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INFORMATION TECHNOLOGY SERVICES - ANNUAL REPORT 2006

The Finance and Administration Committee recommends the adoption of the recommendation contained in the following report, February 1, 2007, from the Commissioner of Finance:

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

This report informs Finance and Administration Committee and Regional Council about the 2006 activities and accomplishments of the Information Technology Services branch of the Finance Department.

3. BACKGROUND

Information technology is fundamental to York Region's services delivery and to its management of York Region information as an asset. The mandate of Information Technology Services is to establish strategic directions for information technology and to set branch priorities and programs that provide information tools and services aligned to corporate goals and department service delivery objectives.

Today, Information Technology Services provides technology infrastructure, information management tools and customer / user support services to over 2,500 staff and management in Region Departments in the following areas:

- Networks to exchange multiple forms of information among staff, other government agencies, and the public
- Electronic information storage and retrieval facilities for York Region business data
- Application and data processing facilities as well as servers to host corporate and departmental computer applications
- A variety of end user phones, personal computers, thin client terminals and other personal computing devices
- A set of common office environment business automation tools including the Microsoft set of office software, e-mail and internet browser tools

- Enterprise Business Management software – PeopleSoft and other corporate systems
- Any required specialized applications for communication with disabled constituents
- Various security programs, systems and mechanisms to protect York Region's information technology environment
- Information Technology disaster recovery facilities, processes and procedures

As well, Information Technology Services hosts a large number of departmental business applications providing the computing, data storage and networking infrastructure for these service delivery applications including those in support of provincial applications in the Health and Community Services and Housing Departments.

3.1 The York Region Information Technology Strategic Plan (YRITS)

Starting in 2004, through extensive consultation with the Corporate Technology Review Committee (CTRC), Information Technology Services produced a comprehensive corporate strategy for information technology at York Region. This document was reviewed and accepted by the Finance and Administration Committee and Council in 2005.

The information technology strategy strove to align the political vision contained in the York Region's strategy document – Vision 2026, with Departments' service delivery programs. Projects with an information technology component were grouped into thirty-two program areas and the respective roles of corporate I.T. and departments in managing these programs were established. Furthermore, a set of guiding principles for how technology was to be used to serve citizens was developed along with a set of strategic outcomes to be used to evaluate the relative importance of information technology projects competing for funding and resources.

Each year, in the fall, the strategy group (composed of the CTRC and other departmental staff) meet to review how far the group have progressed in using information technology to improve service delivery. As well, the list of projects with a technology component is updated. The resulting update to YRITS is then submitted to the Finance and Administration Committee and Council for information and / or approval.

4. ANALYSIS AND OPTIONS

4.1 2006 Highlights

It is clear that the Region is experiencing tremendous growth that is expected to continue for the foreseeable future and the I.T. area has to accommodate this growth by providing the technology support that enables the operating departments to deliver their services.

Statistics are still being compiled for 2006, however, the table below provides a simple illustration of the impact of this growth on I.T. services and the associated tools and devices:

Description	1998	2005
Personal Computers	632	2,438
Telephones	850	3,307
Support Calls	Not available	25,350
Application/Data Servers	11	106
Software Applications	20	209
Network Devices	29	148

Significant progress was made in 2006 in a variety of areas to improve service to our departmental customers. Early in the year, Information Technology Services branch staff were re-organized to be more aligned with the goals of the I.T. Strategy and with the objective of maximizing staff interaction with departments.

A 5-year cost-saving services contract was entered into with Bell Canada to consolidate various fragmented telephone and data networks and to upgrade technical capabilities into a single converged Region business network (the Converged Network) emphasizing systems reliability of the network which connects York Region sites, local networks within buildings, voice mail processing and telephone services.

Several initiatives were tendered in 2006, including one to select a new supplier for desktop, laptop, thin client devices, and servers for the next 3 – 5 years. As well, a number of technology pilot initiatives were undertaken including implementing a wireless in-building network for access to the Internet and to the York Region network from the Administrative Centre at 17250 Yonge Street.

4.2 Corporate and Departmental Support

The Information Technology Services branch focuses is activates into five main areas:

- Day-to- day customer services and support
- Corporate technology sustaining programs
- Enterprise architecture and security
- Enterprise business applications, and
- Day-to-day technology operations and infrastructure maintenance.

The major accomplishments of 2006 by these service areas are described below.

4.2.1 Day-to-Day Customer Services and Support

I.T.S. Service Desk (Help Desk)

The I.T.S. service desk maintains an extended hours call centre, 8:00 am to 5:00 pm Monday to Friday, to provide Region staff with a central point to request information technology services and to get help with information technology problems. After hours requests for services are routed to an outsource service company – Millennium Care (In 2007 the outsource service will be provided by Compugen).

More tickets were logged at the I.T.S. Service Desk in 2006 than in any previous year. Work volume has increased by 25% since 2003 reflecting growth in Region staff and the increased reliance on information technology to deliver Region services. The I.T.S. Service Desk was able to continue to increase the resolution rate for service requests despite the increase in work volume. As in 2005, the summer months were the busiest at the Service Desk.

Business Support Analysis

Departmental solutions are primarily supported by the Business Support Analysts. These staff members spend approximately 40-50% of their time helping Region computer users to effectively use technology in the day-to-day delivery of Region services. In addition, Business Support Analysts work with departments on new initiatives - producing statements of work, monitoring project milestones, escalating schedule slippage, and meeting regularly with departmental stakeholders to review project status, resolve issues and discuss additional initiatives.

Currently Business Support Analysts are involved with over 100 departmental projects of different size and complexity.

4.2.2 Corporate Technology Sustaining Programs

Converged Network

In December 2005, Information Technology Services entered into contract negotiations with InfoStream (now owned by Bell Canada) resulting in a 5 year Converged Network services contract with an effective date of January 1st being signed at the end of June 2006. During that time however, work to migrate to the Bell solution was underway in order that York Region would hit its targets of replacing existing services as old contracts expired and leases on existing equipment terminated.

By the end of August 2006, Bell had transitioned the network connecting all 19 of the York Region's high staff concentration office sites from Sprint's wide area network services to Bell's fibre optic network. By the end of December 2006, 37 of the 42 York Region small office sites (mostly EMS sites) had been migrated to Bell services.

By the end of December last year, approximately 1,700 York Region staff had been migrated to Bell's local area network services; new voice mail equipment licensed to

support 2,000 staff has been installed and the first call centre was migrated from old technology to the new CISCO call centre software system. These initiatives will continue in 2007.

During 2006 the I.T.S. branch also processed over one hundred network service requests for Move-Add-Change-Delete (MACD) to support increasing staff relocation activities which also included installing a significant number of new network links to new Region business locations.

YRITS and Capital Budgets Update

In 2006, the I.T.S. branch produced updated capital budget numbers for corporate infrastructure sustaining projects. Working with individual departments, staff reviewed over forty new department projects with an information technology component to ensure that information technology infrastructure and services were in place when departments implement these initiatives.

As well, as in previous years, the I.T.S. branch participated with departments in a facilitated session to update the YRITS strategy. A document on the I.T. Strategy update will be submitted to Committee and Council later this spring.

PC and Citrix Thin Client Device Deployments

Currently, most of the personal computers (PCs) deployed to staff are leased. In 2006, the Region adopted a policy of purchasing replacement devices for equipment whose lease has expired. PCs are provided for “power-users” and staff with unique requirements. CITRIX thin client devices are terminals for use in a server based computing environment. Server based computing provides the benefits of an Anywhere eDesktop. With CITRIX and server based computing, staff can access Region business systems and data from multiple locations including home. CITRIX is becoming a key component in the Region’s strategies for disaster recovery and pandemic response.

By the end of 2006, approximately 340 staff were using CITRIX thin client terminals and had been added to the Anywhere eDesktop environment. In addition, approximately one thousand staff use their laptops and home computers from remote locations to access their application and data using the Anywhere eDesktop environment.

4.2.3 Enterprise Architecture and Security

Early in 2005, the branch augmented its computer security skills by hiring a dedicated lead for information security. As well, Information Technology Services lead a significant effort to re-architect York Region’s WEB environment and re-design the Active Directory – a major component of York Region’s automated information security and data access control strategy.

Advancements were made in the management of computer assets within York Region by expanding the computer assets Configuration Management Database (CMDB) to track many more information technology resources and to provide much better information

including the financial value of these assets. This was done to update and bring York Region to “best practice” in I.T. asset management.

The technical architecture of the Region’s computing environment was enhanced through a number of activities including participation with the Town of Markham in a needs analysis and design for an internet Portal to enhance citizen interaction with government and through the development of technology standards for WEB pages.

Technology pilots were undertaken in the areas of high availability servers to support critical business systems to ultimately cut the cost of computing at the Region.

The security of the information technology environment at York Region was further strengthened through a security review and optimization of the CITRIX operating environment and through the development of Security Standards for York Region based on the widely accepted International Standard Association’s ISO 17799 Security Standard Document.

4.2.4 Enterprise Business Systems

Two main business applications are currently deployed in York Region at the enterprise level, namely the PeopleSoft application (Oracle) and the eDocs electronic documents management application (Hummingbird, now Open Text).

PeopleSoft Database Environment

During 2006, the PeopleSoft server environment was re-configured to accommodate a testing and quality assurance environment for both the Human Resources Management Systems and the Enterprise Financial Systems. A version upgrade was implemented for all Oracle databases with the Oracle FailSafe data recovery option being added to PeopleSoft production database servers to protect Region information in case of a system failure. Similar upgrades were added to the PeopleSoft disaster recovery environment.

PeopleSoft Financial Information System (FIS)

A PeopleSoft financials Query Viewer was implemented that gives staff the ability of ad-hoc information access. Various software program changes were implemented including: customizations to the Contract pages to add information regarding contract dollar increases, original amounts, and contingencies, greatly assisting project managers who control activity on specific contracts. In addition a major contract activity report capability was developed and deployed. Certification for FIS in the CITRIX environment was achieved and a multi- year project plan to support the business requirements of the various business units was put in place. Lastly, electronic purchase order functionality was released to the departments.

PeopleSoft Human Resources Management System / Payroll

During 2006, several maintenance and enhancement changes were implemented in the Human Resources Management and Payroll components of the PeopleSoft system including: optimizing the Recruit Workforce module to increase efficiency for recruiters

and the development of a PeopleSoft program that automates the calculation of Employer/Employee T4 Earnings / Deductions.

Enhancements were made to automate the salary and job data mass change processes for all payroll groups for the Apr. 1, 2006 economic adjustment and CUPE contract; to automate requirements for retro pay calculations to support pay equity and economic adjustments and to automate load-to-payroll processes for all payroll groups.

A new view/page was developed to protect privacy of information by disabling the display of classified Earning/Deduction/Tax codes from the online Paycheque Summary view from PeopleSoft.

PeopleSoft Human Resources Management System for York Regional Police

As part of its mandate, Information Technology Services provides and maintains the PeopleSoft systems and computing environment for the human resources management system (HRMS) used by York Regional Police.

In 2006, York Regional Police migrated from their legacy HRMS system to PeopleSoft HRMS through a data conversion and upload of legacy system data into PeopleSoft. Various utilities and applications were developed for the migration including customized Peoplesoft views, Police mass salary change and retro pay capability; police training data extract capability; automated adjustment to sick time accrual based on condition and the functionality to automatically track Police employee movement between departments.

PeopleSoft Data Exchange with External Agencies

During 2006, the PeopleSoft team further optimized business processes by automating various data exchanges with both internal departments and external agencies. These enhancements included extracting data for the York Region Employee Recognition Program, extracting data for the OperiTel system used by Transportation and Works; integration data exchanges between the corporate learning system and the human resources system, integrating data exchanges between Transportation and Works time and labour system and the payroll system together with interfaces to Sun Life, Courts Administration and other agencies.

PeopleSoft Customized Integrated Applications and Reports

In 2006, the PeopleSoft team completed several requests for customized applications including a system for EMS that tracks all automated defibrillators installed in York Region office sites and a custom EMS Ministry Training Report to track on-line training of staff.

As well, a 5 year Corporate ERP Reporting Strategy was developed which identified the reporting needs of users and managers from the PeopleSoft system.

PeopleSoft Future Road Map

The magnitude and ongoing investment in enterprise business software such as PeopleSoft, JD Edward and SAP deserves careful assessment and analysis. This is a view

shared by most if not all municipalities using these enterprise business systems. For municipalities using Oracle/PeopleSoft like York Region, this assessment has a timeline established through the “Road to Fusion” which is currently being put in place by the Oracle Corporation. Oracle is pursuing the integration of various parts of the existing PeopleSoft, JD Edward (both were acquired by Oracle) and other software into a new software called Fusion. York Region can choose, among many options, to continue with its current PeopleSoft business system which will likely have less support and attention from Oracle than Fusion, or plan to switch to Fusion during the next few years which will require significant effort and funds for implementation similar perhaps to the effort expended when PeopleSoft was implemented in the late 1990’s. For this reason, York

Region took the initiative and invited other municipalities to discuss their respective plans for this assessment. As a result, York Region, in participation with ten other municipalities, will be initiating a study early this year to review the options available and to assess their future investment in their business systems. Specifically, this study will evaluate the following options:

- Staying on existing Oracle platform (PeopleSoft) but also examining alternatives for maintenance and support of the software;
- Migrating to Oracle Fusion products;
- Switching to another business system;
- Switching to Alternative products and/or delivery models.

E-DOCS Enterprise Document Management System

In 2006, 116 more York Region staff members were given access to e-DOCS. There are now 710 staff who store and access their documents through e-DOCS. Within the Region, e-DOCS document storage increased 50% in 2006 and the number of e-DOCS access activities grew by 107%. There were 249,000 documents stored and 5.4 million e-DOCS access activities carried out by the end of 2006.

In 2006, e-DOCS was established as the place to store e-mail. There are now approximately 85,000 e-mail messages stored in e-DOCS. Region staff are currently adding about 4,000 e-mail documents a month to e-DOCS.

With assistance from departments and the Corporate Technology Review Committee, the e-DOCS team completed a Corporate EDMS Strategy that charted a future road map for further implementation of e-DOCS. In September, the Region's CAO and the Commissioners adopted e-DOCS as the corporate standard for electronic records management. The Commissioner of Corporate Services was appointed corporate sponsor for the on-going e-DOCS rollout.

4.2.5 Day to Day Operations and Infrastructure Maintenance

Data Centre Maintenance and Expansion

The Region has, for some time; maintained its primary data centre on the 3rd floor of the Administration Building in Newmarket. This site is not the best location for a data centre and it has for several years experienced ongoing challenges and costs associated with expansion to accommodate Region growth in information technology usage. During 2006, the viability of this data centre was again extended through the addition of building infrastructure to upgrade the data centre cooling capability by 15 tons of air conditioning and by upgrading the uninterruptible power supplies by 65KVA.

Infrastructure Maintenance

In addition to day-to-day operations of the data centre, staff replaced approximately 75% of the servers and data storage devices as they came off lease in 2006 including: two replacement Blackberry servers: three servers to support network printing; three e-Mail servers; two file servers and two application servers.

To support growth in the use of information technology by Region staff and the public, the server environment which hosts the Region's external and internal WEB sites was upgraded; the main corporate disk storage network was increased from approximately 10 terabytes to 22 terabytes and a new file transfer protocol (FTP) to accommodate transfer of large electronic files to and from Region business locations was implemented.

4.2.6 Future Directions

The capabilities of Information technology available today continue to advance rapidly in a number of key areas including enhancements in the reliability and reach of wireless local and wide area networks; growth in the variety and functionality of small portable wireless PCs, tablets and other mobile devices and the "virtualization" of computer hardware and data storage. As well Microsoft has recently released major new versions of several their "flag-ship" products – the Microsoft PC operating system (referred to as Vista), and the Microsoft suite of office systems software (Microsoft Office 2007) - that promise better business functions and a more secure computing environment.

All of these offer the Region exciting new opportunities to employ information technology to better serve citizens and to improve business processes. During 2007, Information Technology Services will be assuming a leadership role with departments, through the Corporate Technology Review Committee, in understanding the directions that departments wish to pursue with these technology opportunities and to prepare the Region's information technology infrastructure to enable and support their initiatives.

5. FINANCIAL IMPLICATIONS

There are no financial implications from this report. Operating and projects activity impacts are reflected in the Information Technology Services operating and capital budgets.

6. LOCAL MUNICIPAL IMPACT

Throughout 2006, Information Technology Services staff met on a regular basis through the I.T. Directors Forum with the staff of the area municipalities to share information and ideas as well as to collaborate on projects including the initiation of the Portal Business Plan and the OneYork Broadband initiative which are currently in progress with the Town of Markham.

7. CONCLUSION

There are numerous opportunities to invest in information technology. The Information Technology Services branch plays a key role in evaluating technology opportunities, implementing technologies needed by Departments and approved by Council and in operating and maintaining the Region's information technology infrastructure for the benefit of all Region staff and, in turn, to serve the residents of York Region.

The Senior Management Group has reviewed this report.