

Report to Council



Date: November 30, 2015
File: 0250-40
To: City Manager
From: Rob Entwistle, Information Services Department Manager
Subject: Information Services Digital Strategy

Recommendation:

THAT Council receives, for information, the report from the Information Services Department Manager dated November 23, 2015, with respect to the Information Services Digital Strategy.

Purpose:

To provide Council with an overview of the Information Services Digital Strategy.

Background:

Information Services is a centralized corporate service providing all the required IT infrastructure, application systems and support required to deliver City services. The scope of infrastructure and systems Information Services supports has expanded immensely over the last decade. In addition to the traditional roles outlined above the IT industry is transforming from a support function to a key strategic business partner with the explosion of technology that has the potential to help cities provide more efficient services and to make more informed decisions.

New developments in IT technologies such as virtualization, cloud computing and social media have increased the need to provide more services across a combination of environments and platforms. In spite of the growing complexity of the IT infrastructure and economic constraints affecting all sectors of the economy, organizations are expected to provide reliable, secure and continuous IT services in order to support business-strategic initiatives. The growing complexity of the IT landscape, as well as emerging challenges of coordinating distributed resources and services, higher interdependencies and growing data management needs require systematic procedures to manage changes made to the IT environment. No organization can afford the loss of productivity or customer confidence due to ineffective systems, down time or breaches of security.

The evolution of smartphones and tablets, the exponential growth of mobile apps, as well as the popularity of social media have also changed the IT marketplace. Indeed, the

“consumerization” of IT continues to blur the boundaries between personal and professional devices, applications and technology use. Not surprisingly, a growing number of organizations are aware of the potential to leverage these emerging social and technological trends to create new products, services and business models. These recent changes in IT promise great potential and enhances the ability of IT to increase its business value to the organization.

Digital Strategy:

Information Services worked with CGI, a Canadian owned global IT consulting and implementation company with significant experience working with municipalities of all sizes, in 2014 to develop a framework to ensure Information Services can meet the current and future needs of the organization and our citizens. The Digital Strategy was completed in December 2014 and the direction and action items are now forming the basis for work planning in Information Services.

The Digital Strategy identified the need to maintain the health of IT otherwise the backend technologies needed to support growth will fail. IS very closely supports the various business units and IS must be treated as a trusted partner and given the “voice” or authority to place its own “care and feeding” projects at the same level as business projects. A balance must be struck between the organic growth of IS and growth necessitated by projects.

The strategy identified 19 action items to build the IT foundation, mature the IT organization and improve efficiency and excellence. This report focuses on the four action items currently underway.

Standard Configuration Documentation

In 2015 staff documented standard configurations for physical and virtual server builds to allow for quick accurate builds. Documentation is key for disaster recovery plans.

Detailed Application Review

In 2015 staff assessed the current state of more than 100 City applications. Integration, redundancy, lifecycle and business value were evaluated. It was identified 68% of City applications either should be replaced or consolidated over the next three to five years. The application review has created a road map to help ensure both human and financial resources will be available to complete the work. In 2016 major projects will include but not limited to the City’s financial system, electronic document management system, asset management system, taxation system, maintenance management system and recreation support system including registration. It’s important to note any system changes require extensive support from the city departments utilizing the systems.

Web Platform Review - Virtual City

The Digital Strategy noted the City needs to move to a more progressive and flexible web platform. Modern platforms provide the agility needed to support change when required and easy access to mobile devices. Web platforms now need to provide more than just

information portals, as they will become the place where citizens come to collaborate, engage and do business. A new web platform is viewed as being a key deliverable of the Digital Strategy. Today's web platforms must continually evolve to meet changes in technology and consumer preferences.

In 2015 staff conducted a Web Platform strategy to determine needs and costing. This included analyzing our website statistics, staff interviews and an RFI process with web platform providers.

Data Analytics

IS has developed solutions that gather very detailed data from most systems. The data includes geographic, demographic, financial, and relational aspects.

Data analytics could enable the City of Kelowna to analyze a mix of structured, semi-structured and unstructured data in search of valuable business information and insights. Data analytics is the process of examining large data sets containing a variety of data types to uncover hidden patterns, unknown correlations, market trends, customer preferences and other useful business information. The analytical findings can lead to more effective innovation, new opportunities to generate revenue or decrease expenses, better customer service, improved operational efficiency and other business benefits.

In 2015 IS began exploring the City's analytic capabilities with three pilot projects that involved the significant snow event in January 2015, attendance management and water supply. While work was limited the three pilots, one of which is still underway, there was clear demonstration of both the benefits and challenges of data analytics. Data analytics is an important service IS can offer the entire City including its residents that can be used for more informed decisions.

Considerations not applicable to this report:

Internal Circulation:

Legal/Statutory Authority:

Legal/Statutory Procedural Requirements:

Existing Policy:

Financial/Budgetary Considerations:

Personnel Implications:

External Agency/Public Comments:

Communications Comments:

Alternate Recommendation:

Submitted by:

R Entwistle, Information Services Department Manager

Approved for inclusion:

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cc: