Disaster Recovery Applications Test

Audit Report

May 2008

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1.0 Management Summary

The Audit Services Branch completed work relating to the testing of the Disaster Recovery Application test. As part of its oversight role, the Branch participated in the disaster recovery plan and test as a member of the Steering Committee. Audit Services was present during the testing phase of the disaster recovery plan, which was executed from October 22, 2007 to October 31, 2007.

The testing of the Region's disaster recovery plan was successful. Briefly:

- A total of 120 applications were tested in the five day period.
- A total of 119 applications, which included **all priority one applications**, tested and performed without problems.
- relatively minor problem was experienced with one application which resulted in 'partially passed' condition.

This success places the Region ahead of most municipalities in terms of our ability to recover from a major information technology disaster. The Branch and project team are commended for their efforts and the results to date. This was the second test of applications. The first test was in 2004 and was heavily dependant on external resources. One of the recommendations in the 2005 audit report was to transfer the skill set to internal staff. This test was completed using internal staff. It also tested the recovery site, which had been moved from an internal site at the South Services Centre to an external third party. Again, the test results show this was a success.

Based on the work performed, an opportunity was noted for consideration by the Region's Information Technology Services (ITS) Branch:

- update of the business impact assessment

This report has been discussed with Finance Information Technology Services management, who have provided their comments and agreed to take the necessary action to implement the noted opportunities.

Should the reader have any questions or require a more detailed understanding of the risk assessment and sampling decisions made during this audit, please contact the Director, Audit Services.

We wish to thank the Commissioner of Finance, Chief Information Technology Officer, and their staff for their co-operation during the course of the audit, and for their assistance in providing Audit Services with timely responses.

2.0 Introduction

As part of our 2007 Audit Plan, which accommodates various types of audit projects, consulting engagements, and follow up requests from the Audit Committee and management, the Audit Services Branch was present during the Region's disaster recovery plan test from October 21 to October 31, 2007.

The Audit Services Branch uses a Risk Assessment Methodology to develop the Audit Plan annually. This methodology helps to define the level of risks associated with the various strategic

projects and processes at the Region, and is a tool that Audit Services uses in assessing where best to allocate audit resources. York Region's Audit Committee approves the Plan.

3.0 Objectives and Scope

The objective of this engagement was to determine if the Region's Disaster Recovery Plan could be relied upon to recover the applications from a major disruption of services in the Information Technology area.

The audit objectives were accomplished through observation and discussion during a controlled test of the Disaster Recovery Plan and testing at a sufficient detail.

4.0 Methodology

Audit Services was present at the disaster recovery plan test site, observed the testing of applications, sign-off by users, and reviewed output from both production and test environments to ensure the results were successful.

5.0 Detailed Observations and Recommendations

5.1 Results of Disaster Recovery Plan Testing

Observation

The following application experienced a 'partially passed' rating during the Region's testing:

Application	Priority	Status	Condition
PBS	3	Partially passed	Reports failed.

This application will be replaced with Maximo in 2008. Maximo successfully tested as part of the overall test. As such, no follow-up is required

Recommendation

None

Management Response

None required

5.2 Business Impact Assessment

Observation

The business impact assessment which was used to prioritize the applications was based on the risk assessment developed in 2005. In order to ensure the Disaster Recovery Plan is recovering the right applications at the right time, the business impact assessment should be updated on a periodic basis.

Recommendation

It is recommended that Finance ITS facilitate a more formal business impact assessment in the near future with the user departments with a view to updating it and maintaining it on a periodic basis. This will ensure that the appropriate resources are assigned to the disaster recovery planning process and that the plan is recovering the higher priority applications first and the lower priority applications over a longer period of time.

Management Response

The Business Impact Assessment (BIA) process is now built into the Region's application life cycle. As new applications are developed/purchased or major enhancements are performed on existing applications a formal BIA is performed to ensure the appropriate resources are assigned to the disaster recovery environment. IT Services agrees that a new, formal BIA should be performed on all applications on a periodic basis. IT Services will start a formal BIA process this year and will complete the report in the 1st quarter of 2009.

Original signed
Lloyd Russell
Commissioner Finance

Original signed
Louis Shallal
Chief Information Technology Officer

Original signed
Paul Duggan
Director, Audit Services