

VIRTUAL DESKTOP INFORMATION TECHNOLOGY

EXECUTIVE SUMMARY

The City Auditor's Office issued the Virtual Desktop Information Technology Audit Report to Administration on February 4, 2015. The report includes Administration's response to eight recommendations raised by the City Auditor's Office, which will support the successful expansion of Virtual Desktop technology at The City.

RECOMMENDATIONS

1. That Audit Committee receive this report for information; and
2. That Audit Committee recommend that Council receive this report for information.

PREVIOUS COUNCIL DIRECTION / POLICY

Bylaw 30M2004 established the position of City Auditor and the powers, duties and functions of the position. Under the City Auditor's Office Charter, the City Auditor presents an annual risk-based audit plan to Audit Committee for approval. The City Auditor's Office 2014 Annual Audit Plan was approved on December 12, 2013.

The City Auditor is accountable to Council and subject to the oversight of the Audit Committee under Bylaw 48M2012.

BACKGROUND

This audit was undertaken as part of the approved City Auditor's Office 2014 Annual Audit Plan. The objective of this audit was to determine if control processes exist to provide reasonable assurance that the VDI program will achieve the benefits described in IT's 2015 - 2018 budget submission. This assessment was performed using a just in time methodology to support the successful expansion of this technology.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Virtual Desktop Infrastructure (VDI) is a technology that was recently introduced at The City, which shifts most tasks performed by a desktop computer to a server in the data center. The virtual desktop can then be accessed using a lower cost device known as a thin-client or a mobile device, such as an iPad. VDI benefits include supporting flexible working (Tomorrow's Workplace), mobile working, improved business continuity and cost savings.

VDI at The City, branded as myDesktop, was rolled out in three phases. First, IT quickly implemented this technology during the 2013 flood. This provided users that were unable to access their computer with a full desktop experience. The second phase, during 2014, involved operational upgrades to the existing technology and trials with business units. The third phase, which started at the beginning of 2015, will significantly expand the number of users this technology can support and will also implement the technology in IT's second offsite data center.

The results of our review noted an absence of effective controls to address two risk exposures, which may increase as the third phase of this project is completed. We have recommended mitigating controls as outlined in the following table:

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Failing to Deliver Expected Benefits	Lack of System Availability
1. Total cost of ownership model	1. Performance assessment and capacity plans.
2. Defined benefits, measures and a plan for their achievement.	2. Defined service levels
3. Stakeholder engagement and communication plans	3. Documented configuration baseline

We believe it is important that these controls are implemented on a timely basis, since phase three of the project will significantly increase the risk associated with the technology due to the increased user base and expenditure on the technology. The risk associated with failing to deliver expected benefits includes fewer IT support cost savings, reduced business continuity and less flexible working, including the associated facility costs savings.

Administration agreed to the recommendations and provided action plans with commitment dates no later than November 30, 2015. The City Auditor's Office will follow-up on these commitments as part of our on-going follow-up process.

Stakeholder Engagement, Research and Communication

This audit was conducted with the IT Operations Manager acting as the principal audit contact within Administration. Additional support and cooperation was provided by management and staff within IT and other business units across The City.

Strategic Alignment

Audit Reports assist Council in its oversight of the City Manager's administration and accountability for stewardship over public funds and achievement on value for money in City operations.

Social, Environmental, Economic (External)

This report has been reviewed for alignment with The City of Calgary's Triple Bottom Line (TBL) Policy Framework. No implications are identified.

Financial Capacity

Current and Future Operating Budget:

N/A

Current and Future Capital Budget:

N/A

Risk Assessment

The activities of the City Auditor's office serve to promote accountability, mitigate risk, and support an effective governance structure.

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REASON FOR RECOMMENDATIONS:

Bylaw 48M2012 states: "Audit Committee receives directly from the City Auditor any individual audit report and forwards these to Council for information."

ATTACHMENT

1. Virtual Desktop Information Technology Audit Report.