LONDON BOROUGH OF HAMMERSMITH & FULHAM

Report to: Cabinet

Date: 01/11/2021

Subject: Digital Strategy – moving to a modern cloud-based service

Report of: Councillor Max Schmid, Cabinet Member for Finance and Commercial services

Report author: David Wadham, Senior project manager, Digital services

Responsible Director: Rhian Davies, Director of Resources

SUMMARY

Currently many critical systems used across Hammersmith & Fulham (H&F) are hosted by BT as part of the 'Managed compute' service. These systems include things such as H&F's print servers and line of business systems such as Power BI and the Capita income management system. Technology has moved on and the existing hosting solution is outdated, inflexible and costly. This paper seeks authority for the investment funding to move H&F systems to Microsoft Azure hosting. The migration to Azure is in line with the Council's Digital and Information Strategy and ambitions as expressed in Hello 'hybrid' Future, providing H&F with a modern platform that is agile, easily scalable and future proof, as well as with more cost-effective technical services.

The new solution is designed to be flexible and will allow critical line of business systems to constantly transform and evolve so they can always meet the needs of H&F residents and be operated in the most cost-effective way. As well as the benefits for the resident facing services, Microsoft Azure is a foundation block for the further improvement of digital systems. It will enable the H&F network to be transformed into a modern cloud-based version with minimal reliance on old fashioned infrastructure in physical buildings. It will also allow the deployment of the most up-to-date user computing capability during the Tech-tonic 2 programme.

The benefits Microsoft Azure brings will enable a productive agile workforce equipped with the technology needed to work in a modern and flexible way. The migration will complete by October 2023 when the current infrastructure contract expires.

RECOMMENDATIONS

That Cabinet:

1. Notes Appendix A is not for publication on the basis that it contains information relating to the financial or business affairs of any particular person (including the authority holding that information) as set out in paragraph 3 of Schedule 12A of the Local Government Act 1972 (as amended).

- 2. Approves total one-off investment of up to £1.799m to be funded from the IT and Technology reserve.
- 3. Approves Azure cloud hosting services to be commissioned from Microsoft via Trustmarque. These costs are contained in exempt Appendix A.
- 4. Approves a Change Control Notice to be issued to BT to procure the necessary exit management services via the Managed Compute Lot 3 agreement. These costs are contained in exempt Appendix A.
- 5. Approves the additional technical and project management staff resource to be procured to complete the migration. These costs are contained in exempt Appendix A.
- 6. Notes that a separate procurement strategy has been approved to utilise the GCloud 12 framework to secure an Azure migration and ongoing support partner. The costs are contained in exempt Appendix A.

Wards Affected: All

Our Values	Summary of how this report aligns to the H&F Values
Building shared prosperity	Protect and improve front-line services - realised benefits and business cases will reduce costs of running services increasing opportunities of spending in other areas.
Doing things with local residents, not to them	Migration to cloud will align to programmes such as Resident Experience and Access Programme (REAP) and ensure services and customer experiences are co-produced to meet ever changing needs of our residents.
Being ruthlessly financially efficient	By moving services online residents have better choice and control - Cloud services provide more efficient and cost-effective technical services.
Rising to the challenge of the climate and ecological emergency	By migrating to Microsoft's Azure platform, the Council will be moving its infrastructure to a supplier who has a stated ambition to be carbon negative by 2030.

Financial Impact

A detailed table outlining both the one-off and ongoing expenditure are contained within Appendix A.

The migration from BT to Microsoft Azure will incur both one off costs for the implementation and dual running, and ongoing costs for the cloud hosting and ongoing support required.

Approval is sought to fund one-off costs from existing reserves for the delivery of corporate technology and IT. The balance of this reserve at the beginning of 2021/22 was £3.045m.

Funding for the ongoing costs will be met from revenue budgets held within Digital services.

The delivery and implementation of the contract will lead to expected savings of £0.300m per annum from 22/23 onwards compared to the current contract costs with potential further savings as the Council migrates its line of business systems to Software as a Service. These savings will support the delivery of the Medium Term Financial Strategy (MTFS) and the Council's ability to set a balanced budget for future years both for the General Fund and the Housing Revenue Account.

A credit check of Microsoft Limited has a score of 100/100, indicating it to be of very low financial risk.

Legal Implications

This report recommends the migration of the above-mentioned systems away from BT and into Microsoft's Azure cloud hosting platform.

On 19 August 2015 the Council entered into a Call-Off Contract with BT Plc for an initial term until 3 August 2020 which has been extended under clause 65.2 of the Call-Off Contract. A Change Control Notice can be issued by the Council to procure the necessary exit management services via the Call-Off Contract.

The Azure cloud hosting services are intended to be commissioned through Microsoft via Trustmarque who were appointed through the Enterprise Agreement. The related costs are contained in exempt Appendix A.

The Enterprise agreement is a framework agreement procured by the Royal Borough of Kensington and Chelsea. LBHF have the right to call-off under it. However, in this instance it does not allow for achievement of the Council's requirements for social value.

Where an original framework did not include Social Value it is not possible to insist on 10% social value in accordance with the Council's policy in subsequent call offs on that contract. However, the Microsoft Enterprise agreement is a shared contract with RBKC and Westminster. Officers will work with RBKC to determine how Social

Value will apply (locally to H&F if possible) to the Microsoft Enterprise agreement. Microsoft deliver social value but this is evidenced nationally and internationally, not at H&F level. Officers will therefore work with Microsoft to evidence their social value

The value of the proposed procurement is such as to fall within the ambit the public procurement regime as set out in the Public Contracts Regulations 2015 ("PCRs"),

For the purpose of Council's Contract Standing Orders ('CSOs'), the proposed arrangement is a high value contract and will therefore be subject to section D of the CSOs.

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Background Papers Used in Preparing This Report - None

Proposals and Analysis of Options

1. H&F currently have 37 services running on servers which are hosted by BT. These include critical systems such as the Capita income management platform and the Power BI platform.

2. Option A: BT managed compute

This option is for H&F to continue using the existing managed compute service. This option has the significant benefit in avoiding the need to migrate services to a new platform. However, as technology has evolved, the BT managed compute service is the most expensive option considered, almost twice the cost of Azure hosting. The managed compute service is also far less flexible than the other options. If a new server is required, the process to request this and for it to be delivered can take 4-6 weeks. New servers can be created within Azure in a matter of days (subject to approval processes). Finally, this option is not available in the long term, with the existing contract coming to an end in

October 2023. Due to the costs (shown in detail in Appendix A) and lack of flexibility the BT hosting **option is not recommended.**

3. Option B: Full migration to SaaS (Software as a Service), no hosting H&F has a cloud first strategy and many other crucial H&F line of business system are already supplied as a SaaS solution, for example the Mosaic system used by Adult and Children's services. This strategy will be applied to all service currently hosted by BT and as new contracts for services are procured it is likely more systems will be delivered as SaaS and separate hosting costs for H&F will reduce. However, although the general trend across software suppliers is to make their products available as hosted solutions not all suppliers currently have an established and mature cloud offering. While some providers do have such an option moving to cloud hosting would require a new contract with the supplier and an associated procurement. This would entail multiple concurrent procurements, the costs of which are difficult to quantify but would be significant. In some cases, existing contracts would prevent immediate change of supplier or product. Therefore, it would not be possible to fully achieve this option across all line of business systems before October 2023 when the current managed compute contract with BT expires and this option cannot be recommended at this time.

4. Option C: Microsoft Azure

This option entails migrating the services currently hosted by BT into a H&F owned Azure platform and securing an expert partner to support these services. The migration itself will be a complex piece of work taking at least 12 months. However, once complete the ongoing cost of Azure hosting offer savings when compared to existing BT hosting. In addition to reduced costs, Azure offers increased flexibility in the management of the platform. Performance, security patching and optimisation of charges can be controlled through the platform which will ensure key line of business systems will have reliable service at the lowest cost. This flexibility also enables the long-term strategy of migrating services to SaaS. Azure costs can be reduced with no contractual restrictions preventing the service being run down to a bare minimum. The reduced costs (see Appendix A) and support for long term H&F digital strategy makes this **the recommended option**.

Reasons for Decision

- 5. Microsoft Azure hosting is the recommended option for two reasons
 - i. Cost details of the 5-year cost comparison can be found in Appendix A
 - ii. Fit with long term strategy migration of services to Azure immediately offers the flexibility around cost and optimisation that a cloud first approach allows. However, Azure also supports the long-term strategy of moving systems to a Software as a Service model, which increases H&F resilience and supports business continuity by distributing systems and their infrastructure. Moving to SaaS also potentially reduces Azure hosting costs in the future.

6. The flexibility that Azure offers would support the recommendation for its use even if its adoption was cost neutral when compared to current hosting. It currently takes a minimum of 6 weeks to create new servers in Lot 3 managed compute, whereas in Azure this can be done within hours. This level of control will reduce the time spent, and therefore costs, of any other project involving line of busines system upgrades or implementations.

Equality Implications

7. An Equality Impact Assessment has been completed to ensure necessary due diligence in the preparation of this report. However, the nature of this project is to make changes to 'behind the scenes' IT systems and there will be no change for end users of H&F systems. Therefore, there are no adverse equality implication of this work. The Equality Impact Assessment is attached as Appendix B.

Risk Management Implications

- 8. The report recommends the use of a competitively procured framework to commission Azure cloud hosting services from Microsoft through Trustmarque to migrate all BT hosted services to the cloud. This approach is in line with the council objective of being ruthlessly financially efficient. Moving critical systems to the cloud will improve resilience and support business continuity arrangements in the event of an incident as well as ensuring that council data and systems can be appropriately protected.
- 9. Clear and robust programme and project management arrangements will need to be put in place to ensure the secure and complete transfer of data/systems to the cloud.

Implications completed by: David Hughes, Director of Audit, Fraud, Risk and Insurance, tel: 07817 507 695

Climate and Ecological Emergency Implications

- 10. The migration of IT services to a hyper scale platform such as Azure allows for the reduction of energy use due to the economies of scale. Electricity consumption and air-conditioned cooling required by data centres is shared by many thousands of customers across the Azure service. The existing BT manage compute service is far smaller in scale and therefore less efficient than the Azure platform.
- 11. The Azure platform will also allow H&F to design a future proof infrastructure that will enable the H&F workforce to work more flexibly and efficiently. The platform will be able to support 80% of H&F staff working from home. Which will in turn reduce commuter journeys and energy use in H&F buildings.

Implications completed by: Hinesh Mehta, Strategic lead, Parks, Highways and Waste, Tel 020 8753 6703

Digital Service implications

- 12. The migration to Azure is in line with the council's Digital and Information Strategy and ambitions as expressed in Hello 'hybrid' Future, providing H&F with a modern platform that is agile, easily scalable and future proof, as well as with more cost-effective technical services.
- 13. IM implications: The Data Protection Impact Assessment (DPIA) for the Data Centre contract should be updated to reflect this change in hosting arrangements. If no DPIA is in place yet, one should be carried out, to ensure that all the potential data protection and information security risks around migrating to Azure are properly assessed with mitigating actions agreed and implemented.

Implications completed by: Tina Akpogheneta, Interim Head of Strategy and Strategic Relationship Manager, IT Services, tel 020 8753 5748.

Local Economy and Social Value

14. Regarding the implications for social value please see the section on Legal Implications. There are no further implications for social value.

Implications completed by: Ilaria Agueci, Social Value Officer, tel, 0777 667 2878.

LIST OF APPENDICES

- Exempt Appendix A Current and target state costs
- Appendix B Equality Impact Assessment