

Cheshire East Council

Cabinet

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| Date of Meeting: | 9 th May 2017 |
| Report of: | Chief Operating Officer, Peter Bates |
| Subject/Title: | 5-year ICT Investment Programme 2017 |
| Portfolio Holder: | Cllr Peter Groves, Finance and Assets |

1. Report Summary

- 1.1. Both Councils depend on Microsoft® Windows-based software for key ICT and service functions, ranging from authenticating network users to providing employees with critical communication and collaboration tools. Microsoft delivers in Office 365 a highly capable set of offerings that offer a robust email, calendaring, scheduling, task management, desktop productivity, telephony, real-time communications, and collaboration experience. Office 365 (O365) can be tailored to specific requirements, as well as those of groups of users within both Councils and service areas, alternative service delivery vehicles and to enable more effective partnership working.
- 1.2. This Cabinet report recommends the strategic engagement of Microsoft as a Cloud migration partner to support ICT Services in the implementation of an aspirational and transformational hybrid (80% cloud and 20% in house) solution which will enable the following objectives:
 - Deliver significant financial benefits for both Councils service areas and ICT Services; and is future proofed to meet the needs of both Councils.
 - Supports the ambition to facilitate Council staff to work in an agile and flexible way and enable services to be delivered from anywhere on any device and promoting the use of online tools.
 - Improve data capture and quality features, which will not only provide more accurate operational information, but will also, support efforts to predict service demand patterns and trends more accurately.
 - Support staff cost avoidance, achieved through a combination of implementing a new core IT platform and business process improvements.
 - Be scalable to ensure that any growth or decrease in demand can be serviced.

- Ensure that both Councils only pay for the service they consume.
 - Enable existing ICT restrictions and inflexibility to be removed to provide opportunities for partnership working and collaboration.
- 1.3. This large-scale data centre migration programme to Microsoft Office 365 and a cloud platform service (Azure) combines Microsoft services expertise across cloud strategy, infrastructure, IT service delivery and change management to plan, sequence and deliver a major cloud transformation. It is designed to be a medium to long term engagement, supporting both Councils through their ICT shared services transformation programme.
- 1.4. Microsoft Services is the Professional Services organisation within Microsoft. Their role would be to work with both Councils through ICT Services to realise the full value of our investment in the Microsoft technology stack as quickly as possible. Other benefits of partnering directly with Microsoft Services includes: proven methodologies and tools; knowledge and expertise; reputation and commitment; and the de-risk of moving to Microsoft Office 365 and Azure Cloud with a Microsoft value added reseller or provider.

2. Recommendation

- 2.1. That the Cabinet approves procurement of Microsoft Cloud migration partner services at an estimated total cost of £5.31m (excluding VAT) over a 2-year contract period; funded jointly from the Cheshire East Council approved ICT Infrastructure Investment Programme budget and Cheshire West and Chester (through programme recharges or staged payments as agreed).
- 2.2. That authority be delegated to the Chief Operating Officer in consultation with the Shared Services Joint Committee and Portfolio Holders for ICT from both Cheshire East and Cheshire West and Chester Councils:
- to enter into all necessary contractual arrangements to deliver the solution; and
 - to use the Digital Marketplace G-Cloud 8 framework to procure an ICT migration partner to transfer ICT shared services into the Cloud.

3. Other Options Considered

- 3.1. The detailed business case, which underpins this report, considered options on services to deliver the programme and how these were to be procured. The most appropriate route balances time, risk, capability, delivery and cost.
- 3.2. There are a number of options available to the Council in terms of how they support the delivery:
- An end to end delivery partner to oversee the design, build and operate of the new hybrid infrastructure,

- A technical delivery partner to oversee design and build with operate managed by the Council, or
 - A programme management partner to oversee a multi-supplier delivery approach for the key work packages and oversee benefits realisation (new infrastructure, networks, disaster recovery, migration)
- 3.3. The ICT Services 5-year Infrastructure Investment Programme business case recommends Option 1 above. The new hybrid world will be very different to the current infrastructure. Making the hybrid solution work efficiently once delivered (bringing together both Cloud solutions and converged infrastructure) requires deep experience and a wide range of capabilities that we do not believe the ICT Services currently possesses, especially within the current Infrastructure or architecture teams.
- 3.4. Getting the most out of the new investment is critical and this requires a new mind-set when considering the design for both the new infrastructure and operations. Security, resilience, hybrid IT design and new ways of working are required to deliver the business benefits.
- 3.5. The flexibility and scalability of cloud and converged solutions bring new opportunities to do things differently – to manage change effectively, reduce the cost of operations and deliver an automated infrastructure platform using modern agile principles. From an operations point of view and value for money in using cloud services, these are key elements to build into a more efficient future IT infrastructure model.
- 3.6. Microsoft Cloud migration partner services incorporate the following:
- Advice and guidance to support development of cloud strategies and reshaping IT functions to take full advantage of cloud services.
 - Programme governance, working alongside the client to ensure both Councils benefit from the expertise and experience of delivering similar projects to other local authorities.
 - Full implementation of production solutions including migrations of infrastructure and associated applications to the Cloud both as fixed fee or time and materials engagements.
 - Proof of concepts and jumpstarts to quickly get the cloud journey started.
 - Support the shaping and implementation of a Cloud First future IT operating model.
 - Adoption and Change Management services to support end user adoption and acceleration of return of investment in cloud technologies.
 - A range of ongoing proactive and reactive support services covering all Cloud platforms.

- 3.7. In addition to moving enterprise workloads into the Cloud, the heritage, depth and range of Microsoft's devices and services are unique. This includes working across the business, end users, infrastructure, applications and IT operations, to cover the full output.
- 3.8. The technology options considered within the business case included:
- Do nothing; continue with existing technology landscape in its current form supported by existing ICT shared services
 - Fully on premise hosting (traditional non-cloud) including maintenance of essential services and compliance whereby the Councils implement new applications and technology improvements; supported by existing in house ICT shared services.
 - Full cloud infrastructure as a service (IaaS) and associated applications
 - Hybrid (a combination of the traditional and cloud approaches):
 - 50% cloud and 50% on premise hosting
 - 80% cloud and 20% on premise hosting
 - Cloud migration partner investment to support the implementation of this investment programme.
- 3.9. In summary, the management strategy is to engage a Cloud migration partner (Microsoft) to support ICT Services in the implementation of an aspirational and transformational hybrid (80% cloud and 20% in house) solution supported by a strong governance model and programme monitoring and reporting.

4. Reasons for Recommendation

- 4.1. The next few years will see significant changes across the entire public sector. The shape and size of our councils will change however the need to provide high levels of service to our residents will remain, and be set against a backdrop of financial austerity.
- 4.2. With these challenges come new opportunities; information and communications technology (ICT) will be able to help both Councils to achieve efficiencies, providing the mechanism to support shared services and most importantly, keep pace with residents' changing needs and expectations.
- 4.3. The detailed 5-year ICT Infrastructure Investment Programme business case highlights specifically the strategy for the next 24 months. This is both an aspirational and transformational investment programme which will enable ICT Services to contribute to achieving the strategic objectives of both Councils in their mission to deliver high quality services to the residents and people of Cheshire.

- 4.4. ICT Services host, administer and support about 1500 applications for the two Councils. Most of these applications are Commercial Off The Shelf (COTS) packages and it is the nature of these packages that drives many of the issues experienced by ICT Services currently. Many of these packages have small user volumes, are provided by SME suppliers and are on old, out of date operating systems, with the security, service management and maintainability risks that result.
- 4.5. There has been a sustained lack of investment in the infrastructure with an estimated 80% of the infrastructure being more than five years old and on minimal support in 2017-18. As a result, there is a serious unsustainable service delivery and compliance risk which is affecting delivery of the Councils business with recurring major incidents.
- 4.6. Chronic underinvestment in ICT assets reduces maturity, retards delivery capability, inhibits innovation and change, and leads to a very slow, manual environment where staff focus on repetitive tasks rather than supporting the development of new capabilities and transformation. The ability to support new change is limited by the capacity and the capability of some staff.
- 4.7. Current ICT spend masks these significant challenges and vulnerabilities that require both an initial investment and ongoing investment to ensure that both Councils can have confidence in a modern, responsive hybrid infrastructure (utilising both on premises and cloud capabilities).
- 4.8. A new hybrid platform is proposed comprising in-house and cloud elements which will need to be procured, initially in small tranches to replace the most aged elements of the in-house infrastructure and provide an initial capability in the cloud to grow experience.
- 4.9. The infrastructure will grow incrementally towards a full scale significantly reduced footprint from that of the current infrastructure. This reduced hosting requirement will be achieved through aggressive application portfolio management, consolidating applications where possible and retiring or replacing applications unsuitable for modern infrastructures.
- 4.10. The new infrastructure will be significantly more productive and intrinsically automated beyond that of the current legacy estate, making infrastructure management achievable within current staffing levels.
- 4.11. Moving the application portfolio to a modern basis will reduce the technical diversity of the infrastructure needed to support the applications. This will reduce support costs, enable automation and increase the agility of the delivery organisation. These improvements will then increase the bandwidth for supporting change
- 4.12. Operations will benefit from new uplifted tooling, creating an authoritative asset baseline and a status view of infrastructure activity. Attainable delivery service levels, agreed with the Councils and documented in the

Service Catalogue, will be matched by underlying process and infrastructures to provide a sustainable quality of service.

- 4.13. A simplified End User Compute (EUC) environment will reduce the cost and complexity of current application delivery and improve application experience for the User.
- 4.14. Skills, processes and tooling will be uplifted across CEC ICT Services to underpin and exploit the benefits of the new infrastructure to the maximum extent.
- 4.15. Because of these changes, CEC ICT Services will be able to support base operations with improved efficiency and focus more effort to delivering the changes needed for the Councils. Equally the infrastructure, with elements both in-house and within the cloud, will be better placed to support the Councils in reacting to changing circumstances and supporting the working partnerships with other Public and Private Sector organisations particularly health.

5. Background/Chronology

- 5.1. In October 2011: Gartner were asked to benchmark Cheshire shared services IT Service against organisations with environments of a similar size and complexity, and reported that hardware was retained longer than the peer group average and that the age of some of the hardware was cause for concern and was likely to result in higher than normal support costs.
- 5.2. In November 2013: A subsequent Gartner IT overview benchmark highlighted several key areas for consideration a) Total IT business as usual (BAU) costs, at £8.9m, were 53% lower than a similar workload peer group (this figure has not increased since despite growth in technology use and investment in digital services) and b) BAU costs were also £4m (32%) lower than the lowest cost quartile. As this was significantly lower than Gartner expected, they recommended that ICT shared services should review the level of spend and resourcing, and re-assess the maturity of IT processes and re-measure on a regular basis.
- 5.3. In April 2016: ICT shared services was transferred to Cheshire East Council when the financial position, resourcing and inherited asset position were reviewed and processes put in place to improve management practices. Cheshire East Council (CEC) ICT Services provides ICT Services to both Cheshire East Council and Cheshire West and Chester Council (CWAC). Services are provided to approximately 10,000 Users within a budget of approximately £17.5m per annum.
- 5.4. April 2016 – February 2017: Joint ICT Services monthly contractual performance reports (2016-17) continue to indicate continued failure to meet indicators which supports the previous benchmarking outcomes.

- 5.5. In October 2016: A contextual statement to support the ICT Services Service Catalogue and cost model highlighted the lack of investment in ICT infrastructure and essential replacement.
- 5.6. In November 2016: Hewlett Packard Enterprises (HPE) and Microsoft were engaged by ICT Services to undertake a data centre review and Cloud readiness assessment. These specific external reviews informed this report.
- 5.7. In February 2017: Hybrid, a combination of the traditional and cloud approaches, was considered in more detail within a detailed business case. This was circulated to Joint Officer Board and shared with Cheshire West and Chester.
- 5.8. March 2017: It is proposed that the delivery of a strategic investment programme will address the need to provide a flexible, utility based costing model and remove the dependency on ageing infrastructure through cloud-based solutions that are managed by a strategic technology provider/s. It will also prevent threats to customer information either from ageing technology or cyberattack. The programme puts forward proposals for transforming the technology:
- Phase 1: Within 3-6 months enable ICT Services to become a Cloud ready organisation with a 2020 vision, supporting both Councils with Microsoft Office 365 in the Cloud and migration of file servers. Internet resilience is a key consideration and will need to be introduced within this phase.
 - Phase 2: An aggressive 3-24 month application transfer roadmap moving on premise to the Cloud reducing in house data centre provision by 80% (initial assessments indicate approx. 922 servers identified as suitable and 174 servers requiring further analysis) whilst improving disaster recovery, resilience and back up capabilities and providing an agile DevOps environment
- 5.9. ICT shared services has not invested in internal skills and development to support new technologies and is reliant on individual contractors recruited on a project by project basis to supplement the permanent resource base and provide specialist skills. Contractors are not a constant resource or a coherent body of knowledge. New incumbents require time to understand the ICT shared services environment and have not worked with other contractors and staff members. The urgent need to invest in both technology and in house skills is apparent. Both Councils require aggressive implementation of cloud services. The risks of undertaking the required transformation within 24 months with individual contractors are high. In house staff need new skills and a comprehensive training and development programme. It is therefore proposed that we look to the market for a strategic Cloud migration partner to support the implementation of this investment programme.

- 5.10. The detailed business case makes a strategic recommendation is to engage a Cloud migration partner (Microsoft) to support ICT Services in the implementation of an aspirational and transformational hybrid (80% cloud and 20% in house) solution.
- 5.11. The detailed business case was approved at both Technical Enablers Group and Executive Monitoring Board. Joint funding has been agreed in principle with Cheshire West and Chester.
- 5.12. The financial benefits of the business case are included in the 2017-20 Medium Term Financial Strategy.

6. Wards Affected and Local Ward Members

- 6.1. All Wards will be affected by this proposal

7. Implications of Recommendation

7.1. Policy Implications

- 7.1.1. This proposal is in line with Council policies.

7.2. Legal Implications

- 7.2.1. The value of this procurement at over £1,000,000 requires it to comply with both the Council's Contract Procedures and the Public Contracts Regulations 2015 (Public Contracts Regulations). The proposed procurement route using the G-Cloud 8 framework provides a compliant route for procuring the software applications.

- 7.2.2. The Crown Commercial Service conducts regular procurements under the Public Contracts Regulations for the G-Cloud Frameworks, the G-Cloud 8 Framework being the latest iteration of the Framework. Services are procured under the G-Cloud Framework via the Government's Digital Marketplace which enables Buyers to search for services which match the Buyer's criteria and draw up a short list of potential Suppliers. Buyers evaluate the short listed Suppliers on the basis of price or Most Economically Advantageous Tender (MEAT). In some instances only one supplier may meet the criteria meaning that further evaluation may not be required. This process takes place on the Digital Marketplace there is no call for further competition, suppliers are evaluated on the basis of the information they have supplied to the Digital Market Place. On completing the evaluation the Buyer chooses the service and awards the contract to the Supplier.

- 7.2.3. The Council's Contract Procedures provide that, where a legally procured framework agreement is used, there is an exemption to the requirements for competition.

- 7.2.4. The maximum duration of the call off is 2 years when the process may be repeated if necessary under the then relevant G-Cloud framework if

the supplier meets the criteria applicable at that time as well as the MEAT principles, which enable qualitative, technical and sustainable aspects of a tender submission to be considered as well as price when determining which supplier to award to.

7.3. Financial Implications

7.3.1. The delivery of a strategic investment programme will address the need to deliver financial benefits of £5m over a 5-year period, provide a flexible, utility based costing model and remove the dependency on ageing infrastructure through cloud-based solutions that are managed by a strategic technology provider/s. These financial benefits are included in the 2017-20 Medium Term Financial Strategy. It will also prevent threats to customer information either from ageing technology or cyberattack.

7.3.2. All of Microsoft Services in G Cloud 8 (Lot 4) catalogue have an element of agility and flexibility in terms of scope based on the Contracting Authority's environment, infrastructure, skills and desired outcomes. As such, an initial scoping and discovery activity (Phase 1) will be undertaken to determine resource profiles required and pricing for any given requirement. The business case identifies specific requirements, tasks and has received a fixed price quotation from Microsoft Services for Phase 1 activities of £741k excluding VAT. This price includes an approved discount against current list rates.

7.3.3. An indicative price of £4.17m excluding VAT for Phase 2 activities which is based on the SFIA rate card which has been used to determine an indicative time and materials delivery price. Note that this is calculated at a substantial discount rate and may change after June 2017.

7.3.4. An overarching 3-year Microsoft Premier Support package is also required to deliver sections of the transformation programme and deliver business as usual support throughout, at a cost of £395k excluding VAT.

7.3.5. Microsoft Cloud migration partner services are therefore estimated at a total cost of £5.31m (excluding VAT) over a 2-year contract period, funded jointly from the previously approved Cheshire East Council ICT Infrastructure Investment Programme and Cheshire West and Chester (through programme recharges or staged payments as agreed).

7.4. Equality Implications

7.4.1. An Equality Impact Assessment has been completed and is attached as Appendix 1

7.5. Rural Community Implications

7.5.1. The proposal will support the creation of greater digital choice for those in rural communities.

7.6. Human Resources Implications

7.6.1. No implications identified, as this paper relates to the provision of the technical solutions required in order to enable the compliant delivery of ICT and digital solutions. Resources to implement the solutions are identified in the detailed business case.

7.7. Public Health Implications

7.7.1. The ICT Investment Programme supports the Adults, Children's and Public Health (ACPH) Programme which enables the delivery of the Care Act 2014.

7.8. Implications for Children and Young People

7.8.1. The ICT Investment Programme supports the ACPH Programme and joint working arrangements with regional health colleagues, and the Digital Programme which enables resident's access to Council services.

7.9. Other Implications

7.9.1. The detailed business case to support the full 5-year ICT Infrastructure Investment Programme has been reviewed through Council corporate governance procedures: Joint Officer Board (9th February), Technical Enablers Group (1st March), Shared Services Joint Committee (23rd March) and Cabinet process (11th April – 9th May). Cheshire West and Chester will seek financial approval through appropriate internal governance.

7.9.2. Governance is key to the successful delivery of this transformational investment programme. It is proposed that the purpose of the strategic programme board is to engage the senior ICT stakeholders from both Councils in delivering the ICT Investment Programme from a strategic perspective and, to deliver the required outcomes and benefits; act as sign off authority for key decisions or significant changes in scope; and to assure quality and alignment to Corporate and Service objectives.

8. Risk Management

8.1. This paper relates to the provision of ICT shared services; the risks relate to the procurement and implementation of the technical solutions to ensure both Councils deliver a compliant and transformational ICT Services.

8.2. If the proposals made in this paper are not approved at the Cabinet meeting on 9th May 2017, there is a high likelihood on ongoing ICT major incidents and service disruption.

9. Access to Information/Bibliography

9.1. Appendix 1 – Reasons for Recommendation – expanded version

9.2. Appendix 2 - Equality Impact Assessment

The background papers relating to this report can be inspected by contacting the report writer:

10. Contact Information

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