
Meeting: Customer and Central Services Overview and Scrutiny Committee
Date: 21st June 2010
Subject: ICT Infrastructure Review
Report of: Steve Male, Portfolio Holder Customer, Systems & Property
Summary: Central Bedfordshire Council was created in April 2009. A year after transition, the Council commissioned a review of ICT, particularly in light of some significant system interruptions earlier this year. This report outlines the key findings of the review and the Council's proposed action plan.

Advising Officer: Richard Ellis, Director of Customer and Shared Services
Contact Officer: Clive Jones, Assistant Director Customer and Systems
Public/Exempt: Public
Wards Affected: All
Function of: Executive

CORPORATE IMPLICATIONS

Council Priorities:

ICT is an essential part of the Council's operations and is critical to its ability to effectively serve the public.

Financial:

The provision of reliable ICT systems on a constant basis is a fundamental requirement for the productivity of the Council.

Legal:

Secure and stable ICT systems are key to the provision of all services. Any failure of ICT could cause the Council to be liable for service delivery or system failure and potential legal action.

Equalities/Human Rights:

None.

Community Safety:

There are no Community Safety implications arising from this report.

Sustainability:

The provision of virtualised servers will contribute to the overall reduction in CO₂ emissions

RECOMMENDATION(S):

- 1. That the Committee considers the ICT review and proposals for action in response to it.**

Introduction

1. The new unitary authority came into being on in April 2009. To support the creation of the new Council, new ICT infrastructure was needed and a programme for the implementation of this was initiated in 2008.

The programme consisted of 19 projects aimed at delivering a set of infrastructure that could overlay existing infrastructure and provided access to applications and data via virtual servers, accessed via Citrix technology and the use of two Storage Area Networks (SAN).

The new ICT arrangements went live on 1st April 2009. A year later, Central Bedfordshire Council commissioned an independent review of ICT infrastructure design and implementation, the management of ICT, the assurance over ICT, incident management and disaster recovery.

The Council has also experienced major ICT availability incidents and the review addresses the controls and related issues that have contributed to these.

2. The newly appointed Assistant Director for Customers and Systems has considered the review and prepared a response report which proposes actions to all recommendations. This is attached at Appendix A.

Review Findings

3. Before vesting day and live operations, the initial system design was not driven directly by service requirements and disaster recovery system testing was inadequate.
4. Post live operations, upgrade processes for the infrastructure were not conducted as a matter of routine, largely because the limited resources of the ICT team were focused on the large change programme being delivered.
5. It is important that the culture within the ICT team enables the professionals within it to challenge and raise issues of concern about systems.
6. In Feb 2010, the infrastructure failed to recover automatically when there were two disk failures within the same array. These disks contained critical data that was not replicated off site resulting in a prolonged outage to recover the data.

ICT Response

- 7.0 As a result of the review ICT have:
- Changed the configuration of the SAN to a standard supported configuration.
- 7.1 Upgraded the SAN firmware which may have contributed to the disk failure.
- 7.2 Employed a data technician to monitor the infrastructure daily for hardware alarms and take corrective action.
- 7.3 Created a stabilisation project that will deliver the main off site replication by the end of July 2010 and improved reporting tools for error detection and additional SAN resilience by the end of December 2010.
- 7.4 Created change control processes to ensure appropriate design scrutiny and configuration management is in place.
- 7.5 Scheduled ICT attendance at directorate management teams meetings (DMTs) in June to confirm their business requirements and translate these into a programme of ICT work for the corporate management team (CMT) to accept.
- 7.6 Proposed disaster recovery requirements are established from the analysis of the emerging Business Impact Assessments (BIAs). An ICT disaster recovery strategy will be developed that will meet all of these identified requirements.
- 7.7 Commenced regular team meetings, drop in sessions with the Assistant Director and are adopting appropriate work management processes to enable the culture of challenge and involvement of staff to improve. Staff views on the prevailing culture will be solicited through a staff survey later this year.
8. Although there is no evidence that power failures contributed to the SAN failure, fault tolerant power supplies have been investigated. Further power resilience will be very costly to implement. Bedford has standby generation capability but Priory House has planning regulations that prevent back up generators being deployed for the building. To provide generators in Dunstable would also be costly. The risk of a prolonged power outage at these two sites simultaneously is negligible and with appropriate off site replication, staff should be able to move to other buildings and work if the outage was prolonged. Therefore it is proposed to make the existing infrastructure as resilient as possible without providing new power generation facilities.
9. Eventually a move of the core ICT infrastructure to a highly resilient data centre is an option that is being considered. This fully aligns with Her Majesty's Government ICT Strategy to create 10 -12 core data centres for the whole of the public sector.

Progress against these proposed actions in the response will be monitored via the Organisational Plan.

Appendices:

Appendix A – ICT Review Response Report

Background Papers:

ICT Review Report

Location of papers: Priory House, Chicksands