



**Enterprise Resource Planning (ERP) Assessment –
Final Report**

City of Fort Saskatchewan

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Introduction

BACKGROUND

The City of Fort Saskatchewan is currently implementing Microsoft Office 365 and Sharepoint as well as PSD CityWide's asset management and maintenance management modules to provide enterprise asset management functionality and to replace WorkTech/Pearl, the City's legacy job costing and work order management system. The City has taken this opportunity to address critical business needs by looking for guidance in reviewing its current Enterprise Resource Planning (ERP) system. The City is looking to assess the ERP's overall effectiveness, and to support the development of an ERP roadmap for future decisions. The ERP assessment is intended to identify current gaps in existing functionality and capabilities as well as identify long-term recommendations regarding ERP, renewal, or replacement. Specifically, this project's objectives are to:

1. Inform the organization of gaps between current and future ERP needs.
2. Provide realistic and strategic recommendations that eliminate or reduce gaps in current system functionality and reduce staff effort.
3. Provide recommendations that meet a variety of budget, time, and effectiveness variables to allow the organization to prioritize quick-wins and major projects.
4. Identify critical variables to inform ERP renewal, or replacement activities, supporting ERP asset management plans.
5. Prepare the organization to advance service capabilities through strategic system planning.

This document serves as the final deliverable that identifies and recommends a path forward for a future ERP system replacement. Prior to completion of this report the City was engaged to discuss key system dimensions and tradeoffs to help identify where the City aligned with current market opportunities. This alignment is the basis for the road mapping activities identified in this report, and helps inform the extent to which the City is looking to push future features and functionality, to what extent financial operations and capabilities should be centralized, or integrated across multiple systems, what level of training and change support the City can accept, the appetite of the City for enabling future analytics and capabilities, and finally to what extent the City is willing to impact future budgets to enable the system.

These considerations have been developed into a list of ERP specific pre-RFP activities to establish a solid implementation foundation, an implementation roadmap that lists and details best practice activities and sequencing, and an initial financial estimate detailed below that should provide sufficient initial direction to the organization in preparing system budget asks and developing project governance.

Other component deliverables have been included as appendices to this report and include:

- **Gap Assessment Report** – The Gap Assessment Report was developed through a review of background documentation provided by the City, a series of engagement sessions with staff and leadership, our professional knowledge and experience working with other jurisdictions in their ERP Assessments, and general industry best practice. The report identified current issues in People, Process, Implementation, and Technology, the ideal state or “need” associated with each issue and what changes, activities, or projects would need to be completed to close the gap. The Gap Assessment Report was completed in early September 2023 and is included as *Appendix: B*.
- **ERP Market Scan** – The Market Scan was developed through information collected from a variety of sources including publicly available information, vendor discussions, our experience assisting in similar municipal procurements, and market information from our Infotech partner. Overall, the Market Scan analyzed 6 potential vendors/solutions and looked to identify their ability to meet various aspects of City need as well as additional information on some key topics of interest identified through the Gap Assessment Report. The ERP Market Scan was completed in early October 2023 and is included as *Appendix: C*.
- **Functional Requirements Documentation** – Following completion of this report, Tantus will provide the City with a document detailing an initial list of mandatory and desirable functional requirements to prepare the City as it looks to go to market in the coming years.

Target System Position

SYSTEM TRADE-OFF MODEL OVERVIEW

	Features and Functionality	Breadth of Capabilities	Knowledge & Change	Data and Integrations	Budget Impact
More Desirable	Adaptive, Scalable Workflow Functionality	Comprehensive Organizational Capabilities	Dynamic Tailored Content	Organizational Platform	< \$2,000,000
	Advanced Automated Workflow Functionality	Municipal ERP Capabilities	Static Tailored Content	Integration Center	\$2,000,000 - \$4,000,000
	Basic Digital Workflow Functionality	Standard ERP Capabilities	Standard General Content	Data source system with integration capabilities.	\$4,000,000 - \$8,000,000
Less Desirable	Requires Out of System Workarounds	Requires Out of System Workarounds	Standard Content with Knowledge Gaps	Data source system with limited integration capabilities	> \$8,000,000

Overview and Use

The model has been used to assess and identify a number of critical system tradeoffs in ERP implementation planning and phasing. This model looks to identify where the organization envisions itself along desirable dimensions including Features and Functionality, Breadth of Capabilities, Knowledge and Change, Data and Integrations, and Budget Impacts.

In addition to the City's placement on the scale we have aligned categories of potential ERP vendors along each of the dimensions. These categories are expanded on in the section below and include:

- **Legacy Providers** – Historic ERP/Financial Management systems that are currently approaching end of life in a number of municipalities.
- **Mid-Market Offerings** – Mid-Sized systems that focus on a flexible core product offering.
- **Major Platforms** – Large all-encompassing systems that are on the cutting edge of the ERP market.

Through comparing the City's desired state and available market capabilities we can identify what (if any) tradeoffs the City may need to consider when selecting a future ERP system.

In addition, by comparing these options we can begin to identify areas of focus for future requirements development and potential for implementation needs.

Dimensions

The five dimensions include:

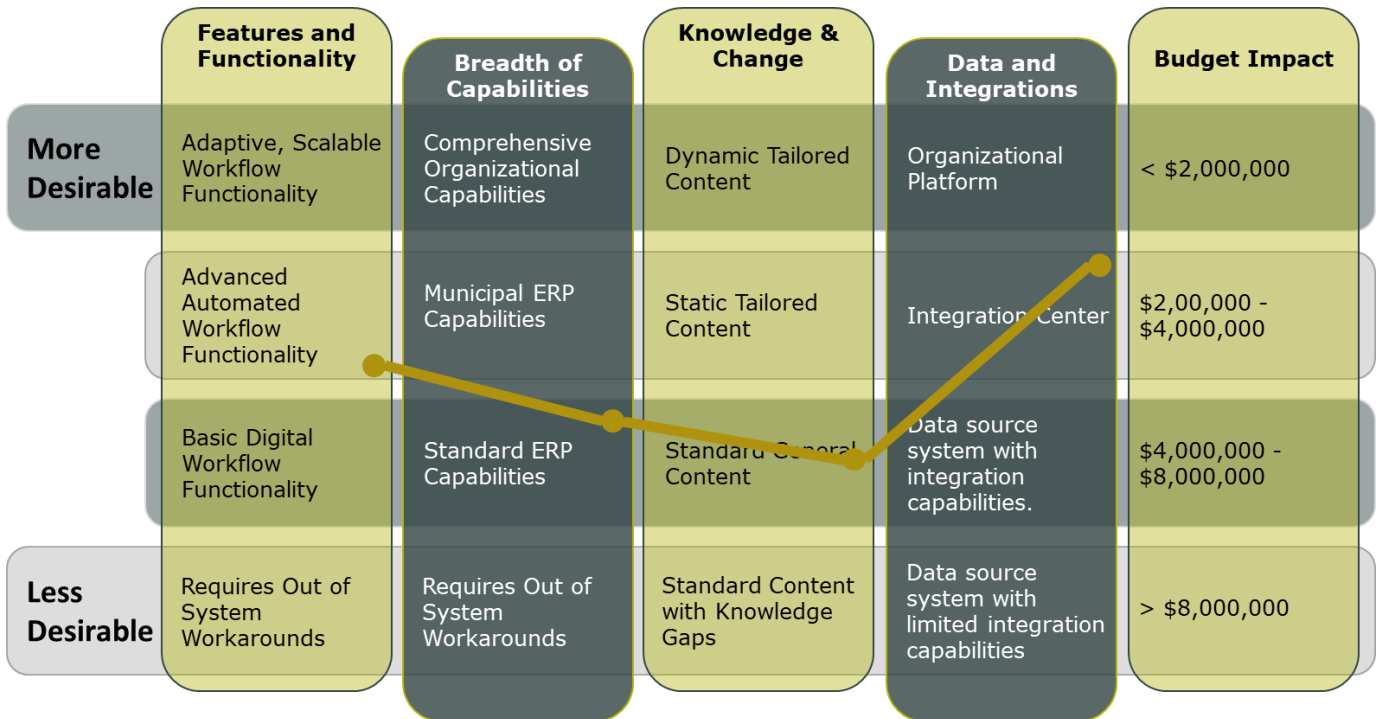
- **Features and Functionality** – This dimension addresses the level of advanced functionality desired. The distinction between levels is primarily represented through the extent to which workflow functionality is enabled to support business operations. At a basic level this includes standard digital workflow functionality that is essential for organizations to transition from paper-based forms, processes, and records. The next level of functionality includes modern automation or AI workflow technologies to automate tasks allowing for additional effort saving efficiencies through features such as automated form/data entry. Finally, at its most advanced level, functionality is scalable, adaptable, and forward thinking. Advanced functionality uses machine learning and AI advancements to not only enable workflow tasks but to enable workflow itself. At this level the system can identify patterns or challenges in processes and workflows and intelligently recommend opportunities for improvement.
- **Breadth of Capability** – System capability needs are essential to understand as an organization in a specialized industry. Most modern ERP ecosystems can provide a standard suite of Financial Management, Reporting, and Human Resources capabilities through additional modules/products that can meet the general needs of any organization. However, the scale and diversity of the ERP market has led to the creation of several municipal specific systems/solutions. These solutions uniquely position themselves as providing capabilities tailored to municipal needs including utility, tax, and licensing in addition to the standard suite of capabilities. Finally, advancements in technology have led to the maturation of some ERP systems into integrated operational platforms. These advanced platforms have robust customization, workflow, and integration capabilities that allow them to meet any current or future organizational need for any industry, all built on one centralized organizational data platform minimizing the need for complex out of system integrations.
- **Knowledge and Change** – Knowledge and Change management are a central piece of any system implementation and a crucial ongoing piece of system operations to support staff as they evolve and grow in their role and career. At a minimum staff need to have training materials and support in place to allow them to use a system to its greatest potential. The minimum level provided by modern vendors is typically a comprehensive package of general knowledge content that provides adequate information for staff to gain expertise in any area of system capability/functionality. As emphasis on knowledge and change management is increased, general content is supplemented with one-time, tailor made, knowledge content. This content reflects

the system or software as it has been configured in the organization and provides unique insights into organizational roles or tasks. In its most ideal instance this tailor-made content is not only provided as part of implementation but is continuously delivered and updated as new features are added with unique insights on how features may impact organizational business processes and staff roles.

- **Data and Integrations** – The replacement of a central and pivotal business operational system opens a unique opportunity for the City to invest in future analytics infrastructure. At their most basic level systems function in isolation, processes and data are designed and stored without the intention of export or integration. As organizations evolved digitally and the desire for analytics grew, isolated systems started to incorporate tools, technologies, or capabilities to assist in the export or integration of multiple organizational systems. These isolated systems function primarily as providers of data but do not typically have the architecture or tools to allow for complex 2-way integrations with multiple systems. Due to the central role of Finance in an organization, most Financial and ERP systems typically offer more robust integration capabilities than isolated provider systems. Modern ERP systems provide numerous tools and technologies to assist organizations in managing multiple 2-way integrations and are typically the central hub for all organizational systems. In its most advanced form modern ERP vendors have extended beyond a traditional hub system and have moved to ERP as an integrated organizational platform. This platform operates as a backbone for not only finance but all organizational data and information, creating a centralized data repository with advanced data management and workflow capabilities.
- **Budget Impacts** – The final dimension is relatively straightforward and looks to identify to what extent the organization is willing to invest and allocate funds to implement a software solution.

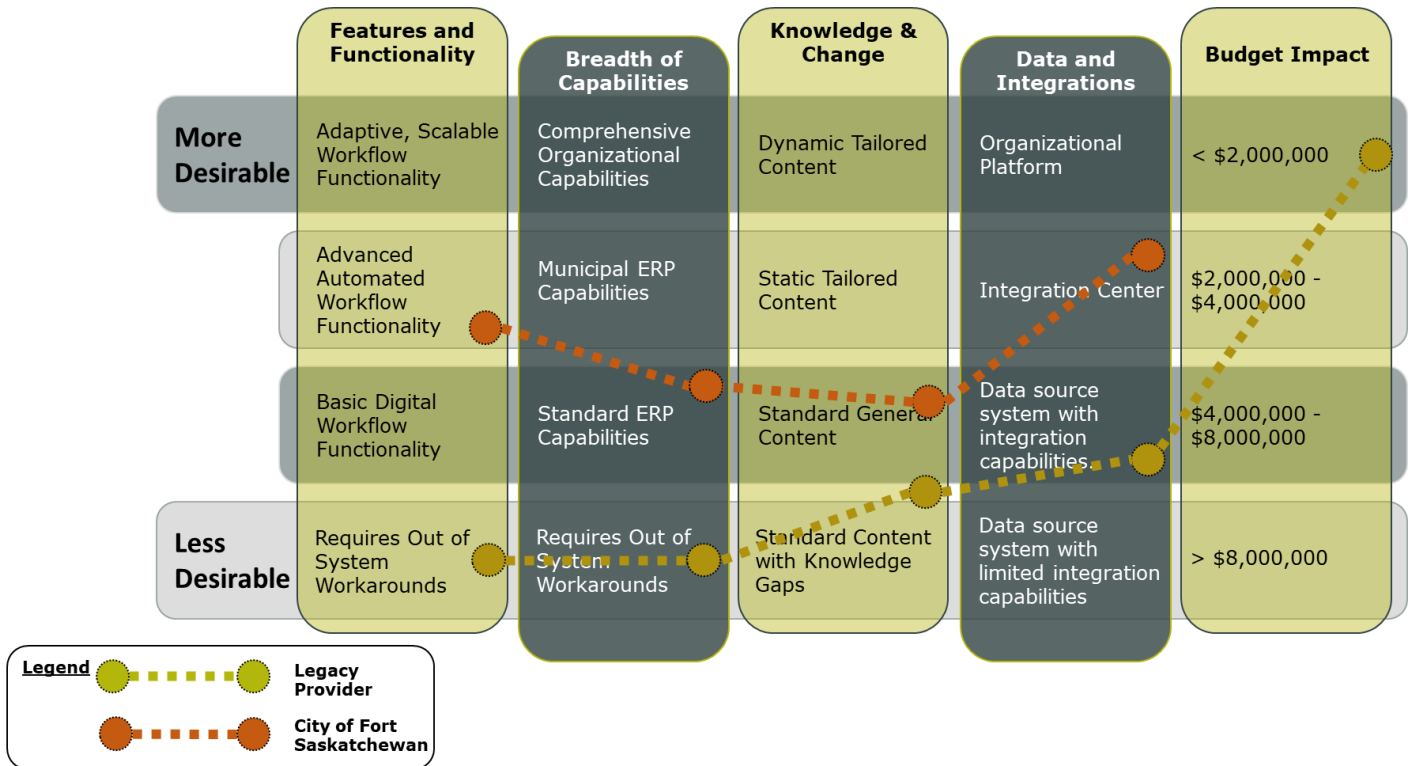
DESIRED FUTURE STATE

A session was held with the City to determine general intentions and expectations regarding the various dimensions identified above. The City acknowledged a need for moderately advanced automated workflow functionality. The City is looking for a system that supports the digitization of business processes as well as inclusion of automation rules and capabilities, but likely does not need the full scale of AI enabled workflow tasks. In terms of capabilities the City has clearly expressed interest in focusing on Standard ERP capabilities over a system tailored specifically to Municipal need and was receptive to the idea of a joint bid to meet all municipal requirements (taxation, utilities, etc.). The City acknowledged that while Training and Knowledge management are a priority, realistically, standard general content is sufficient for the City’s needs assuming the system is continuously modernizing knowledge content. Of increased importance to the City was the level of Data and Integration capabilities. With the number of current challenges integrating City systems the City is looking for easy to use integration capabilities such as APIs or visual integration development tools.



MARKET ALIGNMENT

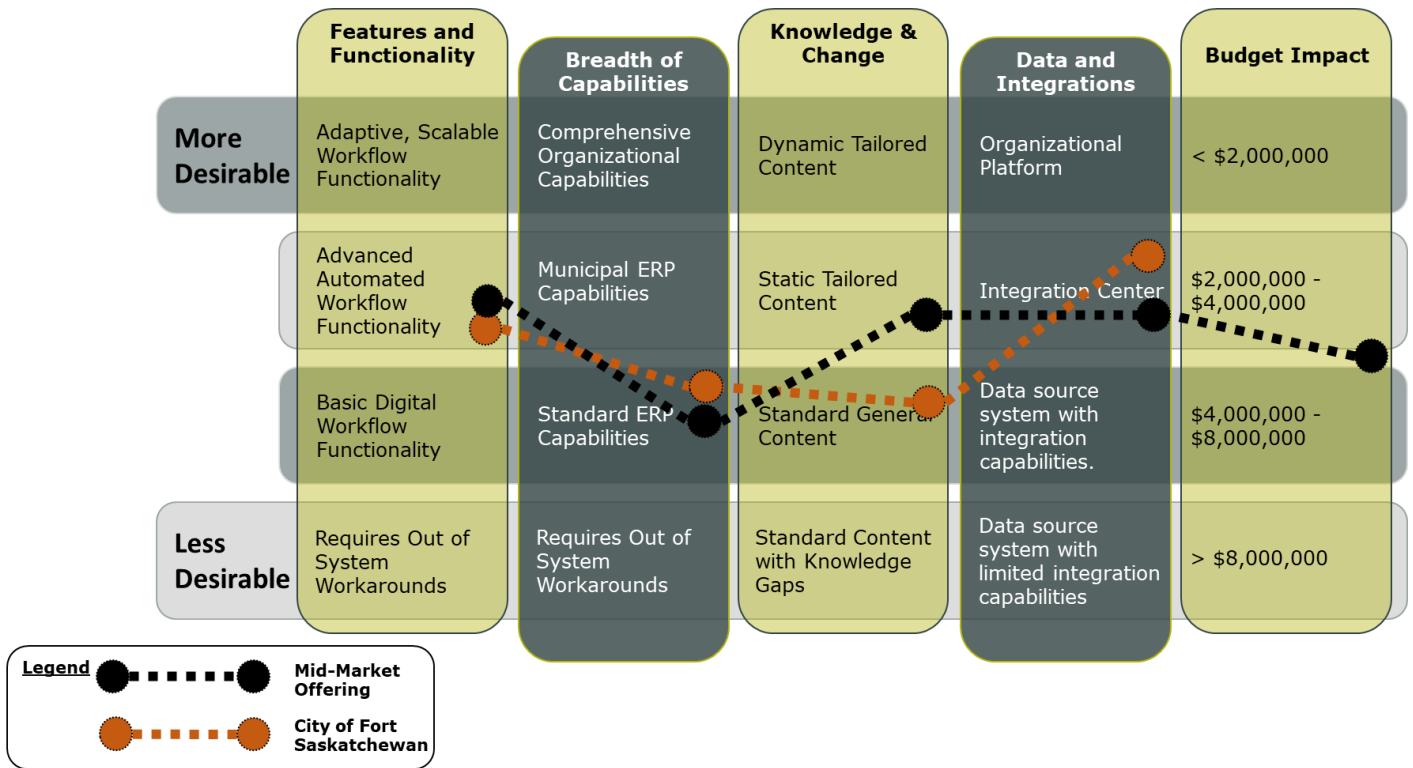
Legacy Provider



The Legacy Provider category includes systems familiar to municipal organizations. These are the previous on-premises financial systems that many municipalities are migrating away from. These systems typically provide minimal functionality and capability. While they have been highly customized, they struggle to meet modern organizational needs. In addition, due to the highly customized on-premises implementation they typically lack sufficient knowledge and change management material leaving many organizations responsible for filling in the gaps. Finally, legacy systems lack the conveniences or technological architecture of modern systems. It is challenging to extract or import data and information from legacy systems, and in many cases requires highly specialized skills and tools to transfer data in and out of the system in an effective manner.

The City is no longer aligned with the Legacy Provider category. While Legacy Providers fit within the City's initial expected budget commitment, they are unable to meet the City's needs in all other system dimensions and would lead to stifled growth and efficiency.

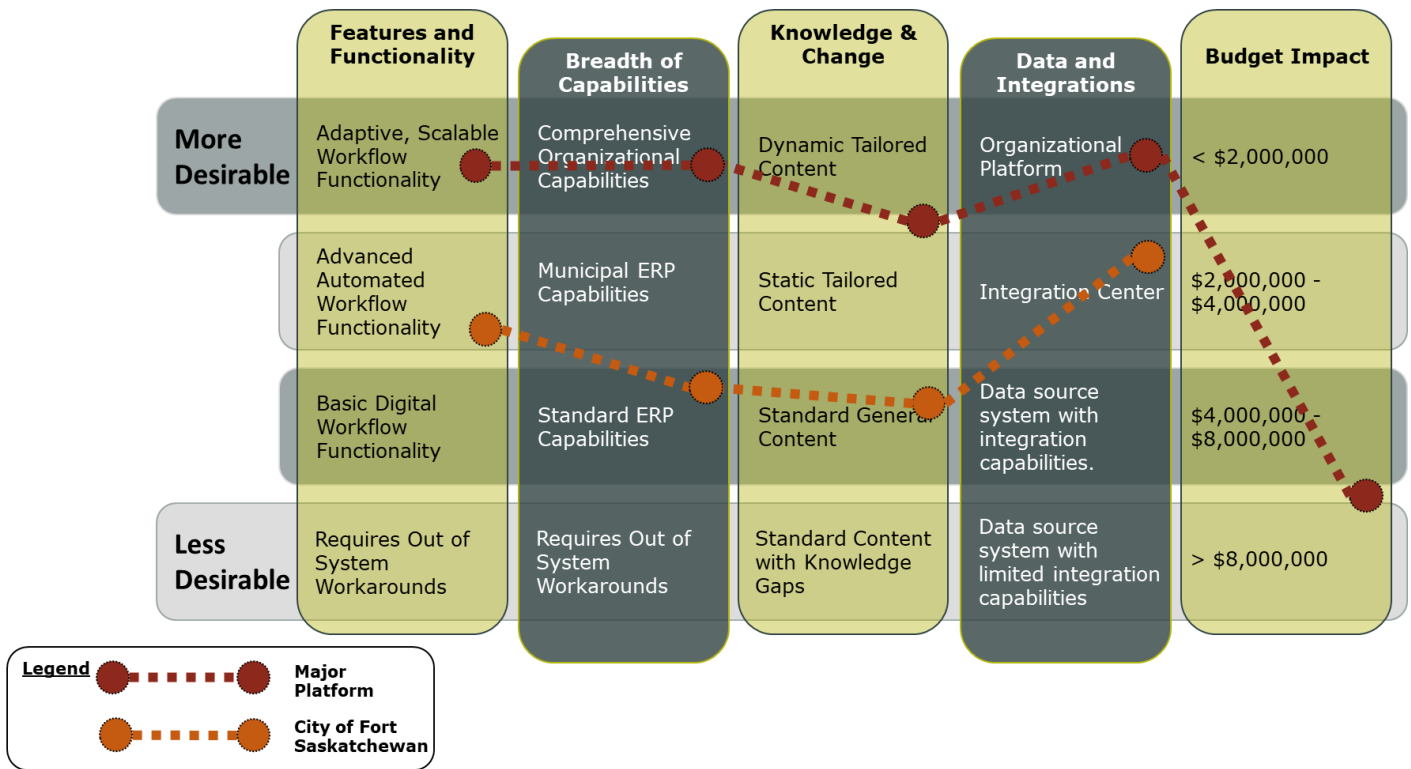
Mid-Market Offering



Mid-Market Offerings are the mid level between smaller legacy providers and the larger major platforms. Mid-Market Offerings include vendors such as Unit4 or Microsoft Dynamics 365 Business Central. These providers typically lack the specialized capabilities of municipal focused providers and lack the complete customization capabilities of Major Platforms. However, Mid-Market solutions offer advanced core ERP functionality leveraging intelligent workflow capabilities such as automation or AI. Mid-Market Offerings provide robust knowledge content platforms that are frequently updated with new system features and capabilities. Finally, as these systems are typically not specialized in any one specific industry, they often provide significant API capabilities to aid integration with a number of organizational systems.

Accepting a Mid-Market offerings would require an additional budget ask beyond the City’s current expectations but would allow the City to meet its current integration, functionality, and capability needs identified throughout the Gap Assessment report.

Major Platform



The final category of ERP provider is the Major Platform. These are large all-encompassing systems that are on the cutting edge of the ERP market. This includes vendors such as Oracle and Workday. These organizations are emblematic of the transformation of traditional ERP systems into large scale organizational platforms that manage and coordinate all organizational data and processes. These systems typically have highly customizable business app development capabilities that allow them to meet practically all business capabilities with some amount of customization. To supplement this these organizations typically have advanced training and knowledge management material tailored to individual learners or career paths. Finally, as an organizational platform these systems push the boundaries of data and integration and are generally embed as the heart of all organizational systems with highly robust and advanced integration tools and data management capabilities.

As indicated above, the scope of Major Platforms can be daunting, and supporting implementation of these systems can be a significant organizational undertaking. While these systems themselves can be scaled back and configured to lessen the burden of organizational implementation, these systems shine when they can push organizational data and processes to their maximum potential. Unfortunately, for the City of Fort Saskatchewan, implementation of a Major Platform would represent a significant financial and effort investment. In addition, to effectively leverage a Major Platform the City would need to employ a greater scale and scope of “Pre-RFP” activities to ensure processes, data,

people, and technology across the organization are prepared for a foundational enterprise architecture transformation beyond the level of a typical ERP system implementation. However, the high capability of these systems and the vendors dedication to continuous improvement and modernization would create an ideal platform as the City continues to grow and develop.

System Implementation Roadmap

RECOMMENDED ROADMAP

Implementation Approach

It is our recommendation that the City tailor the roadmap, requirements, and budget request to select a **Mid-Market Offering** solution. A Mid-Market solution represents a reasonable balance between additional spending with advanced features and functionality that can be used to optimize staff efficiencies and reduce onerous manual effort processes.

In addition, we recommend a **“Big Bang” implementation** approach due to the complexity of all integrated business processes. In a big bang implementation, all desired modules are configured and launched simultaneously as a single event and system cutover. The initial list of implemented modules should focus on replacing current functionality and at minimum include the following modules:

- *Financial Management (including AP/AR)*
- *Payroll*
- *Budgeting/Reporting and Analytics*
- *HRIS (pending Pre-RFP review)*
- *Project Costing/Project Management (pending Pre-RFP review)*

Additional Modules

There may be an opportunity for implementation of additional modules pending a further review of several topics identified in the Pre-RFP Initiatives section of this report. Potential additional modules may include:

- *Purchasing and Procurement*
- *E-Services*

Implementation of additional modules would likely result in a minor increase in licensing costs (with the exception of taxation/utilities). However, selection of additional modules may extend the implementation timeline and result in additional costs to cover extended staff secondments.

Taxation and Utility Module Considerations

The recommended focus on a Mid-Market offering presents the City with two potential options for Taxation and Utility modules. The market scan identified a tradeoff in the current market between systems capable of providing modern-advanced features and functionality and systems capable of delivering a comprehensive scope of municipal capabilities. The City will need to identify and select of the following two potential paths regarding Taxation and Utility modules:

1. As a temporary solution through the RFP process the organization should clearly identify that integration with existing legacy Taxation and Utilities modules is mandatory. This would result in a new single vendor solution with integration of legacy Taxation and Utilities modules (Diamond). This option is more affordable than the second option below. However, this solution should be considered a temporary solution until the market can move to a position where a suitable/affordable Taxation/Utility module system is broadly available. Finally, the end of support for legacy systems and modules may create additional challenges for the organization as they continue to rely on these aging systems to support critical functionality. The Financial Implications of this option have been explored as Scenario 1 below. *A recent, peer municipal ERP procurement has chosen this as the favorable of the two potential options, due to the lack of a sufficient market option available to meet their needs at an affordable price point.*
2. As part of the RFP process the organization clearly identifies that joint-vendor bids are acceptable, and that vendors are responsible for arranging a partnership to meet all requirements identified by the City. This would likely result in a multi-solution winning bid (and potentially a custom developed Taxation/Utilities solution), and a modernization of Taxation and Utilities functionality. However, this would incur a substantial increase in ongoing licensing costs/development costs and may result in a scenario where the organization must consider sacrificing core financial management capabilities to include a Taxation/Utilities solution. The Financial Implications of this option have been explored as Scenario 1 below.

Project Roadmap

Our estimate is that an ERP Replacement project from Initiation to Deployment and Go-Live will take ~30 months to complete. It is our recommendation that the organization sequence the project to be ready for a big bang cutover of systems prior to the end-of-support date for Microsoft Dynamics GP. Project tasks include:

- **Project Initiation** – The formal start of the ERP replacement project. In this stage all Pre-RFP activities have concluded, and the organization is prepared to begin an ERP replacement. Critically, this task would include onboarding the Project Manager and establishing Project Governance structures and Implementation Teams.
- **Detailed Planning and Analysis** – This task includes a refresh of Functional and Non-Functional Requirements and completion of the RFP. This task should be

initiated after the Project Manager has been onboarded and a Governance Team has been established. The organization should clearly outline the goals, expectations, and needs for this project. Requirements can be refreshed from the document developed as part of this project (Appendix A).

- **Procurement** – At this stage the RFP has been completed and released for tender. This task would include all steps throughout the RFP procurement process including vendor demos, evaluation, and award. Of note, Contract Negotiations for major technology systems can be time and effort intensive. The City should ensure they have sufficient legal support prior to Contract Negotiation.
- **Implementation Kickoff** – The vendor (or vendors) have been selected. At this stage the Project Manager, Governance Team, and Vendor will meet to discuss the project plan, project considerations, change management planning, data migration planning, etc.
- **Implementation and Configuration** – The stage at which the system will be implemented for the City in alignment with an implementation plan prepared by the Vendor. This task includes a multitude of activities. Specifically, this will include Data Cleanup and Migration, Stakeholder engagement, and System Configuration.
- **Testing** – As components and modules of the system are configured and implemented a testing process will occur in accordance to vendor/City testing processes to ensure that systems are configured accurately and meet City needs/requirements.
- **Training** – The final step before System Go-Live. The organization should execute the Change Management plan developed with the Vendor to ensure sufficient staff buy-in.
- **Deployment and Go-Live** – The point at which continuing operations and processes move from the previous system into the new system. This task will require significant dedicated Vendor and City staff support to ensure a smooth transition.
- **Decommissioning and Sustainment** – At this point of the project, the system has been implemented and vendor and staff effort shift almost entirely to change management, training and support. At this stage it is critical for the organization to quickly and efficiently address/identify areas of system deficiency and work to resolve these challenges.

The estimated Roadmap can be seen below.

Task	Year 1				Year 2				Year 3				Year 4		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<i>Pre-RFP Activities</i>	■	■	■												
<i>Project Initiation</i>				■											
<i>Detailed Planning and Analysis</i>				■											
<i>Procurement</i>					■	■									
<i>Implementation Kickoff</i>						■									
<i>Implementation and Configuration</i>							■	■	■	■					
<i>Testing</i>									■	■	■				
<i>Training</i>											■	■			
<i>Deployment and Go-Live</i>													■		
<i>Decommissioning and Sustainment</i>														■	■

FINANCIAL IMPACT

Based on the lack of clear phasing preference, we have developed multiple financial scenarios, one that considers a single solution and one that considers new taxation and utilities capabilities in a multi-vendor situation. The financial scenarios both incorporate the recommended team structure and roles outlined in the following section.

Note: Financial impacts identified in this section are estimates based on our previous experience assisting municipalities in ERP procurement and implementation projects. Financial impact estimates have been prepared to provide guidance to the organization and are for budgeting purposes. In-year budget estimates are representative of expected project effort/costs and may not reflect the period in which actual expenses are recognized. Cost estimates assume dedicated staff, a contracted project manager, and 100% staffing backfill costs. Our recommendation is to pursue this structure of resource commitments, and to consider staffing costs in the City's budgeting, but the organization does have an opportunity to reduce system implementation costs through insourcing contracted services, by dispersing staff effort commitments, or simply not fully backfilling staffing effort.

Scenario 1 (Single Solution)

Assuming Scenario 1 (Single Solution) the Total Financial Impact of system implementation across the project lifecycle is estimated to be **\$4,888,000** inclusive of staffing effort costs (*cost estimates for Year 1 do not include "Pre-RFP Initiatives"*). Financial Impact is composed of the following costs and assumptions:

- **Project Management Service (Contract)** – A contracted resource/service to oversee complete system project management. This would include a number of governance activities including project administration, scheduling, project planning, resource allocation support, and general project management expertise.
- **Project Team (Staff)** – This includes an estimate of our recommended internal project team and the dedicated staff time required to support project implementation based on our experience in similar sized municipal organizations. A project team structure including dedicated position requirements throughout the project lifecycle has been included in the "Resourcing and Team Structure" section below. As noted, these costs have been included based on the assumption of 100% backfilling of staffing efforts to reduce the impact to operations from the ERP project.
- **Software Costs** – The estimated annual licensing costs associated with the solution. Licensing costs have been estimated at \$900 per license. With the inclusion of payroll this would include a license for each of the City's 242 FTE positions. Of note, this does NOT include licensing costs for Tax/Utility modules which would raise the estimated cost per license to ~\$1400, or an additional \$360,000 (before contingency) over the project lifecycle.
- **Vendor Implementation Cost** – The estimated vendor implementation cost of the solution. Total vendor implementation costs have been estimated based on our

experience supporting other like sized municipalities through similar ERP system procurements.

Project Costs	Year 1	Year 2	Year 3	Year 4	Total
Project Management Service (Contract)	\$ 45,000	\$ 335,000	\$ 450,000	\$ 20,000	\$ 850,000
Project Team (Staff)	\$ 12,000	\$ 380,000	\$ 1,043,000	\$ 65,000	\$ 1,500,000
Software Costs	\$ -	\$ 220,000	\$ 220,000	\$ 220,000	\$ 660,000
Implementation Costs	\$ -	\$ 240,000	\$ 470,000	\$ 40,000	\$ 750,000
Sub Total	\$ 57,000	\$ 1,175,000	\$ 2,183,000	\$ 345,000	\$ 3,760,000
Contingency Budget (30%)	\$ 17,100	\$ 352,500	\$ 654,900	\$ 103,500	\$ 1,128,000
Total Budget	\$ 74,100	\$ 1,527,500	\$ 2,837,900	\$ 448,500	\$ 4,888,000

Scenario 2 (Multi-Vendor Solution)

Assuming Scenario 2 (Multi-Vendor Solution) the Total Financial Impact of system implementation across the project lifecycle is estimated to be **\$5,356,000** (*cost estimates for Year 1 do not include "Pre-RFP Initiatives"*). This assumes a significant increase in software costs, but similar implementation and resourcing costs compared to Scenario 1.

Project Costs	Year 1	Year 2	Year 3	Year 4	Total
Project Management Service (Contract)	\$ 45,000	\$ 335,000	\$ 450,000	\$ 20,000	\$ 850,000
Project Team (Staff)	\$ 12,000	\$ 380,000	\$ 1,043,000	\$ 65,000	\$ 1,500,000
Software Costs	\$ -	\$ 340,000	\$ 340,000	\$ 340,000	\$ 1,020,000
Implementation Costs	\$ -	\$ 240,000	\$ 470,000	\$ 40,000	\$ 750,000
Sub Total	\$ 57,000	\$ 1,295,000	\$ 2,303,000	\$ 465,000	\$ 4,120,000
Contingency Budget (30%)	\$ 17,100	\$ 388,500	\$ 690,900	\$ 139,500	\$ 1,236,000
Total Budget	\$ 74,100	\$ 1,683,500	\$ 2,993,900	\$ 604,500	\$ 5,356,000

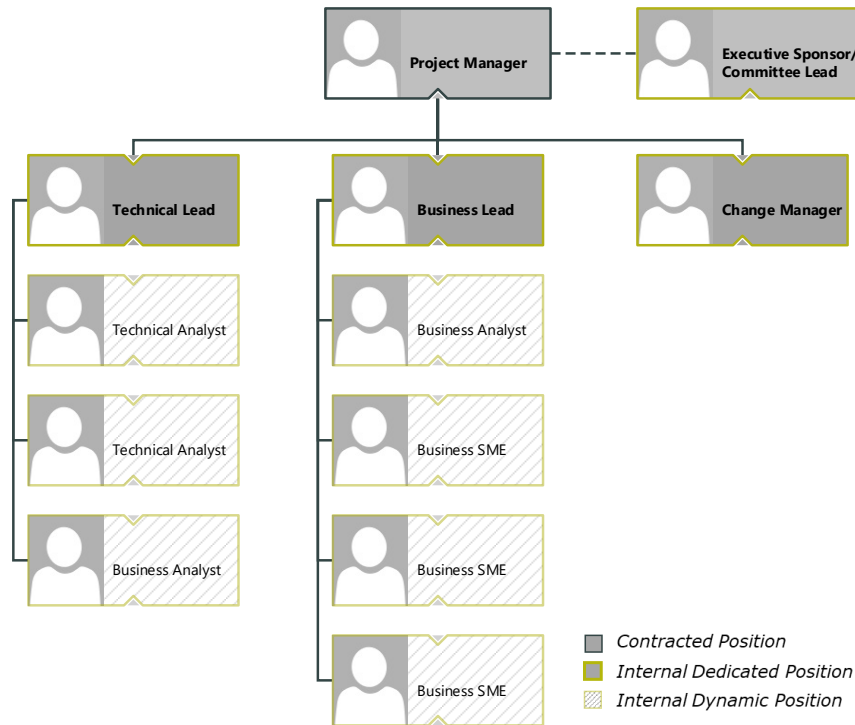
RESOURCING AND TEAM STRUCTURE

We have included the following suggested Project Team Structure and Effort Estimates (# of FTEs) over the duration of the project. This team structure is our preliminary recommendation based on our previous experience supporting a number of system implementations for a wide range of clients, including peer municipalities to the City of Fort Saskatchewan. The recommendation also considers the current implementation capacity in the City itself, based on the gap analysis engagement sessions.

While this is our recommended project team structure, the organization may consider some adjustments to support effort and cost constraints in the City. Specifically, the organization could consider insourcing contracted positions, and modifying “dedicated” internal positions to “dynamic” internal positions (defined below). However, the organization should be mindful of the risks to this major organizational transformation initiative if the project becomes a “side of desk” priority for staff.

The following organizational chart is our recommended project team structure for the City to optimize the likelihood of project success. To support this project structure, 3 distinct role categories have been identified, these include:

1. **Contracted Positions** – These are positions external to the organization. These positions require a unique advanced skillset not currently available to the City and are acquired at a premium cost.
2. **Internal Dedicated Positions** – These positions are internal to the organization. Dedicated positions are critical to project success and are typically a single individual to ensure consistency throughout the project implementation lifecycle.
3. **Internal Dynamic Positions** – These positions are internal to the organization. Dynamic positions are dedicated project roles but are typically comprised of a flexible group of individuals that may change and shift as the project progresses through implementation.



Finally, while the project team structure identified above should be consistent throughout the project implementation lifecycle, there will be periods of time through implementation that may require a reduced level of effort commitment. The project team structure has been identified to ensure a sufficient level of resources through the high effort phases of project implementation (Year 3), and to ensure consistent engagement of a dedicated project team to enable implementation success. A further breakdown of effort estimate by role over the project implementation lifecycle can be seen in the table below.

Required FTEs	Year 1	Year 2	Year 3	Year 4
Project Manager	0.10	0.75	1.00	0.05
Change Manager	0.00	0.00	0.50	0.25
Business Analyst	0.00	1.00	2.00	0.10
Technical Analyst	0.00	1.50	2.00	0.00
Business SME	0.10	0.50	2.50	0.10
Technical Lead	0.00	0.25	1.00	0.00
Business Lead	0.00	0.25	1.00	0.10
Total	0.20	3.75	8.00	0.50

PROJECT GOVERNANCE

Adequate Project Governance is one of the first things that should be established to ensure project success. By establishing a project governance structure early in the project implementation lifecycle, the organization can establish a solid foundation for all future actions and decisions.

As identified in the Pre-RFP activities below we recommend the City establish a Project Governance structure as soon as possible. Project Governance should primarily be composed of two distinct levels:

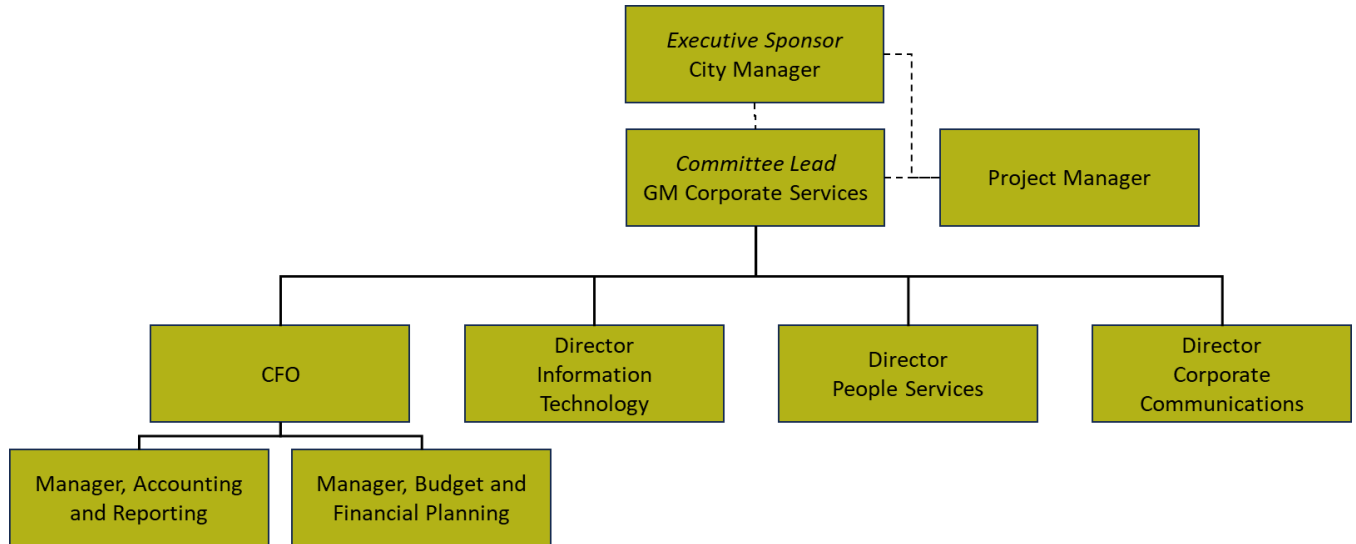
- **Steering Committee Governance** – This is the overall strategic governance body for the project. This committee is chaired by the Committee Lead and includes a select group of leaders from the key stakeholder groups. A recommended Steering Committee Structure has been identified below.
- **Project Level Governance** – This is the operational governance for project implementation. Operational Governance is primarily led and managed by the Project Manager with significant interaction with the Project Sponsor/Committee Lead to ensure adequate Steering Committee engagement. Operational Governance is achieved through the recommended project team above and the contracted project management resource.

Overall, the Steering Committee Governance is responsible for a number of Governance related activities to support the project including but not limited to:

- Managing Scope and Business Objectives
- Risk Management
- Stakeholder Engagement
- Resource Allocation
- Decision Making
- Quality Assurance
- Change Management
- Accountability for Project Outcome
- Cost Control

Steering Committee Structure

Tantus recommends the following as a preliminary Steering Committee structure for the ERP Implementation project.



Pre-RFP Initiatives

To best prepare the organization to support the implementation identified above a number of critical “Pre-RFP” Initiatives have been identified. These initiatives have been developed through our prior experience supporting municipal ERP procurements, as well as key activities identified as part of the Gap Assessment. Each of these initiatives is important for establishing a solid foundation to ensure a successful ERP system implementation. In addition, several projects take advantage of the infrequency in which organizations replace major technology systems to enable further organizational growth and change.

Initiatives have been ordered in priority from high to low, in the table below. An additional time category has been included to help the organization identify and differentiate between major projects that should be considered immediately, and quick win projects that can provide immediate business value with limited effort or “ramp up”.

A suggested roadmap of “Pre-RFP” activities has been included below:

Task	Year 1											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Project Governance												
Develop Project Resourcing Plan												
Develop ETL Roadmap/ Preparation Plan												
Identify Interim Project Based Costing Solution												
Identify Interim People Services Solutions												
Identify Process Redevelopment Opportunities												
GL Structure Review												
Review Financial Reconciliation between Systems												
Develop Data Governance Framework												
Digital Resident Service Delivery Strategy												

The **Digital Resident Service Delivery Strategy is non-essential to project implementation and could be delayed until after project implementation if required. In addition, the **GL Structure Review, Financial Reconciliation Review, and Data Governance Framework** could be postponed until further into project implementation depending on the sequencing of vendor implementation activities.*

Initiative	Description	Category
Develop Project Governance	<p>The organization should formally establish a Project Governance structure prior to the development of the RFP. Project Governance will provide the foundation for all future decisions and activities during the lifecycle of the project. Specifically, the organization should look to develop a Steering Committee including the Project Sponsor and executive champions who will set the overall project strategy. In addition, the organization should establish a Project Level Governance team such as Project Manager/Management team to link project strategy to operational implementation.</p>	1-Month Quick Win
Develop Project Resourcing Plan	<p>The organization should review and modify the desired Team Structure for the replacement project, based on the proposed structure above as a baseline option. This would include identifying general team structure as well as needed project management resources, business analyst resources, technical resources, and subject matter expert (SME) resource secondments. As part of this plan the organization should look to identify specific team members and staff, and plan for backfill capacity needs. If capacity is not available, the organization should consider looking to acquire contracted resources to support implementation activities including:</p> <ul style="list-style-type: none"> Project Management resources System Integrator resources Accounting Controls and Configuration resources Data Cleaning and Migration resources. <p>A recommended Project Resourcing plan has been developed and included in the "Resourcing and Team Structure" section above.</p>	1 Month Quick Win
Develop ETL Roadmap/ Preparation Plan	<p>Prior to implementation the organization should develop an Extract-Transform-Load (ETL) Plan for current data and processes. As part of this plan the organization should analyze existing organizational data that will be transferred to the new system. This would include analyzing and documenting variables, expected values, data types, database schema, data sources, related processes, etc. In addition, the organization should take this opportunity to identify areas where significant data cleanup will be required, as well as areas where data standards such as system IDs can be reviewed and updated.</p> <p>This document should be the source of truth for organizational data structures and can likely be repurposed outside of ERP system implementation to inform components of larger Data Governance activities.</p>	6 Months+ Major Project

Initiative	Description	Category
Identify Interim Project Based Costing Solution* <i>*An interim solution may have been identified</i>	<p>Due to the end of life of the Current Project Based costing application Projecto, the organization should identify an interim Project Costing Solution. The organization should identify what requirements and capabilities are required prior to end of life and identify possible systems and process changes that will need to occur until a new system can be implemented.</p> <p>As part of the review the organization should determine if Project Costing Capabilities should continue to be included as part of the ERP system replacement.</p>	1-Month Quick Win
Identify Interim People Services Solutions	<p>The organization should investigate potential tools, solutions, or capabilities that could be implemented to help improve the capacity of the People Services department. This could include investigation of new short-term solutions for digital workflow or data management capabilities, such as Microsoft SharePoint.</p> <p>As part of the review the organization should determine if HRIS capabilities should continue to be included as part of the ERP system replacement.</p>	1-Month Quick Win
Identify Potential Process Redevelopment Opportunities	<p>The City should review current Business Processes in Finance and Human Resources and identify potential areas for continuous business process improvement. Specifically, the organization should identify and prioritize business processes that could be optimized with the implementation of the new ERP system through digitization, or new workflow capabilities.</p>	3-Month Quick Win
GL Structure Review	<p>General Ledger codes should be reviewed to identify potential changes and resolve gaps identified during the Gap Assessment.</p> <p>Depending on organizational culture and change management capacity, implementation of any identified solutions could be delayed and implemented as part of overall ERP implementation. Increasing the scope of change for users all at one time will require additional change management effort and support.</p>	6 Months Major Project
Review Financial Reconciliation between Systems	<p>Financial reconciliations and integrations between organizational systems should be reviewed and potential solutions should be investigated. Specifically, the organization should investigate current challenges impacting the integration of financial data between Worktech, Cityview, and Intellileisure with the current system. Once investigated the organization should review and update system requirements or identify interim middleware solutions to manage integrations between organizational systems.</p>	6 Months Major Project

Initiative	Description	Category
	Based on the degree of financial reporting risk and manual effort associated with these reconciliations, the City should consider implementing interim solutions prior to any ERP implementation work.	
Develop Data Governance Framework	<p>The organization should develop a Corporate Data Governance Framework. Data Governance Frameworks are essential guiding documents for industries such as municipal government that manage and share private and sensitive employee and customer data. A Data Governance Framework should clearly outline business area data needs, rules, restrictions, and processes to ensure staff have access to appropriate data and information.</p> <p>Specifically, the Data Governance Framework at minimum should include:</p> <ul style="list-style-type: none"> A standard business glossary for data to ensure consistent naming and understanding of data across the organization. Documentation of data quality, accuracy, and completeness standards for organizational data Identification of organizational data assets, where they are located, what business users interact with them, and what business outcomes they support. Identification of Sources of Truth for organizational data or categories of data. Defined methodologies and practices to maintain data assets across the organization. <p>Beyond the minimum pieces identified the organization should consider adopting an existing Data Governance Framework model such as the <i>Data Governance Institute (DGI) Data Governance Framework</i>, or the <i>Data Management Association International Data Management Body of Knowledge (DAMA-DMBOK)</i>.</p>	6 Months+ Major Project
Digital Resident Service Delivery Strategy	<p>The City currently delivers resident E-services through several disparate online systems. Prior to implementing any E-services module in the new ERP the organization should identify a strategy for Digital Resident Service Delivery.</p> <p>This strategy should include identification of future Business Area E-service needs across a range of channels, as well as specific assessment of the feasibility of developing/implementing a unified resident customer service portal for all City services.</p> <p>The results of this strategy should allow the City to identify a potential path forward in consolidating current resident service delivery portals.</p>	3 Months Quick Win

Appendix A – Requirements

ERP Requirements have been submitted to the City as a separate file (City of Fort Saskatchewan – ERP Requirements 1.0.xlsx).

Appendix B – Gap Assessment Report

DEFINING ERP/PROJECT SCOPE

The term Enterprise Resource Planning (ERP) System can be vague and confusing in scope. Generally, an ERP is a type of business management software or set of software that provides core organizational capabilities, particularly around resourcing and financial management. Typically, these systems provide tools for accounts receivable/payable, general ledger management, financial reporting and analysis, budget development, Human Resources, payroll, tax roll management, etc. Despite the high level of sophistication that some organizations may associate with an ERP, all organizations to some level manage resources and finances. An example of some functions a municipal ERP may include can be seen in Figure 1 below.

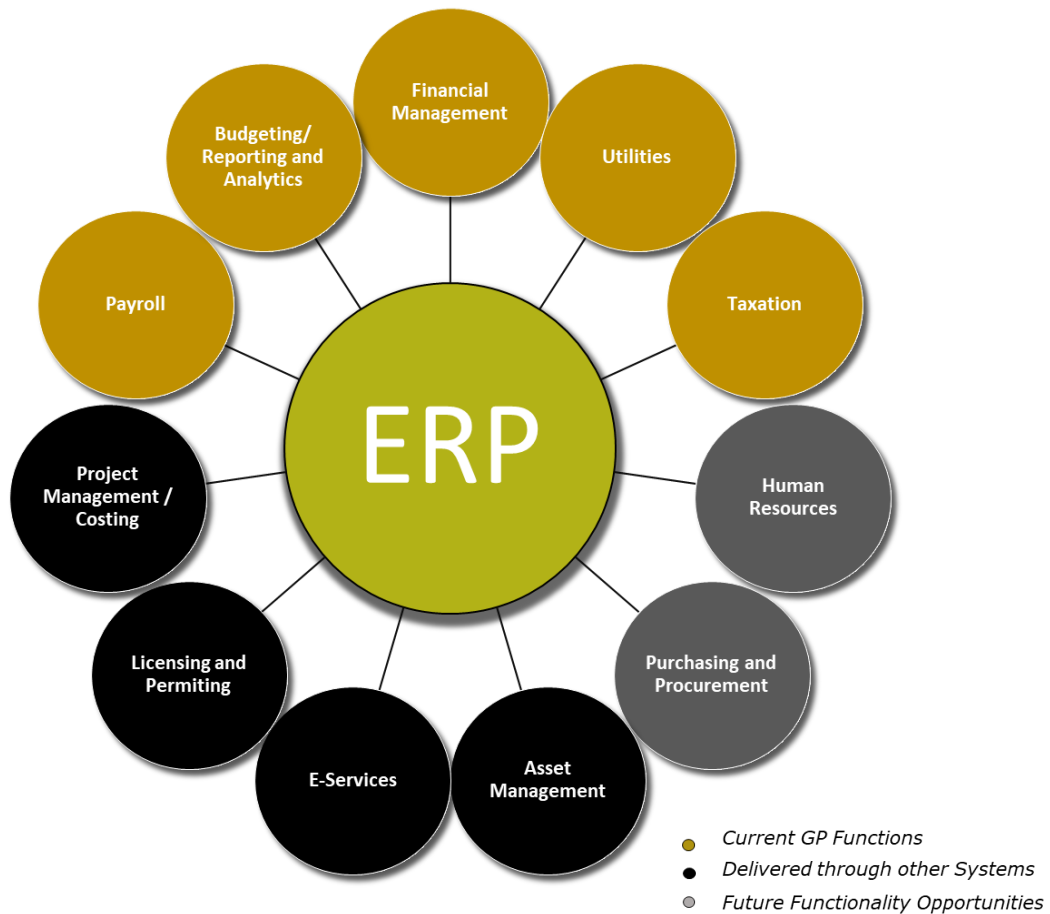


Figure 1 - Municipal ERP Functions

In practice, ERP can be performed through several integrated organizational systems. For the City, the bubbles in Figure 1 represented in gold are current functions delivered through Microsoft Dynamics Great Plains (GP)/Diamond Utility, and FMW. The bubbles in black are currently delivered through other City systems, and the bubbles in grey represent potential areas of opportunity for future systems.

Our scope of work focused on an assessment of the City's current ERP environment and specifically included:

- The financial, banking, sales, property taxes and assessment, billings, purchasing, payments, payroll, and fixed asset modules of Microsoft Dynamics Great Plains (GP)
- Financial Reporting and Budget requirements currently provided by FMW or created using spreadsheets.
- Current implementations of Customer portal, record management, and fort report/service tracker applications
- The integrations between Microsoft Dynamics GP and FMW with various other applications
- Other applications with redundant functionality or the potential to be expanded organizationally.

As directed by the City this assessment does not explicitly focus on current implementations of Intelli Leisure and CityWide, though integrations between these systems and Microsoft Dynamics GP are included as part of the assessment.

Methodology

STAKEHOLDER ENGAGEMENT AND DOCUMENT REVIEW

This Gap Assessment report has been developed based on a review of background documentation provided by the City, a series of engagement sessions with staff and leadership across the City, our professional knowledge and experience working with other jurisdictions in their ERP Assessments, and general industry best practice.

As part of the Background Documentation review Tantus reviewed the following documents provided by the City:

- List of Current Software Applications (2023)
- Summary/Description of Corporate Software (2023)
- Organizational Service Levels (2023)

Each stakeholder engagement session ran for approximately 1.5 hours and occurred on the following dates:

- Leadership Team – June 5, 2023
- Fleet, Facilities, and Engineering Team – June 5, 2023
- Culture and Recreation – Jun 6, 2023
- Information Technology – June 6, 2023
- People Services – June 6, 2023
- Financial Operations – June 8, 2023
- Financial Accounting/Budget – June 8, 2023
- Communications and Legislative Services – June 8, 2023
- Planning and Development/Economic Development – June 9, 2023
- Fire Services/Protective Services/FCSS – June 9, 2023
- Public Works – June 9, 2023

DEFINING CRITICAL SUCCESS FACTORS

Often when organizations consider system refreshes or replacements, they become focused on the technology itself and treat capability, functionality, and performance as pathways to success. Defining, and obtaining these components is important but a singular focus on technology without organizational consideration will lead to a system that is poorly implemented, unused by staff, and ineffective in improving business processes or service delivery.

A successful system refresh, or replacement can at the most technical level be defined as a successful implementation. The system itself has been implemented in the organization within budget, time, and configuration requirements. In practice, however, value is realized beyond the basic existence of a system in an organization. A successful implementation alone cannot guarantee an improvement in business process, nor does it guarantee staff will use the system, or that the system can perform necessary tasks/functions.

Ultimately, organizations must balance and consider Technology (Systems), People, and Processes to prevent the reemergence of existing challenges and to ensure a successful system refresh or replacement.

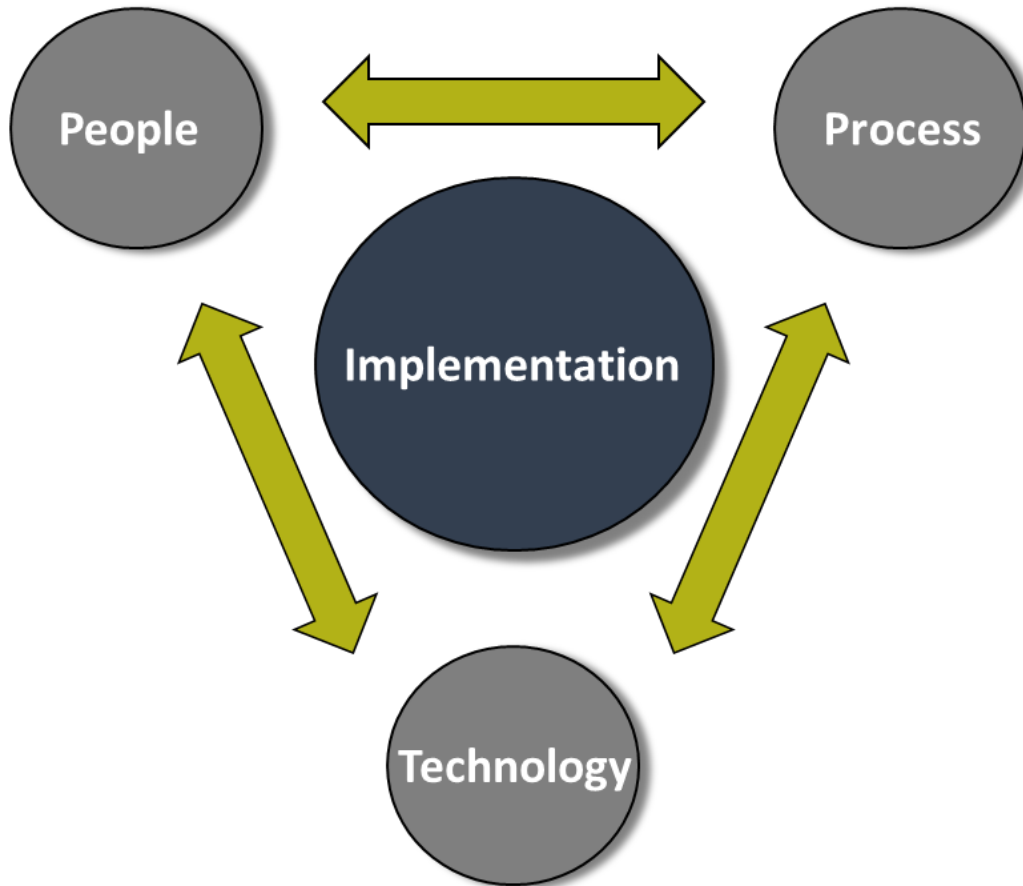


Figure 2 – Critical Success Factors

Specifically, the Critical Success Factors identified in Figure 2 include:

People/Training – People and training includes the human element of technology/implementation. This typically reflects areas where staff lack sufficient training or familiarity with systems/technologies. In addition, this may include areas where the organization lacks sufficient expertise/capacity in subject matter areas to enable components of system functionality, implementation, or administration.

Process – Process includes not only how the organization performs business tasks and functions but how systems can be used to increase the efficiency and effectiveness of standard business tasks, functions and activities. Process findings include areas where business processes lack sufficient process controls, processes are inefficient/ineffective, or areas where process is not aligned to system configuration. Occasionally, process issues may require broader organizational process/policy or procedure redesign. If issues are not addressed, they may persist across a system replacement/refresh.

Technology/System –System requirements typically reflect any area of deficiency in functional or non-functional system performance or capability. Functional capability includes all aspects of the system that help enable business activities such as maintaining a database, searching for data or performing specific functions/workflows. Non-functional capabilities include aspects of the system that are typically in the backend and generally impact IT or Leadership more than day to day users. Non-functional requirements typically include vendor provided support, backend system security, integrations, or performance. These issues are highly system dependent and cannot be remedied aside from system replacement.

Implementation – Initial impressions and configurations of systems can often prematurely make or break the success of organizational systems. Implementation is a key piece in ensuring staff feel they have sufficient buy-in to the system, ensuring promised system functionality is configured/delivered, and ensuring that overall system implementation is within leadership expectations of time, budget, and effort. Findings in this area typically include key decisions/impacts of implementation. These issues can typically be remedied without implementation of a new system but often require a major system refresh/reimplementation and significant change management effort to not only get staff buy-in but to reverse any existing negative impressions.

Gap Assessment Results

OVERVIEW

Overall, Microsoft Dynamics GP is insufficiently meeting staff needs across the organization. The system lacks sufficient training material making it hard for staff to learn system functions and capabilities. The system in its current state is not implemented to meet City need and in many instances Finance staff are performing standard Finance tasks outside of the system due to a lack of system capabilities, creating additional capacity constraints for the team to process and review Financial information. In addition, vendor support is minimal and there are several issues related to system performance that hamstringing the system's usability in the City. Finally, reporting is highly technical and requires significant expertise to develop or modify basic reports, there is significant organizational interest in on-demand self-service financial reporting.

FMW is somewhat meeting staff needs but is significantly hampered by the unintuitiveness of the system, lack of just-in time training materials, and system integrations/manual processes in GP that can delay the timeliness of budget information in FMW. Staff comfortable with system operations did not note concerns about system capabilities.

Beyond Microsoft Dynamics GP and FMW the City has several out of system issues that need to be addressed regardless of future actions taken to replace/refresh existing systems. Specifically, the City's People Services department has experienced multiple staff vacancies and has operated below normal staffing levels resulting in high workloads to ensure crucial processes do not break down and staff may be at risk of burnout. The City has taken some steps to remedy and should continue to invest in near-term systems, technologies, workflow tools, contractors, or additional staff to grow team capacity (*For more information refer to People Services below*).

In addition, the City currently struggles with Data Governance. Staff are generally uncomfortable with financial information stored and used in GP and in some instances are skeptical of the quality of data housed in City systems. Staff across the organization heavily rely on manual processes and spreadsheets to house departmental financial information as a personal source of truth. Generally, these problems are due to a lack of self-service on-demand access to data and information as well as current integration problems resulting in significant manual effort to maintain system data quality. Finally, the current state of the Customer/Tax Roll database lacks standardization and will require significant staff effort to update the database to align with data quality controls present in modern systems (*For more information refer to Data Governance below*).

Additional functions are explored further in the following sections of this report, highlighting **Issues**, the **Need** or desired future state, and what activities or actions need to occur to address the **Gap** between Issue and Need.

FINANCE

Enterprise Resource Planning systems are typically interconnected with a wide range of business areas, functions and capabilities. However, the primary purpose of any ERP is the financial resource planning component. ERPs enable core finance business processes and are often the Source of Truth for financial and resident information. For an organization to grow and expand its internal capabilities as well as services to residents it is crucial that an organization's ERP is able to meet staff demands and allow for future growth and scalability.

In Early 2023, Microsoft announced the end of on-premise Microsoft Dynamics sales, including end of support for a number of versions of Microsoft Dynamics. The City's current version of Microsoft Dynamics GP (18.5.1635) is on the Modern Lifecycle Plan which means bug fix support, tax updates, and general regulatory updates will still be provided on a tri-annual basis. However, the sale of new Perpetual Licenses will end in 2025 and new subscription license sales will end in 2026, effectively capping the number of licenses available to City staff indefinitely. In addition, Microsoft strongly encourages current on-premises customers to investigate migration to modern cloud-based systems to receive new functionality and a greater degree of dedicated support moving forward. Overall, the City's current version of Microsoft Dynamics GP is reaching system obsolescence compared to modern systems.

This feeling of obsolescence is echoed by the City's current challenges with their Microsoft Dynamics implementation, and the capabilities of the software. Financial Operations and Financial Budgeting teams generally feel the system meets basic needs but does not offer the functionality, capability, and automation offered in many modern financial systems. Staff often dedicate significant time for out of system workarounds and manual processes for standard Finance functionality that the system performs poorly. In addition, the dated look and feel as well as the lack of vendor provided training materials has led to additional staff effort and time to become familiarized with the system, perform standard tasks, and assist in the event of leaves, vacations, or staff turnover.

	Issue	Need	Gap
People/Training	<ul style="list-style-type: none"> The City is highly reliant on “expert” staff members to perform specific system tasks or develop reports. Specifically, Departmental staff lack expertise in FMW and are reliant on Finance staff for budget reporting assistance, delaying the timeliness of reporting information and creating additional effort for finance staff. 	<ul style="list-style-type: none"> Departmental staff have the expertise or knowledge tools available to perform FMW functions/budget reporting without the need for additional internal assistance. 	<ul style="list-style-type: none"> Business Area staff are retrained on system operations and a series of training manuals, videos, and ongoing training sessions are developed and deployed by the City. FMW/GP are replaced, and a new vendor is able to provide a detailed/customized series of training manuals, videos, and ongoing training sessions to the City.
	<ul style="list-style-type: none"> Staff struggle to find historical invoices and must rely on assistance from Finance/other staff members to locate documents. 	<ul style="list-style-type: none"> Staff can easily find, locate, and file invoices with little impact on efficiency/effort. Staff can locate/find invoices in a self-service setting without relying on additional staff for assistance. 	<ul style="list-style-type: none"> A centralized system/standard or process is deployed to manage and track all City Invoices. Paper invoices are digitized and fully electronic moving forward.
Process	<ul style="list-style-type: none"> Reconciling expense items with incorrectly assigned sales tax codes requires significant Finance staff effort to resolve. 	<ul style="list-style-type: none"> Sales tax code exemptions are entered correctly by business area staff upon entry. The effort/workload to resolve back-end tax code errors by Finance is reduced. 	<ul style="list-style-type: none"> Training manuals, videos and programs are delivered to staff with P-Cards to better educate staff regarding when and where GST/Sales tax exemptions are needed. GLs are restructured or renamed to clearly indicate to staff when and where GST/Sales tax exemptions are needed.

Issue	Need	Gap
<ul style="list-style-type: none"> Front counter/admin staff receive resident Credit Card information through email to manually process Permit Applications or other phone transactions (emails are deleted immediately upon completion). 	<ul style="list-style-type: none"> Front counter/admin staff are not exposed to sensitive resident financial information. Sensitive resident financial information is not stored on inappropriate City systems. 	<ul style="list-style-type: none"> Processes are redesigned to be fully PCI DSS (Payment Card Industry Data Security Standards) compliant including encrypting all cardholder data and restricting which organizational staff members can process/access card holder data. An electronic web-based self-service portal is deployed to take resident payment.
<ul style="list-style-type: none"> Staff effort is required to manually replicate and import data from Intelli Leisure into Microsoft Dynamics GP.* <p><i>*Clarification around specific processes/issues will be required as part of the "Review Financial Reconciliation between Systems" Pre-RFP activity</i></p>	<ul style="list-style-type: none"> Data is automatically transferred between systems with little to no staff effort. If Intelli is used for billing/receivables*, integrations with subledgers are managed appropriately. <p><i>*Additional Clarification Required as part of Pre-RFP activities</i></p>	<ul style="list-style-type: none"> Automation tools are configured to convert Intelli Leisure data to a Microsoft Dynamics compatible format. Intelli Leisure /Microsoft Dynamics are reconfigured/replaced with systems that integrate data between platforms or provide an API for custom integrations. Appropriate reconciliation tools are put in place to ensure accurate/complete data transfer between systems.

Issue	Need	Gap
<ul style="list-style-type: none"> Any resident correspondence process (Utility and Assessment notices) requires onerous staff review effort to ensure accuracy. 	<ul style="list-style-type: none"> Resident notices can be completed in a timely, accurate manner. Resident Information is correct and up to date. 	<ul style="list-style-type: none"> The process to update resident information is digitized in a resident facing self-service portal to ensure accuracy. A complete audit and refresh of the current Customer ID database is performed. Automation tools/exception flagging tools are implemented to automate portions of the review process. A violations report process is implemented for non-standard processing of resident communications.
<ul style="list-style-type: none"> Preauthorized payment and Vendor Card IDs exist indefinitely, even in the event of a removed Resident/Customer/Vendor. Staff must manually verify that a new entry is not assigned an ID linked to a removed Customer/Resident/Vendor. 	<ul style="list-style-type: none"> Upon removal IDs can be reassigned to new Residents/ Customers/ Vendors. Staff are able to assign IDs without fear of error/manual verification. 	<ul style="list-style-type: none"> A complete review of historical Resident / Customer /Vendor IDs is performed, and inactive IDs are removed. A continuous review process is implemented to continually review and clear inactive system IDs. Microsoft Dynamics GP is re-configured to deny usage of existing IDs to new Resident/ Customer /Vendors. The standard for designating system IDs is reviewed and redesigned to improve uniqueness of system IDs.

	Issue	Need	Gap
	<ul style="list-style-type: none"> Significant manual effort is required for finance staff to import expense information from BMO Spend Dynamics to GP. Specifically, there are challenges splitting out library and City transactions, as well as reconciling inaccuracies in expense GL codes. 	<ul style="list-style-type: none"> Manual effort for finance staff to import and validate expense information is reduced. City staff are able to enter/track expenses in an efficient and effective manner. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is reconfigured/replaced with a system capable of two-way integration with BMO spend dynamics to ensure accuracy of available GL codes. The City should establish a process to audit and reconfigure GL codes to align with current user authorities.
Implementation	<ul style="list-style-type: none"> Customer/Tax Roll information in GP is inconsistent and requires significant staff time to find/reconcile customer information. Specifically, in some instances with multiple residents in one household, residents have been combined into one "customer" with no automated way to separate or remove unique individual residents. 	<ul style="list-style-type: none"> Staff are able to update, remove, or communicate in a timely manner with individual residents related to one Customer ID/Tax Roll. Onerous review, reconciliation and update processes are reduced to save staff effort. 	<ul style="list-style-type: none"> Current City Databases are reviewed, cleaned, normalized and an appropriate Data Governance Framework is put in place.* A Tax Roll audit is performed to ensure current customer information is accurate and correct. The process to update resident information is digitized in a resident facing self-service portal to ensure accuracy. Microsoft Dynamics GP is reconfigured to allow capturing of "Other Owners" related to a Property/Tax Roll. All correspondence should allow for selection of any or all owners for notification. <p><i>*For additional information refer to Data Governance below</i></p>

	Issue	Need	Gap
	<ul style="list-style-type: none"> Staff identified that expense line items displayed in FMW lack descriptive detail due to field character limits. Resulting in significant investigation and time loss by staff to identify expense items. 	<ul style="list-style-type: none"> Expense items contain the ability to “drill down” to see all information necessary for staff to identify (or easily locate) the source and reason for the expense. 	<ul style="list-style-type: none"> Invoices/Purchase Order documents should be fully digitized moving forward to track expense item origin/status in a centralized location. A centralized system/standard or process is deployed to manage and track all City expense items. The character limit for expense item description should be increased to allow for additional information.
	<ul style="list-style-type: none"> The organization struggles to identify and find information regarding Receivable Accounts resulting in inefficient uses of staff time to find information. Specifically, Finance staff spend significant time finding information on the allocation of Grants, flagging delinquent resident accounts across systems, and generally identifying the lifecycle of expenses, invoices, and purchases. 	<ul style="list-style-type: none"> Accounts receivable information is accessible by staff across the organization without additional effort/investigation. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is reconfigured or replaced to support the centralization of Accounts Receivable Information, Grant Information, Purchase Order Information, and Invoice Information.
Technology/ Custom	<ul style="list-style-type: none"> Mobile access to Microsoft Dynamics GP lacks adequate performance. Both VPN and Web client performance is slow* and impacts mobile/WFH staff efficiency. <i>*The web client is an improvement over VPN connection performance but lacks the performance of the local client</i> 	<ul style="list-style-type: none"> Staff are able to access the system and all necessary functions in a mobile setting with little to no impact on performance. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is replaced with a system capable of providing optimized web-based performance. Backend database/transaction data is cleaned to speed up both web and local client versions of GP.

<ul style="list-style-type: none"> • A number of finance capabilities are performed inadequately by Microsoft Dynamics GP/FMW resulting in additional staff effort to correct system outputs, additional staff effort to validate system information, or additional staff effort to maintain manual spreadsheets/calculations to support system functionality. Inadequate capabilities include: <p>Financial Operations</p> <ul style="list-style-type: none"> ○ Bank Reconciliation ○ Insurance/Claims Tracking and workflow management ○ Assessment Notices (must be generated as a highly customized report) ○ Cash Receipting (Significant manual intervention required for errors, refunds, GL changes, etc.) ○ Purchase Orders ○ Vacation/Leave Accruals ○ Deferred Revenue Management ○ Project Based Costing (Currently managed in Projecto) ○ Investment and Treasury Management ○ Prepaid Expense Management <p>Financial Budgeting/Reporting</p> <ul style="list-style-type: none"> ○ Cash flow forecasting and analysis ○ Generation of Financial Statements 	<ul style="list-style-type: none"> • Finance staff are able to perform capabilities identified in a timely manner without need for onerous review, validation, or out of system effort/processes. 	<ul style="list-style-type: none"> • Microsoft Dynamics GP is replaced with a system capable of providing all capabilities identified to a satisfactory level without the need for additional finance effort/validation. • Additional systems are implemented to replace pieces of inadequate functionality within Microsoft Dynamics GP.
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Issue	Need	Gap
<ul style="list-style-type: none"> ○ Reserve Management ○ Tangible Capital Asset Funding/Revenue Recognition ○ Debt Scenario Testing ○ Tax Situation Analysis Modelling ○ Utility Rate Modelling (FMW) ○ Debenture Management 		

PEOPLE SERVICES

The City’s People Services department is currently under budgeted staff capacity due to a series of vacancies across several positions and can struggle to meet departmental Service Levels. Departmental tasks, functions and services are predominantly manual, and paper based. Manual processes and paper forms are typical of many organizations and by themselves are not necessarily problematic if there is sufficient staff capacity to meet workload requirements, proof/review changes, and file/locate paperwork. At budgeted capacity levels the team is generally able to maintain service levels.

However, due to these current effort requirements team members are performing above and beyond standard City expectations to ensure vital processes do not break down and are at risk of burnout. In addition, the organization should look for permanent solutions to grow team capacity to safeguard against future turnover, vacancies, or leaves.

Specifically, it is our recommendation that the City continue to invest in near-term systems, technologies, workflow tools, contractors, or additional staffing supports to grow team capacity.

	Issue	Need	Gap
People/ Training	<ul style="list-style-type: none"> Due to current vacancies staff do not have capacity to complete tasks and obligations within filled FTE positions. 	<ul style="list-style-type: none"> Staff are able to complete tasks and obligations within mandated service levels. 	<ul style="list-style-type: none"> Vacant Human Resources Positions are filled to budgeted levels.
Process	<ul style="list-style-type: none"> Manual processes to update Personnel Information (Termination, Leaves, Wage Adjustments, etc.) require onerous review processes to ensure data accuracy. 	<ul style="list-style-type: none"> Personnel information is entered in a timely, accurate manner. Personnel information is correct and up to date. 	<ul style="list-style-type: none"> Automation processes and digital forms are created to digitize the personnel update process to reduce onerous review processes.

Issue	Need	Gap
<ul style="list-style-type: none"> The process for updating critical employee information is highly manual and often involves repetitive changes in multiple locations. 	<ul style="list-style-type: none"> Changes to critical employee information occurs once in a single location and flows through to other locations. 	<ul style="list-style-type: none"> A series of automation tools to modify data in multiple places are implemented. Data connections and linkages are mapped detailing how and where information is stored and updated. A designated “source of truth” that contains all employee data in a centralized location is implemented.
<ul style="list-style-type: none"> The following pieces of core functionality are manual process that are onerous to manage and require significant staff capacity to perform: <ul style="list-style-type: none"> Training and Competency/Credential Tracking* Performance Evaluation Leave/Absence Management Employee Management Occupational Health and Safety Job Descriptions Seniority and Service Awards Organization Design/Chart Management Interview Scheduling <p><i>*Intellix no longer used for credential tracking</i></p>	<ul style="list-style-type: none"> Core processes can be completed in accordance with service levels by budgeted staff. 	<ul style="list-style-type: none"> Current processes are reviewed, redesigned and digitized to reduce manual effort and automate tedious processes.

	Issue	Need	Gap
	<ul style="list-style-type: none"> Reliance on Paper forms/documents is detrimental to process efficiency. Paper based processes include: <ul style="list-style-type: none"> Employee Files/Updates WCB Papers OHS Investigation and Inspection Reports Training Certificates Drivers Abstracts Official Oaths Job Descriptions 	<ul style="list-style-type: none"> Staff can easily find, locate, and file documents with little impact on efficiency/effort. Staff can locate/find documents in a self-service setting without relying on additional staff for assistance. 	<ul style="list-style-type: none"> Paper based processes and forms are digitized and fully electronic moving forward.
Implementation	<ul style="list-style-type: none"> HRIS MyWay is not currently configured to support exception-based reporting for salaried staff resulting in additional staff effort. 	<ul style="list-style-type: none"> Salaried staff are able to track time through exception-based reporting. 	<ul style="list-style-type: none"> HRIS MyWay is reconfigured to enable exception-based reporting. HRIS MyWay is assessed to determine potential alternative systems
	<ul style="list-style-type: none"> HRIS MyWay is not currently configured to support detailed Vacation Entitlement Projection, resulting in additional manual effort/reporting for Business Area Managers/Supervisors. 	<ul style="list-style-type: none"> Business Area Managers/ Supervisors are able to view Vacation Entitlement Projections without the need for onerous additional reporting/effort. 	<ul style="list-style-type: none"> HRIS MyWay is reconfigured to enable detailed Vacation Entitlement Projections. HRIS MyWay is assessed to determine potential alternative systems

	Issue	Need	Gap
	<ul style="list-style-type: none"> HRIS MyWay is not currently configured to support the ability to provide Staff Employment Hour Projections. Business Area Managers/Supervisors require additional effort to calculate manual staff projections. 	<ul style="list-style-type: none"> Business Area Managers/Supervisors are able to view Staff Employment Hour Projections without the need for onerous additional reporting/effort. 	<ul style="list-style-type: none"> HRIS MyWay is reconfigured to enable Staff Employment Hour Projection Reporting. An integration is put in place to link scheduling software with budgeted/contracted staff hours to enable Staff Employment Hour Projections. HRIS MyWay is assessed to determine potential alternative systems
Technology/ System	<ul style="list-style-type: none"> The Organization maintains multiple software solutions to manage staff scheduling, complicating payroll reconciliation processes, creating redundancy in organizational software capabilities, Business Area Manager inefficiency, and contributing to IT support workload. Software solutions include: <ul style="list-style-type: none"> When-to-Work Google Calendar Vector Solutions AladTec HRIS MyWay 	<ul style="list-style-type: none"> Shift based, Full-Time, Part-Time, Casual, and Salaried staff scheduling are managed in a consistent system across the organization (where possible). Time reconciliation for payroll staff is simplified and onerous effort is reduced. 	<ul style="list-style-type: none"> Redundant software/capabilities are eliminated to save cost/effort.

DATA GOVERNANCE

Data Governance is a broad term used to define all aspects of data management, control, and security in an organization. Data Governance extends beyond internal policies and procedures and looks to define the management of data and how it flows through complex organizations. Typically, Data Governance is more prevalent in high regulation environments such as Banking or Government that collect, manage, and share sensitive internal and external information.

The City is a regulated industry that likely has policies and procedures that dictate the legislated requirements for information sharing. However, the City has not broadly developed a Data Governance Strategy or Framework. Due to this, the organization struggles with a number of data related challenges. Staff are skeptical of information contained in organizationally defined systems of truth (due to lack of training and access) and often maintain multiple out of system spreadsheets and documents as personal sources of truth. In addition, historical implementations of Customer/Tax Roll information has created significant additional effort for staff to maintain data quality due to a lack of defined standardization in data structure and names (e.g "Smith, John" vs "John Smith" vs "Smith John" vs "John and Mary Smith").

Microsoft Dynamics GP does not provide sufficient built-in controls to maintain Data Quality. Any future system replacement or refresh will require significant effort to clean and transform data to meet new system quality controls. *The organization should strongly consider exploring strategies to clean and update system data now in preparation for the future and to improve staff efficiencies.*

	Issue	Need	Gap
People/Training	<ul style="list-style-type: none"> Staff noted concerns about losing access to timely, accurate data, resulting in staff tracking and managing financial information outside of financial systems. 	<ul style="list-style-type: none"> Staff are confident they will have access to accurate data stored in City systems in an on-demand self-service basis. 	<ul style="list-style-type: none"> A change management plan is developed as part of any new system implementation/ refresh that details strategies and methods to engage staff and re-establish trust in organizational data. A robust Data Governance Framework is developed that clearly outlines Business Area data needs, rules, and systems to ensure staff have appropriate access to organizational information.

	Issue	Need	Gap
Process	<ul style="list-style-type: none"> Business processes do not clearly outline stakeholders of information/data resulting in instances in the past where staff have lost access to on-demand data, or instances where “gatekeepers” have been put in place to maintain data confidentiality and integrity. 	<ul style="list-style-type: none"> Staff are confident they will retain access to documents/information needed to perform their job. City data and information is safeguarded and shared appropriately with staff. 	<ul style="list-style-type: none"> Business Processes involving financial information are documented and clearly identify what business stakeholders consume and generate information/data and the lifecycle of this information. A robust Data Governance Framework is developed that clearly outlines Business Area data needs, rules, and systems to ensure staff have appropriate access to organizational information. Information sharing processes and procedures should be redesigned, and a system should be put in place to allow for automated on-demand access to appropriate information by staff.
	<ul style="list-style-type: none"> Performance in Microsoft Dynamics GP is slow, and may be bogged down by the quantity of historical transaction records, impacting staff efficiency. 	<ul style="list-style-type: none"> Financial system performance is optimized. Historical records are stored appropriately. 	<ul style="list-style-type: none"> Historical transaction records are migrated out of the system and stored appropriately to allow for future load/access if required. A process is put in place to review and remove historical transaction information. Microsoft Dynamics is replaced with a modern system capable of maintaining optimal performance and a large historic transactional information dataset.
Implementati	<ul style="list-style-type: none"> The current Microsoft Dynamics GP Customer/Tax Roll database is not normalized to modern standards (Third Normal Form - 3NF) and lacks sufficient data quality. Migration to a new system with advanced Data Quality controls will 	<ul style="list-style-type: none"> Current system data is cleaned and normalized to align with modern Data Quality controls and standards. The organizational financial system functions as a source of truth for organizational information and maintains sufficient Data Quality, Integrity, and 	<ul style="list-style-type: none"> The current Tax Roll/Customer database is audited cleaned and transformed to modern database normalization standards (specifically customers are separated into unique entities and linked to one property).

	Issue	Need	Gap
Technology/ System	require substantial staff effort to clean and normalize current City data.	Security without the need for significant staff effort to maintain.	<ul style="list-style-type: none"> Data Governance standards are developed and implemented to classify organizational data including standardizing terminology, naming conventions, and privacy restrictions. If staff capacity is limited, explore contracted ETL (Extract, Transform, Load) support for financial system replacement/refresh.
	<ul style="list-style-type: none"> Staff identified systems/functions (Njoyn, Payment Processing) that expose or store sensitive applicant information on City owned devices. 	<ul style="list-style-type: none"> Sensitive applicant information is stored on appropriate City devices and systems and is not at risk of exposure to unauthorized individuals. 	<ul style="list-style-type: none"> Njoyn is reconfigured or replaced with a system capable of preventing local download of applicant information.
	<ul style="list-style-type: none"> Microsoft Dynamics GP does not provide automated Data Quality control restrictions. Specifically, there are no system restrictions on appropriate customer/vendor naming conventions. Resulting in additional staff effort to develop and maintain system information. 	<ul style="list-style-type: none"> System information and data is standardized within fields. Data Quality is high and does not require significant staff effort to maintain. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is replaced with a system capable of automated/enforcing Data Quality standards.

REPORTING AND ANALYTICS

Municipal reporting and analytics typically fall along a broad spectrum of maturity ranging from basic descriptive analytics to advanced prescriptive analytics. As municipalities grow in physical and administrative size, data and information stakeholders typically demand increasingly mature levels of analytics to deliver services efficiently and effectively.

The City is a high growth municipality and leadership/stakeholders are increasingly feeling the demand for more mature and advanced forms of analytics to meet resident and internal demand. However, due to the Data Governance challenges expressed above, the City can struggle to meet standard descriptive analysis demands and is currently not well positioned to grow analytical maturity or capability. Staff across the organization maintain multiple local information repositories preventing organizational data unity, systems can house untimely/incorrect information invalidating analytics without significant staff intervention, and an element of skepticism/discomfort of organizational data stifles staff demand and growth.

Even in the event the organization had sufficient Data Unity and Data Governance practices in place, Microsoft Dynamics GP does not provide the capability needed for staff to utilize on demand self-service reporting. Custom reporting in GP is highly technical and requires significant expertise to perform basic/standard reporting.

	Issue	Need	Gap
People/Training	<ul style="list-style-type: none"> The lack of a Data-Driven culture and Data Governance Framework has led to organizational skepticism of information in City systems. In addition, staff feel they do not have sufficient capabilities to collaborate/experiment with data and lack direction regarding development of (KPIs) Key Performance Measures, Dashboards, and Advanced Analytics. 	<ul style="list-style-type: none"> The organization provides clear direction about future strategies regarding data and analytics. Data is sufficiently classified and shared with appropriate stakeholders. Business areas feel empowered to experiment with data and define business area KPIs. 	<ul style="list-style-type: none"> The organization develops a 5-year data strategy outlining organizational and business area need. Management and Supervisory staff receive training to advance expertise on using data to drive service delivery. A robust Data Governance Framework is developed that clearly outlines Business Area data needs, rules, and systems to ensure staff have appropriate access to organizational information.

Process	<ul style="list-style-type: none"> Data is siloed across the organization, preventing staff from broadly experimenting with data, limiting the organizations capability for advanced analytics maturity, and creating inefficiencies and additional effort in staff reporting. 	<ul style="list-style-type: none"> Data is unified across City systems, creating a singular point of access for analytics and self-service information. 	<ul style="list-style-type: none"> The organization investigates the viability of an organizational "Data Warehouse". Automation tools are deployed/ developed to reduce staff reporting effort. Integration/ Middleware software is introduced to manage areas of poor system integration.
Implementation	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<p>N/A</p>
Technology/ System	<ul style="list-style-type: none"> Custom reporting in GP is highly technical, manual, and onerous for staff. Specifically, GP does not currently provide user friendly self-service/standardized reporting capabilities leading to a high volume of custom requests for minor report changes. 	<ul style="list-style-type: none"> Staff are able and comfortable to produce on-demand self-service reports without staff assistance. The system is capable of providing self-service reporting in an intuitive way with a level of detail that meets staff needs. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is replaced, or augmented with a system capable of providing user-friendly, on-demand financial reporting.

INTERNAL CONTROLS

Internal controls are critical to the integrity of financial and accounting information, to prevent financial fraud/misuse, and to demonstrate good stewardship of public funds. Internal controls are major components of financial processes and procedures and are often enhanced with proper system implementation.

Currently GP is meeting audit and internal control requirements but is highly reliant on significant staff effort and time to make up for deficiencies in system capabilities and internal process challenges. Most notably, GP does not provide built in fail-safe capabilities to prevent individuals from having multiple permissions that violate segregation of duty requirements. These contradictory permissions are often the result of a breakdown in communication across the organization about internal role changes for staff. The City does review and update active permissions; however, this process does not occur on a set schedule.

	Issue	Need	Gap
People/Training	<ul style="list-style-type: none"> Staff have expressed a lack of confidence in financial information contained in City systems. Specifically, staff noted an untimeliness in recreation financial information and a lack of on-demand financial reporting resulting in reliance on manual spreadsheets. 	<ul style="list-style-type: none"> Staff feel confident and empowered by organizational financial information. Information is available, accurate, and relevant to staff as needed. 	<ul style="list-style-type: none"> Microsoft GP is reconfigured or replaced with a system capable of providing user-friendly self-service custom reporting. Staff receive just-in-time training on reporting functions through City developed training manuals, videos, learning sessions etc. The organization works to develop a culture that fosters data exploration and experimentation and develops a Data Culture Strategy.

	Issue	Need	Gap
	<ul style="list-style-type: none"> The organization can struggle to review and update processes on a consistent frequency due to limited staff capacity/vacancies. 	<ul style="list-style-type: none"> Processes are reviewed on a consistent basis to ensure alignment with up-to date best practices 	<ul style="list-style-type: none"> The organization should develop a consistent practice/culture of continuous business improvement. As part of the ERP Replacement/Renewal project the organization should clearly identify high value processes for renewal and identify key dates and times to review and renew processes Remove/Replace Microsoft Dynamics GP with a system that provides native best practice internal control processes
Process	<ul style="list-style-type: none"> Staff noted gaps/delays in existing communications processes resulting in missed communication about internal role changes. Specifically, IT/Finance staff are insufficiently notified of internal role changes, resulting in delays in system permission adjustments. 	<ul style="list-style-type: none"> Finance and IT staff are notified of staff changes in a timely manner. Staff permissions are updated immediately upon role changes. 	<ul style="list-style-type: none"> The City should develop a process to review active system permissions on a consistent basis. Onboarding and Offboarding processes should be reviewed and when, where and how stakeholders are notified should be identified. The process for notifying staff of role changes should be automated.
	<ul style="list-style-type: none"> The large number of manual Finance processes identified above require significant staff effort to verify and validate financial information. 	<ul style="list-style-type: none"> Effort to verify and validate information by Finance staff is reduced. Controls for financial information rely on system functionality in addition to staff knowledge and expertise. 	<ul style="list-style-type: none"> Exception based financial auditing tools/processes are implemented. Additional tools/technologies are implemented to improve system based controls.

	Issue	Need	Gap
Implementation	<ul style="list-style-type: none"> Staff noted concerns that some system tasks/functions were not sufficiently segregated in GP.* <p><i>*Additional clarification around specific tasks/functions required</i></p>	<ul style="list-style-type: none"> Duties and permissions are sufficiently segregated and comply with accounting requirements. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is reconfigured or replaced to align to current requirements around segregation of duties and compliance processes.
	<ul style="list-style-type: none"> GP is not currently configured to provide failsafe permission/role management in the instance where contradictory permissions/roles are assigned to a single user. 	<ul style="list-style-type: none"> The system is capable of notifying or denying role/permissions to users in an event where multiple permissions are assigned. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is reconfigured or replaced to enable failsafe permissions/role notification.
Technology/	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

INFORMATION TECHNOLOGY

Information Technology plays a crucial role in the implementation and continuous improvement of City systems. In large organizations IT is viewed as a key stakeholder and organizational leader in strategic system planning, digital services strategies, and tactical business technology support in addition to their typical mandate of technology/network operations and maintenance. Typically, as municipalities begin to grow into medium – medium/large organizations the demand for IT as a strategic partner becomes more and more apparent. This burgeoning demand often requires a number of structural, organizational, and cultural changes that must be considered to prepare and plan for future municipal growth.

The demand for strategic technology support in the City is becoming more and more apparent. The scope of this project speaks to the demand and need for the City to take proactive action regarding organizational technology and visioning. The organization has reached the point where business areas are demanding more from their teams/technology and are looking for ways to strategically employ technology to help solve unique business challenges.

The City’s Information Technology department does not currently have capacity to proactively engage business areas and roadmap technology/business problem solutions. Without proactive engagement, IT is caught reactively providing additional effort/support and is occasionally unable to provide support during key milestones/projects due to a lack of communicated business area need.

	Issue	Need	Gap
People/Training	<ul style="list-style-type: none"> IT staff are not actively engaged by/engaging business areas as strategic enablers of technology change. Resulting in reactive technology/implementation support and unexpected/additional capacity constraints for IT. 	<ul style="list-style-type: none"> IT is engaged early in technology/ systems projects to provide proactive vs reactive support. 	<ul style="list-style-type: none"> Business Area Technology plans are developed by IT in collaboration with Business Areas. IT completes an assessment of Business Area technology need to determine where/what support business areas need. The organization invests in formal Business Area Relationship Capacity building (Expertise or FTEs).

	Issue	Need	Gap
	<ul style="list-style-type: none"> IT lacks the capacity to perform dedicated IT Project Management support for the future ERP Replacement/ Renewal project. 	<ul style="list-style-type: none"> IT is able to perform IT Project Management support across the organization as needed. 	<ul style="list-style-type: none"> The organization invests in formal Project Management Capacity building (Expertise or FTEs). Business Area Technology plans are developed by IT in collaboration with Business Areas. Contracted support services are explored.
	<ul style="list-style-type: none"> IT lacks the capacity to perform proactive IT Business Relationship Management services. 	<ul style="list-style-type: none"> IT is able to proactively engage Business Areas to assist in business area problem identification and solutioning. 	<ul style="list-style-type: none"> The organization invests in formal Business Area Relationship Capacity building (Expertise or FTE). Business Area Technology plans are developed by IT in collaboration with Business Areas. Contracted support services are explored.
Process	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Implementation	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

	Issue	Need	Gap
Technology/ System	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

RESIDENT SELF SERVICE/VIRTUAL CITY HALL

Resident Self Service and Virtual City Halls have been an increasingly common trend in municipalities over the past decade. With the demand for instantaneous digital services in our personal lives, residents have increasingly come to expect the same digital capabilities from their municipalities. This includes digital portals for residents to manage all aspects of their life in relation to the City including paying business licenses, paying property taxes, applying for permits, signing up for recreation programs, etc.

Currently, the City offers a large number of services to residents online through the City’s website. However, these services are fractured among multiple different portals, with each portal requiring unique usernames/passwords for residents. The lack of integration between online service portals does not create a seamless experience for residents and may discourage residents from taking advantage of online services increasing in-person or phone service demand. In addition, the lack of a single unified online services platform is creating additional effort for Finance staff to manually integrate financial information between systems.

	Issue	Need	Gap
People/Traini	<ul style="list-style-type: none"> Staff noted challenges with businesses located in the City losing/misplacing licensing account credentials. Staff are often responsible for assisting businesses in reactivating or changing credentials. 	<ul style="list-style-type: none"> Businesses are aware of their account credentials and can log-in as needed without City staff support. 	<ul style="list-style-type: none"> An education campaign is launched/provided to new and existing City businesses about proper credential management. Licensing Module credentials are setup to enable multiple account owners/credentials for City businesses.
Process	<ul style="list-style-type: none"> Enforcement staff noted concerns that login credential requirements for fine payment may be discouraging residents from paying fines in a timely manner. 	<ul style="list-style-type: none"> City residents pay fines in a timely manner to ensure bylaw payments are collected by the City. 	<ul style="list-style-type: none"> Current payment platforms are reconfigured to allow for a “guest” option when paying City fines.

	<ul style="list-style-type: none"> The City currently maintains multiple Online Services portals (VCH, Cityview, Everbridge, Intelli Leisure) each requiring unique login/password credentials complicating resident self-service processes. 	<ul style="list-style-type: none"> Resident self-service processes are simplified, and access requirements are consolidated. 	<ul style="list-style-type: none"> A middleware solution is implemented to manage access to multiple systems by a single credential. An automated process/ system is deployed to standardize resident credentials across multiple systems.
	<ul style="list-style-type: none"> The organization does not have a centralized vision/strategy for online/resident service delivery leading to additional effort for staff to manage financial information, and fractured resident self-service portals. 	<ul style="list-style-type: none"> A centralized vision guides the organization in selecting/implementing technology solutions that contribute to E-service delivery. Resident self-service processes are simplified, and access requirements are consolidated. 	<ul style="list-style-type: none"> Develop strategy for digital resident service delivery (E-services).
Implem	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Technology/ System	<ul style="list-style-type: none"> Microsoft Dynamics GP does not support integration of current Online Portals into a single unified resident self-service hub, contributing to an inefficient/confusing experience for residents, and contributing to additional manual staff effort by Finance staff to integrate financial information. 	<ul style="list-style-type: none"> Resident online self-service portals are consolidating into a single unified login streamlining the experience. Backend integrations of portals are managed under a single umbrella reducing staff effort requirements. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is replaced with a system capable of providing a single unified hub for online resident service delivery. Information and data is unified across City systems into a unified data repository.

INTEGRATIONS/APPLICATIONS

System integrations are a key component of streamlining business processes, unifying organizational data, and enabling staff. As organizations grow and expand so does the suite of software and applications, as well as the complexity of system integrations.

The high velocity of growth within the City has left the organization increasingly exposed to rapid changes in system quantity, scale, and complexity. Due to this rapid growth the City is struggling to integrate key systems. Major systems such as the Financial system (GP) and the Recreation system (Intelli Leisure), do not integrate seamlessly and create significant challenges for staff and leadership looking to pull reports and transfer data between systems. The City is often reliant on onerous manual effort processes to transfer information or pull information from systems.

	Issue	Need	Gap
People/Training	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Process	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Implementation</p>	<ul style="list-style-type: none"> There are significant challenges integrating Intelli Leisure with Microsoft GP/FMW due to how payments are processed through Intelli Leisure* and the lack of available vendor support during system implementation. Financial data does not cleanly integrate and creates significant additional manual effort for staff to ratify and reconcile data. In some instances, data must be manually replicated in an alternate format. <p><i>* Additional clarification may be required</i></p>	<ul style="list-style-type: none"> Intelli Leisure data integrates cleanly with organizational financial systems and reduces effort by Finance Staff. 	<ul style="list-style-type: none"> Additional tools or technologies are implemented to automate the integration of financial data between systems. Intelli Leisure and/or Microsoft Dynamics GP are reconfigured or replaced with a system that cleanly integrates.
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Technology / System</p>	<ul style="list-style-type: none"> Multiple organizational systems/data sources do not have a “clean” automated import of financial data into Microsoft Dynamics GP/FMW and require onerous manual finance staff intervention, delaying the availability of “real time” financial information. These systems/data sources include: <ul style="list-style-type: none"> Intelli Leisure (Requires significant manual effort) TD Import Land Titles BMO Spend Dynamics (Purchase Cards) Ticketpro (Imported into Intelli Leisure first) Square (Imported into Intelli Leisure first) 	<ul style="list-style-type: none"> Financial data integrates cleanly with organizational financial systems and reduces effort by Finance staff. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is replaced with a system that supports automated integration with other City systems. Other City systems are replaced with systems that have APIs for custom built integrations. Additional tools/ technologies are implemented to automate the integration of financial information between systems.

SUPPORT AND MAINTENANCE

Support and maintenance are critical pieces of organizational systems that are often overlooked outside of IT. Poor support and maintenance can disable business processes, frustrate staff, and disappoint residents. A good vendor/system can ensure the consistency of system operations and in the unlikely event of a disaster can ensure crucial operations are reinstated as soon as possible with minimal adverse effects.

The City has expressed that the current relationship with GP is disappointing. Support requests often take weeks to resolve, and, in some cases, the provided fix may even cause further support requests. In addition, staff noted a lack of clear communication from Microsoft regarding the scope of changes and impacts on business areas. The vendor support provided to the City while likely to continue into the foreseeable future, will continue to degrade as vendor focus shifts increasingly to modern cloud platforms. Internally, GP is onerous to support and can account for up to 29% of internal service tickets in a given time period.

Aside from dissatisfaction with support the system itself has a dated look and feel, that in combination with a lack of vendor provided training material makes it challenging to onboard new staff to system operations, and challenging for staff to learn areas of the system they are unfamiliar with.

	Issue	Need	Gap
People/Training	<ul style="list-style-type: none"> Microsoft Dynamics GP has a dated look and feel and lacks user-friendliness. This creates challenges with staff learning the system or learning new components of the system. In addition, images and logos on citizen facing reports are pixelated and not up to modern City brand standards. 	<ul style="list-style-type: none"> Systems feel intuitive and user friendly. Staff are confident in their ability to learn the system or new capabilities of the system The system presents a modern look and feel to residents 	<ul style="list-style-type: none"> Microsoft Dynamics GP is replaced with a system that meets modern expectations of user friendliness/ branding. Microsoft Dynamics GP is replaced, and a new vendor is able to provide a detailed/customized series of training manuals, videos, and ongoing training sessions to the City A series of just-in time training modules are developed by the City in document/ video form for staff to reference when interacting with GP
Process	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Implemente	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Technology/	<ul style="list-style-type: none"> Vendor support provided by Microsoft Dynamics GP is often significantly delayed or entirely unresponsive. In some instances, staff noted that fixes may have caused/exacerbated other system issues. 	<ul style="list-style-type: none"> Vendor support is provided within timelines established with set Service Level Agreements. Vendor support resolves needed issues and does not create additional system issues. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is replaced with a system that provides support to a higher degree of service. Service Level Agreements are negotiated with Microsoft Dynamics GP/ any new vendor that clearly outline City expectations for support acknowledgement and resolution.

Issue	Need	Gap
<ul style="list-style-type: none"> GP does not provide sufficient notice to staff regarding upcoming system changes. 	<ul style="list-style-type: none"> Staff are made aware of changes to system operations within a reasonable time of notification. City IT staff are able to test changes and identify potential impacts to Business Users prior to full launch. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is replaced with a system/vendor that provides significant notice of upcoming changes in sufficient detail for staff to understand business area impacts.
<ul style="list-style-type: none"> Resource intensive process in Microsoft Dynamics GP “lock” individuals out of their accounts during intensive system processes. The vendor has been unresponsive in providing/activating new inquiry only licenses. 	<ul style="list-style-type: none"> The City has additional inquiry/view only licenses for all staff . Licenses are not shared between staff members to maintain audit and internal control integrity. The vendor is able to scale up/down licenses to meet City need within a reasonable timeframe. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is replaced with a system/vendor capable of scaling up/down the number of licenses based on City demand and provides inquiry as well as “working” licenses. Microsoft Dynamics GP is replaced with a system/vendor with modern performance standards that does not lock out staff accounts during routine business processes
<ul style="list-style-type: none"> Resource-intensive tasks in GP such as Payroll Batch processing can bog down individual user accounts, requiring staff to use a secondary account on a second computer to perform required duties. 	<ul style="list-style-type: none"> Financial system performance is optimized. 	<ul style="list-style-type: none"> Microsoft Dynamics is replaced with a modern system capable of maintaining optimal performance during resource intensive tasks.
<ul style="list-style-type: none"> A current lack of vendor support from Intelli Leisure limits the scope/scale of system improvements that IT can perform. 	<ul style="list-style-type: none"> Sufficient vendor support is provided for City staff to create custom improvements and modify system components to better integrate with City technological architecture 	<ul style="list-style-type: none"> Additional development/support resources are contracted to reconfigure system operations

CONTRACT AND LEASE MANAGEMENT

Contract and Lease management is the capability to manage and monitor municipal contracts and leases. Typically, this includes monitoring renewal dates, digital (or physical) storage of Contracts/Leases, and the management of related workflows and processes.

Currently, the City is storing Contract and Lease documents in Laserfiche but is not tracking information regarding these documents through any formal system. Leases and Contracts are manually managed and tracked on spreadsheets stored in multiple locations on local or shared staff drives. In some instances, this has led to increasingly siloed information regarding contracts and leases, creating delays in Finance processes, or creating additional effort for staff to monitor, action, and find Contract and Lease information.

	Issue	Need	Gap
People/Training	<ul style="list-style-type: none"> Staff can struggle to find Contract, Lease, and Letters of Credit information in Laserfiche and rely on Legislative Services staff to locate documents. 	<ul style="list-style-type: none"> Staff are able to locate documents in a self-service manner without reliance on additional staff for support. All documents are stored in systems accessible by all staff in a timely manner. 	<ul style="list-style-type: none"> Paper based contracts and forms are digitized and fully electronic moving forward. A series of just-in time training modules are developed by the City in document/video form for staff to reference when interacting with Laserfiche. Staff are retrained on City Records Management practices, structures, naming conventions, and general standards.

	Issue	Need	Gap
Process	<ul style="list-style-type: none"> Manual tracking of Letters of Credit, Bonds, Contracts, and Leases has led to siloing of information and miscommunication of active/inactive items between teams leading to delays in process, or inefficient uses of staff time. Specifically, Finance has noted instances where they have not been communicated about new leases/contracts creating delays in payment processing. 	<ul style="list-style-type: none"> Information is shared and accessible across teams in the organization. Staff are aware of where to find information in a timely and efficient manner. 	<ul style="list-style-type: none"> A centralized location/system for the management of information is developed or implemented. Automation tools are deployed to automatically notify stakeholders. A process for contract lifecycle management is developed including communication channels and individual responsibilities.
	<ul style="list-style-type: none"> Risk Management staff must manually intervene to proactively remind individuals of expiring contracts. 	<ul style="list-style-type: none"> Staff are reminded and notified of expiring contracts without the need for proactive staff effort by risk management staff. 	<ul style="list-style-type: none"> Contract information is tracked in a centralized system/ document. Automation tools are deployed to automatically notify stakeholders of desired changes.
Implementation	<ul style="list-style-type: none"> Microsoft Dynamics GP is not currently configured to support the management of Contracts and Leases. 	<ul style="list-style-type: none"> Staff are able to track the information regarding contracts and leases in a centralized organizational system. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is reconfigured or replaced to enable Contract Information Management and Automation.

	Issue	Need	Gap
Technology / System	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

GRANT MANAGEMENT

Grant Management involves the coordinated cross-organizational management, application, and dispersal of grant funding. This often involves monitoring of grant terms, grant identification and appropriate dispersal of grant funding upon receipt as well as generation of any grant reporting requirements.

Grant funding is received and dispersed through GP and manually tracked in business area spreadsheets. However, the City is not tracking grant status or information in any cross organizational system. Important grant information such as relevant GLs or business owners is siloed within the organization. This has led, in some cases, to confusion surrounding the purpose and ownership of received grants. In these instances, Finance must investigate to determine the owner and conditions of any grant funding. In addition, the lack of self-service reporting in Microsoft Dynamics GP creates significant additional effort for staff to find and collect information for grant reporting.

	Issue	Need	Gap
People/Training	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

	Issue	Need	Gap
Process	<ul style="list-style-type: none"> Information regarding grants is siloed and not effectively communicated across teams. Specifically, Finance is not always communicated about new Grant Applications /Awards creating delays in fund dispersal. 	<ul style="list-style-type: none"> Staff are able to locate information around the status and destination of Grants in a timely and efficient manner. 	<ul style="list-style-type: none"> A centralized location/system for the management of information is developed or implemented. Automation tools are deployed to automatically notify stakeholders. A process for grant lifecycle management is developed including communication channels and individual responsibilities.
	<ul style="list-style-type: none"> Grant Reporting is onerous for staff to develop and requires manual effort to find and collect information. 	<ul style="list-style-type: none"> Staff can efficiently pull together information to complete Grant Reporting requirements without significant manual effort/investigation 	<ul style="list-style-type: none"> Organizational information is centralized in a unified location to reduce onerous data search and retrieval. A process is developed to streamline the collection of Grant Reporting information, including outlining where and how Grant Reporting information is stored and accessed.
Implementation	<ul style="list-style-type: none"> Microsoft Dynamics GP is not currently configured to support the management and tracking of grant information/applications. 	<ul style="list-style-type: none"> Staff are able to track the information regarding contracts and leases in an organizational system. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is reconfigured or replaced to enable Grant Information Management and Automation.

	Issue	Need	Gap
Technology/ System	<ul style="list-style-type: none"> The lack of system integrations and lack of self-service reporting capabilities within Microsoft Dynamics GP creates additional manual effort for staff to generate Grant Reporting information. 	<ul style="list-style-type: none"> City systems are integrated, and staff can collect grant reporting information through on-demand self-service. 	<ul style="list-style-type: none"> Microsoft Dynamics GP is replaced with a system that enables self-service custom reporting.

Appendix C – Market Scan

Methodology

This deliverable is intended to provide additional information to the City around the current state of the Municipal ERP market. For the purposes of this assessment six ERP solutions/vendors were selected based on vendor responses to peer municipal ERP replacements, current ERP market leaders, and municipally aligned solutions. These vendors/solutions include:

- CentralSquare Diamond
- Sylogist SylogistGov
- Microsoft Dynamics 365 Business Central
- Unit4 ERP
- Workday Enterprise Management Cloud
- Oracle Fusion Cloud ERP

In this report ERP solutions have been investigated to identify provided modules and vendor capabilities to meet a number of high-level areas of municipal need and high-level “Topics of Interest” identified through the Gap Assessment report and facilitation sessions.

This market assessment was informed through a number of research components including:

- Publicly available Vendor information
- Vendor Demo Sessions/Discussions (5 Vendors engaged, 1 Response)
- Our previous experience with Municipal system implementations/procurements
- Privately available industry research information through our InfoTech partner

Information in this report has been grouped into three sections, a general market overview that highlights our understanding of the municipal ERP market, a capability comparison table highlighting what modules/products each vendor provides to meet City need, and an analysis/overview of each vendor including a summary of available modules.

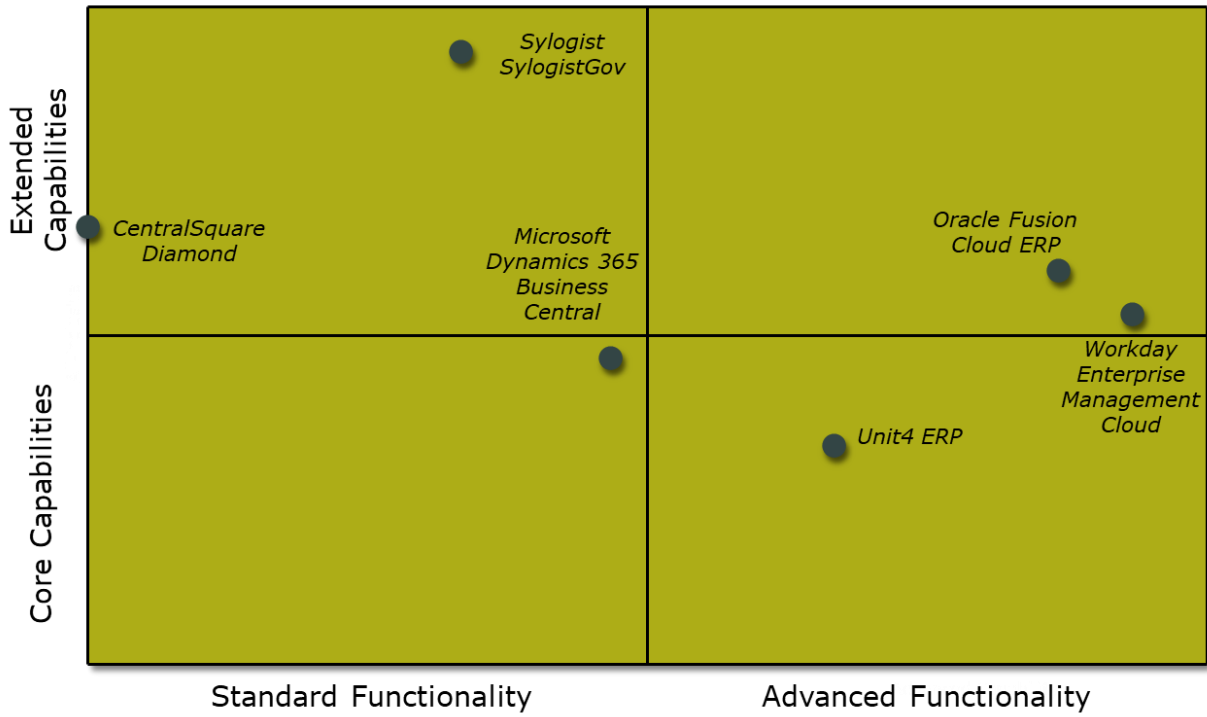
The information developed in this report will be combined with a Municipal Maturity Assessment discussion to identify what market position best matches the City’s desired maturity. This will be used to guide upcoming road mapping/business planning deliverables.

Market Overview

The Enterprise Resource Planning system market for Canadian Municipalities is diverse with multiple vendors, partners, and customized combinations of systems available. While some ERP vendors position themselves as solutions for mid-market organizations, there is a limited selection of mid-market solutions that cater specifically to municipal needs. This unfortunately results in a market with limited solutions capable of balancing municipal specific needs/capabilities with modern advanced ERP functionality.

The following matrix is our assessment on where/how the reviewed vendors/software compare. This assessment is based on a combination of our research of the current ERP market, ERP market information from our Infotech Partner, and information from the Gartner ERP Magic Quadrant research. Exact placement along the matrix may vary with vendor configuration/customization. Vendors were placed based on their relative ability to provide:

- **Advanced Features (Standard Functionality/Advanced Functionality)** - This would include efficiency and optimization advancements such as AI/Machine Learning (ML), Automation and Workflow, Integration capabilities, Data Management capabilities, etc.
- **Capability Alignment (Core Capabilities/Extended Capabilities)** - This includes the ability for a solution to provide core ERP capabilities such as Finance and HR as well as extended capabilities such as Taxation, Utilities, Licensing and Permitting, E-services, etc. This factor accounts for the full scope of Vendor capabilities including additional modules, products, or customizations available.



Capability Comparison

The following table broadly compares the capabilities of each Vendor/Solution along a series of potential capabilities of note identified throughout the engagement sessions of this project. Each cell indicates which module or product a vendor provides that may be able to meet the capability need. *This table does not indicate the relative level of maturity or advanced functionality of each capability.*

	Capability can be met with core ERP product or ERP modules
	Capability can be met with additional product provided by Vendor
	Capability can not be met by Vendor or requires specialized development
*	Indicates a similar product/module that may require customization/configuration

Capability	Central Square Diamond	Sylogist SylogistGov	Microsoft Dynamics 365 Business Central	Unit4 ERP	Workday Enterprise Management Cloud	Oracle Fusion Cloud ERP
Financial Management	Financial Management	Financial Management	Financial Management	Financial Management	Financial Management	Financial Management
Purchasing and Procurement	Financial Management	Financial Management	Supply Chain Management	Procurement Management	Spend Management	Procurement
Payroll	Human Capital Management	Financial Management	Dynamics 365 Human Resources	Payroll	Payroll	Human Capital Management
Human Resources	Human Capital Management	Financial Management	Dynamics 365 Human Resources	Core HR	Human Resources	Human Capital Management
Budgeting, Reporting, and Analytics	Financial Management	Reporting and Analytics	Financial Management	FP&A	Analytics and Reporting	ERP Analytics
Project Management	N/A	N/A	Project Management	Project Management	Financial Management	Project Management
Taxation	Revenue Management	Revenue Management	N/A	N/A	N/A	N/A

Capability	Central Square Diamond	Sylogist SylogistGov	Microsoft Dynamics 365 Business Central	Unit4 ERP	Workday Enterprise Management Cloud	Oracle Fusion Cloud ERP
Utilities	Revenue Management	Revenue Management	N/A	N/A	Revenue Management*	Customer Experience (CX)*
Licensing and Permitting	Community Development	Revenue Management	N/A	N/A	N/A	Customer Experience (CX)*
E-Services	Virtual City Hall	Citizen Portal	N/A	N/A	N/A	Customer Experience (CX)*
Point of Sale	Revenue Management	N/A	Microsoft 365 Commerce	N/A	N/A	Oracle MICROS
Asset Management	N/A	Asset Management	N/A	N/A	N/A	N/A
Licensing Cost¹	N/A	N/A	N/A	N/A	N/A	N/A

¹ Vendor licensing and implementation costs vary significantly based on the number of products/modules implemented, the level of configuration/customization required, and the size of the organization.

Viability Assessment

CENTRAL SQUARE DIAMOND

CentralSquare Diamond is a legacy ERP vendor that provides on-premises ERP solutions tailor made to municipal clients. While CentralSquare has worked to develop a larger general purpose cloud ERP system, the system is targeted to larger organizations and likely requires significant modification to meet the needs of mid-market municipal clients.

CentralSquare does not have an ERP ecosystem but does provide the following software products:

- *Financial Management*
- *Revenue Management*
- *Human Capital Management*
- *Community Development (Licensing, Ticketing, Permitting)*
- *Virtual City Hall*

Diamond ERP was an Alberta based legacy ERP provider, prior to their acquisition by Central Square in 2021. CentralSquare is a US based company that specializes in Public Safety and Justice Software.

Diamond provides Core Finance/HR functionality; however, this functionality is rudimentary compared to modern ERP systems. Diamond does not incorporate modern advancements in technology and may be missing standard quality of life features present in other non-legacy software such as user interface and user experience improvements.

Information was collected through Diamond ERP's now legacy webpage (last updated 2017) and may not include all present features or capabilities.

A "Topics of Interest" table was not included for CentralSquare Diamond due to their status as a Legacy ERP provider and the lack of up-to-date public information provided by CentralSquare.

SYLOGISTGOV

SylogistGov is a new product offering released in 2023 as Sylogist’s attempt to create an ERP system catered to the municipal middle market and meet the needs of organizations transitioning off legacy software. Sylogist is a Calgary based software company and current owner of Serenic/Bellamy (currently end of life to transition to SylogistGov). Sylogist has been involved in the municipal government space for over 30 years and has significant experience with municipal clients across Canada and Alberta.

The following modules are offered as a part of the SylogistGov ecosystem:

- *Financial Management*
- *Revenue Management*
- *Asset Management*
- *Citizen Portal*
- *Reporting and Analytics*
- *Data Integration Module*

Due to a focus on the municipal market SylogistGov will likely deliver future new features and functionality specifically catered to municipal needs, unlike other vendors that may tailor features to broader industries/functionality.

In terms of ERP functionality SylogistGov provides a suite of core finance and municipal functionality, all built on a property-centric platform.

While the system does provide payroll and Human Resources capabilities, Sylogist does not provide public information regarding detailed HR/payroll functionality.

Generally, SylogistGov is a promising offering to municipal clients but lacks the time in market, and technological advancements demonstrated by other vendors.

Sylogist was engaged to discuss system functionality in detail but did not respond.

<i>Topics of Interest</i>	
Topic	Comment
Integrations	Sylogist provides the Data Connect module to manage data import/exports between SylogistGov and third-party applications. Sylogist does not publicly provide additional information about Data Connect.
Training and Knowledge Management	Sylogist does not publicly provide online training/user help resources.

Topics of Interest	
Topic	Comment
System Roadmap	Sylogist does not publicly provide a roadmap of upcoming system features.
Data Management	<p>SylogistGov was built for municipal government, data and workflows in the system are property centric. Sylogist has worked to develop a system that takes advantage of property as a unique value in all municipal workflows and allows for unique insights, analytics, and geographic modelling to support system data.</p> <p>Sylogist does not publicly discuss other system capabilities to support data management such as AI or system data controls.</p>
Self-Service Reporting	SylogistGov provides a standard library of reports, ad-hoc reporting capabilities, and multidimensional worksheets that allow users to drill-to-detail for further analysis.

MICROSOFT DYNAMICS 365 BUSINESS CENTRAL

Microsoft Dynamics 365 Business Central (Formerly NAV) is Microsoft's cloud-based ERP solution and is a comprehensive solution targeted at small-medium sized organizations including public sector organizations.

The following modules are offered as a part of the Microsoft Dynamics 365 Business Central ecosystem:

- *Financial Management including:*
 - *Cash Management*
 - *Fixed Asset Management*
- *Sales Management including:*
 - *Contact Management*
 - *Delivery Management (Invoicing, Order Management, etc.)*
- *Supply Chain Management (SCM) including:*
 - *Purchase Order Management*
 - *Invoice Management*
 - *Inventory Control*
 - *Supply and Demand Planning*
- *Project Management*
- *Service Management*
- *Warehouse Management*
- *Manufacturing*

Microsoft Dynamics 365 Business Central is Microsoft's cloud ERP solution targeted at small-mid sized organizations. Business Central does not provide the same flexibility or capabilities associated with its larger Dynamics 365 platform. Business Central does provide a standard set of Core Finance capabilities but does not provide HR or payroll capabilities without the inclusion of the separate Dynamics 365 Human Resources product. Generally, Finance functionality in Business Central is relatively standard for a modern ERP system.

Business Central does not leverage AI/Machine Learning for error detection, and the system does not offer Optical Character Recognition (OCR) capabilities for automated data entry like other vendors/solutions researched. However, the system does take advantage of the Microsoft 365 platform to leverage staff's familiarity with the Microsoft Office Suite of products to deliver system functionality/integrations with MS SharePoint and Teams. Theoretically, this allows for Business Central to have a shorter change management cycle as staff should be familiar with the logic of systems operations.

While Microsoft Dynamics Business Central is a configurable solution, they still allow for full system customization and tend to rely on this customization to deliver organizational value for specialized industries such as Municipal Government, leading to instances with heavily customized products, complicating system maintenance and upgrades. While cloud architecture does slightly reduce the complexity associated with on-premises customized

systems, fully customized systems can be challenging for organizations to support and maintain.

Overall, Microsoft Dynamics 365 Business Central provides a lightweight version of a modern ERP system that uses staff expertise with Office products to deliver organizational value. However, the system lacks the scale and scope of features/capabilities present in other researched systems.

Microsoft was engaged to discuss system functionality in detail but did not respond.

Topics of Interest	
Topic	Comment
Integrations	<p>Microsoft provides an enhanced integration platform. The system provides numerous options for integrations including:</p> <ul style="list-style-type: none"> • APIs • Prebuilt system connectors with popular applications • No-code/low-code application/workflow developer
Training and Knowledge Management	<p>Microsoft provides a free online training catalog with developed learning paths and training modules tailored to individual roles in the organization. In addition, Business Central is built with user friendliness in mind and provides numerous context menus and in application help links to enable immediate, just in time user training.</p>
System Roadmap	<p>Microsoft provides a list of new and planned features for Dynamics 365 Business Central over the next year and a half and updates the roadmap with public preview dates, release dates, and status.</p>
Data Management	<p>Business Central provides a number of Data Management capabilities in line with other modern systems. These include a unified data platform for all system modules, and integration supports to unify out of system data.</p>
Self-Service Reporting	<p>Microsoft provides some prebuilt and ad-hoc reporting capabilities out of the box with each system module. However, advanced analytics rely on user knowledge and familiarity with Microsoft Excel and PowerBI software.</p>

UNIT4 ERP

Unit4 ERP is a cloud-based system that has been providing financial administration and accounting solutions to “service-centered” organizations since the 1980s. Currently, Unit4 operates internationally and has delivered services to over 400 municipalities worldwide and 35 municipalities in Canada (predominantly in British Columbia).

The following modules are offered as a part of the Unit4 ERP ecosystem:

- *Financial Management*
- *Project Management*
- *Procurement Management*
- *Core HR Management*
- *Payroll*

Unit4 is a middle market ERP vendor typically focused on small to mid-sized organizations and has been positioned as a system able to meet the needs of a variety of differing industries. To enable this strategy the system delivers relatively advanced ERP functionality supported by several integration tools and technologies (APIs, prebuilt connectors) to enable the system as an organizational hub.

Unit4 provides features and functionality of an advanced modern system. Some features of note include smart invoice processing using AI and Optical Character Recognition (OCR) to intelligently identify invoice information and automatically generate invoice workflows reducing manual data entry.

While Core HR is included as a module in the ERP ecosystem, Unit4 also provides a full-scale Human Capital Management system (HCM) for organizations looking to advance HR capabilities beyond HR administration capabilities present in the core module. HCM systems include functionality that support employee document management, performance management, talent management, compensation planning, and employee self-service, as well as advanced HR data analytics capabilities.

All functionality is delivered on a robust cloud platform that supports 3rd party integrations and allows for custom workflows to support business processes. The organization is committed to working with municipal clients and has experience integrating municipal focused 3rd party vendors. However, the system is not built specifically to meet municipal need and is noticeably lacking in modules/capabilities to support Taxation, Assessment, Utility Billing, and E-Services.

A Unit4 sales representative was engaged to discuss additional information regarding system capabilities/supports.

Topics of Interest	
Topic	Comment
Integrations	Due to the lack of industry focused modules Unit4 has invested in system integration capabilities including an API for custom integrations and a number of turnkey integrated workflows with common business applications such as Microsoft Teams and SharePoint.
Training and Knowledge Management	<p>Unit4 does not provide a publicly available training portal, but does provide a rotating series of focused documents, demo videos, podcasts, and webinars. In addition, Unit4 provides release change management support as well as release advisory planning services for an additional charge.</p> <p>The engaged sales representative indicated that as part of a system implementation the vendor does provide training and change management planning and support.</p>
System Roadmap	<p>Unit4 does not provide a public system improvement roadmap.</p> <p>The engaged sales representative did indicate that advanced support packages may provide early access and information regarding future releases and changes.</p>
Data Management	<p>Through a cloud platform Unit4 is able to offer a real time flexible data model across the platform. Modifying and restructuring system data can be performed by staff without technical expertise or IT consulting support.</p> <p>In addition, Unit4 ERP provides a number of automations and workflows to reduce onerous staff effort in entering, auditing, and reviewing data. Workflows can be configured to set triggered alerts, or automatically flag incorrect/inconsistent data.</p>
Self-Service Reporting	<p>Unit4 Reporting is delivered through a separate product (Unit4 Financial Planning and Analysis (FP&A)). FP&A is a comprehensive Financial Planning product that can be fully integrated with Unit4 ERP and other organizational systems to serve as a unified point for organizational financial reporting. FP&A provides a full suite of ad-hoc and standard reporting capabilities including individual customized reports, automated report generation and distribution in multiple formats, drill up and down capabilities, as well as KPI dashboarding capabilities.</p> <p>In addition, FP&A supports analysis of Human Resources information to support Human Resource planning and management.</p>

WORKDAY

Workday was founded in 2005 by the former CEO and Chief Strategist of Peoplesoft following its acquisition by Oracle in 2005. Since then, Workday has been a market leading ERP platform for Mid-Large organizations.

The following modules are offered as a part of the Workday Enterprise Management Cloud ecosystem:

- *Finance Modules*
 - *Financial Management*
 - *Spend Management*
 - *Financial Planning*
 - *Analytics and Reporting*
 - *Payroll*
- *Human Resources Modules*
 - *Human Capital Management*
 - *Human Resources Management*
 - *Employee Experience*
 - *Employee Voice*
 - *Workforce Management*
 - *Talent Management*
 - *Workforce Analytics and Reporting*
 - *Vendor Management*
- *Planning Modules*
 - *Workforce Planning*
 - *Operational Planning*
 - *Financial Planning*

The system provides a full suite of Finance functionality including core finance capabilities augmented by a data and automation driven platform. In addition, Workday has strong Human Resources roots and like other advanced enterprise applications, provides features above and beyond core HR capabilities. Workday provides a full HCM suite with advanced features such as user friendly, organizational chart development/modification, and advanced HR analytics capabilities.

The platform leverages Machine Learning and AI across all models to support and optimize Finance, HR, and Planning activities in a number of ways including reducing onerous data entry and review tasks. Machine learning is leveraged to support organizational analytics by automatically generating unique insights and graphics on organizational data trends/topics of note.

Through Workday Extend the system can function as a true organizational platform with a robust suite of capabilities to design and integrate a number of business applications. In addition, the strong analytics platform is further enhanced through Workday Prism Analytics

that serves as an automated tool for centralized and transforming organizational data to create unique, advanced, cross organizational data insights. However, Workday does not include modules for municipal organizations such as Taxation, Utilities, or E-services.

Overall, Workday is a cutting-edge vendor with a number of capabilities and expertise able to keep up with changes in technology and data architecture into the future, but critically lacks the tailor-made expertise in enabling municipal government capabilities.

Workday was engaged to discuss system functionality in detail but did not respond.

<i>Topics of Interest</i>	
Topic	Comment
Integrations	<p>Workday provides two specific capabilities to assist with system integration and interoperability:</p> <ul style="list-style-type: none"> • Workday Prism Analytics – A data connection platform that allows for the transformation and combination of data through API, SFTP, or Browser-Based file uploads. • Workday Extend – A low-code app/workflow building platform that enables the organization to build automated data connections and transfers between Workday and organizational systems
Training and Knowledge Management	Workday provides Self-Service Training Material, online training program/courses, and an accredited user community for certified “Workday Professionals”.
System Roadmap	Workday is built on a highly adaptable and configurable platform that can be adjusted and modified to meet changes in market needs and changes in future technology capabilities. However, Workday does not publicly disclose a roadmap of future system capabilities.
Data Management	Workday provides a high level of maturity to enable analytics and data management including background low-code workflow configurable data management workflows, machine learning and AI enabled tasks and processes to identify errors and reduce staff effort, and dynamic drill down capabilities for dashboards and reports.
Self-Service Reporting	Self-Service reporting in Workday is highly advanced and provides a number of AI and Machine Learning enabled capabilities including generated “story insights” that combine multiple data sources to tell a visual story of trends in organizational data sets. Self-Service reporting can extend beyond Finance/HR through the unification of organizational data on Workday’s platform (Through Workday Prism)

ORACLE FUSION CLOUD ERP

Oracle Cloud ERP is a comprehensive cloud-based ERP platform introduced in 2012. Oracle is a multi-national software company that has been providing business solutions since the late 1970s. Oracle has significant expertise in delivering a number of organizational software solutions and has taken this expertise into account when developing their Cloud based ERP solution.

The following modules are offered as a part of the Oracle Fusion ERP ecosystem:

- *Oracle Fusion Cloud Financials*
- *Oracle Fusion Cloud Accounting Hub*
- *Oracle Fusion Procurement*
- *Oracle Fusion Cloud Project Management*
- *Oracle Risk Management*
- *Oracle Fusion Cloud Enterprise Performance Management*

Oracle’s offering is comprehensive and ranks as a leader in service centric ERP solutions (ranked by Gartner). Oracle Cloud Fusion ERP uses modern advancements in machine learning and AI to intelligently detect patterns and anomalies in organizational data and processes resulting in improved staff efficiencies. Oracle provides a full suite of core Finance capabilities within their ERP platform, and a full suite of core HR/Payroll capabilities within their separate Human Capital Management (HCM) product.

In addition to providing core capabilities, Oracle Fusion Cloud ERP like Workday excels in its platform-based approach. The system offers a comprehensive suite of modules and products, enhanced by its integration suite to deliver/integrate any number of unique business applications. Of particular note is Oracle Data Management Cloud, a data management solution that automates data governance processes including data access management, data connection management, and data workflow capabilities.

Oracle Cloud is highly configurable and provides numerous cutting edge ERP capabilities in addition to a suite of other flexible product solutions. However, the system may be daunting to implement and maintain due to the scope/scale of general system capabilities.

Oracle was engaged to discuss system functionality in detail but did not respond.

<i>Topics of Interest</i>	
Topic	Comment
Integrations	Oracle provides a number of technologies capable of solving unique business integration problems through its Oracle Integration 3 suite. Oracle Integration Suite provides a number of technical and non-technical methods to build custom organizational applications or system integration workflows.

Topics of Interest	
Topic	Comment
Training and Knowledge Management	<p>Oracle Help Center is a comprehensive online knowledge repository that includes architecture and best practice information, free tutorials and hands on system labs.</p> <p>In addition, Oracle provides "Oracle University", a platform that provides courses along a customized learning stream to build staff competency. These courses include general system operations training videos, hands-on labs, and upcoming product updates. At the end of each learning stream Oracle provides certification.</p>
System Roadmap	<p>Oracle does not publicly provide a system roadmap. However, Oracle's commitment to continuous improvement and adaptability ensures that their ERP remains agile and responsive to the evolving needs of organizations.</p>
Data Management	<p>Oracle provides a separate product called Enterprise Data Management (EDM) that functions as Oracle's Data Management solution.</p> <p>EDM allows for an automated, unified system to manage organizational data including master meta data management, node and hierarchy curation, access management, etc. EDM allows organizations to manage complex organizational data in a centralized location, simplifying integrations between organizational applications and improving management and monitoring of access to sensitive data.</p>
Self-Service Reporting	<p>The Oracle Fusion Analytics module provides a number of self-service system capabilities including dashboards, in-app data manipulation and discovery. Through Oracle Smart view, users are empowered to build ad-hoc on-demand reports without reliance on technical expertise.</p>