



SUBJECT: Enterprise Resource Planning (ERP) Update

TO: Committee of the Whole

FROM: Information Technology Services

Report Number: IT-01-19

Wards Affected: not applicable

File Numbers: 200-6

Date to Committee: April 1, 2019

Date to Council: April 23, 2019

Recommendation:

Receive and file information technology services report IT-01-19 providing an overview of the Enterprise Resource Planning (ERP) project.

Purpose:

To respond to the staff direction received on February 21, 2019 (F-02-19-2) requesting an overview of the Enterprise System Renewal (ERP) project including information on; timing, phasing, resourcing, benefits and risk, cost, third party engagements and potential impacts resulting from the pending provincial/municipal government structure review.

Background and Discussion:

ERP is business management software that allows an organization to use a system of integrated applications to manage the business. The applications allow for the efficient collection, storage and retrieval of information to support business functions and processes across the organization. ERP systems aim to establish a single consolidated repository and often are noted as the 'system of record'. The City's ERP system currently includes a collection of applications that support finance, payroll, and human capital management functions. These are outlined in the table below:

Process	Software Solution	Year Implemented
Financials		
Core financials and asset accounting (e.g., general ledger, accounts receivable, accounts payable, bank reconciliations, financial reporting, procurement)	SAP	1998
Budget and forecasting	Questica	2000 (Capital) 2014 (Operating)
Treasury management (investment)	Does not exist	n/a
Payroll		
Payroll management	Banner	1995
Human Capital Management		
Employee records	Banner	1995
Recruitment	HireDesk	2011
Learning & development	Our Training Room	2014
Time and attendance recording	EmpCenter	2015
Disability management	Parklane	2016
Onboarding, performance management, complement management, employee recognition, health & safety, labour relations, succession planning	Does not exist	n/a

In 2013, Deloitte LLP (Deloitte) was engaged to review the City’s ERP systems and create a 10-year strategy to support ongoing needs.

The review recognized that an unusually high number of applications were being used to support ERP business functions and recommended that the systems be rationalized and consolidated into 1-2 corporate integrated solutions.

A 10-year roadmap was proposed, and Council approved the recommendation in report IT-01-13 to proceed with a two-phased approach to the ERP implementation.

The first phase focused on enhanced IT governance, better management and utilization of the City’s information assets, and development of a roadmap to accommodate short-term upgrades and application optimizations. This phase was to occur over a 3-5-year period.

The second phase was to develop a business case and a funding strategy for a consolidated ERP system that will enable digital business transformation. This phase

was to start in years 3-4 and be completed over the remaining period of the 10-year plan.

Following the adoption of the roadmap the City established an IT Governance model that included an IT Governance Team, an IT Steering committee, and a number of committees charged with evolving and enhancing key business systems.

Recognizing that data and information are valuable assets, the 10-year roadmap recommended the implementation of a data warehouse and a corporate reporting tool. In response a Business Intelligence strategy was developed in 2015 and a formal program was launched in 2016. As of today, the BI tool is being used in Fire, Capital Works, ITS, and Parks and Recreation to assist with reporting and analytics. These capabilities are now being deployed more broadly with the goal of providing self-service capabilities throughout the organization by the end of 2020.

In 2016, an internal staff team developed a strategic roadmap for ERP as a tool to assist in executive decision-making on the future of ERP. The road map identified the City's current state, an environmental scan, readiness milestones, and key decision variables.

In 2017, Deloitte was once again engaged to develop detailed functional requirements, assess implementation options, and provide updated cost estimates. During this time, City staff also completed an extensive environmental scan that included marketplace research and consultation with municipalities that had recently completed or were implementing an ERP solution. It became apparent that, much like the City of Burlington, other municipalities were seeking to replace dated and siloed legacy systems with a fully integrated ERP solution.

In 2018, Council approved report IT-04-18, which provided information on the City's ERP systems and preliminary plans to replace and update ERP. The report highlighted current ERP challenges, risks, benefits, and estimated costs of implementing a consolidated ERP system.

Current ERP Challenges

The City's ERP systems are out of date and lack functionality making continuous improvement efforts difficult. The systems and processes that have served the City well over the last decade (or more) are now not sufficiently meeting the City's needs. Key business processes are supported by multiple systems making routine tasks complex and inefficient. Our current payroll system is cumbersome to operate and requires many manual adjustments.

Numerous integration points exist between systems to support critical business processes like payroll. Integration points are often complex and require significant staff time and specific skill sets within IT Services to support and maintain.

Currently, there are no applications in place to support employee performance management, workforce complement management, labour relations, or treasury management.

The ability to answer basic business questions has become very time consuming and often requires manual data extraction from multiple systems followed by additional manual steps to make the data usable. Microsoft Excel spreadsheets have become an integral part of business processes and have been used to fill gaps in core system functionality. Staff are spending a significant amount of time on routine tasks and do not have the capacity to be innovative and deliver more efficient, value-added services that our community expects.

The use of antiquated technology can impact employee recruitment and the City's overall brand. The City's recruitment software (HireDesk) is out-of-date, cumbersome to use, and lags behind other organizations. As the first point of contact for thousands of applicants, it may give the impression that technology is lagging and that the City may not be a best in class employer.

The City requires vendor software maintenance and support services to keep our systems in good working order. The cost to maintain our existing ERP solutions is approximately \$500,000 annually. In 2019, an additional \$250,000 was budgeted to implement mandatory upgrades to SAP and Banner. Investment in a modernized ERP solution is the preferred way forward rather than directing resources to existing systems that are not meeting the needs of the organization. From a strategic perspective, we are spending resources to manage systems that are causing frustration amongst staff and customers.

The current state is not sustainable, and the City needs to proceed with the implementation of an ERP system as soon as possible to address the following risks:

- Growth of disconnected and disparate systems
- Managing legacy systems that are inadequate and outdated
- Increased costs of maintenance and repair of legacy systems
- Decreased data integrity as more manual processes and workarounds are added
- Inability to leverage technology to support innovation
- Inability to eliminate manual processes
- Increased opportunities for error and fraud

- Ability to attract and retain talented and tech savvy staff
- Dependency on long-standing staff who have specialized skills required to support customizations and unique nuances of legacy systems
- Inability to deliver on strategic objectives
- Negative affect on public opinion and/or City reputation

Benefits of a New ERP

The value from ERP programs and initiatives comes from the adoption of new and/or improved ways of working. A properly implemented ERP system will enable digital business and deliver a measurable business impact. The goal is to reduce the number of peripheral, disconnected, siloed data systems and in doing so deliver a fully integrated, flexible, intuitive solution that will facilitate service delivery improvements. The following benefits are expected through the implementation of an updated ERP system:

- Improved business processes and elimination of manual tasks
- Reduced dependence on spreadsheets
- Improved business agility, innovation, and continuous improvements in response to service changes and improvements
- Improved data management capabilities
- Easier and quicker access to reliable information, supporting a data-driven approach to decision-making
- Elimination of complex and high-maintenance integration points
- Alignment with and deliver incremental benefits with other initiatives including Business Intelligence, Customer Relationship Management (CRM), and Maintenance Management (MMS)
- Support and enable a 21st century workforce
- Increased employee satisfaction in technology tools

Strategy/process

Research shows that a key element to a successful implementation is up-front planning. Taking the time to define the strategic vision, objectives, performance measures, and critical success factors will help the City achieve the positive outcomes that are expected. These steps will also prepare the City to most effectively manage time, cost, quality, risk, and issues as the ERP program progresses.

Given the size, complexity, and business functions impacted, the City is adopting a phased approach to implementing the ERP program. New functionality will be launched at various stages of the program, with the first launch expected approximately one year after vendor contracts are in place. Although phases have not yet been confirmed, it is

anticipated that payroll and human capital management will be addressed first as they are at higher risk. A detailed implementation plan will be confirmed once the software and implementation partner vendors have been confirmed.

The ERP procurement process will involve the selection of a software solution followed by a 3rd party implementation partner who is certified and experienced in ERP implementations. They will assist the City in leveraging the software to transform our business, enhance service delivery, and achieve the desired strategic outcomes.

The City has engaged Deloitte to assist with the procurement process as they have a strong understanding of the ERP marketplace and are familiar with Burlington's processes and requirements. Deloitte will assist in developing the Request for Proposal (RFP) packages, evaluating responses, and advising the City on a best fit solution. The procurement process will be led by the City and involve the ERP Program Manager, staff from Procurement, Legal, IT Services, and other business stakeholders.

While the procurement phase is underway, staff will continue to work on strategies focused on people, processes and technology. These efforts will address business process transformation, data management and conversion, technology architecture and integration needs, change management, risk management, and project resourcing. This will require dedicated staff resources so that we are fully prepared to start implementation when the procurement process is complete.

In addition to the dedicated team, staff across the organization will be engaged at various stages of the implementation as part of their day-to-day job. They will provide subject matter expertise, advice, support with business process re-engineering, testing and training.

Project Governance

A key driver of success is good project governance. Put simply, project governance is a management framework within which effective project decisions are made. As such, an Enterprise Software Steering Committee has been created to provide leadership, oversight, and set strategic direction for the ERP program. The Steering Committee comprises eight members of the Burlington Leadership Team and their primary role is to ensure that the ERP program achieves the intended business outcomes and that those outcomes align with the corporate vision, policies and directions. The committee will provide leadership and direction to the ERP program, act as champions of change, and be responsible for making key decisions.

Program Timing

In the past, technology has primarily been used to increase efficiency and productivity. Today, it also transforms how we work and how we engage with our customers. It is a strategic asset that can help us accomplish our goals and achieve our corporate objectives. The asset management principles we apply to roads and facilities should also apply to technology. As technology ages, it becomes more vulnerable to error, obsolescence, and failure resulting in a decreased ability to maintain existing service levels. Failure to renew technology assets in a timely manner can result in additional costs to the organization. The City's current ERP systems are a barrier to innovation and change. Any delays affecting the ERP program implementation will exacerbate existing challenges and increase organizational risk.

Based on the current plan, the City is preparing to issue an RFP in May 2019 with the goal of having legal agreements in place by the end of the year.

Contract negotiations are scheduled to occur between October and December, this will provide ample time to consider and adjust project timelines based on the outcomes from the Province's regional government review. The RFP document also includes standard wording in the Terms and Conditions section that allows the City to cancel the bidding process.

Financial Matters:

Based on their previous engagement with the City, Deloitte estimated that the cost to implement a new ERP at the City of Burlington was between \$6.0M and \$12.0M. The range in cost is due to several unknown variables including, but not limited to, the roll-out strategy, number of customizations, data conversion work, and deployment option (Cloud v other).

The 2019 to 2028 Capital Budget and Forecast includes a project in 2019 called Enterprise System Renewal (ERP) (IT-CA-1507) with a budget of \$6,055,700. This money will be used to purchase and/or secure a new software solution, including hardware, software, licensing, training, configuration, and professional implementation services.

In addition to the capital funding, additional monies are required for a dedicated project team of approximately 10-12 seconded staff. It is important to note that while the project will span multiple years, dedicated staff will only be required for portions of the project. They will phase in and out as functionality is implemented. The 2019 operating budget included \$1.5M to fund 4 staff starting in 2019. The secondment for one employee will span four years and the secondment for the remaining three employees

will span two years. Staff will submit a separate business case as part of the 2020 Operating Budget to fund the remaining positions. The total number and timing of these secondments will be confirmed once the software solution and the implementation partner have been selected and the timelines of the project have been confirmed.

The capital budget also identified the need for three additional staff to maintain the ERP system on an ongoing basis. While this figure is based on staff research (including other municipal implementations), ongoing staff requirements will be assessed as the program is implemented. Prior to requesting additional positions, staff will look at opportunities to reallocate existing complement.

Connections:

A Corporate I.T. Strategy was developed with a vision to deliver “Innovative City Services powered by tech savvy people, modernized technology and meaningful information.”

Of the five strategic themes developed, two have direct relevance to the ERP program:

- Treat information as an asset. This theme envisions a future where the City becomes more of a data and evidence driven organization, using analytics to improve the lives of residents and enhance the efficiency of the City’s operations.
- Implement or renew core Enterprise Systems. This theme recognizes the continued importance of the major business platforms that manage the City’s core business processes. The actions directed the City to develop an approach and strategy for the consolidation and implementation of an ERP solution.

The 2016 Corporate IT Strategy emphasized the need to update ERP and other key enterprise systems, recommended that the City develop plans for the replacement of ERP, and establish the necessary resources and commitment to proceed.

Recently, the City conducted a staff survey to determine satisfaction with I.T. services and the importance of those services. The largest gap between importance and satisfaction was with business applications.

Other initiatives involving the modernization of enterprise systems are currently underway including the implementation of a Customer Relationship Management (CRM) system, a Business Intelligence (BI) system, and an updated MMS. An updated ERP system would complement and improve the effectiveness of these and other enterprise-

wide systems. Governance committees and the Burlington Leadership Team are working together to ensure that these projects are well coordinated with and align with the overall strategic vision.

The benefits delivered through the ERP program will support the corporate commitment of building a 21st century workforce.

Public Engagement Matters:

Any changes that impact the public will be communicated through the appropriate channels. Opportunities for direct engagement and feedback with the community will be considered throughout the project.

Staff across the organization are enthusiastic about the ERP program and are eagerly awaiting the benefits that the new solution will deliver. Engagement of City staff is critical to a successful implementation and will be addressed through the application of a comprehensive communication and change management strategy.

Conclusion:

The City currently uses multiple software applications to support the finance, human capital management, and payroll functions. These systems are used throughout the organization and support critical business processes. Existing systems have become onerous to manage, are no longer meeting the needs of the organization, do not support fully automated processes, and are nearing obsolescence. The City has an opportunity to address significant challenges by implementing an up-to-date ERP system that will deliver transformational improvements to the organization, staff, and the public.

Given the current and imminent risks and challenges, staff believe it is critical to proceed with the ERP program in a timely manner. We are confident that we can initiate procurement while maintaining the ability to appropriately change direction pending a decision from the Province's regional government review.

Respectfully submitted,

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Report Approval:

All reports are reviewed and/or approved by Department Director, Director of Finance and Director of Legal. Final approval is by the City Manager.