Featured in This Issue: IT as a Force for Transformation

- Municipal transformation led by a series of new technologies
- New era in citizen reporting begins in City of Kamloops
- Survey finds growing momentum for cloud computing
- How the cloud could forever change the IT department

All Devices, All the Time

MISA events raise awareness of how the mobile phenomenon and other technologies will transform the business of IT

See pages 10 and 34
Great news! Teranet and Land Survey Records have created an indexed listing of survey plan images to PIN. As a GeoWarehouse user, you’ll be proactively notified that survey plan images are available for a property. A quick search shows the list of plans, and allows for layering of the associated PINS on the map.

Teranet and Land Survey Records now have survey plan images available through GeoWarehouse.ca

Looking for Survey Plans? We’ve got them!

Actual online images are in colour.
In This Issue

MISA/ASIM News Across Canada  5
Preview of MISA Ontario Annual Conference; preview of 2012 MCIO Summit; three MISA chapters considering joint Web site; MISA Prairies has new strategic plan; MISA Ontario’s cloud seminar in Waterloo

Municipal News Across Canada  40
Edmonton moves to Google Apps; Chatham-Kent has new portal

Columns
Keeping In Touch  4
Governance Issues  41

Report From RIMQ  29
Bring-your-own-device movement examined

Features
Municipal transformation led by new technologies  12
New era in citizen reporting begins in City of Kamloops  16
Survey finds growing momentum for cloud computing  21
How the cloud could forever change the IT department  25
Move to new data centre a triumph for City of Regina  31
Report on MISA Prairies Spring Conference  34

Advertisers Index
Page
Applied GeoLogics Inc.  44
Cisco Systems  7
The Createch Group  15
Digital Boundary Group  37
eSolutions Group  33
Laserfiche  17
KPMG  20
Kaseya Canada  22-23
Microsoft Canada  9
Miller Thomson LLP  11
Monsoon Networks  30
Oracle Canada  27
Teranet  2
Vision Internet  38

Advertising Rates

<table>
<thead>
<tr>
<th>Associate Members</th>
<th>Non-Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,375 pre-printed insert</td>
<td>$1,700</td>
</tr>
<tr>
<td>$1,225 back page</td>
<td>$1,500</td>
</tr>
<tr>
<td>$925 inside front</td>
<td>$1,150</td>
</tr>
<tr>
<td>$625 1 page</td>
<td>$780</td>
</tr>
<tr>
<td>$425 1/2 page</td>
<td>$530</td>
</tr>
<tr>
<td>$275 quarter page</td>
<td>$345</td>
</tr>
</tbody>
</table>

Articles are subject to approval by the Communications Committee. The views expressed in this journal are those of the individual writers and do not necessarily reflect those of MISA/ASIM Canada.

No part of the publication may be reproduced by anyone without prior written permission from MISA/ASIM Canada.

© 2012 MISA/ASIM Canada
Keeping in Touch
By Corey Halford
President, MISA Prairies

Projects Need Care and Feeding

DO YOU HAVE STAFF dedicated to project-management duties, or are they performing project management from the corner of their desks? Further to this, if your staff is engaged in project management from their desks, are they following a defined and documented process, or are they merely wingin’ it?

If I were to wager, I would bet on wingin’ it!

Until the spring of 2011, the IT staff at the City of Airdrie, Alberta, were doing as I stated above; conducting project management off the corner of their desks and wingin’ it.

The consequences were significant. Projects were taking much too long to complete, they were not being resourced appropriately and, above all, the scope of the project was not properly agreed to or documented. I am sure you have seen the consequences of these practices.

If you find your organization in a similar situation as Airdrie, how do you move forward? Frankly speaking, the first step is to recognize that what you are doing is not working. The second step is to do something about it.

Business Case

It took until 2009 for Airdrie to start doing something about it. We began to build a business case to justify a staffing request for a project manager. In 2010, we presented our staffing request to the corporate leadership team during 2011 budget deliberations. All of the hard work that went into building the business case for a project manager paid off, and our position request was approved.

The project manager, Rosaline Wood, has now been in place for a year, and the progress made has already exceeded the benefits stated in the business case!

The project manager’s first objective was to develop a project-management process that not only followed best practice but meshed well with our team and corporate cultures. Now we not only have a process that meets this objective, but we also have templates for all project documents that are completed for every project.

The project manager has had a significant impact on the IT team and the organization. Having a member on our team able to focus on managing IT projects has increased everyone’s productivity.

It has enabled the technical experts to focus on what makes them great at their jobs without having to worry about project management. Projects are being completed on time and on budget with greater consistency.

Significant Impact

Although the impact of the project manager is significant for IT, it has actually been more significant for the organization. For the past five years, the City of Airdrie has been talking about the need for project-management training for staff. The IT project manager has demonstrated that the need exceeds what training can deliver.

With the growing complexity of our projects and corporate initiatives, Airdrie now realizes that staff certified in project management can make the organization more effective in delivering on its priorities.

The future of effective IT project management in Airdrie lies in the ability to add to our project-management team and increase the strategic value of IT in our organization. Taking advantage of our current success, we are building another business case to add to our team for this very reason.

If you are planning to transform your IT team and your organization, make sure you find the time to build a business case to add a project manager. The benefits will far exceed your expectations, and your organization will truly appreciate this resource once executive and staff see what can be delivered.

So the decision is yours. Are you going to continue to struggle with project management, or are you going to do something about it?

corey.halford@airdrie.ca

Rosaline Wood, IT project manager at the City of Airdrie, poses with Jay Stoudt, IT technical services team leader.
THE CITY OF HAMILTON (aka “The Hammer”) is ready to welcome delegates to the MISA Ontario 33rd Annual Conference and Trade Show, to be held May 27-30 at the Hamilton Convention Centre.

This year’s conference theme, “transITion – Building the Future,” is timely. Just as municipal IT is evolving to meet future needs, Hamilton itself is a city in transition.

Conference chair Fred Snelling, Information Services Division, City of Hamilton, explains:

“Hamilton was a classic lunch-bucket industrial town that shed more than 33,000 manufacturing jobs as traditional industries like steel consolidated. Now it’s moving from a manufacturing centre into a community where health sciences and education services are the largest employer.”

Industrial Transition

Transition was essential to ensuring future growth. What steel mills lost in numbers, they gained in high-technology productivity. Hamilton is making the transition to maintain quality of life and retain highly trained talent.

The two-day trade show, with 65 booths, will also be a showcase for the latest products from leading companies that are positioned to help municipalities prepare for the future.

In an inspirational presentation, celebrated Canadian military leader General Rick Hillier (ret.) is Monday’s keynote speaker, sponsored by Telus.

The conference agenda also features four streams highlighting challenges facing IT professionals in a time of transition (http://misa.on.ca/en/conferences/2012_AnnualConference-Hamilton.asp).

- Management – Managing in the face of continual change in technology
- Business – Forming partnerships with municipal departments to develop solutions and provide improved value to citizens
- Technical – Using technology to transform the IT division to meet the demands of changing demographics
- Workshop – Building on initiatives from the 2010 annual conference to create a working committee to meet beyond this conference, focusing on common initiatives.

Attention software analysts and developers – the MISA Ontario Hackfest on May 29 is inviting IT colleagues with a strong technical/programming skill set to attend this all-day event.

Designed to provide prototype ideas to develop into working applications, the Hackfest supports the new Municipal Commons initiative, which will be discussed Monday afternoon and will provide a repository of open-source municipally focused applications for free to all MISA Ontario municipal members.

To register, please visit www.misa.on.ca or contact Dave Salter (dave.salter@hamilton.ca) for more information.

Golf or Cruise

What’s a MISA conference without social events, networking and hospitality suites?

The MISA Ontario Annual Golf Tournament kicks off events on Sunday at King’s Forest Golf Club, ranked among Canada’s Top 100 golf courses, or delegates can join Cruizin’ the Hammer, an afternoon and boat cruise that explores Hamilton’s sights.

Monday evening’s dinner and entertainment will be held at the Canadian War Plane Heritage Museum, while Tuesday evening’s banquet and awards ceremony will be held at the Sheraton Hotel.

MISA Ontario 2012 has it all – so come to The Hammer and learn how to make a “transITion and build the future.”

Please register at www.misa.on.ca/en/conferences/2012_Registration.asp.
WHAT DOES IT mean to be a municipal CIO? What is the modern role of the leader of a municipal information technology team, and what changes to the role and to IT itself does a leader need to anticipate?

The second annual Municipal CIO Summit, presented by MISA/ASIM Canada, will examine such high-level questions and take IT leaders beyond the level of day-to-day concerns.

Municipal delegates will be joined by politicians and officials of other levels of government as well as global industry analysts at the summit in Hamilton, Ontario, on May 30-June 1, at the Downtown Hamilton Sheraton Hotel.

It will begin with MISA/ASIM Canada’s Annual General Meeting in the afternoon on Wednesday, May 30, the last day of the MISA Ontario Annual Conference held at the same venue, and will end at noon Friday.

Presenters will include David Nicholl, CIO of the Government of Ontario; Kate Johnston, president of the Municipal Service Delivery Officials; and professor Ken Grant of the Rogers School of Business at Ryerson University.

Facilitated discussions on the management of technology changes and social media will be led by Dave Wallace, CIO of the City of Toronto, and Rob Meikle, CIO of the City of Brampton, Ontario.

The summit will also feature discussions with two research analysts: Andrea DiMaio of Gartner Group, speaking on cloud computing and IT governance, and Christian Kane of Forrester, addressing the bring-your-own-device phenomenon.

Gartner and Forrester are joined as sponsors of the summit by Cisco Systems, Compugen, Microsoft and Partho Technologies.

To register please visit http://misa-asimmciocsummit2012.eventbrite.ca.

MISA Chapters Consider New Portal, Establish National Forum on LinkedIn

THE BOARDS of directors of three MISA chapters have agreed in principle to investigate establishing a collaborative platform for the chapters’ Web sites.

MISA BC, MISA Prairies and MISA Ontario are working together to develop a request for proposal for a new platform that could provide access, transactional capabilities and support for each of their sites. Each site would be distinctive but they would have a common look and feel.

Executive members of the three chapters will be meeting to discuss the initiative during the MISA Ontario Annual Conference in Hamilton in May.

MISA/ASIM Canada’s Web site could also be included in the terms of the RFP, which the chapters hope to issue this summer. Implementation is tentatively planned for the end of 2012.

 Meanwhile a new online forum has been established to facilitate easier collaboration among IT professionals and managers from municipalities within the five member organizations of MISA/ASIM Canada.

 The forum on LinkedIn was announced at the MISA Prairies Spring Conference in Calgary by chapter president Corey Halford, who also described the collaborative Web-site initiative.

 Called the MISA Forum, the new collaborative site can be joined by anyone with a LinkedIn account and is being used by numerous people from various chapters to inquire, among each other, about policies, methods, systems and applications.

MISA Prairies has a new strategic plan setting out ambitious goals for collaboration and expansion through 2014.

The plan was approved by member representatives at the Annual General Meeting on April 24 at the end of the Spring Conference in Calgary.

The chapter’s mission, encompassing municipal members in Alberta, Saskatchewan and Manitoba, is “to provide networking opportunities enabling our members to be involved, be leaders, and be innovative in the delivery and transformation of municipal services.”

Values for the chapter defined in the strategic plan are cooperation, honesty, respect, innovation and leading by example.

MISA Prairies has enjoyed steady growth in recent years and now has 52 municipal and 32 associate members. The strategic plan establishes goals to expand membership even further and to demonstrate and enhance member value through collaboration tools, events and social media.
move fearlessly among the clouds

it’s open, yet secure.
agile, yet efficient.
virtual, yet real.
intelligent, yet simple.
virtual, yet real.

it builds on your current network,
combining servers, networking,
storage and virtualization.
so you can deploy
applications in minutes,
not weeks.

move among the clouds.
grow your business.
and turn silos into
new ways of working together.
introducing the Cisco data center
business advantage.

cisco.com/ca/datacenter
MISA/ASIM News Across Canada

MISA BC’s Spring Event Will Be First of Two To Examine Big Issues in Year of Innovation

THE MISA BC SPRING Conference in Kamloops will be the first of two conferences held by the chapter in 2012 to address issues of major concern to municipal IT leaders, in what is turning into a watershed year for technology developments.

The conference in Kelowna on May 24-25 will offer an exceptional lineup of speakers, ranging from broad strategic vision through to technical implementations as well as local government case studies.

And it will be free! There will be no charge for registration by employees of member municipalities in the MISA/ASIM Canada community.

The conference will be held at the Thompson Rivers University Conference Centre in Kamloops, set in the rugged beauty of the BC interior and the site of several previous MISA BC conferences.

The Spring Conference has grown in recent years and now encompasses two full days. Municipal presentations will be offered by Kamloops, Nanaimo, Surrey and Chilliwack as well as Thompson Rivers University addressing mobile management and security issues.

Vendors offering strategic analyses of trends in technology and service delivery will include Google, Adobe and IPS Canada.

Co-organizers Gwen Leahy of Kamloops and Guillermo Ferrero and Jason Birch of the City of Nanaimo point out that a revolutionary shift is taking place in how we consume – and produce – information. Mobility is now fundamental to how people work and play on the Web. Using built-in GPS, cameras and gyroscopes, they can interact with government in innovative ways whenever and wherever they want.

Conference delegates will learn how to reap the benefits of mobile citizens and staff, balancing innovation with appropriate policy and security.


Privacy, Security in Spotlight at Fall Conference

By Linda Hunter

THIS SEPTEMBER, the City of Chilliwack will proudly host the 18th annual MISA BC Fall Conference at the Harrison Hot Springs Resort & Spa.

With the theme “Beyond Privacy & Security,” the conference on September 18-21 will focus on the disconcerting reality that municipal priorities are being threatened. The breaching of boundaries by technology is opening possibilities for one of municipal government’s worst nightmares – the theft of sensitive information and the hijacking of mission-critical infrastructure.

Attendees will examine the impact of a security breach on municipalities and organizations in terms of monetary loss, loss of data records and harm to those involved.

Questions will focus on the steps to be taken upon discovery of a breach and how to assess the potential legal ramifications when privacy-sensitive information has been compromised. Also addressed will be the question of what can be done to improve detection and enhance protection from cyber-attacks, security breaches and disgruntled employees.

One of the best conference secrets is out already – MISA BC has created an exclusive conference venue in which to stay, work, and play by reserving the entire Harrison Hot Springs Resort for the four-day event.

Conference chair Erik Leidekker, head of IT for Chilliwack, says the plan is to fill the autumn days with inspirational and informative speakers along with an exciting trade show, networking opportunities, and interesting training sessions and case studies.

Days will turn into nights filled with unique events, delicious cuisine and exciting entertainment.

Keynote speakers will include:
- Elizabeth Denham, information and privacy commissioner for BC
- Eric O’Neill, an investigative and security consultant and former FBI operative
- Michel Juneau-Katsuya, a security specialist formerly with the RCMP and Canadian Intelligence Service.

A chance to rekindle friendships and build new relationships in the ultimate conference location awaits you at the Harrison Hot Springs. To register please visit www.misa2012.ca.

Linda Hunter, event planner for the Fall Conference, can be reached at linda.hunter@shaw.ca.
From effectively delivering social services to fueling economic growth, governments have to work more efficiently with the resources they have. Microsoft understands the challenges you face, and through cost-effective solutions like cloud computing, we’re helping you do more with less – helping you make a real impact for a better tomorrow.

Find your answers at microsoft.com/ongovernment
MUNICIPALITIES CONSIDERING the use of cloud computing should take a cautious, incremental approach and build security principles into every step, specialists in the field say.

That was the advice given to attendees at a MISA Ontario workshop on cloud computing held in April by the chapter’s Cloud Computing Special Interest Group.

Speakers told the 60 attendees that, while there are risks associated with placing data, applications or hardware in the hands of cloud service providers, they can be offset by opportunities for cost savings and service agility. A step-by-step approach based on clear guidelines can give municipalities a window for evaluating the costs and benefits.

“Some people who hear about the cloud automatically think that everything, lock, stock and barrel, has to be moved to it,” John Weigelt, national technology officer for Microsoft Canada, told his audience.

“But it doesn’t have to be the whole business, and it doesn’t even have to be a whole workload. We’re in an era now where service provision to individuals can be a mashup, an amalgam of on-premise and cloud technology.”

IT departments sometimes fear a loss of control if services are moved to the cloud, but this can be eased by applying the concept of a service brokerage, suggested Garth Reid, enterprise architect, converged infrastructure with Hewlett-Packard (Canada) Co.

“We recognize that security is a big issue and that customers want to avoid vendor lock-in,” Reid said.
“But the role of a CIO is changing because of a transition from building to consuming. This introduces an interesting concept of putting IT in the position of a broker of IT services. Rather than owning and managing the entire stack, you can achieve cost savings by moving some workloads into a cloud environment.

“But how do you retain control of that? By inserting yourself as the go-between, so you apply your organization’s governance and rules of engagement to control how you employ cloud-based services.”

The wide-ranging, day-long discussion took place April 11 at RIM Park in the City of Waterloo. The City’s Information Management & Technology Services department led by Garry Bezruki was the host.

Jury Konga, principal of eGovFutures Group and chair of MISA Ontario’s Cloud Computing Special Interest Group, served as the workshop facilitator. The coordinator was Connie McCutcheon, manager of eGovernment and cloud solutions for Niagara Region and director of MISA Ontario’s Western Region.

Since the workshop’s title was “Cloud Computing – 101 and Beyond,” speakers went into detailed descriptions of the cloud and its various service models. Presentation slides can be accessed at www.misa.on.ca.

Collaborative Opportunities

In a brief “unconference” session, participants defined the questions and then chose the roundtables they wanted to participate in for lively discussions.

The afternoon provided further information from an expert panel dealing with considerations of privacy, return on investments and security/risk management. The panellists were: David Goodis, director of legal services and general counsel for the Office of the Information and Privacy Commissioner of Ontario; Bill Baldasti, vice-president of sales with Infusion Development Corp.; Rocco Passero, executive lead, Infrastructure Technology Services with the Ontario Ministry of Government Services; and Brian Whitelaw, division manager, technical services with the City of London.

Whitelaw noted that London introduced hosted services – essentially cloud computing – five years ago and now has almost 20 of them. He outlined numerous potential security risks associated with hosted services but said London has protected itself by rigorous application of security policies, enforcement of service-level agreements and penetration testing of service-providers’ environments.

“IBM and Microsoft cloud solutions are probably more secure than most municipalities,” Whitelaw declared.

Addressing the issue of what kinds of municipal services might be useful for initial movements to the cloud, Baldasti suggested that they should be services subject to sudden changes in demand. Use of the cloud, with its pay-for-usage service capability, would assist municipalities to avoid under-provisioning or over-provisioning of services. Initial service types moved to the cloud could include:

- On-and-off services, such as elections management
- Very fast-growing services, such as social-media campaigns that could go viral
- Services with unpredictable spikes in demand, such as emergency-management information
- Services subject to predictable bursts in demand, such as parks and recreation applications.

What about the impact of the cloud on the IT department? Malcolm Smith of IBM Canada offered an analysis, which can be found in the article on page 25.

Plans are under way for Cloud 102 and Cloud 103 in the fall. Anyone interested in participating in the special interest group can contact Jury Konga at jkonga@sympatico.ca.
IT as a Force for Transformation

Transformation in Our Municipalities Led By a Series of New Technologies

The New Reality: Constant Change, Innovation and Collaboration

By Jury Konga
eGovFutures Group

“The ONLY CONSTANT IS CHANGE” – and that story certainly rings true for information technology professionals in municipal government and the broader public sector.

IT “transformation” also continues to occur as new technologies and new user expectations evolve. The question for many is, how should we evolve and transform our IT services? And further, to what degree do we need to innovate and collaborate to be effective in managing the changes?

There’s a variety of issues that IT departments are facing to provide safe and stable corporate operating environments while addressing new and expanding user service under diminishing budgets.

Open Government

Open government is transformative and is now found at all levels of government. It has several core components: citizen engagement, open data, collaboration and innovation, together with a supporting infrastructure of which IT is a critical enabler. These components are presented in the accompanying illustration as the Municipal Government Open Framework.

The global perspective on open government is interesting. The April 2012 Open Government Partnership meeting in Brazil (www.opengovpartnership.org/) had more than 50 countries adopting the OGP principles and many countries, including Canada, presenting their action plans for moving forward.

While some limited progress is being made at both the federal and provincial levels, including some great work in British Columbia (www.data.gov.bc.ca), it is the municipal government sector that has shown more agility and leadership in open government. While it is often the larger urban centres that are seen as leading the charge in civic transformation, smaller jurisdictions are also taking leadership roles.

Digital Cities

The City of Regina has recently initiated its open-government journey including a recent open-data catalogue launch (www.regina.ca/residents/open-government).

This initiative is led by Alyssa Daku, manager of corporate information governance in the City Clerk’s Office, who states: “Open government involves information that spans the organization. It requires all business areas and information owners to participate.

“While IT is definitely instrumental in helping us innovate with our data and operate our portal, access to information, transparency and public accountability are corporate-wide responsibilities. The business incentive for open government can include reduced internal duplication, enhancing the use of information assets, increased business efficiency and heightened innovation.”

The City is moving forward thanks to a collaborative and cooperative environment where IT is an important team member providing the IT infrastructure and appropriate formatted data that supports the open-government program.
IT as a Force for Transformation

As Chris Fisher, Information Technology Services (ITS) director at Regina, says: “Regina’s approach was for everyone to work together for the corporate and citizens’ good. We experienced that same teamwork model when we piggybacked on ‘terms of use’ work done by the G4 municipalities and participated in the MISA Prairies’ open-data workshop.

“Through great contacts and helpful people, Regina is committed to making this work, and ITS is just one cog turning the wheel of open government here.”

In the larger centres in North America, New York City certainly stands out as providing leadership at the local level. In the spring of 2011, the City unveiled its Digital City Roadmap, created by chief digital officer Rachel Sterne, which focused on:

- Access
- Internet connectivity for all
- Open government
- Technology and culture
- Engagement
- Citizen-centric digital experience

Similar to Washington, DC, and San Francisco, New York City was an early adopter of open data and has held a series of successful “BigApps” contests for developing apps using their open data.

Continuing its progressive ways, the City’s Department of Information Technology and Communications (DoITT) released preliminary standards, policies and guidelines – in a wiki!

As reported by Michael Keller in New York World, DoITT’s director of research and development Andrew Nicklin describes the wiki format:

“It is an attempt to drive things in an interactive and iterative manner. Why pass a Word doc around when we can all make changes collaboratively?”

Edmonton is a leading example among Canada’s digital cities. Chris Moore, Edmonton’s CIO, has been continually moving to transform IT operations and City services.

Edmonton moved quickly in its development of its open-data initiative and subsequently made a transition to using the Socrata Open Data portal cloud service. In its latest transformation, Edmonton is migrating to use Google Apps while continuing to use some Microsoft tools such as Sharepoint, Visio and Project.

Innovation and Collaboration

Innovation is possible for everyone – it doesn’t need to be something entirely new. It really only needs to be new to your organization to be innovative.

In 2010, the Institute for Citizen-Centred Service published the study Clicks, Calls, & Counters – Innovations in Municipal Service Delivery (www.iccs-isac.org/en/msd/index.htm). It included case studies varying from Windsor’s inventory of programs and services to Vancouver’s open-government data initiative.

This study needs updating. Much has happened over the past several years, and it would be interesting to get some statistics on how many of these innovation projects/programs have been replicated by other municipalities. Most could benefit from “borrowing” and implementing the innovations in their own organizations.

There are, however, still those organizations that stand out and provide new perspectives that inspire the rest of us. A case in point is San Francisco, an early open-data adopter. It was the first city to incorporate the position of chief innovation officer.

Jay Nath, that first innovation officer, is quoted in a blog by Emily Badger, The Dawn of the Municipal Chief Innovation Officer:

“Innovation is often coupled with and seen as technology,” he says, “and I fall into that trap myself very often because of my tech background.

“But I do think that innovation is really about a new way of thinking, new approaches to old problems. It could be about how do you engage with your community better? And it may not involve technology at all.”
IT as a Force for Transformation

This speaks to the variety of elements involved in innovation, which may include policy, process and technology. San Francisco has all these and continues to use them extensively, such as with its current crowd-sourced “ImproveSF” initiative.

Collaboration is a continuum that has levels of participation from informal information sharing to full projects backed by legal resources and partners. It also has variables related to theme, area of interest and geographic scope of collaboration. This can be illustrated in the figure on page 15 from the May 2010 Municipal Interface article on Collaboration 2.0.

In Canada, the open-data cities of Toronto, Vancouver, Edmonton and Ottawa, informally grouped as the G4, continue their collaboration following the development of their Open Data Framework in late 2010.

A variety of cities across Canada constitute the MRMv2 (Municipal Reference Model) team of supporters, beta testers and implementers. In Ontario, there is growing collaboration between Service Ontario and municipalities toward enhancing the integration of service delivery, with further collaborative discussions happening via MISA Ontario’s External Relations special-interest group.

In the US, while similar types of collaborations are occurring in many forms, we don’t see enough collaboration among the various levels of government. It is very encouraging that a big step forward has been taken in Illinois.

At a Web site called MetroChicagoData (www.MetroChicagoData.org), public data from the City of Chicago, Cook County and the State of Illinois has been combined into a single open portal to help increase service efficiencies and promote access to information and new innovation.

Standards are another major challenge. There are a plethora of standards organizations that relate to IT including ISO, IEEE, OMG – the list goes on and on.

In addition to international standards, there are local versions (North America, Pan Canadian, provincial), some of which are driven by legislation and guidelines from senior levels of government. The ever-present cloud is continuing to evolve, and the Cloud Open Data Center Alliance (with Intel as technical adviser) is adding to some confusion about the types of services and related standards that the future cloud will hold.

Collaboration and Risk Taking

It is apparent that many local governments are transforming their visions to be more citizen centric and efficient – both of which have implications for IT departments. The other reality is that for many IT shops the day-to-day operational and “fire-fighting” needs dominate their agendas.

This leaves little time for the strategic planning required for holistic corporate IT transformations – but maybe some time for targeted moves and taking advantage of the work of your peers. Is this an opportunity for the community to come together?

If we want to accelerate transformations at the municipal level, one of the adjustments that needs to be made is elevating risk tolerance. This can be done with the view that it’s OK to experiment and fail as long as we learn from our mistakes and move forward (and share the failures so others don’t repeat them). The sharing of the risk burden among many is another strategy to moving the agenda forward more quickly – we need to become more agile!

Collaboration is a key for the municipal IT community to embrace as part of its modus operandi. While a variety of
IT as a Force for Transformation

disjointed tools are available to assist, there is a need for an integrated platform to facilitate comprehensive collaboration by government.

One concept of such a platform is the “Virtual Government Network Collaboration Framework” (see page 14) that was conceived by Thom Kearney, who also developed the federal government’s GCpedia collaboration platform (www.psleader.org/2012/03/framework-for-the-virtual-governmentnetwork). There are plans to move the concept into operation in 2012.

Assuming that we have a collaboration platform or set of effective tools available, what do we want to achieve? Here are some initial thoughts that we can use as a starting point for further discussion:

- Set an innovation agenda.
- Crowd-source for priorities – both from IT and clients.
- “Crowd-fund” for funding to support the priorities.
- Establish a mechanism/institute for managing the innovation platform.
- Co-develop the collaboration platform with the private sector.
- Develop an IT projects/initiatives database to facilitate opportunities for partnerships.
- Develop an intellectual capital/resource pool database of IT people resources and skill sets.
- Crowd-source a best-practices compendium for new areas.
- Develop a long-term strategy for partnerships among local government, the broader public sector, academia, NGOs and the private sector aimed at creating more effective and open government as well as delivery of enhanced and efficient citizen-centric services.

So, here’s a starting point – let’s throw it into the cloud and start the dialogue!

Jury Konga is the principal of eGovFutures Group, chair of MISA Ontario’s Cloud Computing Special Interest Group (SIG) and inaugural chair of the Gov 2.0 SIG. He can be reached at jkonga@sympatico.ca or @jkonga on Twitter.

Get the most out of ALL your assets...

Asset & Service Management Software Solutions for Municipalities

Meet us at the MISA Ontario 2012 Annual Conference (May 27-30) booth #2

Contact us for a demonstration at info@thecreatechgroup.com or 905.777.8171 x101 thecreatechgroup.com
IT as a Force for Transformation

City of Kamloops Uses Smartphones To Open New Era in Citizen Reporting

By Adam Chadwick
City of Kamloops, BC

CITIZENS AS CUSTOMERS? That’s the view of the City of Kamloops as it begins to use mobile apps for public-service solutions.

If municipalities take the view that citizens are customers and municipal services are products, then they must continually strive to improve their products so that their customers are well-served citizens and taxpayers.

Successful companies understand this and listen to their customers, always reviewing how well their products are meeting customers’ needs. To that end, providing safe, effective and economical municipal services also requires frequent review to ensure that they are still meeting customer needs.

To one degree or another, municipal services will always have civic “issues” (potholes, graffiti, signs down or generally any broken municipal infrastructure) that will exist until they are fixed – and in all cases the time it takes for issues to be fixed depends greatly on how soon they are reported.

Currently, the usual sources of civic-issue reports are from the public or municipal staff, with the most common form of reporting being by either telephone or e-mail directly to the appropriate municipal department. Unfortunately, in the case of reporting public issues, having to know a phone number or Web site/e-mail address makes it difficult for people to report them.

It is also less likely that this reporting will happen in the field, at the time an issue is first detected, thus making it less likely that it happens at all.

These two factors hinder reporting, thereby ultimately resulting in municipal services being of poorer quality than they otherwise could be.

Reporting via Smartphones

Now that smartphones (as opposed to cell phones) are becoming more and more ubiquitous – 46% of adults in the US are reported to own smartphones – it becomes more feasible for municipalities to encourage citizens to use their smartphones to report civic issues, or encourage employees with municipally-owned smartphones to do the same.

By using smartphones, reporting is substantially improved, virtually eliminating the roadblocks that previously hindered it. Additionally, smartphone capabilities for capturing a photographic image and a geographic location substantively improve the quality of reports – with very little additional overhead on the part of the submitter.

Without a photograph and location, the submitter is required to describe the problem and its location either verbally or in writing (depending on the means used to report the problem). For many types of problems this is not easy or accurate:

- Civic issues are not always easy to describe – for example, what is the size of a pothole? The size may be quite different than expected when a public-works crew arrives to fix it. This type of discrepancy may result in different prioritization or equipment being dispatched to deal with the problem than otherwise would have been.
- Locations are not always easy to describe – for example, what is the address of a piece of graffiti that is located in a back lane with no visible address? How well can the location of a fallen tree blocking a trail in the middle of a park be described?

Additionally, if an issue cannot be reported from the field, time and fading memory can affect the accuracy and timeliness.

Implementing a Mobile Solution

With this as a backdrop the City of Kamloops has chosen to move forward with a mobile solution (www.citysourced.com) using smartphones for both the public and employees alike to report civic issues. While the City is currently completing the internal pilot phase (employee smart phones only), a public rollout of the myKamloops app is scheduled for May 2012.

Taking advantage of a cloud-based solution means that it is relatively easy to implement from a technical perspective, with the vendor supplying the app (for download from the various app stores) and a Web-based console for receiving and processing submitted issues. No internal hardware, software or IT resources are required for the City to implement the system.
FIND OUT WHY...

more than 150 municipalities and provincial agencies choose Laserfiche enterprise content management. Visit laserfiche.com/misa for insight from Public CIO.

“Laserfiche helps us meet our sustainability and environmental guidelines, as well as work smarter, not longer.”

Rachelle Meredith
Corporate Records Administrator
Town of Okotoks, AB

“Laserfiche offers a streamlined implementation process that’s easily scalable to meet government needs at any level. We’re able to provide a wide range of information, all with minimum impact on IT workload.”

Tony Persson
IT Coordinator
Township of Springwater, ON

“When a citizen calls to request a document, I can e-mail it from within Laserfiche. The citizen literally receives it before I hang up the phone.”

Bill Matson
Records and Elections Coordinator
City of Niagara Falls, ON

“We’re the first municipality in the province and probably in Atlantic Canada to apply retention schedules to our electronic records with Laserfiche. That’s huge.”

David Burke
Corporate Records Manager
City of Saint John, NB
Nevertheless, and conversely, implementing a software solution for the public to use introduces a number of new challenges that would not be apparent if, for example, an internally resourced software solution for City staff were implemented. Some of the challenges are:

- Relative lack of control over the application’s use and general software-system management
- Public exposure to potential system problems and/or downtime
- Wide variety and versions of smart-phone operating systems to support
- Introduction and education of the public in the use of the app
- Large number of potential users.

Resolving Four Issues

These issues are merely anticipated at this point since the City’s pilot has not yet been rolled out to the public – but there will probably be others. The pilot, however, has uncovered four issues to be resolved before public rollout.

1) The lofty goals of increasing staff efficiency, improving internal processes, reducing infrastructure operating costs, improving municipal services, and increasing citizen engagement and organizational transparency, while laudable, are very difficult to fully achieve during an initial public rollout.

As a result, the City of Kamloops has chosen to proceed to public rollout with the primary goal of implementing the myKamloops app primarily to simplify reporting – to essentially add an additional type of input channel.

Admittedly, some efficiencies, service-cost reductions and organizational transparency will also be achieved, but only partially. A second stage of the implementation is planned whereby those goals will become the primary focus of activities built around a fully functioning and publicly available smartphone-based, civic-issue-reporting system.

Attempting to achieve all goals at initial rollout would either result in a significant delay of the public rollout until all aspects were achieved, or, failure, at least to some degree, to reach the stated goals.

Implementing the system in two stages (primarily, issue reporting in stage one) allows goals to be met in a short time with a more realistic system environment (one running in the public domain). Decisions regarding next steps can then be based on the results from stage one. After all, a pilot project is simply that, a test. It cannot be expected to fully emulate real-world, public-use of a software environment.

2) Unlike telephone reporting where two-way communication ensures that the City has received, acknowledged, and understood the call, a one-way submission via a smartphone does not engender that same level of comfort.

It is essential therefore for immediate follow-up to occur via a “success” message sent back to submitters once an issue has been received. Additionally, and optionally, notifications updating the status of the issue can also be sent back to submitters throughout the processing.

There is a potential problem, however, unless the back-end portion of the system accurately reflects activities happening in the field. When an issue is closed (fixed) in the system and the submitter is informed (via an automated push notification), the issue must also be closed in the field.

Not coordinating the actual field reporting of issues with their processing by back-end systems will result in a lack of confidence in the system – leading to new problems when citizens phone and say, “Wait, don’t close that issue, it hasn’t been fixed yet!”

Until now, because the status of the issue has not been reported, it can be out of sync with the actual status in the field. To make this information available to submitters (in order to satisfy the goal of transparency) these two states need to be in sync, at least when an issue is closed.

3) This is not just a technology solution. A number of organizational issues are raised with the implementation and rollout of a public-facing app affecting most City departments.

IT as a Force for Transformation

Phone/E-mail-Based Issue Reporting

<table>
<thead>
<tr>
<th>Phone number or Web site/e-mail</th>
<th>Verbal/written description of issue and location</th>
</tr>
</thead>
</table>

Smart Phone-Based Issue Reporting

<table>
<thead>
<tr>
<th>Photo and map location</th>
</tr>
</thead>
</table>
IT as a Force for Transformation

In the City of Kamloops’ case, it is the first time this has been done – there is no organizational experience to fall back on. This applies not only when dealing with the smaller implementation and rollout details, but also at the higher levels in the organization when looking for general directions, levels of approval, public expectations, marketing app availability and media involvement. A lot of this has to be experienced for the first time.

It is also very difficult to restrict the breadth of involvement of the various City departments. Since the public can submit any kind of issue using the app (irrespective of the issue types available in the app), all departments that traditionally respond to civic issues must be involved in implementing the app.

Therefore it cannot feasibly be isolated to affecting only a small number of City departments and staff.

This means involving them, training staff, and coordinating responses to issues so the organization is managing them in a consistent manner across the organization.

Some pushback can be anticipated from those areas of the organization where the greatest number of civic issues is likely to be submitted, especially immediately after public rollout (including potholes, graffiti, snow removal). This will likely result in a spike of issues for a period of time after initial rollout.

Coincidentally, these types of issues are also those that are particularly difficult to report using the traditional telephone and e-mail methods due to the difficulty in describing their geographic locations. Allowances must be made in case agreed-to service response levels may not be achieved should a substantial increase in submitted issues is experienced.

4) It means integrating the back-end database of civic-issue reports submitted via the mobile app with current in-house system(s) for recording civic issues. It should not be that a civic-issues data silo is created just for those issues that are submitted via the mobile app.

Issue recording, management and analysis are currently conducted at the City of Kamloops at a multi-departmental level with all data being derived from a single database. Management of issues using the mobile app must respect that and result in a single database of issues that would be represented in that system no differently than would others that are phoned or e-mailed to the City.

This is both a technology and organizational issue since it results in people having to work differently when it comes to processing civic issues received via the mobile app. Ideally however, through automation and integration this differentiation is kept to the least amount possible.

Measuring Success

There are many tangible and intangible measurements of success that can be applied to this type of software-solution implementation – some are easy to measure, while some not so easy.

Listed below are those that have either been experienced during the City’s pilot project or are anticipated to be experienced after public rollout.

• Public perception of a municipal organization that is opening its processes to public scrutiny. This leads to an increased feeling of engagement by the public and positive public response to the new method of reporting issues – the City is perceived to be addressing problems that the public feels need to be addressed. This is the beginning of including public concerns as a priority in the City’s issue-response processes.

• Civic issues detected and resolved faster than they would have been otherwise. This includes reducing infrastructure breakdowns, long-term operating costs (due to smaller repairs done sooner), and the number of occurrences of certain types of issues (for example, graffiti seems to be reduced by fast and consistent removal).

• Use of the app by employees for internally reported issues. Use of system capabilities to send issue reports to crew leaders while in the field thereby improving issue response and prioritization.

• Straightforward processes for managing mobile app-sourced issues requiring negligible amounts of additional staff overhead to handle and manage reports.

• Shift of issue-report submissions away from the relatively expensive walk-in or phone-in interaction to less expensive submissions via smartphones.

• Reduction in the cost of addressing civic issues due to an ability to more easily find a reported issue in the field (as a result of being provided with a map-based geographic location) and being better prepared (including staff, equipment, materials) to resolve an issue (due to being provided with a photograph).

• Positive media reports and feedback from the public and employees.

While the City of Kamloops is in the early stages of moving to mobile apps for public-service solutions, it is becoming increasingly clear that both the public and the City can benefit greatly from their implementation.

Adam Chadwick, GIS manager for the City of Kamloops, can be reached at achadwick@kamloops.ca.
Making changes requires knowing what to change.

KPMG can help.

Fiscal Sustainability.

kpmg.ca/publicsector
Survey Finds Growing Momentum For Worldwide Use of Cloud Computing

By Ken Cochrane and Jeff Thomas
KPMG Canada

This article is based on a presentation to the MISA Prairies Spring Conference in Calgary in April 2012.

The mystique is coming out of the cloud. Around the world there is a growing body of public-sector experience with cloud computing, together with research showing that the cloud is likely to have significant influence on the transformation of municipalities and other government bodies.

It won’t be primarily a technological transformation, although of course technology will be at the core. No, this transformation will be all about management – the management of technology in delivering government services. And it won’t be a revolution as much as a maturation of management concepts and processes.

How do we know this? Because of what government leaders have told us. Those with experience in cloud computing have discovered what it can do and have reported their findings in research studies.

One of those studies was conducted over several months in 2011 by Forbes Insights in collaboration with KPMG International. The research involved surveys and interviews with officials in both the public and private sectors. In the case of the public sector, 429 government executive and managers were interviewed in 10 countries including Canada.

Acceleration Coming

The key finding was that government adoption of the cloud is happening slowly but is poised to accelerate. Almost 30 per cent of government organizations have undertaken a strategic examination of cloud computing. Australia, Italy and Singapore are leading the way in developing strategies.

The public sector has modest expectations of the cloud; only 50 per cent of government respondents expected to gain some cost advantages from it, and cost is the overwhelming consideration for governments considering the use of cloud computing.

The biggest cause for concern? As you might expect, it is security. Forty-seven per cent of government respondents cited security as their top reason for reluctance to use the cloud, although 80 per cent said they would be more confident if cloud services were certified by a government body.

A copy of the full survey report, Exploring the Cloud, can be obtained from the authors of this article. Since its release, we have seen a more rapid pace of investigation of the cloud by government bodies, and expectations are rising as well.

The cloud appears to be following a classic adoption pattern for a new foundational technology – slow and experimental at first, then rising in a steeper trajectory to the point where the technology is universally accepted and taken for granted. No government organization that we know of has said “No thanks” once the costs and benefits of cloud computing have been evaluated.

Many organizations we talked to said: “This is business transformation. This is going to really change how we do business.”

For municipalities and other public-sector organizations, a key driver for evaluating cloud services is the challenge of keeping pace with technology. It is becoming all but impossible.

Much of the public-sector infrastructure in Canada and the world today is rusting out. Most data centres are in the late stages of their life cycle. And satisfying and sustaining the public’s service expectations has become much more difficult because of the consumerization of IT and the ever-growing number of mobile devices through which people expect services, information and answers to questions – now!

Maturation of Management

The solution to today’s IT problems is not more technology. We have that, but we can’t afford it. The solution is a...
Audit
Patch
Monitor
Remote
Antivirus
Backup
Mobile
All in one.
Contact us at 1(866) 487-4117 (x1403) to find out why 40+ Municipalities rely on Kaseya

Visit us at booth 55 at the MISA Ontario 2012 Annual Conference Hamilton, Ontario

Kaseya saves you endless hours of repetitive labor

by automating and controlling IT assets remotely, easily and efficiently from one integrated web-based platform. Kaseya empowers you to do more, in less time, with fewer resources—liberating you from day to day hassles so you can focus on helping your company grow.

Try it today FREE with no commitment.

www.kaseya.ca
IT as a Force for Transformation

The maturation of the management of technology to introduce shared resources where appropriate. That’s the direction that our survey found in public-sector strategic thinking.

The first lesson from our survey, then, is that the cloud is a serious approach to managing technology more effectively. Municipalities should at least experiment with it and develop strategies for evaluating its pros and cons. Considering the possibilities of the cloud should be part of all future-oriented planning.

Moreover, we believe that municipal IT leaders have a responsibility to educate themselves about the cloud and its potential benefits. Otherwise they run the risk of missing opportunities. Our survey found, for example, that only 13 per cent of public-sector organizations are using or planning to use community cloud services – the equivalent of a wide-area network among multiple municipalities, all sharing the cost.

Why is this opportunity, which appears to have very large growth potential, so little used? We believe it is because our survey respondents do not know about it or understand it. This will change. Education will be a major factor in adoption rates for cloud computing.

Rightsourcing Technologies

Our study discovered that public-sector organizations knowledgeable about the cloud do not consider it to be an all-or-nothing decision. They are using a concept known as “rightsourcing” to determine where the cloud might fit into their plans and to what extent.

Rightsourcing is based largely on questions of data privacy and security, so it addresses the most pressing concerns of governments. The concept is applied to examine each business unit and its data and processes to determine where the enabling IT resources should reside, and whether those resources can be shared in any way or should remain strictly under close in-house control.

As part of this process, municipal IT leaders should focus on core businesses and the applications that support them, not on infrastructure. Part of the business case for the cloud is that it frees the IT department from being a utility and elevates it to be a strategic resource for service delivery.

To accomplish this requires a carefully managed exploration. Based on our survey results and experience, we have identified six steps that municipalities should take to gain a better understanding of how the cloud could affect them.

1. Adopt a comprehensive approach. Don’t consider only one platform. Evaluate the organization’s needs holistically from the perspectives of service providers, core process owners and IT.
2. Apply leadership. Clear and visible top-level direction will be needed to accomplish cultural change.
3. Balance risk and reward. Understand the risks inherent in cloud computing, investigate ways to mitigate them, and do not let them be an excuse for doing nothing.
4. Create centres of excellence. Develop capabilities for standards and certifications that will enable cloud deployments by additional agencies or programs.
5. Collaborate with providers. Use pilot projects to help providers to establish appropriate usage-based pricing.
6. Collaborate with the private sector. Business is ahead of government in cloud adoption. Municipalities can learn lessons from how businesses are delivering services.

Municipal IT leaders can expect to see increasing momentum in the use of cloud computing as a modern way to manage information technologies. The cloud has potential to reduce the size of the “stack” that IT departments must manage and enable the departments to concentrate on maximizing the effectiveness of the upper layers of that stack.

Ken Cochrane is a partner with KPMG Canada’s Management Consulting Practice in Ottawa and can be reached at kcochrane@kpmg.ca. Jeff Thomas is a partner with KPMG Canada’s Risk Consulting Practice in Calgary and can be reached at jwthomas@kpmg.ca.
IT as a Force for Transformation

How the Cloud Holds Potential To Forever Change The IT Department

By Malcolm Smith
IBM Canada

This article is based on a presentation to the seminar “Cloud Computing – 101 and Beyond,” sponsored by the MISA Ontario Cloud Computing Special Interest Group in Waterloo, Ontario, in April 2012.

WHEN MUNICIPAL IT professionals get together and the subject of the cloud comes up, the remark is often made that this is nothing new – what we call cloud has actually been around for many years in one form or another. While aspects of this are true, the cloud is a unique intersection of technologies, management approaches and client demand that is changing the way cities operate.

The impact of the cloud on the way IT is operated and delivered will bring significant changes to the life of the IT department over the next few years.

Within that time, a worldwide survey by IBM has revealed, the cloud is likely to go mainstream. Organizations of all kinds in both the public and private sectors will be using cloud-based services for mission-critical purposes, not just for development and testing as is most often the case today.

In the coming world, IT leaders in a municipality will have to consider the option of using cloud services to achieve one or more objectives. That might mean putting applications into a public, private or hybrid cloud. It might mean implementing software as a service, or infrastructure or platform as a service. It will mean changing the way IT services are delivered.

Whatever options are considered, the use of cloud computing will necessitate new ways of thinking about how the IT department works. If a municipality uses the cloud at all, the IT leader will have to rethink the department’s strategic goals, implement changes to processes, and build a new kind of team.

Newly Complex Issues

Issues that are quite simple to deal with in a one-server, one-application world become more complicated in the shared multi-tenant environment of the cloud. Consider capacity planning.

Suppose you have a server running registration programs for the parks and recreation department. It normally runs at five-per-cent capacity or less year round, but you know that the server needs sufficient power to manage those peak days in September when everyone registers for recreation programs. The server’s capacity utilization could easily reach 80 per cent or more.

Now imagine that application is on a cloud server along with 15 other applications. Will any of those applications be crowded out by the parks and rec application in September? What if someone provides a new application on the same server one week before? Does more than one application peak at the same time? To manage such scenarios, capacity planning in the cloud must be carried out differently.

New governance issues arise too. Take the routine procedure of updating a middleware application on a shared server. Today you would manage planned downtime windows with one application owner. Tomorrow you would have to coordinate upgrades with many stakeholders.

The change will affect applications, performance and costs. In a multi-tenant environment, governance of decisions such as this becomes more complex. Who makes the decision? How is the decision made? How are disputes resolved?

What if another user does not want or cannot afford to make the application changes that the upgrade requires? Governance questions will arise in the cloud that your department is not used to, and changes will have to be made.

Malcolm Smith of IBM Canada addresses delegates to MISA Ontario’s seminar in the City of Waterloo.
IT as a Force for Transformation

Consider budgeting. One of the tenets of cloud computing is “pay-as-you-go.” This requires a different set of tools to collect and allocate costs. The bigger change that cities face is the budgeting process where business units will now see the real cost of their IT decisions and can now make informed trade-offs that they never had to make, or were never able to make, before.

Department of the Future

What will the municipal IT department of the future look like? Cloud computing is going to affect the department’s goals, structure and functions. The degree of change will be determined by how far the municipality wants to go in using cloud services, and why.

Generally speaking, the “why” arises from what the cloud is. Cloud computing is a consumption and delivery model that creates a configurable supply chain for IT services.

When implemented, a cloud-computing approach creates an IT service that demonstrates:

- On-demand self-service – users can turn it on or off at will
- Ubiquitous network access – delivered to any device over a network
- Location-independent resource pooling – running in a pool of resources
- Rapid elasticity – resources are scaled up and down dynamically
- Pay per use – the user pays only for the resources the service consumes.

To study how these characteristics produce benefits for organizations, the IBM Academy of Technology examined 110 cloud-computing implementations in a survey conducted in August 2010. Cloud computing delivers a wide range of benefits, from high-resource utilization and flexibility to increased responsiveness.

Approximately 80 per cent of the clients said they realized significant sharing of IT resources through a highly virtualized infrastructure, and approximately 60 per cent said they achieved ease of use through self-service with rapid delivery. This was the case regardless of the industry or geography.

There are barriers to moving to the cloud, however. Security concerns, pricing strategies, system complexity, rapid technology advancements of cloud capabilities, gaps in standardization and a lack of clear value propositions were the biggest inhibitors to cloud computing.

The survey found that enterprises need to make organizational and process changes, and reach a higher maturity level of integrated service management to get the full value of cloud computing.

Relationship Management

If your municipality decides to employ public cloud services, you can expect to encounter a number of new relationship situations:

- Multiple providers – It is unlikely that a single cloud provider will be able to provide all of the cloud services that a municipality wants. Public-sector procurement policy may also dictate that multiple providers be used. Consequently, relationships with multiple cloud providers will be the norm and will have to be managed in a highly professional manner. Managing external service providers often requires new management skills and processes. Managing multiple service providers requires new skills to integrate and coordinate end-to-end service levels.
- Too many cooks – Business units might go directly to service providers to buy cloud services, bypassing the IT department. This is already happening in some municipalities and raises the issue of corporate cohesion and accountability. IT will need to develop new skills to work with business units to coordinate and manage cloud services to ensure that they meet standards such as data residency, privacy, security and resilience.
- Communications complexity – In serving its existing users, the IT department is responsible directly for communications and interactions with them. When service provision is moved to the cloud, however, communications will have to be facilitated between the users and the cloud provider. A different kind of communications mindset and competency will be required.

IT Business Strategy

In some respects, the role of the IT leader for strategic planning and direction will be diminished by the cloud. In one respect, though, it will be elevated.

Traditionally the IT strategic plan integrates business strategy with technology capabilities. It provides a mapping between business capabilities and requirements, and the support of these by current and emerging technologies. This creates a framework within which the organization can optimize its technologies and introduce innovations. Everything flows through IT.

In the world of cloud, alignment will become looser between IT and the municipal business units and tighter between the cloud providers and the business units. IT could lose its influence over technology decisions unless it adapts to this new model. IT departments need to focus on business strategy and innovation, and less on technology operations.

Developing new IT services internally can be challenging and expensive. If the municipality goes so far as to decide to solely purchase standard cloud services from external providers, internal designers of services and applications will find themselves displaced.

The key technology role of the IT department in the new world will become the integration of services sourced from multiple providers. With this, there is the opportunity for significant cost reductions.
3 Billion Devices Run Java

Computers, Printers, Routers, BlackBerry Smartphones, Cell Phones, Kindle E-Readers, Parking Meters, Vehicle Diagnostic Systems, On-Board Computer Systems, Smart Grid Meters, Lottery Systems, Airplane Systems, ATMs, Government IDs, Public Transportation Passes, Credit Cards, VoIP Phones, Livescribe Smartpens, MRIs, CT Scanners, Robots, Home Security Systems, TVs, Cable Boxes, PlayStation Consoles, Blu-ray Disc Players...

Java™ #1 Development Platform

oracle.com/goto/java
IT as a Force for Transformation

While some existing responsibilities of the IT department will be reduced or eliminated, there will be a greater need for more important strategic roles in understanding business needs and identifying technology solutions, and in managing procurement and the selection of partners to provide cloud services.

In fact, procurement could present the biggest single challenge in the adoption of cloud computing by municipalities. Expertise will be required by the enterprise – ideally organized and managed by the IT department – in initiating and managing relationships with vendors and partners in line with the municipality’s strategic plan for service delivery and sourcing. The shift from budgeting for data centres, hardware, software and labour to paying hourly or monthly unit prices for services will require a change in the way cities plan and budget.

The IT department will be responsible for the step-by-step integration of cloud services with legacy systems. This will mean a fundamental change in the procurement models that we have had for the past 25 years.

What about security? In a cloud-based architecture, IT will probably retain leadership in addressing the issues and risks related to information and data assets. Most service providers have higher levels of security than cities have – and can demonstrate it. Cities that have moved to public cloud providers have found that security, while a concern, is not a real barrier to moving to cloud computing.

Information Policies and Architecture

Municipal IT departments often have responsibility for determining how information is structured, classified, stored, and protected in the enterprise. How will the cloud affect that?

Our view is that organizations including municipalities generally recognize that the ability to process information and refine it into useful insight is essential to achieving business objectives. The information strategy, often formulated by IT, establishes the approach for managing business information as an asset and ensuring that the necessary content and capabilities are available to support the business strategy.

The other part of IT’s information-management responsibility relates to the information architecture, which provides the structure for organizing and maintaining business information, based upon the organization’s overall information requirements.

As municipalities move to the cloud and data continues to grow exponentially, it appears that both the strategic and architectural responsibilities of IT for managing information will endure and increase in importance.

One caution: ensure that you never lose control over your data if you move to public clouds. Public cloud service providers then become custodians of your data – not owners! It is your data, and it is your responsibility to control it.

Service Delivery and Support

When the cloud comes to your organization, what impact will it have on the employees of the IT department? The answer is, “It depends!”

Strategically, the IT department will require more expertise in the alignment of IT service delivery with the strategic requirements of the corporation’s business. Focus will shift to creating and managing service catalogues. While many services will, over time, be supplied by public cloud providers, the municipality cannot relinquish responsibility for service quality and service-level attainment, which will be in the hands of IT.

Daily operational responsibilities, however, will increasingly move to cloud providers. Municipal IT departments will need fewer employees focused on implementing and maintaining equipment, applications and databases.

This means that municipalities need to realign people to more strategic roles that are focused on how technology can be an enabler of the municipality’s strategic initiatives. I expect that most IT employees want this shift to occur. While this shift won’t happen overnight, the time to think about it is now.

New Roles, Responsibilities and Skills

The picture of the new municipal IT department in the cloud era that is presented here is partially drawn from the findings of an IBM white paper, Exploring the Impact of Cloud on IT Roles and Responsibilities, a copy of which can be obtained from the author. It predicts that the anticipated changes will take place over several years as organizations move carefully, step by step, to learn what the cloud can and cannot do for them.

In general, it appears that much greater business alignment and focus will be the name of the game for municipal IT professionals. The adoption of cloud computing has the potential to dramatically bring the IT department into line with the way that the municipality operates its business and take away much of the budget devoted to “keeping the lights on.”

New roles and responsibilities will ensure that the IT department has a much greater involvement in the financial-planning process than ever before, and we expect that large municipalities will need to invest in analytics and modelling to help them make the most cost-effective use of the resources they have.

Strategic and tactical functions will have greater longevity than operational ones. This implies that IT professionals will need to ensure they have the right skills to meet the challenge of the cloud.

Malcolm Smith, business development executive, Cloud Solutions, with IBM Canada Ltd., can be reached at malcolms@ca.ibm.com.
Editors’ note: We are grateful to RIMQ for contributing French-language articles to Municipal Interface. This article discusses the bring-your-own-device phenomenon. Our organizations are not really ready for it and are uncomfortable about its adoption. Exploring the pros and cons, the authors conclude that permitting employees to bring their own devices to work is actually a win-win approach.

Imaginez un gestionnaire, très fier et heureux d’avoir embauché la meilleure recrue en T.I., un programmeur de la nouvelle génération que tous les employeurs s’arrachent. Imaginez ce même gestionnaire, ayant à cœur de lui fournir des conditions de travail et des outils technologiques à la hauteur de ses compétences.

« Bien entendu, vous aurez une tablette et un Blackberry, annonce-t-il au moment de l’offre d’emploi ». Pas nécessaire, j’ai déjà un iPhone et un iPad3 », répond le nouvel employé.

• Dans ce cas, nous vous les fournirons.
• Non, je ne veux pas avoir à trimbaler deux appareils, je veux utiliser le mien.

À sa grande surprise, le gestionnaire constate qu’il s’agit d’un enjeu réel de négociation et même, une condition sine qua non pour l’acceptation de l’offre par le candidat. Fic tion?... Non. Réalité!

Cette situation s’est réellement produite lors d’un processus d’embauche dans une agence québécoise spécialisée en stratégie Web. Elle fut racontée par l’un de ses dirigeants lors de la 4ème journée annuelle des T.I., qui avait lieu à Saint-Hyacinthe le 11 avril dernier.

La nouvelle génération de travailleurs a déjà ses propres outils techno et ne comprend pas la logique d’utiliser ceux de leur employeur, si gratuits et si disponibles soient-ils. Et pour cause. Leurs équipements sont pour eux davantage que des gadgets électroniques ; c’est un carrefour où convergent leur flux d’information ainsi que l’ensemble de leurs activités professionnelles et personnelles stockées quelque part dans le Cloud.

Bienvenue dans l’univers du BYOD (Bring Your Own Device), un mouvement irréversible avec laquelle les organisations devront composer, à moins d’aimer nager à contre-courant.

Natif vs immigrants Internet

La génération You Gen-C est « native » d’Internet, en comparaison avec nous qui sommes des « immigrants ». Ceux qui ont notre âge (50-60) ont déjà vécu dans un autre monde. Notre esprit est plus « élastique », plus ouvert, mais possiblement aussi moins efficace car il ne fait pas « un » avec les outils... Certains diront « Dieu merci! »!

Ce n’est pas nécessairement le cas des « jeunes » qui eux ne connaissent pas d’autres façons de fonctionner. Ils ne comprennent pas pourquoi ils devraient compromettre leur efficacité sous prétexte de règles qui leurs apparaissent archaïques, ni pourquoi ils devraient utiliser un PC et un Blackberry alors que leur univers tourne autour de l’écosystème Apple.

Enjeux

Quels sont les enjeux ? Le principal est bien entendu la sécurité. Que se passe-t-il si un employé perd son propre ordinateur qui contient des données qui n’ont rien de personnelles, et tout du domaine professionnel ? Que se passe-t-il s’il se fait voler son téléphone intelligent avec des données « sensibles » ? Ce sont de bonnes questions.

En fait, il ne se passe rien de plus que s’il avait perdu l’appareil que lui aurait confié la municipalité : cela dépend si elle avait défini au préalable une politique d’utilisation des actifs informationnels, avec les directives qui doivent l’accompagner. Si les règles ont été suivies, il y a peu de chances que la perte ou le vol cause un réel préjudice à l’employeur.

Oui, mais il est plus facile de faire respecter une règle lorsqu’elle touche les équipements de la ville... Effectivement! On perçoit clairement la nécessité de définir les règles du jeu afin que chacune des parties y trouve son compte. Il faut un contrat, en d’autres mots.

Avantages

Avant d’aller plus loin, quels sont les avantages pour chacun ?... L’employé est heureux de travailler avec un outil qu’il maîtrise parfaitement, possiblement plus évoluté que celui que la Ville lui aurait fourni. De plus, il sera satisfait de ne pas avoir à transporter deux appareils (pour ce qui concerne le cellulaire).

Toutes autres choses étant égales, la Ville aura probablement quelqu’un de plus efficace, car habituée avec ses propres outils. De son côté, l’organisation aura moins d’équipements à gérer, pas de factures à éplucher, à analyser et à payer. Elle n’aura qu’à verser une allocation mensuelle qui peut être nettement inférieure au coût qu’elle aurait dû verser à l’opérateur (toujours dans l’optique d’un téléphone cellulaire).
Report from RIMQ

Contrat
Outre la durée, au minimum le contrat doit prévoir les fonctionnalités requises par les appareils. Il doit aussi prévoir que l’employé doit rendre les équipements disponibles en tout temps durant les heures de travail. Le délai maximum pour leur remplacement en cas de vol, de perte ou de bris doit être spécifié.

Le contrat doit aussi préciser que l’employé est propriétaire et seul responsable de son appareil et du plan d’abonnement (pour le cas du cellulaire), et que ce plan ne peut être changé sans l’autorisation de son employeur. Il doit aussi permettre d’y installer un utilitaire de contrôle : ainsi, les informations spécifiques à la Ville pourront être détruites en cas de perte ou de vol.

De plus, l’employé doit s’engager à protéger ses accès par un mot de passe ou par un autre mécanisme. Bien entendu, il sera le seul utilisateur de l’appareil. La politique d’utilisation des actifs informationnels devra également couvrir les aspects « perte, vol ou bris », en ce qui concerne la sécurité des données institutionnelles. Logiquement, le contrat contiendra une clause spécifiant l’obligation de respecter cette politique.

Finalement, dernier élément de l’entente mais non le moindre... le document précisera le montant de l’allocation à verser mensuellement à l’employé.

Éléments facilitateurs
La clé de voute du BYOD est la virtualisation, tant au plan de la station de travail que de la téléphonie. Si le poste de travail de l’employé est totalement virtualisé, l’équipement sur lequel il se déploie est bien secondaire. L’employé peut fort bien utiliser son Desktop Windows 7-Ville sur son iMac, celui-ci se contentant de gérer l’affichage. Dû-t-il le perdre, se le faire voler : aucun impact, les applications et les données ne sont pas sur l’appareil personnel de l’employé mais plutôt sur le serveur.

Pour ce qui est du téléphone cellulaire, le même procédé est possible, bien qu’il soit moins fréquemment utilisé. Il est possible de placer un circuit téléphonique IP de la municipalité et d’utiliser le protocole SIP pour fournir un « cellulaire-Ville virtuel ». À la fin de l’entente, il suffit pour l’employeur de retirer les accès au numéro institutionnel et cela en sera fini du « cellulaire-Ville », autant que du « desktop-ville ». Même en l’absence d’un accès SIP, les directions des TIC ont maintenant à leur disposition de nombreux produits qui leur donnent le contrôle de l’appareil pour détruire au besoin les données municipales.

Alea jacta es
Le sort en est jeté. Le phénomène est irréversible et à moins d’aimer nager à contre-courant, il sera contre productif de résister à ce phénomène qui constitue somme toute une situation gagnante pour les deux parties. Ceci dit, nous ne prétendons pas avoir couvert la totalité des enjeux soulevés par ce phénomène (pensons aux impacts fiscaux possibles...), mais l’objectif est ici de faire progresser la réflexion. « Que ceux qui veulent commenter se lèvent, ou se taisent à jamais... »

« Vous êtes bien compliqués ! », dirait peut-être le jeune travailleur qui vient d’obtenir son premier emploi plus « formel »... Ce sera alors le moment de lui souhaiter la bienvenue dans une autre dimension plus encadrée, moins ludique mais tout aussi efficace du cyberspace!

Gaston Huot, gaston.huot@villebrossard.qc.ca, est Directeur des Ressources informationnelles, Villes de Boucherville, Brossard, et Saint-Lambert, et membre du Conseil d’administration du RIMQ et de MISA/ASIM Canada. Danielle Boucher, danielle.boucher@ville.sainte-catherine.qc.ca, est Coordonnatrice, communications et relations citoyens, Ville de Sainte-Catherine.
Challenging Move to New Data Centre Turns Into Triumph at City of Regina

By Dale Strawford
City of Regina

ESTABLISHING A NEW DATA CENTRE was the largest operational challenge that the City of Regina’s Information Technology Services department had ever faced, and we had plenty of worries before it started. But now that it’s done, we’re boasting!

Our new motto is, “Give ITS a lever long enough and a fulcrum on which to place it, and we shall move the world!”

How Did We Get on this Path?
The road to data-centre salvation began in 2010 with plans to improve the second-floor Data Centre’s environmental controls. Items like fire suppression, improved security and adequate backup power were cited by the external auditor, adding weight to ITS’ request.

When renovations to the second floor were scheduled to adhere to the City’s contemporary office-space guidelines, the opportunity to move the data centre off the floor arose, freeing up prime real estate.

The history of the space dated back to 1981 and the City’s first mainframe. The space included a small test lab and was clearly occupying far more square footage than required to house the server and storage farms. One of the major disadvantages of having excess space is that it tend to accumulate extra items. It led to a space that was a bit unkempt and not ideally suited to tour groups.

A study listing relocation options for the data centre within City Hall was prepared, but ultimately the numbers were not attractive. A co-location opportunity with SaskTel was explored, and a business case developed. Once we received executive approval, an agreement in principle followed and the wheels were put into motion.

Opportunity Knocks
While a daunting task, moving a data centre presents many opportunities that don’t come along very often. The biggest of these was the creation of a new data centre from the ground up.

It may not seem like a big deal, but getting new top-of-rack switches, 10 gigabit connectivity and colour-coded cabling in some brand new racks makes IT Operations’ people very happy. So does proper airflow management with hot and cold aisles. These items all contribute to having a stable environment.

One of the problem spots with IT infrastructure is that many hands are involved over time, and standards may not always be adhered to. In our case, it was 30 years of work performed by a mix of 50 staff. Building a data centre anew was a chance to start fresh and clean.

As part of the data-centre transition, a new Demarcation Room was created in City Hall that was also fresh and clean. New Cat 6 riser cables were installed as part of that installation – again, a key foundational item.

Devil Is in the Details
There is a line in Sun Tzu’s book The Art of War that states “Every battle is won before it is ever fought.” In the case of a massive IT project, that is very true.

Our research told us most data-centre moving projects consume 12 to 18 months. We were initially given three months to complete the work. In the end we had five. This extra time was a blessing not just for planning but to execute the work of retiring additional servers and migrating more physical systems to the virtual world.

These timelines were very tight for an organization with 2,200 permanent employees and a large IT infrastructure to support their work. Only the efforts of a focused and committed team could have made it the success it was.

Moving a data centre is not for the weak of heart. In the month preceding the move date, ITS orchestrated more changes to the computing environment than would typically happen over five years.

And the changes were rapid fire. The disruptive nature of the changes meant network outages were required. When our customers were affected beyond the scheduled work, issues were rectified quickly, but they did happen. Customers were extremely patient and understanding of our efforts.

Speed bumps appeared at several points in the project including:
- Network switching and broadband wireless routing changes
- New corporate firewalls
- New core switches
- Cable plant changes for fibre and copper
- New demarcation room in City Hall
- Municipal-area-network redundant fibre ring changes
- Legacy systems retired
- Data centre infrastructure moved in entirety.

The move’s planning and strategizing had started many months before. All infrastructure pieces had been broken down to their lowest common denominators, and teams put in place for the responsibility of each. Frequent meetings ensured that all team members knew their role.
The date of January 21 was finalized after walking through a move plan many times to ensure that it fit. We have learned that optimization of one parameter means sub-optimization of everything else, so you have to keep an eye on the big picture.

In the weeks before, core network services like DNS, DHCP, e-mail and e911 systems were moved to the new data centre. This was to get traffic flowing across a new leased one-gigabit connection and lessen the workload on the big move day. Virtualization assisted by enabling some of the servers to be moved across the wire.

Infrastructure was identified as supporting Phase 1 (critical applications) and Phase 2 (non-critical applications). The priority was to get the Phase 1 systems operational first.

At the new data centre, the racks had been installed, pre-labelled for infrastructure placement and pre-wired for the Phase 1 infrastructure, with new top-of-rack switches and end-of-row core switches, KVM switches, power-distribution units and redundant power feeds. This saved time for the VMware and SAN infrastructure due to the many connections involved.

The night before the move, the database and applications teams ensured that all systems were backed up, transactions closed out, processes completed, and systems shut down. The “move” team arrived at 6:00 am to start disassembling and packing up systems for the movers.

A team of 11 began work in a space of less than 300 square feet! Phase 1 systems were brought online, and the Applications team conducted testing in concert with customers to verify that systems were working properly.

Phase 2 followed. Everyone’s shift for the day ended at approximately 7:00 pm. A 13-hour day was a long one, but we had accomplished a great deal.

Incredible Shrinking Data Centre

The data-centre move was the largest IT project we had ever undertaken and has also been one of the most successful. Tangible outcomes included:

<table>
<thead>
<tr>
<th></th>
<th>Pre Move</th>
<th>Post Move</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of racks</td>
<td>11</td>
<td>10</td>
<td>9%</td>
</tr>
<tr>
<td>Tower servers on floor</td>
<td>9</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Physical servers</td>
<td>77</td>
<td>53</td>
<td>31%</td>
</tr>
<tr>
<td>Rack unit space</td>
<td>314</td>
<td>142</td>
<td>55%</td>
</tr>
<tr>
<td>Power usage</td>
<td>26kW</td>
<td>23kW</td>
<td>12%</td>
</tr>
<tr>
<td>Square footage</td>
<td>1,100</td>
<td>288</td>
<td>74%</td>
</tr>
<tr>
<td>Signs of duct tape usage</td>
<td>Some</td>
<td>None</td>
<td>100%</td>
</tr>
</tbody>
</table>

Soft and fuzzy outcomes included:
- Reducing our data-centre footprint – power and cooling inputs, space
- Increased virtualization uptake
- Retirement of older applications and hardware
- Cable-plant rebuild in the data centre and new risers for the City Hall building
- Eliminated rack mounted UPS’s that were points of failure
- Excellent team-building exercise
- Data centre is now completely documented, labelled, and fully understood by all team members.

Another big win came Monday morning. Normally there is almost always something that falls through the cracks in any weekend IT implementation, which results in calls to the customer-service desk. That was not the case on the Monday after the data-centre move! It was business as usual for our customers, just the way we like it.

Five Tips for Success

1. Plan. You can’t plan enough – meet, whiteboard, write it up, walk through, repeat until everyone is satisfied. Continue until everyone is sick of you.
2. Communicate. You can’t communicate enough with your business customers and internal teams. They need to be confident that you have done your homework, have a plan and a backup plan.
3. Develop clarity of purpose, with a common vision and understood roles.
   - Common vision – the team simply functions better when it works toward a simple common vision and members understand their role.
   - Compartmentalize everything – reduce roles to their most basic elements and make use of the individual team members’ expert knowledge of their systems of responsibility.
   - Technical architect – crucial to plan, coordinate, and execute the move at every stage within the technical domain.
   - Project manager – your single point of communication with customers and other teams. When anyone other than the project manager communicates even the simplest things outside their teams, it can cause problems – miscommunication, rumours and nervousness.
   - The lone exception is for corporate and departmental buy in, which must be led by senior management.
4. Get people in the same room. Hold a “calming” meeting. Applications folks were nervous until we had discussed the move in a meeting, airing concerns about bandwidth and backup plans. There is no substitution for getting people in the same room with a whiteboard to brainstorm. All the phone calls and e-mails in the world cannot compete.
5. Build a team. Every success can be attributed to a team. You need a good one to succeed. And the project manager is the one to lead, the tie that binds.

In Regina’s case, the team of professionals each took on their roles with a passion – and the results showed!

Dale Strawford of the City of Regina’s Information Technology Services department was the technical architect of the data centre move project. He can be reached at dstrawford@regina.ca.
In a highly competitive and complex online communications sector, we are uniquely prepared and qualified to adapt and evolve to the continuously changing digital landscape.

Join us at Booth 42!

Who are the faces behind the feet?
Two of us are speaking at the Conference (with a few more at Booth 42). Come see us!

Saj Jamal
Municipal Use of Online Communication
Monday, May 28, 2012
9:25 am - 10:10 am

John Turner
Going with the Flow: An Innovative Approach to Managing Improvement Projects
Tuesday, May 29, 2012
2:00 pm - 2:45 pm
Calgary Takes Thought-Leadership Role
At MISA Prairies Spring Conference

By Lawrence Moule
Co-editor, Municipal Interface

HOW MANY CHANGES are coming to the way that municipal information technology departments operate? If you listened to all the predictions made at the MISA Prairies 2012 Spring Conference in Calgary, you might not be able to keep track.

Once again the Prairies conference set the scene for a transformative year. It produced clear indications that a number of concepts, like bring your own device, cloud computing and unified communications, have crossed a divide. The question no longer appears to be whether they will become part of the operations of IT departments but when and to what extent.

The conference also brought the City of Calgary to the fore as an important contributor to MISA and a thought leader in municipal service delivery. Calgary carried off the largest conference MISA Prairies has ever had. The 145 delegates were full of praise.

Rob Schneider of Strathcona declared: “I thought this was the best conference put on by the Prairies so far. It’s growing, it’s getting up near the size of the BC conference, and I’m seeing a lot more sessions and innovation.”

“I brought several staff members and what impressed me was that every one of them, no matter what their level, got value out of this conference and commented on it.”

The conference theme was “Any time! Anywhere! Any device! Any worries?” It was the brainchild of Heather Reed-Fenske, chair of the conference organizing committee, and reflected what Calgary’s Information Technology department is experiencing in trying to adapt to the new world.

Despite having much larger resources than any other municipality in attendance at the conference, Calgary does indeed have worries. They encompass everything from trying to provide the necessary infrastructure to serve wireless communications all over the city, to providing and affording the applications and human resources required to meet service expectations every minute.

“We did an advance survey to ask delegates about the types of sessions they would like to see, and number 1 with a bullet was BYOD (bring your own device),” Reed-Fenske said, sitting with Doug Hodgson, Calgary’s chief information technology officer, in the comfortable main-floor restaurant of the downtown Delta Bow Valley Hotel.

“Knowing all the things that need to happen to bring that kind of service to our city, what we hope is that participants at this conference will get some insights from what vendors are doing and what some other municipalities are working toward.”

Hodgson added: “This MISA conference is more important and valuable than any number of technical industry conferences we might go to because these delegates are truly our peers. They are working with exactly the same challenges, tackling the same things. When we can talk and share what each party is doing, we gain great value.”
Calgary shared its experiences by delivering several well-rehearsed presentations covering cloud-computing adoption, identity management, PCI compliance in a mobile environment, workforce mobility, privacy issues and the convergence of social, local and mobile communications.

Impressive effort and commitment went into those presentations, which can be viewed along with the other presentations at www.misaprairies.ca/en/conferences/Download_the_presentations_MISA_2012.asp.

Large-Scale Trends

The conference keynote presentation showed delegates that the issues they are facing are not the result of technology fads or short-term trends but of societal movements that are creating permanent shifts in service requirements.

Mark Cleverley, director of strategy for IBM’s Global Government Industry Group, illustrated dramatic changes in consumer behaviour and expectations. For example, in the United States today 66 per cent of Internet users access it wirelessly and 65 per cent of adults online use social networks. Both percentages were zero only 11 years ago.

“These two numbers point to very significant differences in a short time,” Cleverley said. “They are having a big impact on the way that people behave, the way they expect to do their work, play and business, and the way they expect you to deal with them in government. It is all changing very rapidly.”

The physical world, Cleverley said, is becoming transformed into data points so that almost everything can be measured and monitored. Delivery of information can be pinpointed precisely by location, device and time. Ordinary people have access to extraordinary computing power.

Combined, this is producing irreversible change in citizens’ expectations for service delivery. Conversely it is also giving municipalities unprecedented opportunities to engage citizens in helping to identify where emergency and maintenance services are required, and where strategic priorities should be redirected.

As a demonstration of how much potential there is for citizen engagement through technology, Calgary’s Corporate Marketing and Communications department gave a remarkable presentation about “SoLoMo.”
Calgary CITO Doug Hodgson, second from right, poses with members of the SoLoMo presentation team: from left, Tyler Pedrobie, Derek Habberfield, Robb Fergusson, Afsheen Mohamed and Jacob George.

Stephen Brown of Mitel tells delegates that unified communications will move to the cloud.

Navid Nafisiyazdi describes the City of Calgary’s approach to information management.

At right, Heather Reed-Fenske receives a congratulatory plaque as chair of the conference organizing committee from Corey Halford, MISA Prairies president, and vice-president Sabina Visser of the City of Lethbridge.

Tracy Ludwick of Strathcona County visits with Steven Hsu at the Nirix Group booth in the sold-out trade show.

Delegates to the MISA Prairies conference catch up with each others’ news while awaiting the start of a session.

Calgary’s Doug Hodgson, left, chats with Steven Jennings of Alcatel-Lucent before his presentation to conference delegates entitled “Dynamic Trends in Government Communications.”

Performing after the Monday night dinner, Steady the Wheel rocks the house. The band features Jay Stoudt of the City of Airdrie, far right, on guitar and vocals.
Standing for “social, local, mobile,” SoLoMo is the name of a program under way in 2012 in which the department is experimenting with new ways to interact with citizens. Department director Jacob George and project leaders Robb Ferguson, Afsheen Mohamed, Derek Habberfield and Tyler Pedrobie together gave conference delegates enough ideas to fill a book.

George pointed out that Calgary has more Twitter followers than any municipality in Canada, and its Web site, www.calgary.ca, receives nine million visits a year. On the home page is a button labelled “Get Involved.” Calgary is determined that its citizens will do just that, and that the City will reach out to them.

Corporate Marketing and Communications, with help from the Information Technology department and an Ottawa-based company called Purple Forge Corp., has created a series of applications providing information to citizens through mobile devices. They are also encouraging independent groups to create services of benefit to citizens, such as the http://transitcamp.ca site established to gather and disseminate ideas for improving Calgary’s transit system.

Referring to the book Cognitive Surplus by Clay Shirky, George said: “There are people who are willing to volunteer their time and their skill sets, and mobilizing their cognitive surplus is a powerful thing that governments can do for the greater good. That’s really what SoLoMo is about.”

Tyler Pedrobie said Calgary is taking a “mobile-first” approach to communications rather than a Web-based approach. In the six months through March of this year, mobile traffic to Calgary’s Web site tripled to 15 per cent of all traffic, and the growth is continuing.

Conference organizers took a mobile-first approach to communications, too. The conference app, also created by Purple Forge, was downloaded widely by delegates across all platforms, and the conference sites on Twitter and LinkedIn were in constant use by device-carrying delegates.

During sessions and conversations, delegates uniformly reported that mobility is a primary issue because it has suddenly introduced many new twists into their communications systems.

Karen Parsons of the City of Grande Prairie explained: “We have many staff who have their own devices, and we also have lots of City devices. We are trying to figure out a good balance for that.

“We have a BlackBerry server, and now the mayor and councillors all have iPads – but they are not integrated into our network! We need to go with the market, but it is changing so fast.

Thank you MISA Members for making Digital Boundary Group the leading provider of operational security assessment services to Municipalities across Canada!

DBG Services Include:

- PCI Readiness Assessments
- External Penetration Testing
- *Web Application Penetration Testing
- Infrastructure Security Assessments
- SCADA Security Assessments
- Security Training

*Approved MISA National Special Offer

Digital Boundary Group has been assisting the City of Lethbridge for the past few years with several facets of IT security. Their expertise and understanding of securing a business is top notch. We have greatly benefited from their customized training programs as well. They have proven themselves to be very knowledgeable, thorough and efficient at what they do. It is reassuring to have these kinds of services available in this ever-changing industry.

Sabina Visser, General Manager - Information Technology, City of Lethbridge

We have been utilizing Digital Boundary Group for operational security assessments and related training services for the past few years to ensure we are operating securely in a fast changing threat landscape. We value their expertise and professionalism and have benefited from their security services.

Brian Whitelaw, Division Manager Technology Services, City of London

For more information, visit us online www.digitalboundary.net

Email: info@digitalboundary.net I 1.800.747.3557 Ext. 248 or 265
Prince Albert Wins Award For Mobile-Agenda App

CREATION OF an electronic agenda that City councillors and committee members can access through iPads, saving money and trees, has won for the City of Prince Albert, SK, the Municipal Showcase award for 2012 from MISA Prairies.

Kevin Fines, PC support officer with Prince Albert’s Corporate Services division, made the winning presentation in the annual competition April 23 after the annual dinner during the MISA Prairies Spring Conference in Calgary.

The application, built on iAnnotate software from Apple, enables users to download, search, mark up, and synchronize documents at the push of a button. Deployed in late 2010, it saved Prince Albert 232,897 pieces of paper in 2011.

Other innovative solutions in the competition included:
• An interactive Web map by the County of Grande Prairie No. 1
• A GIS basemap built for the village of Crossfield by the City of Airdrie
• A road-conditions app by Calgary that became number 1 on iTunes.

Kevin Fines of the City of Prince Albert, left, receives the Municipal Showcase trophy from Corey Halford, president of MISA Prairies.

Presenters in the Municipal Showcase competition were, from top: Tracy Archibald, County of Grande Prairie No. 1, Alberta; Tyler Pedrobie, City of Calgary; and Chrystal Williams, City of Airdrie, Alberta.

what’s your vision? the Government Website Experts can help!

redeem for your free consultation on...

Contact Vision Internet at:
888.263.8847
www.visioninternet.com/MISA
“Then there are the summer students. The City will hire about 100 students this summer to work in parks and other areas. We are not going to buy phones for all those people! So we need to have a bring-your-own-device policy.”

Challenges like these drew the municipal delegates to the vendors’ displays looking for innovative ways to manage and secure devices held in many hands. The vendors perceived a new urgency in delegates’ questions.

Ashley Fruechting of Vision Internet noted, “Mobile was part of the discussion last year from an introductory standpoint, but this year people have really embraced it and are asking, ‘How do we make our Web sites more mobile friendly?’ or, ‘Should we be developing apps?’.

“Their focus is, ‘What are we going to do about this?’ instead of, ‘Are we going to do it?’”

From talking with delegates, Gus Bruneau of Seccuris Inc. concluded that mobile preparedness varies by municipality, but “I don’t think anybody has a really good grasp of what mobile means and the challenge that it brings – it’s so new and changing so rapidly.

“People at this conference are genuinely trying to get educated, so we’ve had a lot of conversations, and it has been very worthwhile to be here.”

Expert Insights

Vendors contributed a great deal to the conference program. Delegates particularly praised a panel session on the workplace of tomorrow facilitated by Laura Hambley of The Leadership Store, and a presentation by Bill Dupley of Hewlett-Packard Canada on how to build a business case for a cloud solution.

Other far-reaching issues were the subject of presentations by Mitel Networks Corp. and Alcatel-Lucent.

Stephen Brown, vice-president of field development, North America, for Mitel, predicted that voice and data communications for all kinds of organizations including municipalities will become unified in the cloud.

“We are about halfway through the re-invention of business communications – a move to a completely software-centric world,” Brown told his session.

“A common virtualized infrastructure for voice and data, which supports all kinds of devices, will be available as a unified-communications service in the cloud within the next three years.”

For delegates wondering about data management and networking issues, Steven Jennings, executive director of strategic industries for Alcatel-Lucent, offered a prediction about a coming revolution in network technology.

It will be driven, Jennings said, by unprecedented network stresses including unceasing demands for network capacity caused by the demands of mobile users and a sharp rise in the use of video. Alcatel-Lucent expects that, by 2015, video transmissions will account for 70 per cent of traffic on smartphones.

The future solution to such capacity demands will be the use of unified, adaptable and optimized IP networks, Jennings said, that will “literally enable your government to be a cloud.”

Known as IP/MPLS networks, they use the Internet protocol enhanced with the multi-protocol label-switching (MPLS) standard, so that data packets travel along different, optimal routes to get to the same destination. In effect, each application creates its own network.

IP/MPLS networks combine wireless and wireline transmissions and can be connected to any device. Such a network is in use now at the City of Tacoma, Washington. Jennings predicted that this type of network will enable municipalities to have more cost-effective communications and greater collaboration than ever before.

Optimistic Outcome

The promise of greater integration and unification of IT resources was the grand message that this conference delivered. Delegates could see optimism beginning to appear beneath the weight of their many problems.

“To me it’s not really about the technology,” Ron Soehn of the City of Red Deer commented. “It’s more about how to fit the technology within a municipal environment to deal with things that we feel now that we don’t have control over.

“There are more questions than answers at this point, but that’s OK — everybody can use a conference like this to figure out how to create their own efficiencies.”

Calgary’s Hodgson said the conference might ultimately provide a vision for far greater municipal collaboration.

“Looking further down the road, I’m hoping to see municipalities take advantage of technology to truly consume and provide services among each other,” Hodgson said. “I really think that’s possible, and here’s where the discussion starts.”
City of Edmonton to Move to Google Apps

THE CITY OF EDMONTON will become the first major municipal government in Canada to use Google e-mail and other cloud-based office technology apps for all City employees.

An agreement recently signed with Google opens the door for all City employees to access their online resources from any location and with any device, Edmonton announced in a news release April 10.

For the first time, those City employees who do not have an e-mail account will have one as well as access to other office technology tools called Google Apps, such as docs, spreadsheets and presentations.

Currently, about 3,000 City employees who do not work in an office setting don’t have e-mail accounts.

Google Apps will enhance productivity, efficiency and collaboration between departments while maintaining strong security and privacy standards, Edmonton officials said.

“This move supports our city vision, ‘The Way Ahead,’ to use the most innovative technologies available,” said city manager Simon Farbrother.

“We will now have a more inclusive work environment where all employees will have access and be able to share and collaborate in real time on the same document whenever they want, in any location, and on any device such as smartphones and laptops.”

The change will be phased in over the next few years. Google e-mail and calendar will be put in place beginning in late 2012, and the other apps will be available for employees to use late next year.

Edmonton’s chief information officer, Chris Moore, said that before selecting Google e-mail, calendar and other apps, analysis and testing of the different technology options available occurred along with a third-party assessment and review. In August 2011, Council approved the decision to go with Google.

“When we looked at Google, what we found was it met our needs on two fronts,” Moore said in an interview with ComputerWorld Canada, “one financial, and the other one from a functional perspective.

“It wasn’t so much that we set out to [say], ‘let’s go to the cloud.’ We set out to lower our operating expenses around productivity tools, and of course, the cloud model provides that.”
IN THIS SERIES of columns providing some insight gained from my 35 years at Peel, I have used as a framework the three dimensions of management – managing up, managing down and managing across.

This column focuses on the dimension referred to as “managing down” – your relationship with your team.

You Are Responsible

From my previous columns, you may have picked up that I very much believe in accountability and responsibility. As a leader, you are responsible – for everything.

Most of us are quite happy to accept responsibility for the good things that happen. On the contrary, these are the times when we should step into the background and give genuine credit to our team. It is when things don’t go so well that we need to be front and centre.

Some of you may remember the Toronto Computer Leasing Inquiry, which I followed closely and where I was, in fact, called as an expert witness. The answers from different senior leaders provided some interesting contrasts on this issue of accountability.

Many of these leaders took the position that they couldn’t possibly be expected to know everything that went on in their organization and, therefore, couldn’t really be held accountable. In contrast, Mike Garrett, the former city manager (and ex-Peel CAO), clearly stated that these events happened “on his watch” and that he was, therefore, directly accountable.

In my view, Garrett was not just being noble. He was showing a real understanding of the nature and responsibility of leadership.

It is undoubtedly true that, as leader, I cannot know the details of everything that is being done by everyone in my organization. Nevertheless, I hired these people, either directly or indirectly. If I didn’t hire them, I put or kept them in the roles that they had – effectively deciding that they were competent.

I delegated authority to them to make decisions. I was responsible for communicating the vision of what we were trying to accomplish as well as the policies, procedures and values by which we operate. Finally, I was responsible for ensuring that the systems, checks and balance were in place to confirm that things were operating as they should.

Admittedly, I can’t have perfect knowledge. There will be mistakes or bad judgment, including some of my own. People will go against corporate direction and not live up to my expectations. Checks and balances will fail. Bad things will happen.

When they do, I don’t need to fall on my sword, but I am responsible and I do feel that in some way I have failed or not done all that I could. Being a leader means taking responsibility – fully and sincerely.

As an aside, I am always impatient when the media excuses a sports team’s coach or manager on the basis that success is determined by the players on the field. Of course it is. But the main job of a leader is to ensure that all team members are performing to their full potential. If they’re not, who is at fault? Certainly the players but also (and perhaps most importantly) the leader. Why else do leaders get the “big bucks”?

Your Most Important Decisions

Your most important decisions as a leader are your hiring decisions – who you hire, who you put into which roles, and how you orient and train the members of your team.

At times, I have been heard to say (perhaps with some exaggeration) that not only are these your most important decisions, they are your only important decisions. If you hire the right people, put them in the right roles, and provide the proper orientation and coaching, then life is good. You can sit back and let them get on with the job. Your job is simply to keep them pointed in the right direction and provide any assistance when needed – clearing away obstacles, gaining approval for decisions, and so on.

On the other hand, if you hire the wrong people, life is very different. Your time is spent managing, cajoling, coaching, mending fences, reviewing decisions, intervening in issues, and all of the many tasks that most of us dislike.

In some ways, it is easier to deal with a bad hire than a mediocre one. For really bad hires, we can usually just take the required action and start over. But when we hire someone who is minimally competent, it is a little more difficult.

Quite often, this person will be with us for a long time, meaning that we have now taken on the twin burdens of both improving the person’s performance and, in the interim, living with his or her deficiencies.
Governance Issues

Given the importance of our hiring decisions – and some in human resources departments may cringe when I say this – my advice is that, if any aspect of the resume or interview raises questions in your mind, just ask. For instance, I am often interested in why a prospective hire left one job and took another, where this didn’t appear to be an obvious career choice. I am always interested in why they have applied for the particular job for which I am interviewing.

Their motivation will tell me something about what is important to them. And I have mentioned previously that the “first six months” question can provide insight into their preferences for managing up, down or across.

In my view, given the importance of “fit” to a potential hire’s ultimate success, we need to find ways to evaluate this factor, while avoiding the trap of personal bias. Fit is too important to ignore during the hiring process.

Getting Things Done Through Others

A corollary of everything that I have said so far is the standard definition that “management is getting things done through others.”

This is something that you have to believe. You are the coach and not the doer. Whether you are successful or not depends on what the team does on the field. Your job is to prepare them as best you can.

At my retirement event, Mike Proudlock opened with an anecdote about coming into my office and apologizing for interrupting whatever I was doing. He quoted my response as saying that what I was doing wasn’t important. My job was being available for him, providing the support that he needed.

This was a nice story and might have included a bit of embellishment, but the principle is valid.

If you lead a team of 100 people, your personal work represents less than one per cent of the available resources. Peel’s CAO, David Szwarc, leads an organization of 5,000 people. Is it more important for David to get done the things on his to-do list – as important as these may seem – or can he accomplish more by ensuring that the other 5,000 Regional employees are working effectively to achieve the goals of Council and the citizens of Peel?

Of course, this is a bit of a false choice. He needs to do both. But David knows, as well as anyone, that leadership (supporting and providing direction to staff) is his most important job. It is why he continues to dedicate so much time to meeting with both management and front-line staff in all departments, notwithstanding the many other seemingly more important things competing for his time.

If management is getting things done through others, then supporting our people (so that they can do their jobs) is our job one.

Coming Next

In the final column in this series, I will have a few more thoughts on managing down, as well as some ideas on the particular challenges of managing across in a municipal government environment.

roy.wiseman@rogers.com

Supporting people so they can do their jobs is the most important role of executive leadership

My second piece of advice, especially for external candidates, is that if you are not confident about your choice, either request yet another interview or go back to the market. If you need someone right away, fill the gap with a contract until you can find the right person.

The risk and negative consequences of a less than good decision are too important to make a decision simply because you feel under pressure to just get someone quickly.

Another point is that an external candidate should be significantly better than an internal candidate applying for the same position. In general, we only look at external candidates who have already done the job for which we are hiring, whereas internal candidates are usually someone for whom this is a step up. So we are measuring potential against actual experience. Our scoring systems should reflect this.

I also feel that sometimes we may be doing ourselves a disservice by not looking at external candidates with experience similar to our internals and with the potential to advance to the next level. But external candidates who might have strong potential but lack experience tend to get weeded out in the screening process.

Finally, I understand that evaluating “fit” is frowned upon by many HR departments, since it can introduce biases that have no place in hiring decisions. But when I look back on the bad hiring decisions that I have made, the issue has almost always been “fit” rather than ability or skills.
National and Member Executives

National Officers

PRESIDENT
Maurice Gallant, City of Fredericton
506-460-2830
maurice.gallant@fredericton.ca

VICE PRESIDENT
Kathryn Bulko, City of Toronto
416-397-9921
kbulko@toronto.ca

TREASURER
Garry Bezruki, City of Waterloo
519-747-8726 (fax 747-8727)
bezruki@city.waterloo.on.ca

SECRETARY
David Hennigan,
The Capital Regional District
250-360-3141
dhennigan@crd.bc.ca

www.misa-asim.ca

MISA Atlantic

PRESIDENT
Maurice Gallant, City of Fredericton
506-460-2830
maurice.gallant@fredericton.ca

MISA Prairies

PRESIDENT
Corey Halford, City of Airdrie
403-948-8800 x 706
corey.halford@airdrie.ca

VICE PRESIDENT
Sabina Visser, City of Lethbridge
403-320-3880
sabina.visser@lethbridge.ca

TREASURER
Dan Newton, City of Red Deer
403-342-8283 dan.newton@reddeer.ca

SECRETARY
Tracy Archibald,
County of Grande Prairie #1
780-532-9722 x 155
tarchibald@countygp.ab.ca

www.misaprairies.ca

MISA BC

PRESIDENT
Guillermo Ferrero, City of Nanaimo
250-755-4486
guillermo.ferrero@nanaimo.ca

TREASURER
Barbara Davey, City of Surrey
604-591-4803
brdavey@surrey.ca

SECRETARY
Wayne Ikesaka, City of Vernon
250-550-3540
wikesaka@vernon.ca

http://misa.bc.ca

Réseau de l’Informatique Municipale du Québec (RIMQ)

PRESIDENT
Gaston Huot, Villes de Boucherville, Brossard, Saint-Bruno et Saint-Lambert
450-923-6362
gaston.huot@ville.brossard.qc.ca

VICE PRESIDENT
Jean-Guy Renaud, Ville de Terrebonne
450-471-8265 x 1312
jeanguy.renaud@ville.terrebonne.qc.ca

SECRETARY-TREASURER
André Labonté , Ville de Saint-Jean-sur-Richelieu
450-357-2435
a.labonte@ville.saint-dean-sur-richelieu.qc.ca

www.rimq.com

MISA Ontario

PRESIDENT
Geoff Hogan, County of Grey
519-376-2277
g Geoff.hogan@grey.ca

VICE PRESIDENT
Dan Munns, Town of Whitchurch-Stouffville
905-640-1910 x 285
daniel.munns@townofws.ca

TREASURER
David Laneville, City of Timmins
705-360-2605 (fax 705-360-2686)
davidl@timmins.ca

SECRETARY
Claire McKay, County of Wellington
519-837-2600 x 2290
clairem@wellington.ca

COUNSEL
Lou Milrad, Miller Thomson LLP
416-595-7926 (fax 595-8695)
lmilrad@millerthomson.com

www.misa.on.ca

www.misa-asim.ca

www.misa.on.ca

www.misaprairies.ca

www.misa.bc.ca

http://misa.bc.ca

www.rimq.com

www.misa.on.ca
A More Efficient Workforce

Find out how Cartegraph Solutions can help you manage your Workforce and your Municipal Infrastructure Assets.

Contact AGL at (877) 433-9533 today.

Come visit us at
MISA Ontario Conference, Booth 36 Hamilton Convention Centre May 28 - 29, 2012

Check appliedgeologics.com for additional details.