



Report to: General Committee

Report Date: April 28, 2014

SUBJECT: Digital Markham

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RECOMMENDATION:

- 1) THAT the report entitled “Digital Markham” be received;
- 2) AND THAT the contract for developing Digital Markham strategy be awarded to PricewaterhouseCoopers LLP (PwC), in the amount of \$211,700 (inclusive of HST);
- 3) AND THAT this engagement be funded from capital project #13829 (Technology Strategy Review) in the amount of \$75,000 and the remaining balance of \$136,700 be from the Capital Contingency project #6395;
- 4) And that the report on Digital Markham be presented to April 30th Council meeting;
- 5) AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE

The purpose of this report is to obtain committee approval to award the development of a “Digital Markham” strategy to PwC.

BACKGROUND

In 2005 the City of Markham developed a corporate technology strategy based on significant consultation with internal stakeholders which was adopted by Council in 2006. The six recommendations included in this strategy were:

- 1. Adopt Enterprise Architecture Principles and Policies to facilitate the establishment of a clearly defined technology architecture and operationally reliable and efficient environment with primary focus on an enterprise view.**

This recommendation has been fully implemented. Thirty two guidelines and principles were adopted and have been part of the IT decision making process over the past seven years. These help maintain an environment that is systematically managed in the areas of IT asset and lifecycle, data, security, solution selection, solution delivery and privacy.

- 2. Optimize Business Architecture through technology directions and decisions that help reduce the technology footprint and support consolidation, while minimizing operational impact.** Significant strides have been made in these areas through server consolidation, virtualization, moving to Multi-function Devices, and “thin-client” use for libraries and the Emergency Operations Centre.

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3. **Plan Portal Implementation to ensure access to everything, everyone, anytime, anywhere through a single, robust and user friendly online entry point for accessing city information and services.** The City's portal has been providing a reliable and positive online experience to its users through its new look and feel, and improved content navigation built based on user-centric design and implemented on an industry leading portal technology. Previously stand-alone websites for the Markham Public Libraries, Markham Museum, Flato Markham Theatre, Varley Art Gallery and Economic Development were brought together on to this platform without compromising the unique needs of these business areas.

In its second phase of this project, over 50 interactive online services covering a wide range of City functions such as permits, including online payment capability were deployed. In addition, enhanced accessibility features were implemented along with the first Mobile App for City services. Recently, the portal has been enhanced to be used with full functionality on mobile devices of different sizes and platforms.

The project also benefited from the partnership established with the Region of York on a shared cost model for infrastructure and its operation but also in project planning/execution, among others.

4. **Initiate Information Management Programme by establishing policies, business processes and practices that facilitate the management of information as a corporate asset.** A broader strategy was developed and progress has been made in the areas of electronic report review/circulation over the past several years and e-Agenda and e-Plan Review initiatives currently underway.
5. **Implement IT Best Practices to establish an environment that provides IT services and operations based on established industry best practices and methodologies.** With proper skill training, the development of the IT Service Management metrics and regular review of processes for efficiency, the ITS department has reached a mature state in end-to-end service management.
6. **Refine IT Governance to have a decision making process that permits the prioritization of IT investments are in line with corporate objectives.** By leveraging existing organizational structure and by establishing steering committees for major initiatives, as well as by working closely with the Information and Communications Technology Sub-Committee of council, the City has made advances in executing its strategic objectives. Some work still remains to help refine this process.

In addition, over the last year, special focus has been given to the opportunity to leverage innovation and business transformation through technology. This includes initiatives such as Electronic Plan Review, Single-sign-on for portal, Electronic Agenda, IT infrastructure enhancements and business continuity, Human Resources system assessment and possible partnership with the Region of York, Automated Vehicle Location, technology use for Election, among others. The objectives of the previous IT Strategy have reached substantial completion. It is timely to recalibrate Markham's strategy for the next 3 - 5 years through a new technology roadmap.

Markham Experience

Markham has been a leading municipality in relation to adoption of technology to better serve residents and its customers.

- In 2003, Markham conducted the first binding municipal election for online voting, and has been using this approach ever since.
- Following the 2006 municipal election, Markham successfully engaged its citizens to obtain feedback on its strategic plan “Building Markham’s Future Together”. The associated online public engagement and consultation program - Click With Markham - was awarded the prestigious Canadian Association of Municipal Administrators (CAMA) award for innovation in public consultation.
- Markham has deployed a number of technologies to help manage its internal operations efficiently and has transformed one-third of its workforce to be mobile and access near/real-time information. Technology is widely used across the City functions from fire routing/dispatching technology through to public WiFi access in all its facilities, building inspection, managing water and storm systems etc. With the launch of its Portal in 2011, the City has been successful in providing new and enhanced online experience and services including payment capabilities to its citizens covering a wide range of business areas. In 2013, in addition to providing enhanced accessibility features/tools for online services through the portal, the City also launched a Mobile App that packages a number of services/information and is being used well by the community.
- On April 11, 2014 we hosted a successful Smart Cities forum on “Smart Markham” that attracted over 100 people and included speakers and panelists from the technology industry and various business sectors (health, education, municipal, utilities). The discussion has been a great platform to initiate the process of developing Smarter Markham and related initiatives through public engagement.

Digital Change

During the last number of years, there have been significant changes taking place in the workplace, in the consumer market, and in the industry. For one, being impacted by the prevalence of consumer technology in mobile devices that are easy to use and the lower capital cost, customer expectation for services has increased. In addition, there is significant rise in social media networks, transforming the way society behaves and interacts.

With technology advances such as cloud computing, Big Data and real time analytics, digital has created a new, agile method to manage and access personal, public and corporate information. In addition, there are continued advances in new mobile technology and network connectivity that have not only facilitated the adoption of use of these technologies but made it much simpler to access and/or provide services.

As a result of these developments, the expectations of governments by citizens have significantly changed. Our customers want access to multi-channel services, faster response time (24/7), accessible & more efficient online engagement. City staff must anticipate citizens’ needs and accordingly use new tools and more efficient business processes to reap the benefit of the digital change.

OPTIONS / DISCUSSION

Corporate Technology Roadmap

It is with this background, and understating that most of the objectives identified in the last strategic plan have been achieved, that staff requested and obtained approval for undertaking a corporate technology roadmap. The newly refreshed technology strategy would provide direction based on a more integrated approach, corporate objectives and priorities and it would be used to help guide the organization to focus on specific areas for the next 3 – 5 years.

Accordingly staff engaged four vendors, ranging from small firms to large IT research and consulting firms, to provide a proposal to undertake the work. Two of the proposals put significant effort on assessment of the current IT environment and benchmarking, as compared to strategy development. The third proposal did not have experience outside small to mid-sized municipalities. These three proposals also lacked defined maturity of process, and experience in conducting effective public engagement for such a strategy and will result in a more traditional IT strategy.

The proposed price from the four vendors for the engagement ranged from \$75,000 - \$208,000. After a thorough review of the proposals and subsequent meetings with each vendor, Staff determined that PricewaterhouseCoopers LLP (PwC) provided the most suitable proposal for developing the corporate technology roadmap – Digital Markham.

PwC's Proposal - Digital Markham

The PwC proposal is to develop a digital strategy for the City (Digital Markham) that provides corporate technology roadmap for the next 3 – 5 years, identify the associated resources to deliver on the strategy and recommend the relevant governance for decision making. This will be accomplished in three major steps: Current State Assessment, Future State Visioning and Roadmap and Initiatives.

The Current State Assessment will provide a good overview of where the City stands today in relation to its digital abilities, what constraints it operates under, projects underway, and resourcing/capacity etc. that will help to identify risks and future opportunities. The report from this phase of the process will also include digital maturity assessment (in the areas of mobile, online, social, infrastructure and data) measured against other cities such as New York, San Francisco, Chicago and Vancouver.

The Future State Visioning step will involve “Catalyst Session”, an innovative and interactive stakeholder engagement process, with the objective to understand where the City would like to go in the future. This will be undertaken through integrated workshops with key stakeholder groups including business community, citizens and Council members, and will be used to identify priority initiatives, and recommended policy/regulatory changes to achieve the desired objectives. Their Catalyst Session is a unique approach to accelerating collaboration and engagement through the creation of creative environments for visioning. It is designed to help foster innovation and align various stakeholders to common goals, and will be instrumental in designing the vision for the future of Digital Markham. The successful engagement of business, government, organizations and citizens in the recent Smart Markham Forum will serve as a strong starting point for the development of the digital strategy.

The Roadmap and Initiatives step will include a Digital Markham strategy which outlines the goals, guiding principles and planned outcomes supported by pragmatic and executable roadmap which will establish the City's path moving forward. The strategy will describe the recommendations from people, processes and technology perspective and will be accompanied by high level cost, risks and mitigation measures. The whole process leading to the final Digital Markham strategy is expected to last three months using the accelerated approach, and it will be ready to be adopted for the new Council term in 2015.

The suite of tools offered by PwC including their digital change framework, the Citizen's Compass and other online instruments sets them apart from the other vendors under consideration.

Our discussion with the City of Vancouver, where PwC undertook a similar initiative in 2013, indicates that the PwC's methodology and final results were very successful and positively received by Council, the community and staff.

CONCLUSION

There is a shift in expectations from citizens in terms of use of technology and how they would like to interact with and/or access government services. This digital shift is taking place at a fast pace with the rapid change and consumerization of technology. In order to provide our citizens with services that is fitting to the current time and meet their expectations, it is important for the City to establish a digital strategy – Digital Markham.

This strategy will set the technology roadmap and focus areas for the next 3 – 5 years in line with corporate goals/objectives. It provides a framework to guide strategic decisions regarding the City's digital services and infrastructure. Furthermore, it aligns with Smart City/Smart Markham initiatives and Markham's Economic Strategy, and will position Markham as a lead municipality in establishment of a digital strategy.

The Information and Communications Technology Sub-Committee of Council (ICT) approved the Digital Markham strategy proposal on its April 11th, 2014 meeting. It is recommended that PwC's proposal for developing this strategy be approved.

FINANCIAL CONSIDERATIONS AND TEMPLATE:

The contract award to PricewaterhouseCoopers LLP for developing the Digital Strategy for Markham – Digital Markham - is \$211,700 (inclusive of HST). The cost for the project will be partially funded from capital project #13829 "Technology Strategy Review" in the amount of \$75,000, and the remaining \$136,700 will be funded from the Capital Contingency project #6395. The capital contingency project will be replenished in accordance to the capital budget control policy through the report "Status of Capital Projects" to be brought forward to General Committee on May 26th, 2014.

HUMAN RESOURCES CONSIDERATIONS:

Not Applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

Not Applicable

BUSINESS UNITS CONSULTED AND AFFECTED:

Key business units have been consulted and will be involved in the development of the strategy.

RECOMMENDED BY:

25/04/2014

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Trinela Cane
Commissioner, Corporate Services

25/04/2014

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for Andy Taylor
Chief Administrative Officer