact Analysis been carried out?

Yes

e) Risks and Impact Analysis

No exceptional commercial, technical or legal risks were identified that would lie outside of the Corporate risk appetite, Creative & Aware.

Any exceptional risks (above risk appetite) will be reported to the IMT Board as a matter of course.

7. Appendices

These are listed below and attached at the back of the report	
Appendix A	Detailed Business Case IMT-418 Azure Migration V1.1

8. Background Papers

No Background Papers within the meaning of section 100D of the Local Government Act 1972 have been used in the preparation of this Report.

This report was written by John Wickens, who can be contacted on 01522 553651 or john.wickens@lincolnshire.gov.uk.