Digital Transformation Strategy

Final Report

March 1, 2021

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Table of Contents

1.0 Version History

Version #	Date	Prepared By	Prepared For	Comments
1	Dec. 20, 2020	S. Chase, G. Bezruki	S. Chambers	1st version of final report
2	March 1, 2021	S. Chase	R. Baumann	2nd version of final report including updated information
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2.0 Introduction and Background

2.1. Introduction

Perry Group Consulting (PGC) is a firm that specializes in technology in municipalities. Our mission is *building better municipalities*, and we have worked with over 120 municipalities across Canada on technology strategy and planning work, business process optimization and solutions implementation.

Perry Group was hired by the Municipality of Kincardine (the "Municipality"), through an RFP process, to assist in the development of a Digital Transformation Strategy.

The project, which began in August 2020, was sponsored and run by the Municipality's Chief Administrative Officer.

The consulting team spent a considerable amount of time meeting with representatives from all departments along with the IT Specialist and the GIS Coordinator to understand the current situation.

We worked closely with the CAO to develop the Strategy.

2.1.1. Purpose of this Report

The previously submitted Current State Report reviewed foundational areas such as the technical infrastructure, policies and procedures as well as IT Service Management Practices. It identified areas that were working well and in good position to move forward as well as areas that require further attention. This Final Report provides details on the opportunities, the prioritization processes and an understanding of the expected benefits.

2.2. Acknowledgements

Perry Group would like to acknowledge the active involvement, cooperation and support of Kincardine's staff and stakeholders throughout this project.

3.0 Current State

3.1. Introduction

Kincardine, like so many other municipalities, faced unprecedented challenges when the pandemic hit and required the closing of the municipal office resulting in significant changes to service delivery and interactions with residents and businesses.

Along with the private sector, municipalities were forced to move their business online with many staff working remotely. Technology was expected to quickly solve these challenges and some municipalities were better positioned than others to move quickly. Even simple remote access to email was a challenge for some. Kincardine was no different. As the CAO noted, it was “eye-opening” as working remotely highlighted how dependent they were on paper and manual processing.

Technology is more important now than ever before as in-person interactions change to an online service model. The Municipality moved quickly to enable some online processing such as digital signatures however, in reviewing the current environment, there were still many processes that had not been optimized and digitized and remain predominantly manual. During the discovery phase, it was found that most systems are not utilized to their highest potential with many manual processes working around the technology and often data is entered into a system for tracking purposes after the fact. This sort of manual processing inhibits the Municipality’s effectiveness and leads to inefficiencies.

Application sprawl was occurring as business departments were able to make their own decisions on solutions acquisitions. This siloed systems and the lack of integration resulted in duplication of data. Having no clear source for the most current and accurate information means end-to-end digital services could not be offer that would make it easy for customers to interact and transact with the Municipality. This also means that, typically, the customer must come to the Municipal Administration Centre, with paper forms filled or with copies of plans to submit an application or make a request. There are some fillable forms online but there is no integration or associated workflow, meaning they are simply emailed to a staff person who reenters the information into another system. This does not reflect modern customer expectations, nor is this an efficient way for the Municipality to deliver services.

Technology should enable a modern municipality to transact (pay, book, apply, request) with its citizens online 24x7, using their smartphones or tablets. It should support and enable increased engagement with citizens. It should help processes be more efficient, reducing the amount of time staff spend processing paperwork and, instead, allow staff to spend more time working on more value-added activities.

Technology should provide management with the information it needs to support evidence-based decisions – helping to identify optimizations that drive service costs down with improved efficiencies and reduced redundancies and supporting cost avoidances. It should give Council the insights, performance indicators and long-term projections it needs to provide effective oversight to the administration.

The Municipality's leadership has identified a vision for a Strategy that will "map a path forward to a more integrated environment, enhancing the user experience, transforming manual processes to automated or digital processing and thus driving operational efficiencies, reducing or eliminating redundancies, increasing productivity and enhancing service delivery." This is a change that is not just about technology but is actually about transforming the way the Municipality makes decisions and delivers service. It requires a change to the culture so that the organization comes together to tackle technology-enabled business initiatives.

3.2. The Importance of Technology in the Municipality's Digital Transformation Journey

The best run municipalities around the world, large and small, rely on technology to be effective, increase the productivity and efficiency of their staff, and deliver services that delight customers with their simplicity and convenience.

The Municipality is already heavily dependent upon technology in the back-office. Services as diverse as collecting taxes, billing and collecting of utilities charges, handling customer enquiries, licensing of animals and managing recreation program registration, all rely on information technology to operate.

While the Municipality has made some progress in some areas, looking to the future, technology will only continue to grow in importance and be the enabler for digital transformation.

Existing systems reaching "end of life" must be replaced. New systems will be required by the Municipality to address emerging needs, such as online services and customer service delivery. New services will emerge that are likely to be heavily reliant on technology. More customers will expect to use their computers, smartphones and, perhaps in the near future, voice assistants to interact with the Municipality.

The Municipality will increasingly employ what are referred to as "smart technologies" and be more connected as town-wide sensors are used to monitor critical infrastructure and alert staff to where problems are anticipated or have occurred. Data and information will become more important, providing insights about service delivery that allow Municipality officials to optimize efficiency and improve services.

The Municipality needs to be well-positioned to implement and manage technologies that are increasingly important to its effectiveness and enable digital transformation.

3.3. Technology's Role in Supporting Growth

The Municipality is poised for population growth over the coming years and as it transitions into a larger municipality and a larger enterprise, it must establish technology capabilities suitable for its size and its residents.

Technology can assist the Municipality with the pressures it will face during this growth period.

3.3.1. Some Existing Practices Will Not Scale

As the Municipality grows, it will simply become impossible for paper and personal knowledge-based processes to be effective at coordinating activities and sharing information across larger teams, more projects and more cases. To support the Municipality's growth, existing knowledge, processes and procedures must be captured, optimized and digitized into integrated systems such that work can be run and tracked through the systems. This helps new staff easily adopt processes and ensures the knowledge of long-standing employees can be documented for succession planning purposes.

3.3.2. Growth Means Increasing Complexity

As the Municipality grows, the complexity of the issues to be dealt with will also grow. Accordingly, the importance of integrated planning and coordination across departments and agencies will grow.

Information technology can assist with the sharing of information, visualization and coordination of activities.

3.3.3. Pressure on Core Services

All departments are dependent on core corporate services, in particular, HR and Accounting.

Eliminating manual processes that inhibit the ability of departments to move at the speed they need, while balancing corporate controls related to timesheets, vacation requests and staff scheduling, performance reporting, purchasing and budget management, can all be enabled using technology.

3.4. Why Digital Transformation and the Digitization of Processes?

3.4.1. Transformation

The word “transformation” has been used over and over by organizations to enable change for better. Kincardine has identified the opportunity to transform the way business is performed by reviewing the current business processes and business systems. It is important to note that digital transformation should only take place if it adds value to the business, otherwise there is no point. There are many reasons to set targets for digital transformation that are meaningful for the Municipality. A few of the more frequently used targets reflect an organization’s desire to:

Improve Customer Service: Providing a service online to customers, expanding the service availability 24/7, anytime from anywhere. As an example, today, a Tax Certificate can be requested by phone or over-the-counter only. An online process for requesting or accessing through a self-service portal and payment will allow customers to receive that service anytime from anywhere.

Reduce the Cost of Service Delivery: The cost of a service could be material and staff time. A target to reduce staff time spent on a business process could be a measurement of success for digital transformation projects. As an example, the current AP process requires 100 hours (hypothetical) of manual processing time. A project that reduces this to 10 hours may reduce the cost of the service delivery by $100,000 / year (hypothetical).

Reduce Cycle Times: The time taken from the point of request to delivery of a service can be measured. Major reductions to the cycle time will improve customer service as well as efficiency of the service offering. As an example, roads service requests take 10 days to complete on average. An efficient digital scheduling and assignment system may reduce the manual work and bring the average cycle time to 5 days.

Generate Revenue: Any new revenue opportunities or increases to existing revenue streams could also be a target for digital transformation projects.

Given the importance of technology to achieving the goals of digital transformation, a review was conducted of how well the Municipality is positioned to respond to the opportunities. Several key areas were identified as being top priorities and foundational pre-requisites for digital transformation. The foundational pre-requisites are:

- Governance
- Technology Investment and Resourcing
- Business Systems Analysis and Project Management
- Optimization and Digitization of Business Processes
- Security

4.0 Digital Transformation Pre-Requisites

4.1. A New IT Governance Model

Currently, decisions about technology solutions are made either independently by departments or through the budget process. This leads to different systems performing similar tasks, some departments having digital solutions while others don't and costs for technology being dispersed across the organization.

The best solution to mitigate all these challenges is through the implementation of an effective IT governance model. IT Governance is intended to ensure that IT activities align with corporate goals and objectives, that there is visibility into IT workloads and progress, and that services are meeting expectations.

We have found that organizations that are the most successful with technology have clearly assigned decision rights, roles, and responsibilities. Also, those organizations where Senior Management acts as a driving force around technology are more effective at being successful in driving change throughout their organizations.

The governance model should reinforce principles of collaboration, open-ness and transparency and collective decision-making.

Governance is an important aspect for successful delivery of projects. For this reason, this is a pre-requisite to embarking on any of the proposed opportunities.

4.1.1. What is Technology Governance?

Technology governance is defined as "the processes and structures which inform, direct, manage, and monitor how the organization makes the best and most effective use of technology."

A formal governance framework will provide clarity and a mandate for the right people making the right decisions about technology at the Municipality. It should clearly identify the groups and individuals who are involved in IT decision-making and should specify which decisions are the responsibilities of which groups.

Organizations often view decisions about technology as complicated, technical and "best left to the experts in IT". However, decisions about technology often have ramifications well beyond the technology itself. Some questions to ask would be:

How do we want to use technology in our business?

What technology do we want our people to use, and how do we want them to use it?

How much should we spend on technology?

Which of our business processes should we direct our IT dollars towards?

What do we need to tackle first? Should we do this now, or later?

How secure do we want / need to be?

What should be available first in the event of a data centre outage or a disaster event?

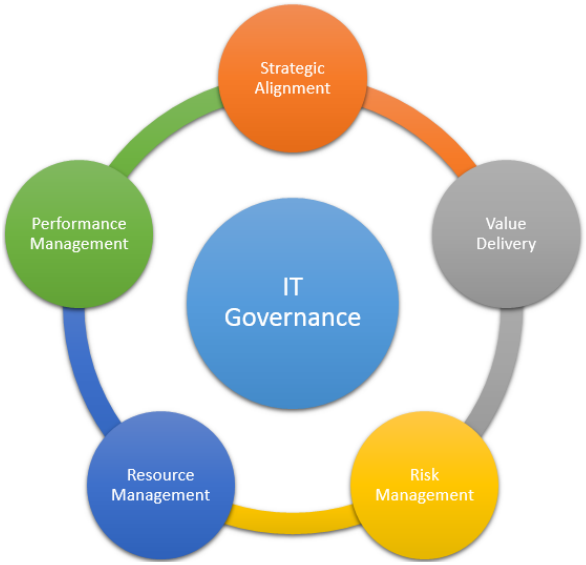
Kincardine has just one IT specialist on staff at this time. The role is intended to provide general support for technology but specifically network connectivity, hardware support and general assistance as needed.

The IT Specialist is not in a position to provide recommendations on software issues or other major decisions related to technology. They can and should provide technical advice such as the network configurations and capacity, however, most decisions should not be made by IT alone. These are important business decisions that the leaders of the organization should address. There will always be purely technical decisions to be made, where the right IT staff with appropriate expertise will need to be involved; but in most cases, IT experts should be advising business leaders.

There are several IT governance models that provide guidance or best practices such as COBIT, ITIL, CMMI, FAIR and so on. These methodologies are detailed, well-tested and are frequently seen driving technology savvy organizations forward. That said, strict adoption can often over-encumber organizations that are still evolving. As a result, the Municipality should focus on the highest and most important features of these governance frameworks to employ a model that is the best fit for Kincardine.

We feel that the following are Kincardine's central goals of technology governance:

- Developing and approving the Digital Transformation Strategy.
- Establishing and communicating technology-related policies and standards.
- Determining prioritization of technology-enabled investment programs in line with the Municipality's priorities.
- Monitoring the status of the technology projects and resolving resource conflicts or other barriers that may be limiting their ability to succeed.
- High-level monitoring of the status of IT assets (e.g., hardware, software, resources).
- High-level monitoring of service levels and service improvements (e.g., SLAs, performance measurement, client outreach).



An IT governance framework facilitates collaborative working, bringing together the appropriate mix of leadership and staff from departments and disciplines.

IT Governance Committee

An IT Governance Committee (ITGC) can take many different forms. For Kincardine, it is recommended that the Senior Leadership Team take on this role as these are important business decisions that the leaders of the organization must address.

With this new vision and plan, there is the opportunity to enhance the organizational understanding about what it takes to deliver successful technology solutions. There has been the tendency to focus only on one department's requirements for technology projects and then under-estimate project impacts, time and the resources required to deliver the project.

By having the leadership team make the critical decisions, they can be sure that all technology projects align with corporate goals and that solutions can be fully leveraged by multiple departments, reducing the need for many department-only solutions. Furthermore, the Municipality will work to ensure that selected initiatives are delivered successfully – using industry best practices around project management, business process design, and change management frameworks.

Figure 1 below reflects conceptually a potential IT Governance Structure.

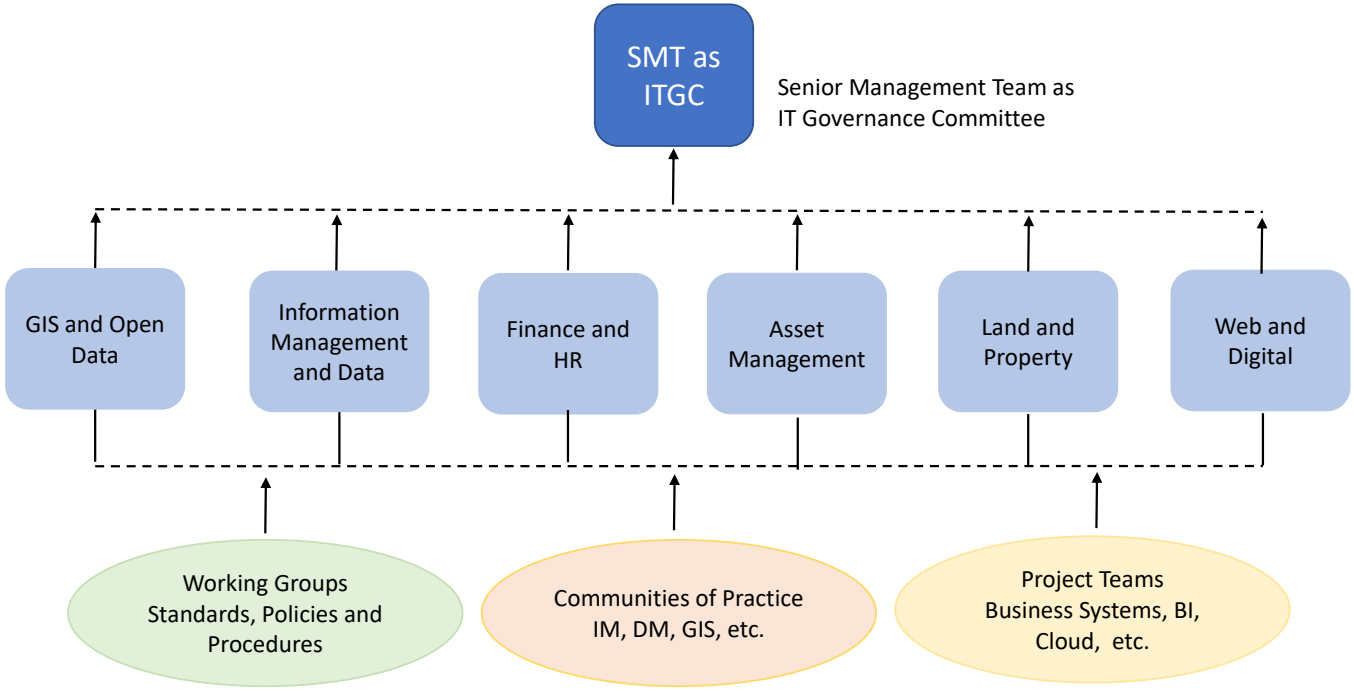


Figure 1: Potential IT Governance Structure

4.2. Technology Investment and Resourcing

4.2.1. Technology Investment

The Municipality's intent is to drive transformation through the implementation of digital business solutions.

One challenge noted is that there has been historic under-funding and under-resourcing of technology programs. This is not unusual for a municipality, however, more investment is needed in order to become a leader in digital service delivery.

Leading private sector organizations driving digital transformation, the banking sector and others (to whom municipalities are often compared) are investing heavily in digitalization. These market leaders are investing almost double (7% of total expenditures) that which organizations that are treating technology more traditionally, do (3.5%).

As shown in Figure 2 and Figure 3 below, the Municipality of Kincardine currently spends approximately 0.225% of the capital budget on technology; and about .98%[1] of the operating budget.

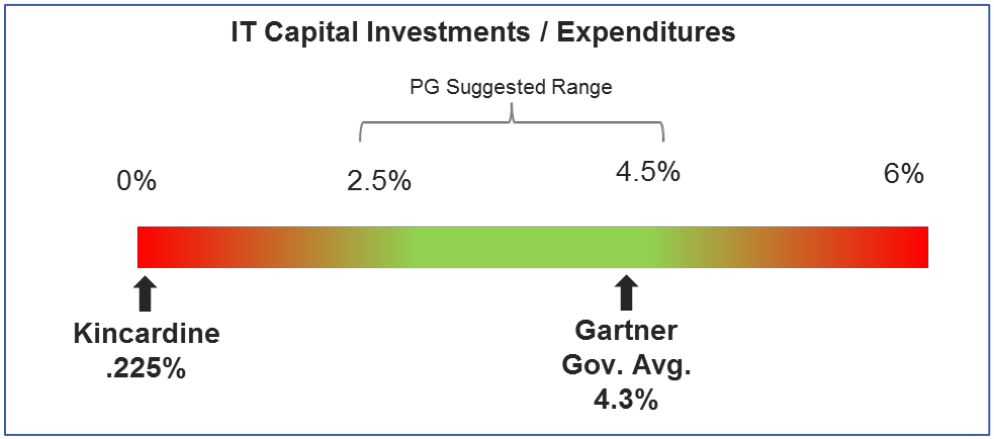


Figure 2: IT Capital Investments[1]

[1] This is calculated as an average of the 2020 capital and operating budgets for the Municipality

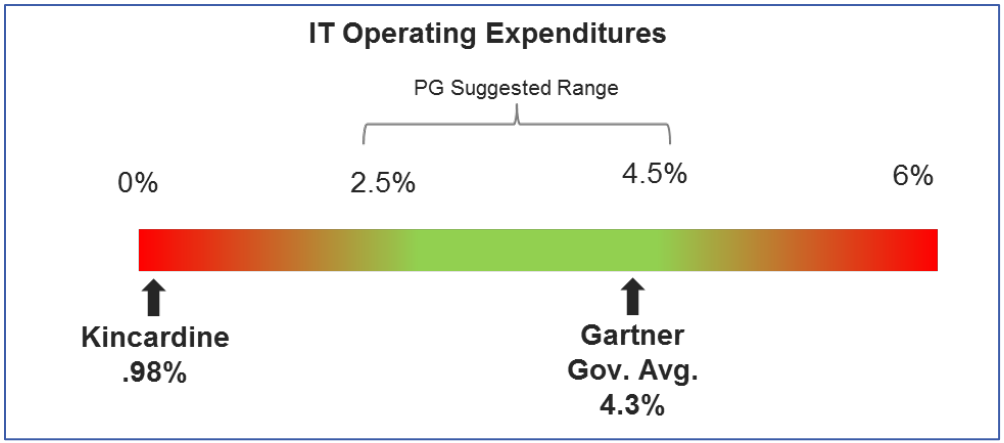


Figure 3: IT Operating Expenditures[1]

As depicted in these diagrams, the Municipality's investment in both of these areas is outside of the PGC suggested range and significantly less than market average. Failure to invest in both of these areas will inhibit the ability to move forward and be sustainable technologically as well as adversely affect its ability to become a leader.

Ultimately, without the right resources with the right skill sets, technology outcomes and performance will be sub-optimal and project outcomes will be compromised.

Thus, the overarching IT resourcing philosophy for the Municipality should be one that ensures that realistic and achievable plans are committed to, projects are fully funded and that sufficient resources from both business units and IT experts are allocated to projects and operational work to ensure initiatives are set up for success.

4.2.2. IT Resourcing

Typically, in Ontario municipalities, IT staff make up between 1-4% of total staffing.

Those that invest more in technology tend to be more advanced in their utilization of technology. For example, municipalities such as Innisfil, Newmarket, Burlington and Kitchener that devote a higher proportion of staff to technology, are further ahead with their technology efforts.

Kincardine has just 1 onsite IT staff member who started not long before the pandemic struck. The IT staff has had to focus on maintaining the network, delivering work from home solutions, and providing basic troubleshooting and IT support for all staff. There is also a GIS resource in the Public Works department who provides GIS support as well as back up support for the IT staff.

Figure 4 below shows the IT staffing levels in comparison to the total staffing level for the Municipality:

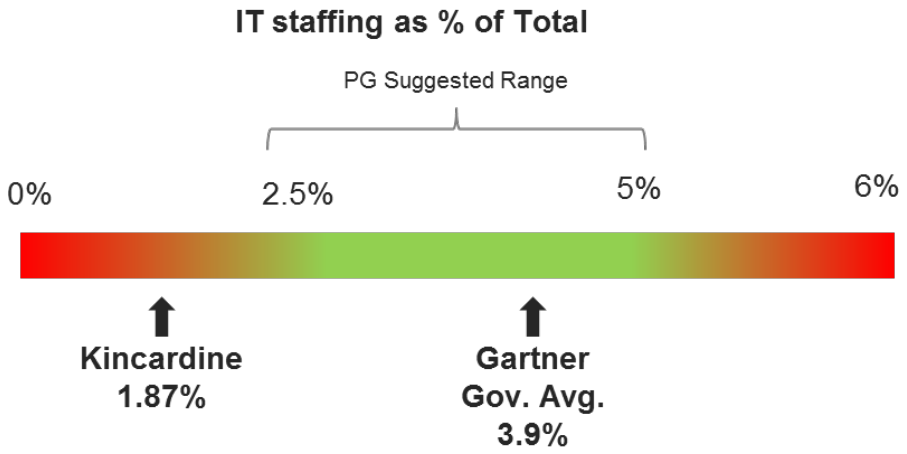


Figure 4: IT Staffing vs. Total Staffing

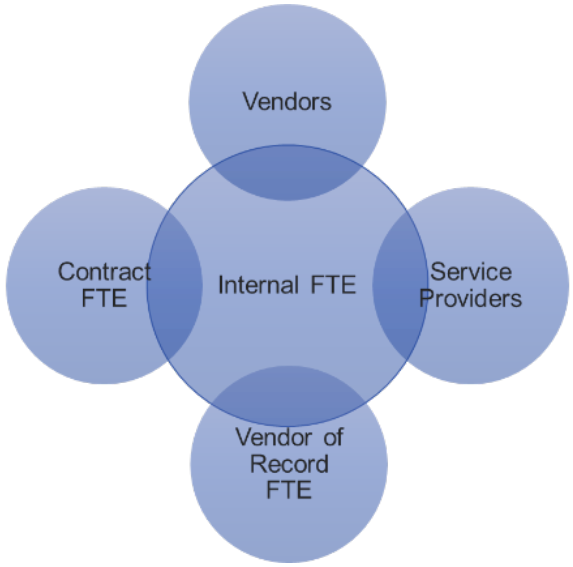
The above calculated value of 1.87% included both technical resources – IT Specialist and GIS Coordinator.

It is important to note that the number of IT staff should be proportional to the number of total staff so, as the Municipality grows, it should expect its IT staffing to grow in parallel. Failure to invest in the right resourcing and skill sets will also inhibit the Municipality's ability to leverage its technology investments to the fullest and will impede digital transformation.

Additional information regarding alternative approaches to resourcing can be found in the Considerations and Recommendations section.

4.2.3. Hybrid IT Service Operating Model

The reality of modern IT, particularly with small municipal teams, is that it is impractical to try to maintain in-house the necessary skills and capacity to plan, implement and manage all the Municipality's increasingly complex technical environment and burgeoning project demands. To do so would mean hiring an unfeasible number of additional IT staff, far beyond that which is recommended here.



Smart IT organizations approach this challenge by relying on a team of in-house IT staff with strong internal connections and understanding of the organization's business needs (business partners), who in turn, work with a network of trusted partners, vendors and solution providers to deliver the required services.

Similar to the way that the Municipality approaches road building and road maintenance – relying on construction firms with road building expertise – the emphasis is on "getting projects done", or "project throughput" rather than on IT staff necessarily implementing the technology themselves.

This is a hybrid model of IT service delivery that combines internal IT and business skills with market-based expertise and services. Ultimately, it means that IT staff begin to work as coordinators or orchestrators of IT service delivery that will be executed by a combination of internal staff and external providers.

The goal should be to increase speed, agility and project throughput by using the right mix of resources and skills for the job at hand.

It is best to carefully consider how to derive the greatest value from its limited IT resources – to free up their time and enable them to work on higher value initiatives that will position the Municipality for the future. Within any organization, municipal or private sector, there are numerous routine activities that are required to be completed but, in many cases, they can be completed more efficiently and at a lower cost by others. The Municipality needs to determine the activities that it feels should be managed internally, and which activities can be handled by others (e.g., departments, contracted staff, vendors or partners).

The Municipality has, for some time now, been leveraging the expertise and services of MicroAge Basics (MicroAge), a technology service provider. MicroAge has been retained to look after and manage all of the activities associated with data backup and restoration, along with all of the associated hardware appliances and software.

Security management is a good example of an opportunity to leverage industry experts. It would be unfeasible to properly resource the IT team with the skills and expertise needed to ensure that the Municipality's data and technology ecosystem remains secure 24 hours per day and 365 days per year. With the increase of cyber threats, this is one where the importance of the service cannot be underestimated.

It is recommended a hybrid approach be considered that leverages external resources in addition to the IT staff to deliver technology services.

The following are some additional opportunities to consider when looking for alternative resourcing strategies:

- Capital funding contract staff positions.
- Vendor of Record – IT resources on-demand.
- Use of external expertise to plan, design and set strategies.
- Leverage strategic partnerships.
- Out-Task IT services.

Additional information regarding these alternative approaches to resourcing can be found in the Considerations and Recommendations section.

4.3. Business Systems Analysis and Project Management

The need for business analysis and project management was raised numerous times in both the interviews and the survey.

4.3.1. Resourcing

Business departments would like more assistance from an IT resource to:

- Help them make decisions about technology solutions.
- Assist with research into possible solutions, and to
- Translate their business requirements into technical specifications.

It is recommended the Municipality consider an additional IT resource to take on the role of Project Manager / Business Analyst (PM/BA). Note that this will bring the "IT Support to Full-Time Staff" ratio to just 2.64%, still slightly below the recommended range. The primary role of the PM/BA would be to build strong relationships with business units. In this role, the PM/BA will support departments in identifying business requirements for technology-related projects and lead the implementation of projects.

The PM/BA would fulfill this by applying the principles of business analysis in the requirements gathering, planning and re-engineering of business processes and practices and convert these requirements into technology specifications. The PM/BA will then implement new project governance processes that will increase the successes of IT projects. A draft job description for consideration can be found in Appendix 2.

The current approach to IT has relied upon vendors and suppliers to be involved in the configuration and installation of software and hardware. The team should continue to utilize and expand its use of third parties and contracted resources to ensure that it can deliver services that meet the needs of the Municipality.

4.3.2. Prioritization

The IT Governance process needs a consistent way to prioritize the projects that are proposed by various business units.

A systematic priority model could reduce the uncertainty of a project being selected for implementation and influence the staff to bring forward projects that are aligned with the organization's needs. The concept of a priority model is to ensure that the projects undertaken will help the Municipality achieve its corporate vision.

The following are some ideas that may be used as attributes in the priority model.

Strategic Alignment: How well does the idea align with the Corporate Strategy. Some projects may support a departmental strategy or a divisional strategy that could score less than a project that directly contributes to a corporate strategic goal.

Negotiability: There are certain ideas that are formally approved by Council or are legislated requirements or have Health & Safety issues that may require higher priority.

Funding Availability: A project that is fully funded by a grant, other levels of government or by a third-party funding agency may get higher priority than a project that needs to be budgeted through tax dollars.

Risk Factor: The risk here is related to the risks associated with the implementation of the idea. An idea associated with a high possibility of risk for implementation could score low compared to a low-risk idea.

Business Benefit: This could also be called the Return on Investment (ROI). An idea that can bring higher benefits to the customers (internal or external) and/or the organization may score higher compared to an idea that brings little benefit.

Benefactors: The recipients of the benefits of the idea is also an important factor. An idea that helps improve service levels for all citizens could score higher compared to an internal divisional project that impacts five staff members.

Readiness: Even the best idea may fail if not implemented at the right time. The business readiness with resources, environment, and other factors such as sequencing, and dependencies may factor in this. The Readiness attribute mostly impacts the scheduling of a project.

Each of these attributes could be associated with a weight that gives prominence to the attribute compared to other attributes in a scoring system. For example, funding availability could be considered as an attribute that is less important compared to the Negotiability attribute. Also, within each attribute, there could be levels for a staggered scoring mechanism, e.g., under the Strategic Alignment attribute, an idea that directly contributes to a corporate goal may get more points than an idea that aligns with a divisional goal.

4.3.3. Project Methodologies

The Municipality should work to establish its own methodologies to ensure consistent project management and delivery. This should be an effective method and process that is repeatable and capable of delivering exceptional outcomes.

The following recommendations support the goal of building a project delivery engine. Selecting the right projects and ensuring that these projects have been carefully thought through is an important step in improving the overall success rate with its IT investments.

Once selected, the projects must be executed successfully if the Municipality is to realize the return on its investments. A number of factors are critical to project success, including:

Strong project sponsorship and leadership commitment.

Clear business vision with identified business outcomes.

A strong project leader.

Sufficient resources dedicated to the project – subject matter, business analysis and technical expertise.

An empowered project team that can make decisions / drive change.

A focus on business processes and outcomes over technology implementation.

A clear change management plan to ensure successful adoption.

Best practices recommend applying a proven project management methodology. Thus, adopting and applying project management methodologies and techniques consistently to technology projects is suggested.

The Project Management Institute (PMI) PM Body of Knowledge (PMBOK) provides best practices that the Municipality can adopt for its major projects.

The methodology illustrated in Figure 5 below, illustrates the standard project phases, documentation requirements, and checkpoints in a classic waterfall project management approach.

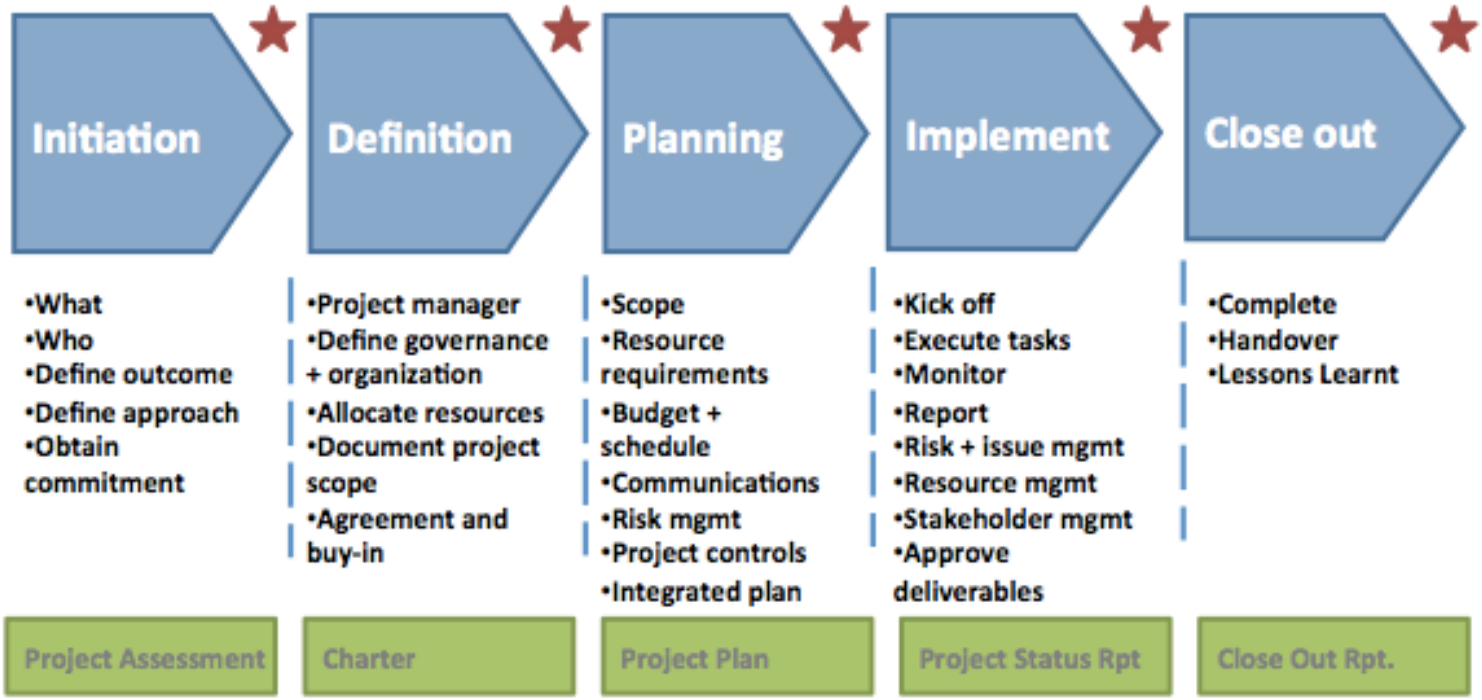


Figure 5: Sample Project Methodology

4.4. The Importance of Digitization

In order for the Municipality to become more efficient and effective in the delivery of its services, and leveraging its current and future investment in technology, the existing processes need to be reviewed and/or re-engineered, optimized and digitized. Well-designed, standardized and digitized processes are foundational to a well-run municipality.

To enable the types of integrated service offerings that citizens are now expecting, the Municipality must use its business systems to manage services and automate processes. Effective municipalities rely on the combination of **people**, **processes** and **technology**, working together in a synchronized way, to deliver services to customers.

Collectively, the **digitized platform** is the set of processes and technologies that work together to enable customers to interact with their local government, and to enable staff (customer-facing staff, back-office staff or field crews) to manage processes and deliver services to its customers.

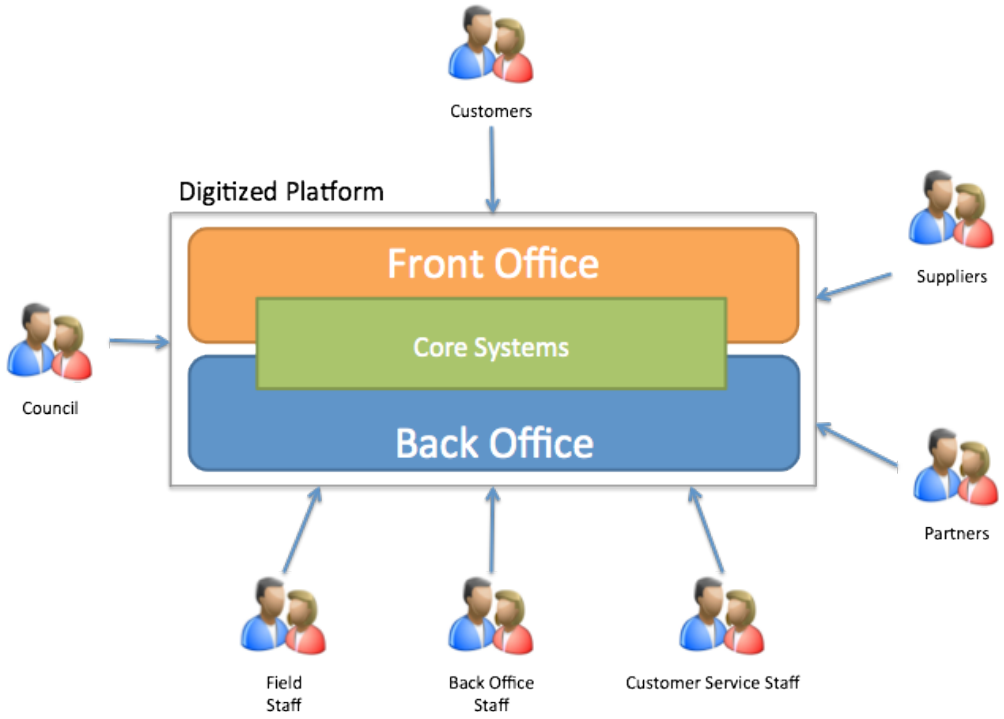


Figure 6: The Digitized Platform

The term *digitized* represents a move away from paper-based processes to electronic, online, workflow-managed, real-time processes.

The term *platform* represents a common set of shared tools and technologies that connect customers and staff, and link staff that support different parts of processes together.

The digitized platform is centered on a powerful central core of business systems (e.g., Finance, Work Management, Permitting, Licensing and Land, Recreation Management) that drive most of the operation of the Municipality. These core systems connect front-office and back-office processes that facilitate services to customers, manage interactions with suppliers and enable collaboration with partners.

Systems in use should be common and shared across departments / business units so that tasks initiated by one department can be allocated to other departments, such as a change in a permit application status (in Building) triggering the processing of a pre-approved payment (in Finance).

It is the full digitization of processes that is critical to becoming an efficient organization that can deliver end-to-end customer-centered digital services.

When processes are digitized and managed electronically, all transaction processing, workflows, notifications, quality checks and validations can be carried out online, so they can happen anywhere (in the office, at a worksite, in a truck at the side of the road, or at home).

Offline steps (manual interventions such as checking a paper file or getting a physical signature) are reduced or eliminated when all of the processing is handled online. The online chain provides complete visibility of the process throughout the organization.

Systems manage the routing and workflow of the processes, including escalating items to senior staff when exceptions are encountered, or performance falls below defined levels of service.

Digitization allows an organization to track its own process, to share information between staff and to track important management metrics that contribute to improved process effectiveness.

Digitization also makes it easy to add new services (such as the introduction of a tree by-law) because changes can be introduced through established business systems that already support the online applications process, back-office administrative tracking (such as processing payments) and providing data to field crews.

The full digitization of processes and the digitized platform is what will make the organization tick, and it is in this area that the Municipality must focus over the next few years as it is integral to digital transformation.

4.5. Prepare for Cyber Security and Other Risks

Cyber security is an ever-present challenge for municipalities who are increasingly targeted by hackers.

Some communities such as Wasaga or Woodstock that have been hacked, have seen significant harm to their credibility, have faced massive service disruption, and have spent hundreds of thousands, and in some cases, millions of dollars recovering from security incidents.

Even if you have cyber insurance, you must put in place reasonable measures to protect yourself.

The Municipality has conducted a security scan within the past 2 years and should plan and budget to conduct another external security review in the next year. It is recommended that external security scans be conducted at least annually.

The security review will identify actions that the Municipality will need to take. We anticipate that this will mean staff education and training, incident plans and policy updates, alongside investments in technology to secure your environment and services to constantly monitor for attacks.

In addition, the Municipality should have business continuity plans and associated disaster recovery plans that identify how the Municipality would respond to a major incident or interruption in technology services (if, as happened in Goderich, a tornado hit the municipal building).

5.0 Opportunities, Evaluation and Prioritization

5.1. Opportunities

As identified in the Current State Summary Report, the Discovery Phase identified a number of opportunities that could potentially yield increased efficiencies, lower operational costs or, more importantly, improved customer service.

The opportunities centered around the following themes:

- Digitize/Mobilize/Enable the Workforce – internal productivity.
- Digital Engagement and Online Services – customer-facing.
- Governance – IT policies, standards, priority setting.
- New Investment / Leveraging Existing Investments – reuse before buying and buy before building.
- Future Readiness/Smart City – open data, analytics, community engagement, innovation incubators.

The identified opportunities are listed in the following table:

Opportunities		
Customer Service Portal	Cityworks	Wi-Fi Connectivity
Online Burn Permits	ActiveNet	WAN Connectivity
Intranet	Human Resource Information System (HRIS)	Policies & Procedures
Digital Contracts and Agreements	Payroll	Open Data

Work from Home	Microsoft 365 (O365)	Data Analytics & Visualization
Digital Logbooks	Mobile Devices	Governance
Training	Disaster Recovery / Business Continuity	Geographical Information Systems (GIS)
Records Management	Network Services	

5.2. Evaluating and Setting Priorities

With limited resources to implement and support all of these opportunities, the Municipality recognized that it would need to evaluate each of these against a set of agreed upon criteria to establish prioritization.

The following considerations were used in determining the priority ranking for each opportunity:

Which will have the greatest impact on the community?

Which will result in the greatest efficiencies for staff? and

What solutions are best positioned for success?

5.2.1. Kincardine's Prioritized Opportunities

Based on the initial list of opportunities, the consulting team worked with the leadership team to evaluate each opportunity.

Figure 7 below shows the results of the evaluation in priority sequence. The details and scoring of each of the opportunities can be found in Appendix 1.

Opportunity	Theme	Scored Value	Priority
Wi-Fi Connectivity	Digitize / Mobilize / Enable the Workforce	21	1
Online Burn Permits	Digital Engagement and Online Services	20	2
GIS	New Investment / Leveraging Existing Investment	20	2
Customer Service Portal	Digital Engagement and Online Services	19	3
Cityworks	New Investment / Leveraging Existing Investment	19	3
ActiveNet	New Investment / Leveraging Existing Investment	19	3
Records Management	New Investment / Leveraging Existing Investment	18	4
Intranet	New Investment / Leveraging Existing Investments	17	5
Digital Contracts and Agreements	Digital Engagement and Online Services	17	5
Training	Digitize / Mobilize / Enable the Workforce	17	5
HRIS	New Investment / Leveraging Existing Investment	17	5

Opportunity	Theme	Scored Value	Priority
Payroll	New Investment / Leveraging Existing Investment	16	6
Mobile Devices	Digitize / Mobilize / Enable the Workforce	16	6
Network Services	Digitize / Mobilize / Enable the Workforce	16	6
WAN Connectivity	Digitize / Mobilize / Enable the Workforce	16	6
Digital Logbooks	Digitize / Mobilize / Enable the Workforce	15	7
O365	New Investment / Leveraging Existing Investment	15	7
Policies & Procedures	Governance	15	7
Data Analytics & Visualization	Future Readiness/Smart City	15	7
DR/BCP	New Investment / Leveraging Existing Investment	14	8
Governance	Governance	14	8
Work from Home	Digitize / Mobilize / Enable the Workforce	13	9

Opportunity	Theme	Scored Value	Priority
Open Data	Future Readiness/Smart City	13	9

Figure 7: Opportunities Evaluation

5.2.2. Consulting Team's Prioritized Opportunities

An evaluation of the potential opportunities using best practices and other municipal successes was also undertaken. The approach used was based on the following principles:

The organization only has so much capacity – financially and staffing resources.

Change management plays a critical role in the success and adoption of new technologies and projects. Is the organization ready for change?

What are the short and longer term benefits both internally and externally?

Is the technology ecosystem mature enough to support the initiative / project?

Figure 8 is a simplified version of Perry Group's Municipal Technology Maturity Model (MTMM) which was detailed in the previous report (Current State Summary Report).

The diagram reflects that all of the layers are interconnected. Without a stable and secure infrastructure layer, reliable business applications cannot support efficient and effective service delivery. Without these back-end applications, delivery of integrated end-to-end online services cannot be achieved. And without the integration layer, information remains locked within individual application silos.

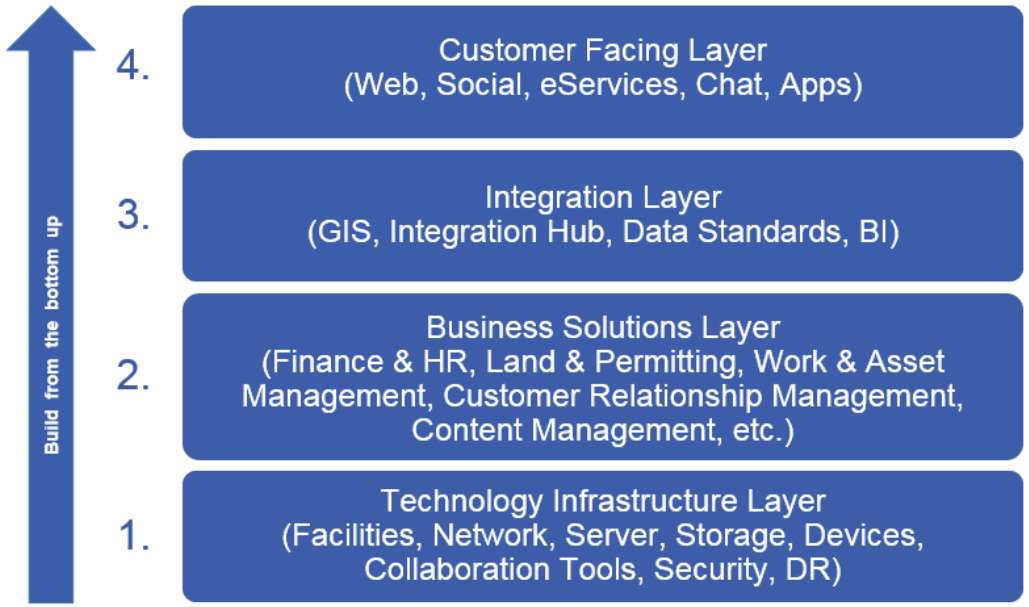


Figure 8: Simplified MTMM

Figure 9 below, reflects PGC's assessed priority for each of the identified opportunities along with the priority ranking of the leadership team.

Opportunity	PGC Priority	Kincardine Priority
Governance	**1**	8
Business Analyst/Project Manager	**2**	Not Assessed
Wi-Fi Connectivity	**3**	1
Network Services	**3**	6

Opportunity	PGC Priority	Kincardine Priority
WAN Connectivity	**3**	6
DR/BCP	**3**	8
Intranet	**4**	5
Training	**4**	5
O365	**4**	7
Mobile Devices	**5**	6
Work from Home	**5**	9
HRIS	**6**	5
Payroll	**6**	6
Replacement of the Core Financials	**6**	Not Assessed
Online Burn Permits	**7**	2
Land Property Management System	**7**	Not Assessed
ActiveNet	**8**	3
Records Management	**8**	4
Digital Contracts and Agreements	**8**	5

Opportunity	PGC Priority	Kincardine Priority
Policies & Procedures	**8**	7
GIS	**9**	2
Cityworks	**9**	3
Data Analytics & Visualization	**9**	7
Digital Logbooks	**9**	7
Open Data	**10**	9
Customer Service Portal	**11**	3

Figure 9: Assessed Priority for Identified Opportunities

Considerations and Recommendations

6.0 Considerations and Recommendations

6.1. Considerations

6.1.1. Establish Effective IT Governance

The Municipality should improve its oversight, coordination and focus on the technology program, ensuring that resources (funds, people) are allocated to those activities that will have the highest value impact, and that the initiatives that are undertaken deliver on expected outcomes. Including:

- Implement a new governance model that engages leadership, management, and IT in steering the technology program, setting investment priorities, and monitoring the delivery of the program.
- Improve the investment selection process to match initiatives with realistic available capacity and allow a greater focus on fewer initiatives to improve outcomes.
- Improve project delivery outcomes through the adoption of project management best practices.
- Implement policies and processes to improve the rigor by which technology ideas are conceptualized, planned, funded, and executed.

The Governance committee should also set the vision for the ongoing planning and sustainability of the Digital Transformation Plan.

6.1.2. Set Resourcing Strategies

The reality of modern IT, particularly with municipal teams, is that it is simply impractical to maintain in-house the skills and capacity needed to plan, implement, and manage the Municipality's increasing technical requirements.

Smart IT organizations approach this challenge by relying on a team of in-house IT staff with strong internal connections and understanding of the organization's business needs. This team, in turn, works with a network of trusted partners, vendors and solution and service providers to deliver the required services.

Just as the Municipality approaches road building and road maintenance – contracting engineering and construction firms with road design and building expertise – in some situations, IT can adopt the same approach, with the emphasis on "getting projects done", or "project throughput" rather than on IT staff necessarily implementing the technology themselves.

Some key strategies include:

- Assigning **capital funding to short-term contract staffing** to support project delivery. This means increasing project budgets to cover internal and external staffing to successfully implement and is a widely used method to capitalize project costs and bring in specific expertise to support project delivery.

  Contracted staff may be used directly on the project but are more often used to backfill subject matter experts in business units or IT, thus freeing up expert and experienced internal staff to work on projects. For example, a contract Civil Engineer may be brought in to work on a one-year contract to free up one of the Municipality's current Civil Engineering staff to work on the next phase of the Cityworks project.

  This allows the organization to retain the accrued project learning and expertise when the project is complete, and to offer development opportunities to internal staff.

- Use **managed service providers** to manage aspects of your technology (e.g., Security Operations, Network Services).

  Kincardine has a single staffing resource looking after the technology ecosystem and they are already challenged with volume and will become overwhelmed with work. Currently, backup and restoration of the network data has been out-tasked to a local provider, MicroAge Basic. This has alleviated some stress on IT, particularly during the pandemic.

  Some IT systems are tailored to a specific municipal line of business, however, many technologies in use (such as networks, servers, file storage and email) are more generic.

  As hospitals, construction firms, banks and other organizations have come to use the same systems, these areas of IT have become more commoditized. In areas of commoditized service provision, because of their scale, expert service providers in the marketplace can be more cost effective than internally managing the service. In some situations, out-tasking to a managed service provider can be attractive to organizations that need to free up internal staff to use the strong business knowledge of their organization to work on projects.

  The Municipality can use out-tasking to managed service providers as a strategic approach that trades off low value activities for higher value work that has more strategic value to the organization, such as architecture, strategy, integration, mobility and project implementation activities.

- Use **consulting services** and external expertise to help set strategy and direction.
- Leverage **strategic partnerships** where possible (e.g., other local municipalities or agencies.)

Looking forward, more strategic decisions will be needed to determine if the Municipality is equipped to build and deliver a good solution or whether another partner (in the public or private sector) is better suited to address a need.

The opportunity for developing partnerships through the Municipal Innovation Council (MIC) with others in Bruce County has significant potential for pursuing shared service models of varying degrees. By identifying shared and common processes, there is an opportunity to find cost savings, efficiencies and innovative serviced delivery that will benefit each partner.

Several municipalities in Ontario have already embarked on a variety of sharing initiatives, including:

- Address common needs across municipalities, reducing the need to purchase and implement separate systems (for example, shared document and records management systems in Northumberland County, or shared GIS solutions in York, Simcoe and Niagara Regions)
- Streamline business processes, reduce delays and handoffs across tiers of government (for example, in handling planning and permitting processes)
- Improve the coordination of work between partners and neighbours (for instance, asset maintenance and roadworks on County and local roads)
- Improve customer experiences (perhaps by allowing customers to search and book ice time, facilities or recreation programs across all of the communities in the County, or to apply to transport abnormal loads through the community more easily)
- Share core IT services, as at the District of Muskoka that shares Financial Systems with some of its area municipalities, or Grey County (among others) that share GIS services and infrastructure between the County and its area municipalities
- Leverage and share subject matter experts across the partner organizations, both IT and business skills and experiences.

6.1.3. Digital Business Processes

The Municipality has the unconscious practice of solving individual functional problems with specific solutions, acquired by the individual department. This tends to cause frustration among staff and leads to siloed systems and data sets. Application sprawl is evident and overall end-to-end business process automation is not present.

Business processes should be designed to support manual customer interactions and paper-based processes. While there is application sprawl, there will also be gaps where systems are needed but not in place or run stand-along without integration to other systems. A detailed review of business processes prior to acquisition provides the opportunity to streamline, leverage existing systems and re-engineer a process prior to digitization.

6.1.4. Grow Digital Literacy

A tech savvy and capable organization will not be led by people that are uncomfortable with technology.

Leaders don't need to be good with computers, or an expert with systems, but it is important that municipal leaders know what's possible, so that you can be better informed commissioners of technology solutions and services.

IT has a key role to play in providing education and learning opportunities, but as individuals within the leadership and management teams, we recommend that people work on learning more about technology, getting more comfortable with it, be more curious, ask the silly questions and find out what leaders in the municipal and non-municipal space are doing. This understanding will grow with the recommended governance committee but should continue to evolve as a corporate learning initiative.

6.1.5. Prepare for Cyber Security and Other Risks

Cyber security is an ever-present challenge for municipalities who are increasingly targeted by hackers.

Some communities such as Wasaga or Woodstock that have been hacked have seen significant harm to their credibility, have faced massive service disruption, and have spent hundreds of thousands, and in some cases, millions recovering from security incidents.

In light of the many examples of cyber-attacks as well as the Municipal Emergency Planning requirements, there is the need to develop a formal Business Continuity/Disaster Recovery strategy. (BC/DR Strategy). A good BC/DR Strategy should include the following activities:

- Business Impact Analysis (BIA):
  - This process should capture all departmental services/processes with formalized recovery time objectives (RTOs) and recovery point objectives.
  - Upstream/downstream dependencies.
  - IT service catalogue dependencies (e.g., applications).
  - Third-party Cloud providers (required to meet RTO).

- Risk Assessment (RA):
  - Evaluate the BIA assumptions using various threat scenarios.
  - Analyze threats based on the impact to the organization.
  - Prioritize potential business disruptions based on their severity, which is determined by their impact on operations and the probability of occurrence.
- Develop a Disaster Recovery Strategy:
  - Use outputs from the BIA and Risk Assessment.
  - Identify critical assets.
  - List possible disaster scenarios.
  - Develop a technical plan to protect systems and data.
  - Test, evaluate and modify, as appropriate.

7.0 Recommendations

This report outlines recommendations specifically designed to create a more conducive environment that embraces digital transformation and one in which the Municipality can ensure the investments it makes in new technology can be successfully implemented and adopted and that the investments achieve the expected returns on investment in reasonable timeframes.

As a result, implementation of these recommendations requires active engagement and sponsorship from leaders, support from Council, and active involvement of management and staff across the organization.

While Kincardine may want to become a leader in Digital Service Delivery immediately, work will need to be done in stages, building capacity, knowledge and experience over time. This progression should realistically be staged over the next few years. A summary of the path to take is below with further details for each project included in Appendix 3.

The opportunities address the gaps that were previously identified in the Municipal Technology Maturity Model (MTMM) assessment and further developed through discussions with the leadership team. Building the foundation should be addressed first so there is capacity for sustainability and future growth.

Summarizing the major stages of digital transformation is as follows:

Build Digital Capacity and Culture

Establish digital leadership, through governance and education, developing a new approach to project selection and prioritization, with a more corporate perspective with an emphasis on collaboration. Initiatives include:

- Establish IT Governance
- Hire/contract Business Analyst/Project Manager position
- Improve Wi-Fi Connectivity
- Augment Network Services with contracted/out-tasked service providers
- Improve WAN connectivity
- Begin Disaster Recovery/Business Continuity Planning
- Develop Intranet Strategy and Plan
- Implement new Training Plan
- Fully implement Microsoft 365

Build Momentum

Through process improvements, upgrades and replacement of outdated systems and building the digitized process foundation, continue to identify opportunities for further digital initiatives with a digital first mind-set. Projects to be considered:

- Establish Mobile Device Program enabling remote/field access
- Establish new Work From Home Program
- Develop Plan to replace outdated business solutions:
    - Core Financial System
    - Human Resource Information System
    - Payroll System
- Look to develop plans for new systems:
    - Online Permits (Burn)
    - Land and Property Management
    - Develop Roadmaps that will leverage existing systems:
    - ActiveNet
    - Enterprise Content Management (Laserfiche)
        - Including Digital contracts and agreements
    - Geographic Information System
    - Cityworks
- Develop Policies and Procedures

Deliver Digital Services

Leverage the digital foundations that have been build, further enhance services through continuous improvement of processes, leveraging partnerships to become the data-informed municipality enabling evidence-based decision-making. Initiatives include:

- Data Analytics and Visualization
- Digital Logbooks
- Open Data
- Customer Service Strategy and Portal

A Digital Transformation Strategy represents a major change to business processes and service delivery for Kincardine. Digital Transformation has the potential to affect everyone and everything they do. This will be challenging for many. The benefits are widespread, including improved collaboration, maximum effectiveness and engaging in a new way with customers. It also will change the daily work of staff meaning training and change management are so important.

By beginning to work immediately on the foundational tasks, the Municipality can realize it's goals of digital transformation and digital service delivery.

Appendices

8.0 Appendix 1 – Evaluation and Scoring Details

Opportunity	Annual transaction numbers (2019) 3 - (Over 500 transactions) 2 - (500 – 100) 1 - (less than 100)	Most requested online service by citizens 3 - (High customer demand) 2 - (medium demand) 1 - (low demand)	Most requested internal service by staff 3 - (High staff demand) 2 - (medium demand) 1 - (low demand)	Benefit to customer/ staff 3 - Visits vs online 2 - Semi automated 1 - No change	Success rating 3 - (Low risk, low complex) 2 - (Medium risk, medium complex) 1 - (High Risk, High Complex)	Readiness 3 - (Budget approved and staff ready) 2 - (Either budget or staff is available) 1 - (No budget and staff is not ready)	Number of Departments benefited 3 - (Town-wide) 2 - (Multiple departments) 1 - (Single department/ division)	Score	Priority
Wi-Fi Connectivity	3	3	3	3	3	3	3	21	1
Online Burn Permits	3	3	3	3	3	3	2	20	2
GIS	3	3	3	3	2	3	3	20	2
Customer Service Portal	3	2	3	3	3	2	3	19	3
CityWorks	3	2	3	3	2	3	3	19	3
ActiveNet	3	3	3	3	2	3	2	19	3
ECM	3	1	3	3	3	2	3	18	4
Intranet	3	1	3	2	3	2	3	17	5
Digital Contracts and Agreements	3	2	2	3	2	2	3	17	5
Training	2	1	3	3	2	3	3	17	5
HRIS	3	2	2	3	2	2	3	17	5
Payroll	3	1	3	3	1	2	3	16	6
Mobile Devices	2	1	3	3	2	2	3	16	6
Network Services	1	1	2	3	3	3	3	16	6
WAN Connectivity	3	1	3	3	2	2	2	16	6
Digital Logbooks	3	1	2	3	2	2	2	15	7
O365	3	1	2	2	2	2	3	15	7
Policies & Procedures	1	1	2	2	3	3	3	15	7
Data Analytics & Visualization	1	2	3	3	2	1	3	15	7
DR/BCP	1	1	2	3	2	2	3	14	8
Governance	1	1	2	2	3	2	3	14	8
Work from Home	1	1	2	2	2	3	2	13	9
Open Data	1	2	2	2	2	1	3	13	9

9.0 Appendix 2 Project Manager / Business Analyst (PM/BA) Job Description

9.1. JOB DESCRIPTION: Project Manager/Business Analyst

Summary: Responsible for the analysis of business solutions and business requirements, recommending solutions and improvements to business processes, developing project plans and implementing them. Provides business solutions support by working with the business units and the vendors to resolve issues. Analyzes business solutions and business processes to determine potential systems integration opportunities.

Location: Municipal Administration Centre

Department: Administration

Reports To: Treasurer/Director of Finance/Chief Financial Officer

Supervises: None

Last Updated: December 2020

Education & Experience Requirements

University degree related to area of responsibility.

Recognized Business Analyst certification such as Certified Business Analysis Professional (CBAP).

Recognized Project Management certification such as Project Management Professional (PMP).

Knowledge and experience of business solutions software.

A minimum of 3 years' experience in an IT Business Analysis or Project Management role.

Required Skills & Competencies

Including, but not limited to, the following:

Project Management

Takes full responsibility for the definition, documentation, and successful completion of complex projects (typically with significant business, political, or high-profile impact, and high-risk dependencies). Identifies, assesses, and manages risks to the success of the project.

Ensures that realistic project plans are maintained and ensures regular and accurate communication to stakeholders.

Adopts appropriate project management methods and tools whether predictive (plan-driven) or adaptive (iterative/agile) approaches.

Ensures quality reviews occur on schedule and according to procedure.

Manages the change control procedure and ensures that project deliverables are completed within agreed cost, timescale, and resource budgets, and are signed off.

Provides effective leadership to the project team and takes appropriate action where team performance deviates from agreed tolerances.

Business Analysis

Takes full responsibility for business analysis within a significant segment of an organization where the advice given, and decisions made will have a measurable impact on the profitability or effectiveness of the organization.

Takes responsibility for investigative work to determine business requirements and specify effective business processes, through improvements in information systems, information management, practices, procedures, and organization change.

Selects, adopts, and adapts appropriate business analysis methods, tools and techniques, selecting appropriately from predictive (plan-driven) or adaptive (iterative/agile) approaches.

Collaborates with stakeholders at all levels in the conduct of investigations for strategy studies, business requirements specifications and feasibility studies.

Prepares business cases that define potential benefits, options for achieving these benefits through development of new or changed processes, and associated business risks.

Requirements Definition and Management

Plans and drives scoping, requirements definition and prioritization activities for large, complex initiatives.

Selects, adopts, and adapts appropriate requirements definition and management methods, tools and techniques selecting appropriately from predictive (plan-driven) or adaptive (iterative/agile) approaches.

Obtains input from, and formal agreement to, requirements from a diverse range of stakeholders.

Negotiates with stakeholders to manage competing priorities and conflicts; establishes requirements baselines.

Ensures changes to requirements are investigated and managed; contributes to the development of organizational methods and standards.

Business Process Improvement

Analyzes and designs business processes.

Identifies alternative solutions to exploit new technologies and automation.

Develops graphical representations of business processes to facilitate understanding and decision-making.

Assesses the feasibility of business process changes and recommends new approaches.

Manages the execution of business process improvements.

Selects, tailors, and implements business process improvement methods and tools at program, project and team level, in line with agreed standards.

Contributes to the definition of organizational policies, standards, and guidelines for business process improvement.

Business Process Testing

Designs and manages tests of new/updated processes.

Specifies test environment for whole lifecycle testing (for example, using a model office concept).

Manages selection/creation of relevant scenarios for testing and ensures that tests reflect realistic operational business conditions.

Ensures tests and results are documented, reported to stakeholders and are available for specification of user instructions.

Highlights to business stakeholders, issues and risks identified during testing.

Provides specialist guidance and advice to less experienced colleagues and users to ensure that tests are conducted in an appropriate manner.

Change Implementation Planning & Management

Creates the business readiness plan, taking into consideration IT deployment, data migration, capability deployment (training and engagement activities) and any business activities required to integrate new digital processes or jobs into the "business as usual" environment.

Determines the readiness levels of business users with regard to upcoming changes; uncovers readiness gaps and creates and implements action plans to close the gaps prior to going live.

Assists the user community in the provision of transition support and change planning and liaises with the project team.

Monitors and reports progress on business readiness targets, business engagement activity, training design and deployment activities, key operational metrics and return to productivity measures.

Defines the series and sequence of activities to bring stakeholders to the required level of commitment, prior to going live.

Application Support

Identifies and resolves issues with applications, following agreed procedures.

Uses application management software and tools to collect agreed performance statistics.

Carries out agreed applications maintenance tasks.

Systems Integration and Build

Identifies, evaluates, and manages the adoption of appropriate tools, techniques and processes (including automation and continuous integration) to create a robust integration framework.

Leads integration work, in line with the agreed system and service design.

Monitors and reports on the results of each integration and build.

Designs and builds integration components and interfaces.

Contributes to the overall design of the service and the definition of criteria for product and component selection.

Contributes to development of systems integration policies, standards, and tools.

Systems Installation/Decommissioning

Undertakes routine installations and de-installations of items of hardware and/or software.

Takes action to ensure targets are met within established safety and quality procedures, including, where appropriate, handover to the client.

Conducts tests of hardware and/or software using supplied test procedures and diagnostic tools.

Documents details of all hardware/software items that have been installed and removed so that configuration management records can be updated.

Provides assistance to users in a professional manner following agreed procedures for further help or escalation.

Reviews change requests.

Maintains accurate records of user requests, contact details and outcomes.

Problem Management

Initiates and monitors actions to investigate and resolve problems in systems, processes, and services.

Determines problem fixes/remedies.

Assists with the implementation of agreed remedies and preventative measures.

Relationship Management

Identifies the communications and relationship needs of stakeholder groups.

Translates communications/stakeholder engagement strategies into specific activities and deliverables.

Facilitates open communication and discussion between stakeholders, acting as a single point of contact by developing, maintaining, and working to stakeholder engagement strategies and plans.

Provides informed feedback to assess and promote understanding.

Facilitates business decision-making processes.

Captures and disseminates technical and business information.

Other

Undertakes special projects.

Complies with Municipality of Kincardine policies and procedures.

Complies with Municipality of Kincardine's and the Occupational Health and Safety Act Regulations.

Performs other tasks as assigned by management.

Working Conditions: To be supplied by client

Physical & Mental Demands: To be supplied by client

Employment Information: To be supplied by client

10.0 Appendix 3 – PGC's Rationale, Efficiencies and Next Steps

10.1. Governance

PGC Recommended Priority: **1**

Kincardine Priority: **Not Assessed**

10.1.1. Rationale for PGC Recommended Priority

Currently, decisions about technology solutions are made either independently by departments or through the budget process. This leads to different systems performing similar tasks, some departments having digital solutions while others don't, and costs for technology being dispersed across the organization.

Establishing a formalized IT governance process (the way in which IT decisions are made) is a proven way of aligning and improving IT decision-making and ensuring that the expected benefits from the technology investments are being realized.

10.1.2. Efficiency Gain

By establishing the appropriate governance model, the following benefits may be realized:

Ensuring that technology investments align with the corporate priorities.

Eliminate duplication of software.

Ensure that projects are managed efficiently and effectively and delivered on time and within budget.

Ensure that expected benefits from technology investments are being realized.

Ensure that the right investments are being made to support staff in the delivery of their services in an efficient and cost-effective way.

10.1.3. Next Steps

Establish a corporate IT Steering Committee.

Establish a corporate IT Governance Framework.

10.2. Business Analysis / Project Management

PGC Recommended Priority: **2**

Kincardine Priority: **Not Assessed**

10.2.1. Rationale for PGC Recommended Priority

Currently, a role does not exist that has the responsibility for helping business units implement, support and evolve business solutions capabilities. As well, there are no business analyst roles to assist business units in exploring and understanding business problems and opportunities, to scope out projects and build business cases. Both of these represent critical gaps and a potential obstacle in moving forward with a digital transformation program.

In order to drive the maximum value out of current and future technology investments, there is a requirement for a staffing resource to fill this critical gap. It is envisioned that the role would be responsible for the following:

- Building strong relationships with business units and supporting them in the use of the business solutions.
- Supporting departments in identifying business requirements for technology-related projects and leading the implementation of projects.
- Applying the principles of business analysis in the requirements gathering, planning and re-engineering of business processes and practices and converting these requirements into technology requirements.
- Implementing new project governance processes that will increase the successes of IT projects.

A draft job description for the role can be found in Appendix 1.

10.2.2. Efficiency Gain

Some of the potential efficiency gains from filling this role are as follows:

- Business units will be more aware of technology capabilities and be able to determine which solution best meets their business needs resulting in potential efficiencies in the delivery of their services.
- Acquisitions will be justified through business case analysis thereby having the potential of mitigating wrong or poor decisions.
- Projects will be executed and managed more efficiently resulting in cost savings and efficiency gains.

There will be faster resolution to user issues / problems with existing business solutions because there would be a skilled resource on staff to assist in the problem resolution, thereby creating operational efficiencies through less non-productive time.

10.2.3. Next Steps

Establish robust Business Analysis and Project Management capacity / capability to help business units evaluate ideas and opportunities and plan and execute projects successfully

10.3. Wi-Fi Connectivity

PGC Recommended Priority: 3

Kincardine Priority: 1

10.3.1. Rationale for PGC Recommended Priority

The need for a reliable, wireless network capable of supporting workers remotely in the field or for connecting the municipal facilities that are not on the WAN is an essential component of the network. It would enable the ability to leverage the technology/business solution investments that have been made and to create operational efficiencies.

Currently, there are a variety of communication connection types and technologies being utilized. Wi-Fi is deployed within some facilities and is used by staff for mobility purposes within the building.

The Municipality does not have any Wi-Fi capabilities to enable remote workers in the field to connect to the network. If connectivity is required, staff will tether their device to their cell phone, but this is not capable of supporting access to the business solutions used by the Municipality.

While the Municipality does offer free Wi-Fi services in some if its facilities, this utilizes the Municipality's current internal network and staff resources to support and maintain.

Bruce Telecom, as mentioned previously, is a public utility that is wholly owned by the Corporation of the Municipality of Kincardine. They have made significant investments in building out the fibre optic and wireless infrastructure within the Municipality and beyond. Showing leadership in ensuring accessibility to the internet for the community, the Municipality has partnered with Bruce Telecom to provide free public WIFI in downtown Kincardine as well as at the Davidson Centre. This partnership could be further leveraged to provide free WiFi coverage in all municipality facilities, parks and other public spaces. This would not only provide free WIFI access for customers and participants but also could further enable connectivity for staff working in the field, at remote locations.

10.3.2. Efficiency Gain

The potential efficiency gains will be primarily operational efficiencies (staff time) and the potential for lower operational costs in the longer term. Staff would be able to access the network from their location of work and update the information in real-time.

Municipalities take different approaches when delivering public Wi-Fi. Some have built their own public Wi-Fi networks, committing their own resources and time to the work. In this area, Burlington has partnered with the local telco – Cogeco – which now provides public Wi-Fi in City facilities and in parks and other civic spaces.

In Burlington, a partnership with an organization with strong expertise has allowed citizens to receive a great service, from a provider with deep expertise, while IT resources can focus on other areas that are core competencies for them.

Given the pressures on internal IT resources, the Municipality should think strategically about the opportunities for partnership as it considers technology opportunities.

10.3.3. Next Steps

Meet with the appropriate Bruce Telecom representative and explore the possibilities of potentially leveraging their wireless network and understand where “under service” areas will still exist.

Explore the possibilities of creating a partnership and transferring the responsibilities for delivering public Wi-Fi to Bruce Telecom.

Build a Wi-Fi connectivity strategy and roadmap that address the Municipality’s current and future needs.

10.4. Network Services

PGC Recommended Priority: **1**

Kincardine Priority: **Not Assessed**

10.4.1. Rationale for PGC Recommended Priority

Currently, there is only a single staff person looking after all aspects of the technology ecosystem with the exception of the backup and restoration of the network data. That task has been out-tasked to MicroAge Basic, and the service being delivered to date is acceptable.

It is inconceivable for a single IT resource to be able to manage and support the entire ecosystem which includes all of the elements identified in each of the Municipal Technology Maturity Model (MTMM) layers. Considering the limited staffing resources and the complexity of the technology ecosystem, the Municipality should consider adopting a hybrid IT service operating model.

10.4.2. Efficiency Gain

Depending on the activities identified, some of the potential efficiency gains may be as follows:

The technology ecosystem would be much more secure through a managed security provider. This could mitigate potential hacks or security breaches and thereby avoid financial and data loss as well as damage to the Municipality's credibility in the eyes of the public.

It would enable the IT Specialist to be more strategically focused on high value tasks.

Problem resolution times could be reduced resulting in an efficiency gain.

10.4.3. Next Steps

The IT Steering Committee should identify and investigate the activities that could potentially be out-tasked. This would free up valuable time for the IT Specialist to allow for the opportunity to focus on more strategic and value-added activities.

Once the potential activities have been identified, undertake a cost benefit analysis to aid in the decision-making process.

10.5. WAN Connectivity

PGC Recommended Priority: **3**

Kincardine Priority: **6**

10.5.1. Rationale for PGC Recommended Priority

The need for a reliable, high-capacity wide area network (WAN) connecting the various municipal facilities is critical and foundational to the delivery of services, whether it be internal or external. It also enables the ability to leverage the technology/business solution investments that have been made and to create operational efficiencies.

Currently, there are a variety of communication types and technologies being utilized. The locations of the various business operations are dispersed over a large geographical area which creates a challenging communication environment. Some applications and business processes are affected by a lack of or limited WAN.

Bruce Telecom has made a significant investment in building out a high-capacity fibre optic network across the Municipality and beyond. They also have provisioned their network for wireless connectivity. With this infrastructure in place, the Municipality has the unique opportunity to leverage an already existing network and fast track the onboarding of other municipal facilities.

10.5.2. Efficiency Gain

The potential efficiency gains will be primarily operational (staff time) and the potential for lower operational costs in the longer term. One of the prerequisites prior to embarking on the optimizing and digitizing of a process, is a network that is high-performing, reliable and secure.

10.5.3. Next Steps

Create an inventory of all the municipal facilities that would need to be connected to the network.

Meet with the appropriate Bruce Telecom representative and explore the possibilities of working with them to create a municipal WAN.

Build a Connectivity Strategy and Roadmap that addresses the current and future needs.

10.6. Disaster Recovery / Business Continuity Plan (DR/BCP)

PGC Recommended Priority: **3**

Kincardine Priority: **8**

10.6.1. Rationale for PGC Recommended Priority

The Municipality has neither a documented and formalized Disaster Recovery (DR) nor a Business Continuity Plan (BCP). What is in place is a contract with a local service provider (MicroAge Basics) that looks after the backing up of the data and, if needed, the recovery of data. While this provides some level of comfort, the absence of documented and formalized plans is a critical risk.

In the event of a localized disaster, the Municipality must be in a position to recover in the shortest amount of time and to maintain credibility with citizens through the continuance of services, albeit at a potentially reduced level. This can only be achieved if there is a documented, formalized and approved Disaster Recovery and Business Continuity Plan. Equally important to having these plans, is the need to test them on a regular basis to ensure that recovery and continuity are achievable.

10.6.2. Efficiency Gain

The following are some of the potential efficiency gains as a result of having a documented and formalized Disaster Recovery and Business Continuity Plan in place:

Mitigation of damage to the Municipality's credibility.

Mitigation of downtime or outage resulting in the mitigation of financial or efficiency loss.

Easier and quicker recovery capability against a defined plan,

The ability to continue to deliver critical services to citizens resulting in reduced hardship to individuals.

10.6.3. Next Steps

Undertake the development of a Disaster Recovery and Business Continuity Plan.

Have the plans formally approved.

Test the plans on a regular basis, identify deficiencies and take the appropriate steps to resolve the deficiencies and update the plans.

10.7. Intranet

PGC Recommended Priority: 4

Kincardine Priority: 5

10.7.1. Rationale for PGC Recommended Priority

At the start of the Pandemic, staff made the concerted effort to provide up to date communications available online. Also, online forms were made available as well as emergency management messaging. With no clear ownership, the site has not been consistently updated resulting in staff no longer using it for information.

10.7.2. Efficiency Gain

The following are potential efficiency gains as a result of implementing a corporate Intranet:

Staff can easily access the appropriate forms needed resulting in operational efficiencies and cost savings.

Staff have the ability to collaborate with other staff resulting in increased operational efficiencies.

Staff would have access to various knowledge bases which would enable them to resolve questions or issues in less time resulting in cost savings and efficiency gains.

It would act as an engagement platform for keeping staff connected with what is going on organizationally resulting in a more informed and knowledgeable workforce.

10.7.3. Next Steps

Upon approval by the IT Steering Committee, undertake the development of a Corporate Intranet Strategy and Roadmap seeking input from key stakeholders along with representation from staff. In addition to content creation and maintenance, consideration should be given to roles and responsibilities. Who has overall responsibility for the Intranet, who manages content (determines appropriateness, look and feel etc.) and who maintains the content (including updating, archiving and deleting.)

10.8. Training

PGC Recommended Priority: 4

Kincardine Priority: 5

10.8.1. Rationale for PGC Recommended Priority

The Municipality has made significant investments in technology and business solutions such as Esri, Laserfiche, ActiveNet, CityWide, Cityworks and Microsoft 365, yet staff have not been fully trained nor do they understand the solutions' capabilities. This may lead to operational inefficiencies and increased costs.

Training is not the sole responsibility of IT. IT is typically responsible for training related to the use of hardware (PCs, laptops, etc.) and, in most cases, the common productivity tools. It is the solutions owner, process owner or a subject matter expert (SME) that should be delivering the training on the solutions in use. Currently, there is no one accountable for the delivery of technology and/or solutions training.

Establishing a training program early on in the priority listing will enable the Municipality to start to realize some of the benefits and operational efficiencies from the investments made.

10.8.2. Efficiency Gain

Having staff fully trained in the use of the technologies and business solutions that are provided, will create not only an informed and knowledgeable workforce, but also lead to operational efficiencies, e.g., an accounts payable clerk who understands the complete process will most likely process more transactions and resolve process and transaction issues on their own.

10.8.3. Next Steps

Develop a formal Corporate Technology and Solutions Training Strategy and Roadmap with input from staff, the owners of the technology solution, the Subject Matter Experts and possibly the Vendors.

10.9. Microsoft 365 (O365)

PGC Recommended Priority: **4**

Kincardine Priority: **7**

10.9.1. Rationale for PGC Recommended Priority

The Municipality has been a user of Microsoft Office products for a number of years and are currently in the process of migrating to Microsoft 365 (formerly Office 365). Microsoft has made a significant investment in modernizing its products and, as a result, the product is no longer referred to as a suite of applications but instead a collaboration platform.

Microsoft 365 capabilities include broader access to up-to-date Office products (staff can install on various devices, including tablets and phones) as well as OneDrive (Cloud file storage and sharing), SharePoint (document and records management and collaboration, including version control), Microsoft Teams (digital meetings, chat and discussion) and numerous other collaboration capabilities (e.g., Kanban boards (Planner), workflows (Flow, SharePoint)) and more.

These new tools can provide the modern collaboration environment that management and staff have identified as “important needs”. This platform can also be used to connect outside workers digitally to the organization, by providing accounts and access to services from their personal devices.

It is important that the Municipality recognizes the significant impact of this change and focuses on change management for staff and that staff receive the proper training for the tools.

10.9.2. Efficiency Gain

The potential efficiency gains will be primarily operational efficiencies (staff time).

As Microsoft 365 is a Cloud-based service, staff will always have access to the latest product releases. Previously, staff resources would be required to do a physical upgrade on each of the PCs or laptops. Now that it is in the Cloud, there are no installations thereby freeing up IT resources.

Staff will also become more productive, i.e., documents can be created collaboratively in SharePoint and Teams allows for digital meetings and chat.

10.9.3. Next Steps

Develop a Microsoft 365 implementation roadmap and execute.

Manage the changes effectively with staff.

Ensure that staff receive timely and relevant training in the platform tools.

10.10. Mobile Devices

PGC Recommended Priority: **5**

Kincardine Priority: **6**

10.10.1. Rationale for PGC Recommended Priority

During the discovery phase, there were concerns raised by staff that they did not have the appropriate technologies to do their jobs, e.g., staff were often using their own personal cell phones for work-related activities as the Municipality did not provide them. This allowed for a gap to be bridged in the short term but is not a long-term solution. The use of staff's own personal devices creates vulnerabilities for the Municipality and is a high risk from a security perspective in the absence of policies and a mobile device management solution.

The Municipality also has a mix of end user technologies in its ecosystem ranging from traditional PCs, to laptops, tablets and a limited number of smartphones. In the event of a disaster / pandemic crisis, staff should have the ability to pivot to any location by having the proper technology. Pivoting becomes a challenge if traditional PCs are being used.

10.10.2. Efficiency Gain

By having standardized mobile technologies, staff will become more efficient in the delivery of their functions which may result in lower operational costs.

Data can be captured in the field thus eliminating the need to write it down and then come back to the office to enter it.

By deploying a mobile device management solution, the Municipality would be able to locate and, if needed, remotely lock and/or erase a device in the event of it being lost thereby protecting critical business data.

10.10.3. Next Steps

Develop a Mobile Device Strategy and Roadmap with input from users.

Create the appropriate policies and procedures.

Re-evaluate the use of traditional PCs and consider the deployment of laptops in their place.

Acquire the appropriate technologies to allow for mobile device management.

10.11. Work From Home Program

PGC Recommended Priority: **5**

Kincardine Priority: **9**

10.11.1. Rationale for PGC Recommended Priority

The rationale for advancing this item, is specifically tied to the current pandemic crisis. The Municipality adapted rather quickly to the changing environment and was able to provision the appropriate staff with technology to enable them to work from home during the crisis. Looking forward, the Municipality needs to ensure that the technologies deployed are capable of addressing staff needs should a crisis arise, i.e., the deployment to users of laptops instead of traditional desktops.

10.11.2. Efficiency Gain

Benefits of establishing a work from home program include remote workers typically have more time and fewer distractions which leads to increased productivity and in the event of a crisis (i.e., COVID-19), staff would be able to pivot quickly and continue to carry on their jobs with few limitations.

10.11.3. Next Steps

Develop a strategy, roadmap, and implementation plan.

Develop related policies, procedures and any staff-related agreements.

Upgrade the technologies used for allowing staff to connect into the network remotely. All access should come through a secured single point of entry and not via a user's desktop PC.

Close attention needs to be paid to Cyber Security.

10.12. Human Resource Information System (HRIS)

PGC Recommended Priority: 6

Kincardine Priority: 5

10.12.1. Rationale for PGC Recommended Priority

Currently, the Municipality does not have an HRIS solution, and the manual process is labour intensive, inefficient and creates increased operational costs as the Municipality grows.

The implementation of a comprehensive HRIS solution is critical to the Municipality's ability to manage the employee lifecycle. The solution would typically include all aspects of managing the employee database and directory, applicant tracking, benefits administration, payroll processes, work scheduling, time and attendance, leaves tracking, electronic signatures, compliance protocols, customizable insight reports, employee self-service, performance and more. The solution will need to be tightly integrated with any of the other Municipality's solutions that use employees in the delivery of a service.

The Municipality uses HRdownloads for the creation of policies and some legislated training. The solution is appropriate for its intended use.

10.12.2. Efficiency Gain

The anticipated efficiency gains would be:

Increased efficiencies and lower operational costs.

More accurate and up-to-date employee data via self-service options.

Automated and workflow capabilities.

Digital time entry reporting.

More timely and better reporting capabilities.

Tracking and maintaining certificates and licenses.

Training / learning management.

10.12.3. Next Steps

Develop an HRIS strategy and roadmap with input from the appropriate staff.

Develop a requirements document to be used as input into the RFP process for the acquisition of a solution.

Document the existing process used to support HR and Payroll.

Create and issue an RFI to understand what is currently available (if appropriate).

Create and issue an RFP for the acquisition.

10.13. Payroll

PGC Recommended Priority: 6

Kincardine Priority: 6

10.13.1. Rationale for PGC Recommended Priority

Currently, the Municipality uses Easypay and Easystub to process employee payroll. Staff identified a number of concerns regarding the solution:

The solution is interfaced with Keystone Payroll. As noted below in 10.14, Keystone is a legacy system that will ideally be replaced in the near future.

Time capture and entry is a manual process.

If a new payroll system is acquired, it must be tightly integrated with the selected HRIS solutions.

The recommendation is that payroll be included in the requirements document for the HRIS.

10.13.2. Efficiency Gain

The anticipated efficiency gains would be:

Increased efficiencies and lower operational costs.

More robust self-service options for staff.

Automated and workflow capabilities.

Digital time entry at the source.

More timely and better reporting capabilities.

10.13.3. Next Steps

Undertake a fit gap analysis to determine where the gaps are in the existing solution.

Document the requirements for a new payroll system and include the identified gaps.

Document the existing process used to support HR and payroll.

Incorporate the payroll requirements as part of the HRIS requirements.

10.14. Core Financial System

PGC Recommended Priority: **6**

Kincardine Priority: **Not Assessed**

10.14.1. Rationale for PGC Recommended Priority

The Municipality utilizes a product called Keystone for its financial needs. The solution is older technology and there is a concern about the viability of the product going forward due to the fact that the company is relatively small.

There was no evidence of a roadmap for the solution. The solution is not integrated across many of the other platforms.

10.14.2. Efficiency Gain

The anticipated efficiency gains would be:

Increased efficiencies and lower operational costs.

Automated processes with workflow.

More timely and better financial reporting capabilities.

Improved integration across other core systems.

10.14.3. Next Steps

Undertake a fit gap analysis to determine where the gaps are in the existing solution.

Document the requirements for a new financial system and include the identified gaps.

Document the existing process used to support the Municipality's financial requirements.

Incorporate the payroll requirements as part of the HRIS requirements.

Create and issue an RFI to understand what is currently available.

If needed, create and issue an RFP for the acquisition.

10.15. Online Burn Permits

PGC Recommended Priority: **7**

Kincardine Priority: **2**

10.15.1. Rationale for PGC Recommended Priority

The Municipality does not have a licensing / permitting system which is typically part of a Land and Property Management Solution (LPMS).

At the time of this assessment, burn permits could only be obtained by going to the appropriate facility with the appropriate paperwork. Payment methods were either cash or cheque. There was no ability for an individual to apply and pay for a permit.

The need to provide an integrated online service that allows individuals to apply and pay for a burn permit online has been identified by staff.

10.15.2. Efficiency Gain

The anticipated efficiency gains would be:

Increased efficiencies and lower operational costs.

Increase in customer service.

Potentially increased revenues by more permits being taken out due to the convenience of applying and paying for a permit.

10.15.3. Next Steps

In the absence of a permitting system, any solution developed would be an interim step and, as such, the IT Steering Committee should be consulted to determine if this should proceed prior to a permitting solution.

A corporate strategy needs to be developed and approved regarding both the permitting solution and the technology that is to be used for any form of online payment. Consideration needs to be given to single payment engine and, if possible, leverage an existing payment engine found within one of the enterprise business solutions that the Municipality currently utilizes.

Real-time integration into the appropriate back-end business solutions is critical.

10.16. Land Property Management System

PGC Recommended Priority: **7**

Kincardine Priority: **Not Assessed**

10.16.1. Rationale for PGC Recommended Priority

A major gap in the Municipality's business systems layer is the lack of a corporate Land and Property Management System (LPMS) to coordinate land and property-based processes.

The LPMS would deal primarily with the following functional areas:

Land development.

Planning and zoning.

Permitting and inspections.

By-law enforcement.

Licensing and registrations.

Professional and personal licenses.

The system would be used by staff across the organization, including in Building, By-law, Planning, Engineering, Fire, Finance, Clerks and Legal.

The LPMS would replace the manual processes currently being used, simplifying the currently complex systems environment, streamlining business processes and mitigating the risk exposure due to the lack of process and data integration. Furthermore, the digitization could free a significant amount of office space currently occupied by paper records and street files.

This is a major, enterprise-wide, cross-functional initiative which will lead to the digitization of key business processes and support the delivery of modernized digital services.

Consideration should be given to implement online permitting and digital plans submission as part of this process. The initial focus is around building processes, with a plan to extend to online and mobile capabilities, implemented for Building and then to other business areas. This could be considered a phase 2 item, but it should be considered upfront to ensure whatever solution is selected can deliver this functionality in the near term as opposed to having to look for add-ons later.

Once the online capabilities (including digital plans submission) have been implemented in Building, these capabilities can be expanded to other business units – such as Licensing and By-law Enforcement.

10.16.2. Efficiency Gain

The following are some of the potential efficiency gains that may derived as the result of implementing an integrated LPMS:

Single solution serving multiple business areas thereby creating operational efficiencies and cost reductions.

Online self-service components create efficiencies for both the customer and staff because information is being sent electronically and managed through automated processes once received.

Digitization could free a significant amount of office space currently occupied by paper records and street files.

10.16.3. Next Steps

Develop a business case to justify the potential acquisition and implementation of a Land Management and Permitting System and seek approval from the IT Steering Committee to proceed with the development of a strategy and roadmap.

10.17. ActiveNet

PGC Recommended Priority: **8**

Kincardine Priority: **3**

10.17.1. Rationale for PGC Recommended Priority

ActiveNet's Recreation Management Solution is one of the more common solutions found within the municipal sector. The Cloud-based solution that the Municipality has elected to implement reduces the dependencies on internal IT staff and creates operational efficiencies for staff.

The system is operational but lacks a roadmap as to how the solution will evolve and be used by the organization.

10.17.2. Efficiency Gain

The potential efficiency gains as a result of the ActiveNet solution are as follows:

Operational efficiencies will be achieved because the solution is Cloud-based and hosted.

Cost reductions will be achieved because many of the services offered are self-serve online requiring very little staff intervention due to automated processes.

Reducing the number of printed guides and moving them online would create operational efficiencies and cost reductions. It's important to note that there would still be a requirement for a limited number of printed versions.

10.17.3. Next Steps

Create a roadmap with input from the key stakeholders as to how the solution will evolve and what new services are to be offered online to the citizens.

Ensure that staff are fully trained in the use of the solution to maximize the potential benefits of the investment.

10.18. Records Management

PGC Recommended Priority: **8**

Kincardine Priority: **4**

10.18.1. Rationale for PGC Recommended Priority

The Municipality acquired Laserfiche as its Records Management and Enterprise Content Management Solution.

The use of the system has been limited to date, resulting in an underutilization of the investment. The system is currently being used within the Clerks department to manage some of the corporate records. While the solution is operational, what seems to be lacking is a roadmap for how the system will be deployed and used across the organization, along with an appropriate licensing model and a plan for ongoing training for the users.

10.18.2. Efficiency Gain

Some of the potential efficiency gains from a fully deployed Records Management solution can be as follows:

There is one common repository for all structured and unstructured data that can be searchable to find specific information which creates operational efficiencies.

Management of records through automated processes creates operational efficiencies and cost reductions.

Having digital records will eliminate the need to have physical storage space somewhere for records, resulting in cost reductions.

10.18.3. Next Steps

Develop a roadmap with input from key stakeholders for the deployment of Laserfiche across the entire organization.

Develop the appropriate policies and procedures in support of the Laserfiche initiative.

Acquire the appropriate licensing so that users can gain access to the system.

Develop an ongoing training program for users of the system to ensure that they are fully utilizing the solution.

10.19. Digital Contracts and Agreements

PGC Recommended Priority: **8**

Kincardine Priority: **5**

10.19.1. Rationale for PGC Recommended Priority

The Municipality does not currently have a digital contract and agreement solution. They do have a digital signature solution and policy in place which is a major step towards fully implementing further digital documentation. The management of digital contracts and agreements should become part of the Records Management roadmap and implementation.

10.19.2. Efficiency Gain

The potential efficiency gains from having a digital contracts and agreement solution in place would primarily generate operational efficiencies. Leveraging the existing Records Management solution for this purpose would result in cost savings or avoidance.

10.19.3. Next Steps

With input from the appropriate stakeholders, define the requirements for a digital contracts and agreements solution.

Undertake a fit gap analysis to determine if the existing Records Management solution is capable of fulfilling the requirements.

Based on the outcome of the fit gap analysis, build the appropriate roadmap.

10.20. Policies and Procedures

PGC Recommended Priority: **8**

Kincardine Priority: **7**

10.20.1. Rationale for PGC Recommended Priority

Cleary defined policies and procedures play an important role in the administration and operation of a municipality. Established policies create a framework for decision-making and ensures there is consistency throughout the

municipality. Procedures or processes, on the other hand, define the manner by which something is accomplished. Within the complexities of the municipal ecosystem, there may be circumstances where procedures are actually embedded within a specific policy. Policies and procedures are intended to work in harmony with each other and act as a guiding resource for the day-to-day operations of a municipality.

As part of the discovery process, it was determined that there are very few documented policies and procedures in place which represents a significant risk to the Municipality.

10.20.2. Efficiency Gain

The primary efficiency gain by having defined policies and procedures will be operational efficiencies.

10.20.3. Next Steps

Identify the appropriate policies and procedures that need to be in place to support the digital transformation initiative.

With input from the key stakeholders, create and document the identified policies and procedures.

Obtain approval for Senior Management and/or Council on the appropriate policies.

Educate staff on the policies and procedural practices.

10.21. Geographical Information Systems (GIS)

PGC Recommended Priority: **9**

Kincardine Priority: **2**

10.21.1. Rationale for PGC Recommended Priority

The Municipality has leveraged the Esri GIS licensing that the county has in place and has an enterprise license agreement (ELA) in place for the product. Having an ELA in place enables the staff to access and use a broad range of Esri products that can assist in creating operational efficiencies.

10.21.2. Efficiency Gain

A fully implemented and operationalized GIS ecosystem will equip staff with the tools to manage spatial data efficiently and effectively, generating operational efficiencies and potential lower operational costs.

10.21.3. Next Steps

Develop a Corporate GIS Strategy and Roadmap so that there is clear understanding as to how the Municipality can leverage the power of GIS to assist in the digital transformation process and create efficiencies and lower operational costs.

10.22. Cityworks

PGC Recommended Priority: 9

Kincardine Priority: 3

10.22.1. Rationale for PGC Recommended Priority

Cityworks is currently used as an Asset and Work Management solution. The product was acquired by and utilized extensively within Public Works.

It should continue to be used and an investment should be made in staff training to ensure that they have the skills and knowledge to leverage the full capabilities of the system. Attention needs to be placed on ensuring that the solution is fully integrated with all of the other back-end systems and that the work processes have been optimized for efficiencies.

Prior to rolling the system out to other areas within the corporation, it is important to undertake an analysis of the business needs to determine if Cityworks would be a good fit.

10.22.2. Efficiency Gain

The potential efficiency gains are associated with operational efficiencies and potentially lower operational costs.

10.22.3. Next Steps

Develop a corporate roadmap for the deployment of Cityworks.

Undertake a fit gap analysis to determine if Cityworks can address some of the other corporate needs such as LMPS.

Continue to educate staff in the use of Cityworks to ensure that full benefits of the investment are being realized.

10.23. Data Analytics and Visualization

PGC Recommended Priority: **9**

Kincardine Priority: **7**

10.23.1. Rationale for PGC Recommended Priority

Data analytics and visualization technologies was determined to be for future consideration.

Given the availability of resources, it was determined that this was not of an immediate urgency but should be planned for some point in the future.

10.23.2. Efficiency Gain

The potential efficiency gains as a result of implementing data analytics and visualization technologies are as follows:

Supporting management and Council in monitoring and oversight of service quality through simple dashboards and data analytics.

Data analytics enables critical decision-making based on evidence and will enable the Municipality to prioritize high value investments.

10.23.3. Next Steps

Develop a strategy and roadmap to define how data analytics and visualizations can be used to make the Municipality more efficient through data-driven decision-making.

10.24. Digital Logbooks

PGC Recommended Priority: **9**

Kincardine Priority: **7**

10.24.1. Rationale for PGC Recommended Priority

In order to effectively deploy digital logbooks, the underlying infrastructure needs to be in place prior to embarking on an initiative of this type. With the existence of some gaps within the various MTMM layers, advancing a project of this nature is not possible.

10.24.2. Efficiency Gain

Potential efficiency gains from the deployment of Digital Logbooks are associated with both operational efficiencies and potential cost reductions.

Digital logbooks allow for the capturing of information at the source and if fully integrated in real-time the need to have the information entered into the back-end solutions are eliminated and thus create efficiencies.

Provides for consistencies in the type of information to be captured digitally which may lead to cost reductions.

10.24.3. Next Steps

Develop the necessary requirements of a Digital Logbook with input from key stakeholders.

Scan the marketplace for potential solutions that may meet the needs of the staff.

Any solution pursued must be capable of being fully integrated in real-time with the appropriate back-end solutions.

10.25. Open Data

PGC Recommended Priority: **10**

Kincardine Priority: **9**

10.25.1. Rationale for PGC Recommended Priority

To effectively manage and deliver an open data service, the appropriate resourcing needs to be available. Current resourcing is an impediment to the delivery and sustainability of an open data service.

10.25.2. Efficiency Gain

There are limited efficiency gains from the delivery of an open data service. The primary benefit would be operational efficiencies from the posting of data sets that are most frequently asked for by external consultants, businesses and residents.

10.25.3. Next Steps

When ready:

Develop a strategy and framework for an open data service with input from all internal key stakeholders.

Create the appropriate processes for the identification, release, and maintenance of the published open data sets.

Engage with the County to find opportunities to collaborate on creating a comprehensive collection of relevant data sets.

Engage with the various stakeholders to identify new data sets.

10.26. Customer Service Portal

PGC Recommended Priority: **11**

Kincardine Priority: **3**

10.26.1. Rationale for PGC Recommended Priority

Establishing a fully integrated and secure customer portal requires that all of the supporting back-end systems be in place, be fully integrated, and that all of the required workflow processes be defined, optimized and digitized.

Currently, there are a number of gaps in many of these areas which would act as an impediment to the implementation of a customer portal.

10.26.2. Efficiency Gain

There are numerous efficiency gains with the establishment of a customer portal. They all revolve around operational efficiencies and cost reductions. The following are a few of the more common operational benefits:

Customers leverage self-service online applications and do not require staff to process the request.

Automated processes complete the customer's transaction without the need for manual intervention.

Service is available 7 x 24 leading to increased customer satisfaction.

Payments can be processed automatically online resulting in lower costs.

10.26.3. Next Steps

Develop a strategy and road map for the creation of a fully integrated and secure customer portal.

11.0 Appendix 4 – Glossary of Terms

While this document is written in as plain a language as possible, some technical terms and acronyms are defined here to offer clarity.

Term	Explanation
Agile	An iterative approach to project management and solution development
Asset Management System	A corporate system that is used to manage a Municipality's assets
AV – Anti-Virus	Software to protect from virus infection
AVL – Automated Vehicle Location	GPS-based tracking of vehicles
Back-Office	An office or department where work is carried out to support the business of an organization, rather than being customer-facing
BI – Business Intelligence	Refers to technologies, applications and practices for the collection, integration, analysis and reporting of business information, and is designed to support better business decision-making
BIA – Business Impact Assessment	An assessment that considers the potential impact of a disaster situation or loss of service on business operations
Cityworks	The Municipality's Asset Management System
CIO	Chief Information Officer

Cloud	A general term for systems and data that are not located on the organization's premises. Access to these systems and data is achieved through the Internet
COP	Community of Practice
CRM – Customer Relationship Management	A generic system for case management that can be used for handling customer enquiries
Digital	Refers to a mindset, mode of operating, and delivery of services that takes advantage of modern technologies (web, app, social, mobile, data). These deliver improved experiences, business efficiencies and insights
Digitized	The automation of manual and paper-based processes, enabled by the digitization of information and workflows, moving from an analog (often paper-based) process to a computerized process
DR/BC – Disaster Recovery/ Business Continuity	A set of policies, procedures and practices that are designed to assist an organization recover from a significant IT failure
DRI – Directly Responsible Individual	The person ultimately accountable for a service, a product or a project
Records Management	A system designed to provide enterprise-wide document and records management capabilities
ERP – Enterprise Resource Planning	A system that is designed to address business requirements across the whole organization
GIS – Geographical Information Systems	Systems designed to capture and report on all types of geographical data, including spatial data
HCM – Human Capital Management	A corporate-wide system for managing the workforce and workforce management processes such as employee records, payroll, etc.

IA – Infrastructure Architecture	The hardware, software and other systems that comprise an organization's technology assets used to deliver IT services
ITGC – Information and Technology Governance Committee	Corporate governance committee for information and technology decision-making
ITIL – Information Technology Infrastructure Library	A set of detailed practices for delivering IT services
ITSM – Information Technology Service Management	The standards and processes used to define how IT delivers services
Keystone	The Municipality's Finance system
LAN – Local Area Network	Internal private connectivity between municipal facilities and devices
LPMS – Land and Property Management System	A land, planning, permitting and licensing system (e.g., CityView)
MTMM – Municipal Technology Maturity Model	Perry Group's generalized architecture used for assessing municipal technology environments
NG-911 – Next Generation 911	Modernized networks and capabilities for Canada's 911 systems
PMO – Project Management Office	A group that defines and maintains project management standards for an organization (PMO-Lite is a less onerous version that still allows standards but is not as formal)
PPM – Project Portfolio Management	The centralized management of all projects, potential and existing, to facilitate resource management, project delivery and status reporting

RPO – Recovery Point Objective	Refers to the amount of data at risk (that could be lost) after a failure or disaster occurs
RTO – Recovery Time Objective	The maximum tolerable length of time that a computer, system, network, or application can be down after a failure or disaster occurs
SAN – Storage Area Network	A dedicated high-speed device that interconnects and presents shared pools of storage devices to multiple servers
SLA – Service Level Agreement	Documented target levels of service (e.g., response and resolution timelines for incidents)
VOIP – Voice Over Internet Protocol	Modern telephony systems sharing computer networks
WAN – Wide Area Network	A collection of local-area networks (LANs) or other networks that communicate with one another. A WAN is essentially a network of networks, with the Internet the world's largest WAN.
WMS – Work Management System	The system used for managing an organization's work orders

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- - Trademarks acknowledged - -

Perry Group Consulting Ltd.

Digital Transformation Strategy

Supplementary Report: Business Process Review

March 22, 2020

www.perrygroupconsulting.ca
647-669-9540

Table of Contents

1.0 Version History

Version #	Date	Prepared By	Prepared For	Comments
1	March 20, 2020	P. Gunasekera	S. Chase	1st version of supplementary report
2	March 22, 2020	S. Chase	R. Baumann	Supplementary Report
3				
4				
5				

2.0 Introduction and Background

2.1. Introduction

Perry Group Consulting (PGC) is a firm that specializes in technology for municipalities. Our mission is *building better municipalities*, and we have worked with over 120 municipalities across Canada on technology strategy and planning work, business process optimization and solutions implementation.

Perry Group was hired by the Municipality of Kincardine (the "Municipality"), through an RFP process, to assist in the development of a Digital Transformation Strategy.

The project, which began in August 2020, was sponsored and run by the Municipality's Chief Administrative Officer.

In February 2021, the Municipality requested additional work to be included in the original project. This supplementary report is the outcome of the additional request.

3.0 Additional Work Requirement

Kincardine is interested in performing Business Process Optimization (BPO) of two of their key business processes. As an extension to the Digital Transformation Strategy work, the Municipality requested the Perry Group to review the following business processes:

- Document and Records Management Process
- Internal Procure-to-Pay Process

The requirement was to understand the current processes and identify improvement opportunities that could eliminate duplicate and low value steps. The objective was to design a future ideal business process including identifying the efficiencies and potential cost savings for the organization.

4.0 Methodology

The following four-step process methodology was adopted in the BPO work.

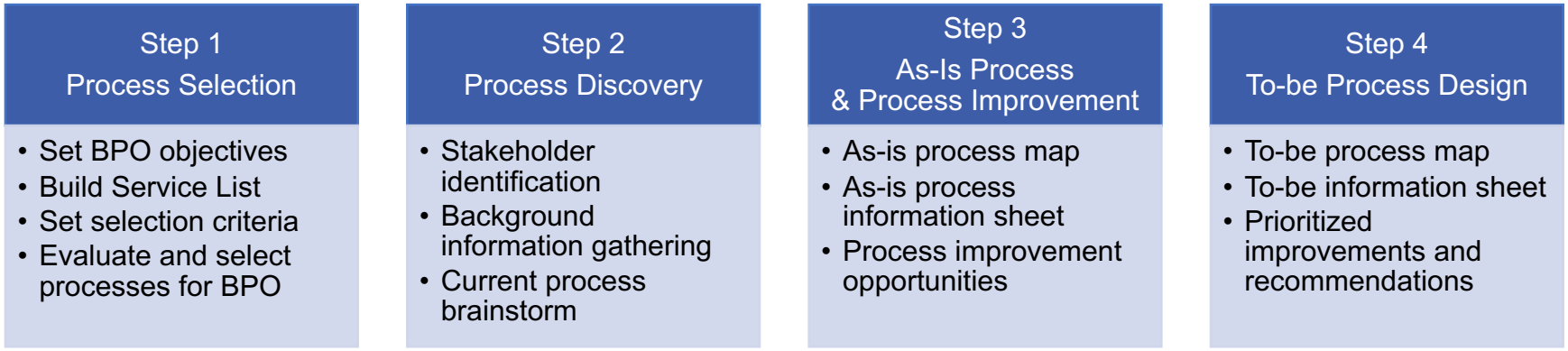


Figure 1-Business Process Optimization (BPO) Methodology

Step 1 – Process Selection

The Municipality selected the two business processes to be evaluated. The BPO selection criteria was not required.

Step 2 – Process Discovery

The next step involves a review of existing (as-is) processes. An as-is workshop (one for each process) was conducted for each of the 2 processes to understand and document the current (as-is) business processes and practices. The consultants used the Miro online process mapping tool (illustrated below) to capture, organize and share the steps in the process flow in real-time with the participants.

Figure 2-Sample Process Capture Using the Miro Tool During an As-Is Process Workshop

The challenges within the current process as well as high level ideas for improvement were identified and discussed during the as-is workshop.

Step 3 – As-Is Documentation and Improvement Identification

Following the workshops, the as-is business processes were documented and clarification was sought where necessary.

Use of paper forms within the process and the administrative activities with high potential for improvements and/or elimination were identified.

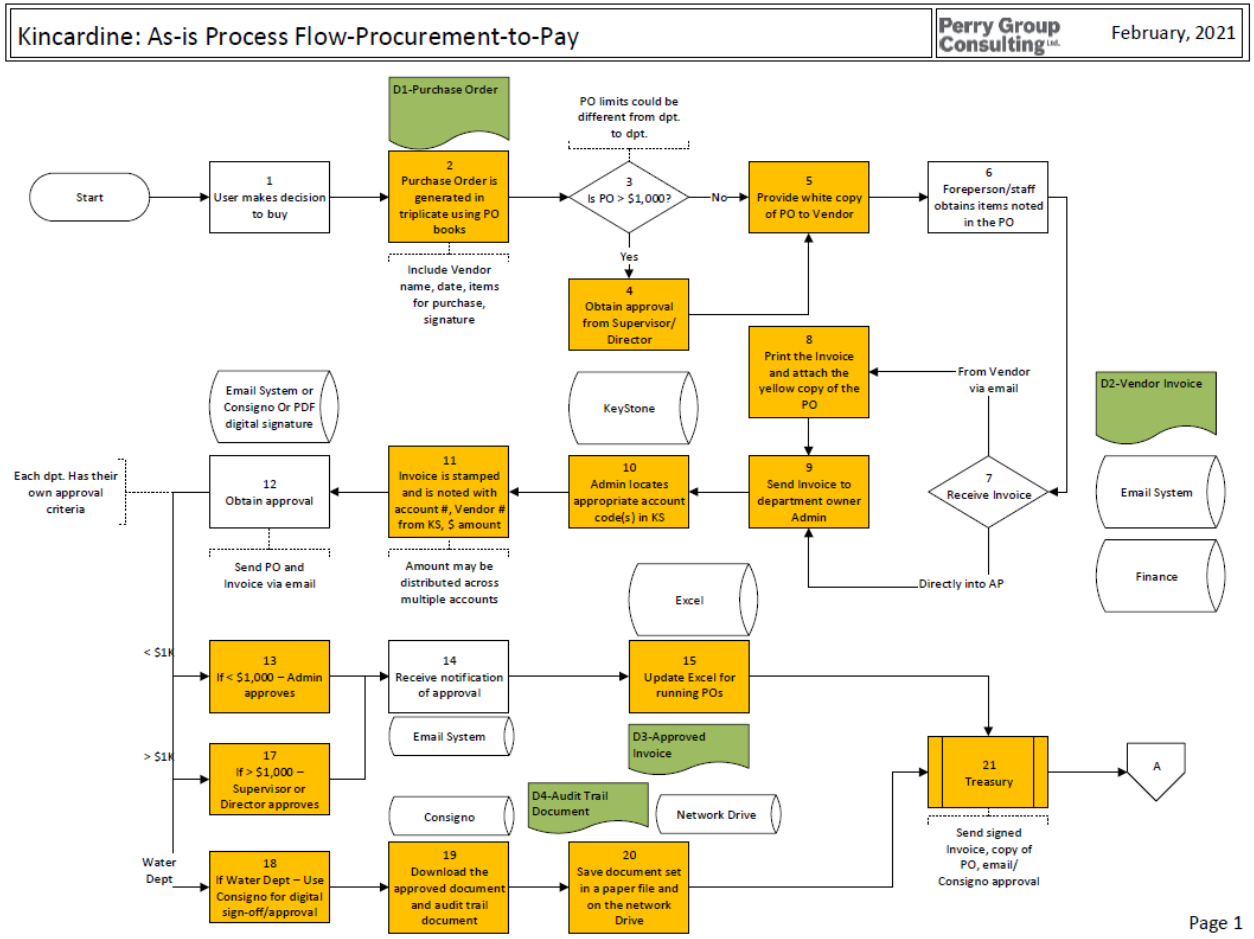


Figure 3-Sample As-Is Process Map

The as-is process maps were shared with the subject matter experts and teams for their review and any feedback was used to update the as-is documents to accurately reflect the current processes.

Step 4 – To-Be Process Design

Next, the consultants generated ideas for optimization for each process based on past experience, knowledge of municipal business processes, current as is process, participant inputs, objectives of the project and knowledge of business solution capabilities in the industry.

Process optimization workshops were then held with Kincardine staff for each process. During the workshops, the consultants shared potential and proposed changes to the process, explained the potential benefits and discussed the viability of proposed improvements.

Participant inputs were gathered to improve the proposed optimizations and to identify potential challenges that must be addressed for implementation to be successful.

The to-be process flows including preparing a to-be process information sheet were fully documented.

The as-is business process maps were updated to identify specific tasks that could be eliminated or improved (indicated in red in the figure below) as a result of the optimization.

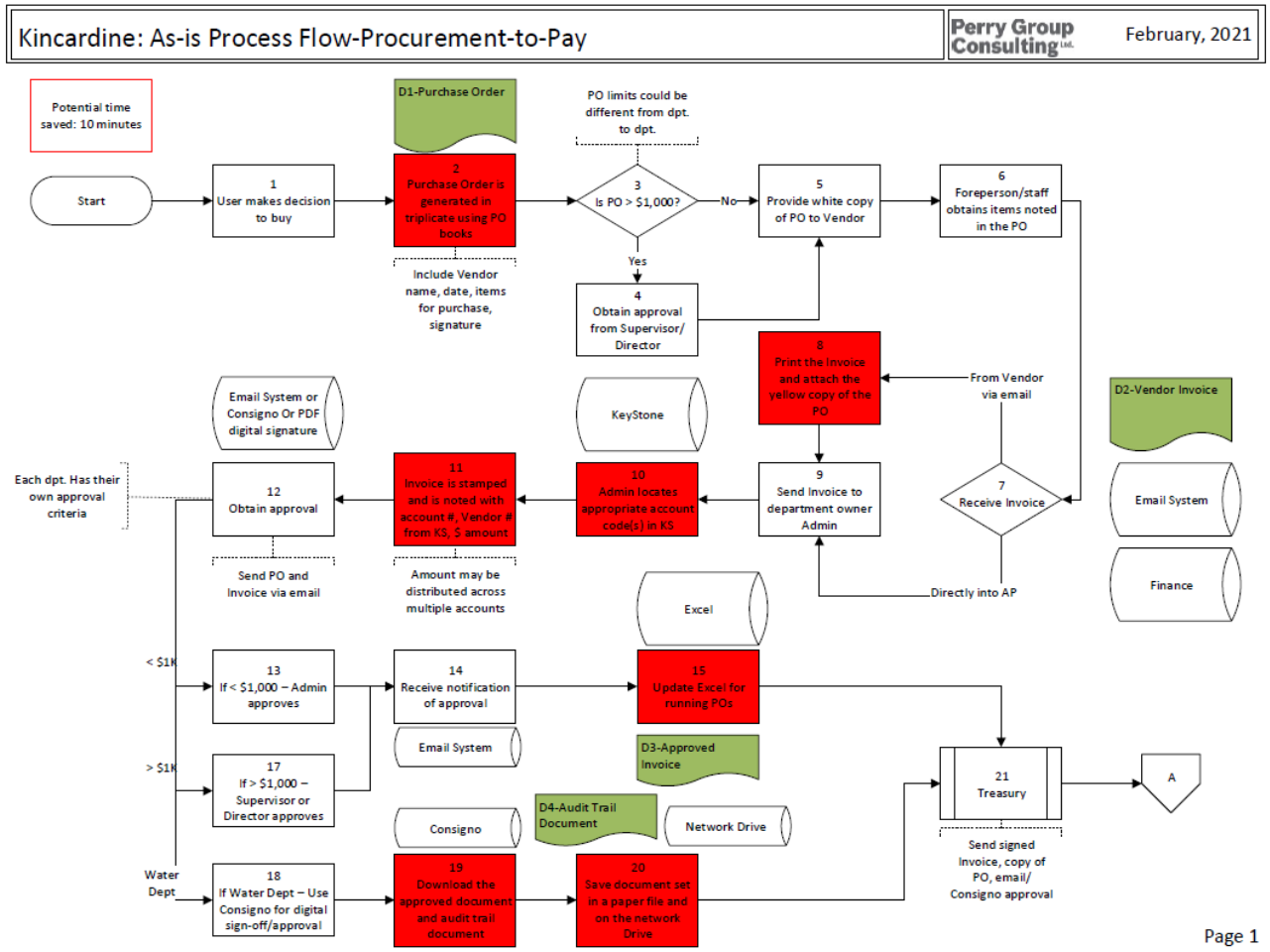


Figure 4-Sample As-Is Process Map with Eliminated Activities

Potential improvements to customer experience, potential staff time savings and the number of hardcopy documents that could be eliminated were identified.

A standard blended hourly rate for staff of $40 per hour was used to calculate the potential cost avoidance.

Potential time saved through the identified process improvements was converted into a potential cost avoidance value, using the blended rate.

Optimization benefits:

Annual # of transactions	Time saved per transaction	Hourly rate ($)	Cost avoidance ($)
3,400 Purchase Orders	The time spent on generating a PO would amount to the same as current	$40	$0
7,000 Invoices	20 minutes per invoice	$40	$93,000
500 Utility, Capital, Council Invoices special processing	15 minutes per invoice		$5,000

Other cost avoidance	Value ($)
Savings due to the reduction of paper use	Negligible

Total annual potential cost avoidance	Value ($)
Total cost avoidance	**$98,000**

Figure 5-Sample Optimization Benefits Quantified in the Information Sheet

- For both processes, a process optimization package was created and shared with each team for feedback.
- The feedback from each team was assessed and optimization packages were updated accordingly.

Findings and Recommendations

5.0 Findings and Recommendations

5.1. Documents and Records Management Process

Current Process

Kincardine has been using the Lasefiche (LF) records management system for many years. In the current environment, departmental users decide what documents should be declared as records and such records are sent to the Clerks department to be stored in the Laserfiche system. Currently, between 5 – 10 % of all documents are declared as records. The detail as-is process is available in the Appendix 1.

Process and Policy Recommendations: Recommending the following process and rule changes:

- Implement self-service records declaration by the end users.
- By default, the internal staff should generate documents within the Laserfiche (LF) environment (Folders)

People Recommendations**:** No changes to existing roles and staff positions are needed. A comprehensive change management combined with a training program should be executed along with the rollout of the Laserfiche self-service.

Technology Recommendations**:** The following improvements in the Laserfiche solution are recommended:

- Automatically apply metadata using the built-in features of LF E.g., Tokens, Templates, Class, workflows etc. https://www.youtube.com/watch?v=PRaHXQ6JWmw
- Integrate with business systems to pull business systems specific data into the metadata fields
- Use Folder templates, Document templates features in LF to automate the document creation process
- Use Dynamic fields in LF to simplify the metadata selection for staff
- Digitize existing paper-based records. E.g. Roll files in Planning, Building, By-law. A corporate-wide project should be initiated to digitize the paper records
- Integrate LF with business systems using the existing capabilities of LF: https://www.laserfiche.com/solutionexchange/how-to-plan-an-effective-laserfiche-integration/
- Implement event-driven cut off and retention to reduce the manual steps required in records declaration process
- Implement disposition workflows for departmental approval
- Evaluate automatic redaction features in Laserfiche for FOI requests
- Implement a public facing FOI request form using LF Forms and Workflow

- **Use LF Forms and Workflow for other business process automation needs. E.g. Accounts Payable, Accounts Receivable, Public facing forms etc.** This is an opportunity to use LF for process automation in other areas of the business. Not necessarily document management related.

Based on the above recommended technology changes, a potential future to-be process was documented. The to-be process flow is available in the Appendix 3.

Challenges: The following challenges have been identified:

- Access to all users could be a challenge. Currently, about 50% of the staff have access to LF
- The implementation of a records management system usually creates an inconvenience to the staff. This needs to be handled through the change management process
- There will be an additional cost to purchase/upgrade Laserfiche modules for the technology changes required
- Laserfiche does not integrate with some of the current systems (i.e. Keystone)

Assumptions:

- That the staff will embrace the changes.

Optimization benefits:

Current statistics:

- 4,000 – 5,000 records declared annually
- 300 – 500 records disposed annually

Currently about 5% of the documents are declared as records. In some departments this rate is lower and some departments the rate is higher. Assuming a cross departmental rate of 10%, the potential total number of records generated annually could be as high as 45,000. Similarly, the annual number of dispositions could be as high as 4,000. The as-is process was used to identify the potential time savings in specific activities through automation. Some of these activities could be eliminated and others can be improved to save staff time. The detail business process can be found in the Appendix 2.

These potential future numbers have been used for the calculation of potential future annual savings below.

Annual # of transactions	Time saved per transaction	Hourly rate ($)	Cost avoidance ($)
45,000 New records added	5 minutes	$40	$150,000
4,000 records disposed	5 minutes	$40	$13,333

Total annual potential cost avoidance	Value ($)
Total potential future annual savings	**$163,333**

Implementation Cost Estimates:

Description	Unit Cost	# of units	Total Cost
Additional LF user licences	$600 - $800/user	20 additional users	$12,000 - $16,000
Workflow and Forms Module	Included		$15,000
Integration: API toolkit	N/A	1	$2,000 - $3,000
Public Portal (Optional)	N/A	1	$40,000 - $50,000
Scan Connect (per scanner)	$150.00/scanner	5 scanners	$750.00
Vendor services: Training, Implementation, change management, configuration etc.	$1,200 - $1,500/Day	10 days	$12,000 - $15,000
Internal resources/Backfill:	TBD: Depends on the availability of internal		

Project Management, Business Process, Change Management, etc.	Project Manager/Resource		
Resources to digitize paper documents	TBD: Depends on the amount of paper records		

It is important to review the current licensing contract and the modules included, to understand the existing access and the availability of modules for the municipality. The numbers provided here are rough estimates. It would be beneficial to compare to the Laserfiche Cloud subscription option as well. The Cloud pricing of LF is provided here: https://www.laserfiche.com/products/pricing/

5.2. Internal Procure-to-Pay process

Current Process

The current procure-to-pay process is heavily dependent on manual activities. The following key process issues were identified:

- Paper-based Purchase Order (PO) books are in use
- Distributed varying levels of authority has been delegated to staff
- Manual spreadsheets maintained for multiple activities. E.g. Council expense tracking, GL distribution of utility payments, Holdbacks etc.

The detailed as-is business process is available in the Appendix 4.

Process and Policy Recommendations: Recommending the following process and rule changes:

- Purchase Orders should be required for purchases over the value of $300
- Review the Schedule that prescribes the purchases that don't require a PO. E.g. Legal and Engineering services
- At the time of generating the PO, assign account numbers as well

- Purchase Orders should commit the PO value in the account, providing the account owners, a real balance and commitments at all times. This could eliminate manual tracking of account balances by departmental staff
- Capture payment terms, holdback and Warranty details at the beginning of the process when the PO is generated

People Recommendations: None

Technology Recommendations**:** The following technology changes are recommended:

- Implement a digital Procure-to-Pay process. Review the capabilities of Keystone system first. If Keystone is not able to digitize the process, then consider building custom workflows using the Laserfiche workflow engine. It is important to interface with the Keystone data through direct integration or through access to Keystone data in a separate database. E.g. Keystone data are duplicated (automatically through batch jobs) on a daily basis into a separate database which is integrated with LF. Here is an example of a similar implementation: https://laserfiche.bayham.on.ca/Weblink/0/edoc/194229/April%2019,%202018%20-%20Council.pdf
- Allow departmental staff to generate a PO with a user-friendly interface
- The system should be mobile friendly and accessible anywhere, anytime
- Ability to lookup Vendors, GL Accounts
- Ability to attach documents: Quotes, Invoices, Contracts etc.
- Ability to configure the Purchasing By-law rules and best practices
- The system should integrate the PO generation with the Invoice processing
- Ability for Vendors to upload invoices via the Municipality's website
- Ability to extract AP data from the system to be loaded to the Keystone AP module
- Ability to process returns
- Ability to process Invoices without a PO
- The system should have a way to categorize the Invoices based on reporting requirements. E.g. Capital items, Grouping requirements (Council expenses, Divisional expenses etc.)
- Enable data analysis to identify combined/coordinated purchasing opportunities. E.g. Cleaning supplies
- Ability to report based on multiple criteria: Vendors, PO (balances), Invoices and balances, payments etc.
- A flexible workflow engine could accommodate future changes to the process

- Discuss the ability to download electronic bills from the utility companies (Hydro, Phone etc.) instead of the paper bills
- Discuss the ability to download billing data in Excel/csv format from the utility companies

Based on the above recommended technology changes, a potential future to-be process was documented. The to-be process flow is available in the Appendix 6.

Challenges: The following challenges have been identified:

- Keystone system does not have a data import feature in the AP module. Need to contact Keystone and understand their product development plans and future roadmap.
- Keystone PO module may not provide the features identified here. Perform a fit-gap analysis of the Keystone system with the identified improvements and discuss any 3rd party integrated systems that are available. Also review the capabilities of Laserfiche workflow engine and forms engine as a potential solution.
- Not all staff have access to Keystone. If the Keystone PO module is a good fit and implemented, access to Keystone should be extended to staff who would be generating POs and processing invoices.

***Assumptions*:**

- That the recommended ideal process flow could be implemented
- That the Keystone vendor would be flexible to build an AP data interface
- That the Laserfiche forms engine and workflow engine could be used in case Keystone system is not capable of digitizing the entire process.

***Optimization benefits*:**

The following cost avoidance opportunities were identified based on the activities which could be eliminated or improved in the current process through the end-to-end digitization of the process. The as-is process was used to identify the potential time savings in specific activities through automation. Some of these activities could be eliminated and others can be improved to save staff time. The detailed business process with savings identified, is found in the Appendix 5.

Annual # of transactions	Time saved per transaction	Hourly rate ($)	Cost avoidance ($)
3,400 Purchase Orders	The time spent on generating a PO would amount to the same as current	$40	$0
7,000 Invoices	20 minutes per invoice	$40	$93,000
500 Utility, Capital, Council Invoices special processing	15 minutes per invoice		$5,000

Other cost avoidance	Value ($)
Savings due to the reduction of paper use	Negligible

Total annual potential cost avoidance	Value ($)
Total cost avoidance	**$98,000**

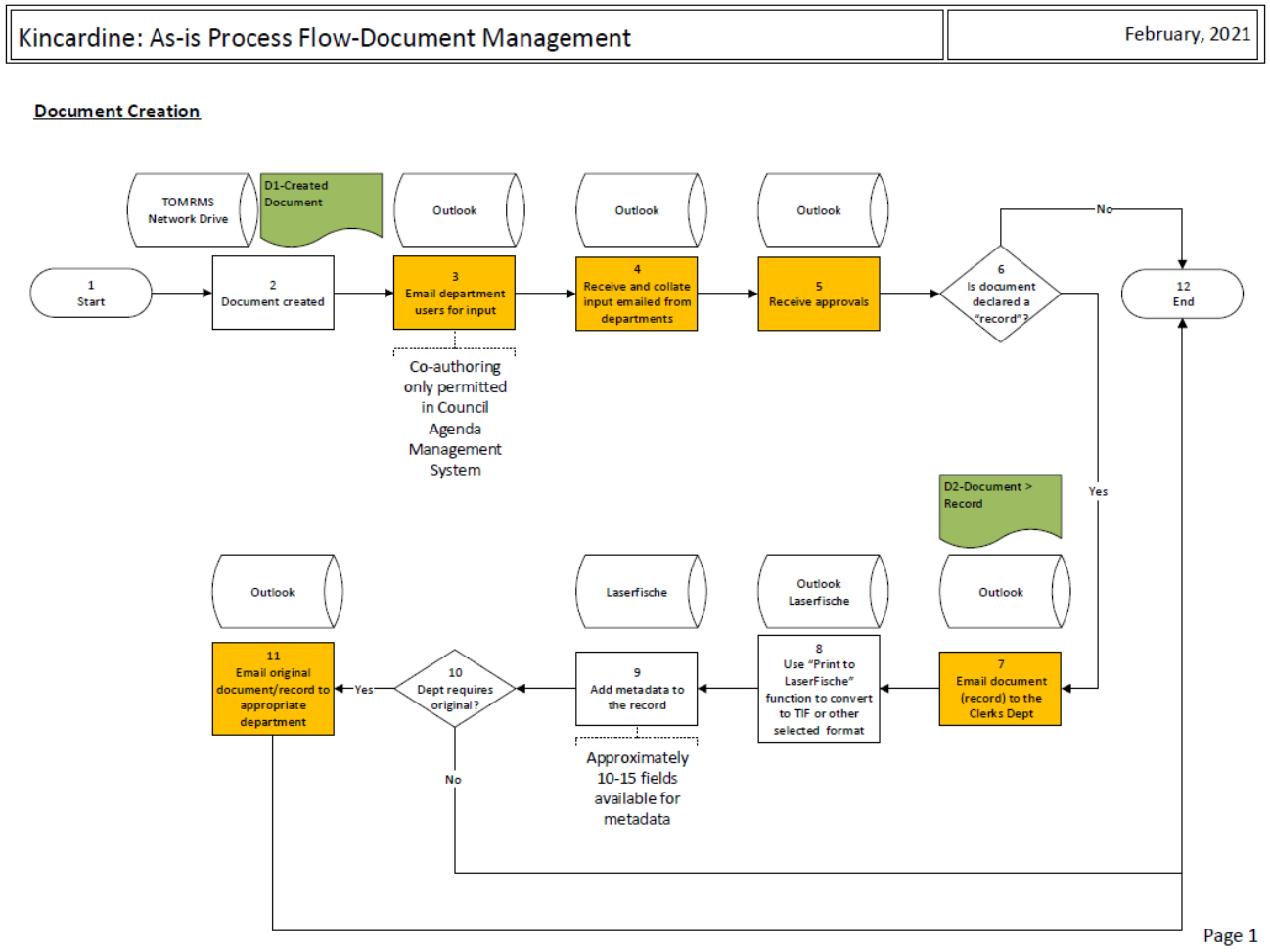
Implementation Cost Estimates:

If the Municipality decides to implement Laserfiche, the related costs are provided under the cost estimates for document and records management. There will be additional implementation costs related to vendor services and staff resources. The following table identifies the staffing and high-level vendor services costs:

Description	Unit Cost	# of units	Total Cost
Vendor services: Training, Implementation, change management, configuration etc.	$1,200 - $1,500/Day	10 days	$12,000 - $15,000
Internal resources/Backfill: Project Management, Business Process, Change Management, etc.	TBD: Depends on the availability of internal Project Manager/Resource		
Resources to digitize paper documents	TBD: Depends on the amount of paper records		

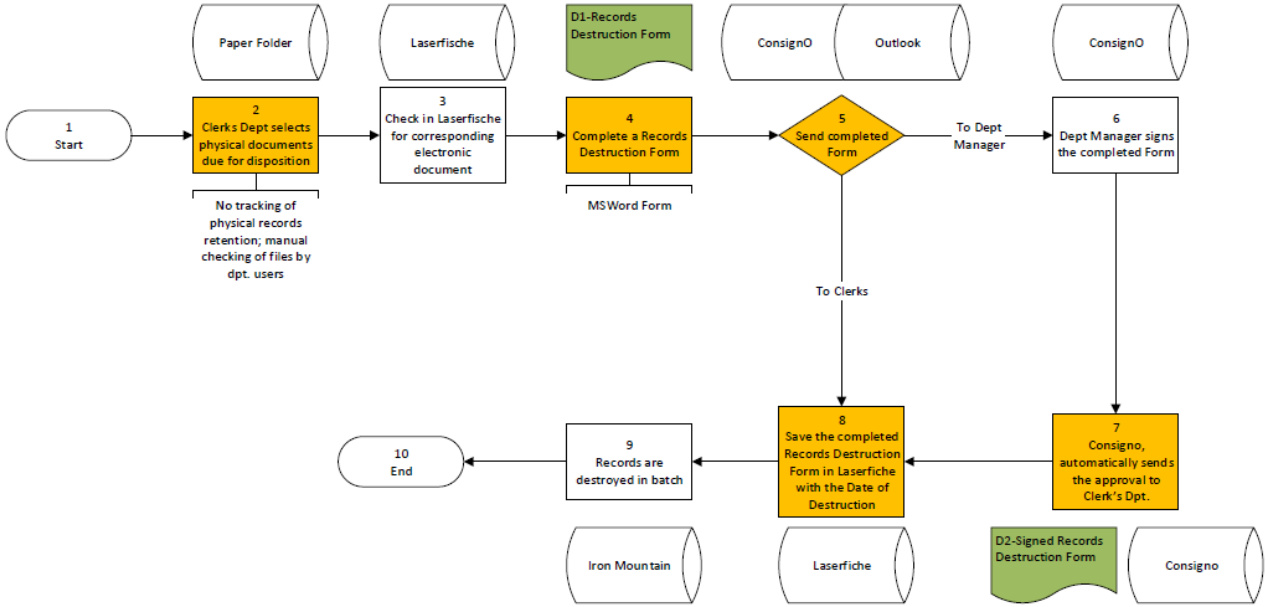
Appendices

6.0 Appendix 1 – Records and Document Management : As-is Process map



Kincardine: As-is Process Flow-Document Management	February, 2021

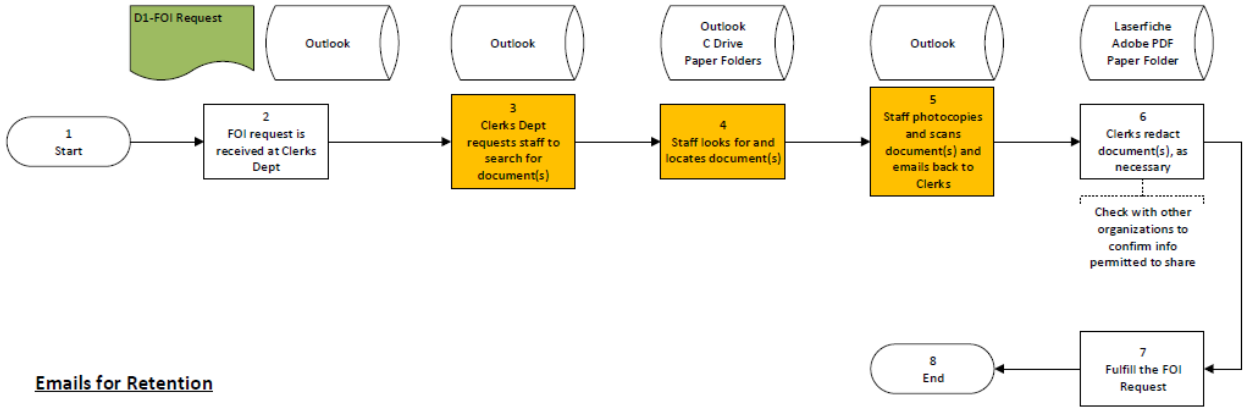
Document Disposition



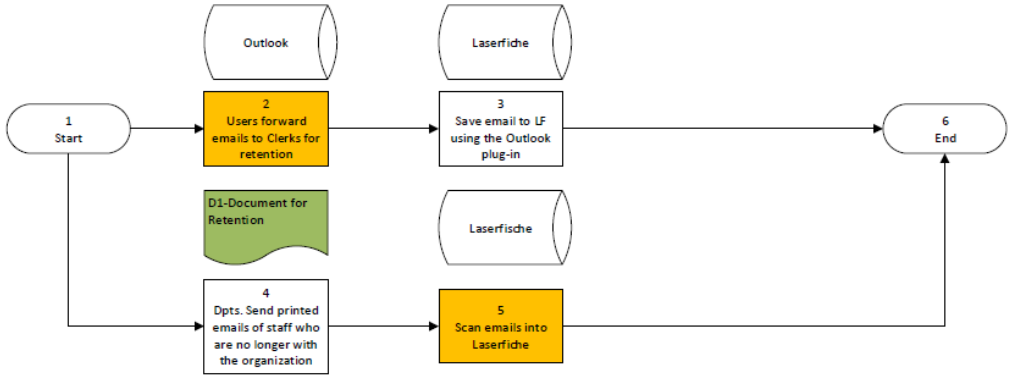
Page 2

Kincardine: As-is Process Flow-Document Management	February, 2021

Freedom of Information Requests

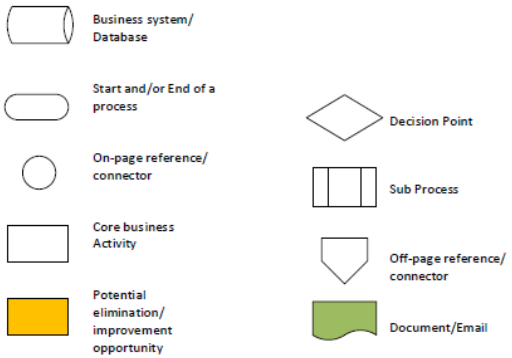


Emails for Retention



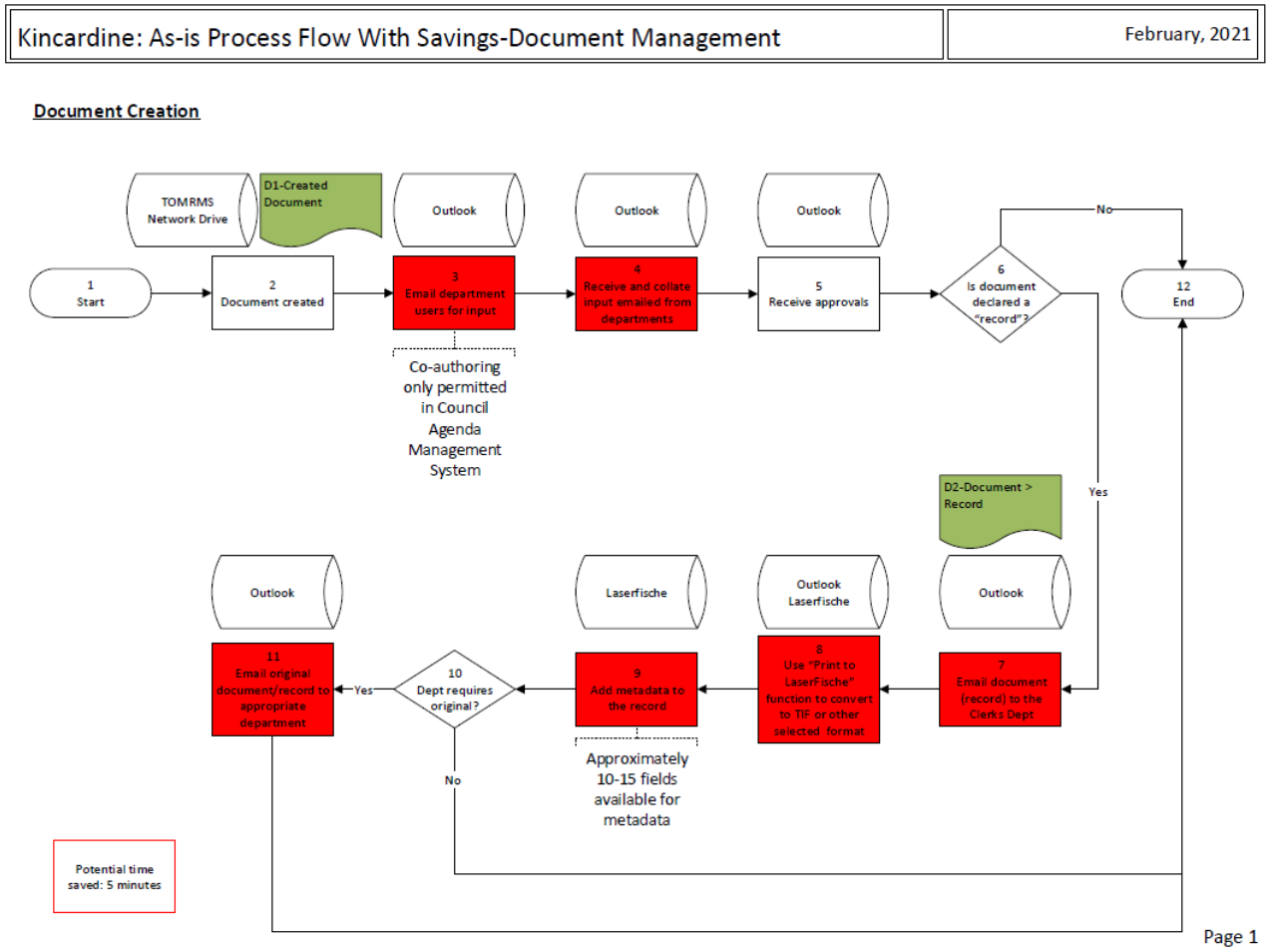
Page 3

FOI – Freedom of Information



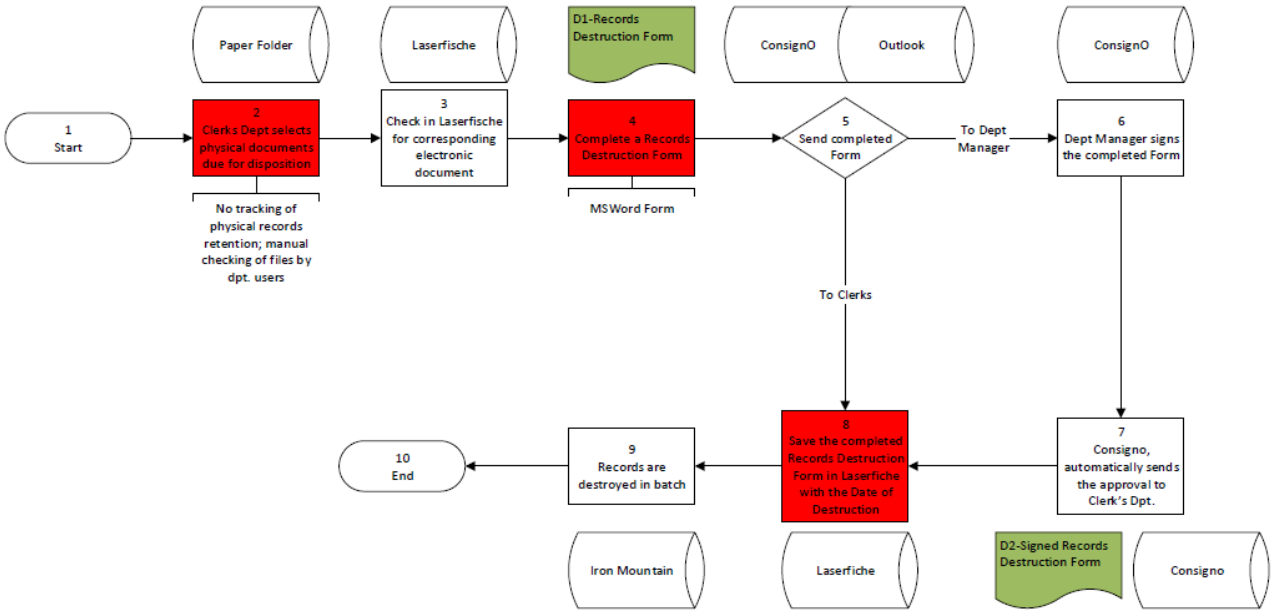
Page 4

7.0 Appendix 2 – Records and Document Management : As-is Process map with savings



Kincardine: As-is Process Flow With Savings-Document Management	February, 2021

Document Disposition

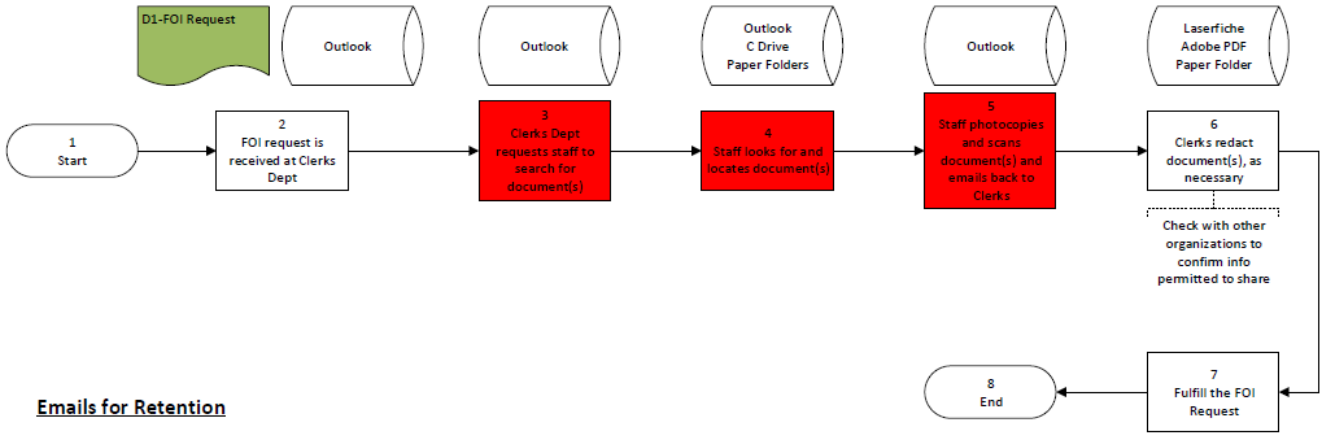


Potential time saved: 5 minutes

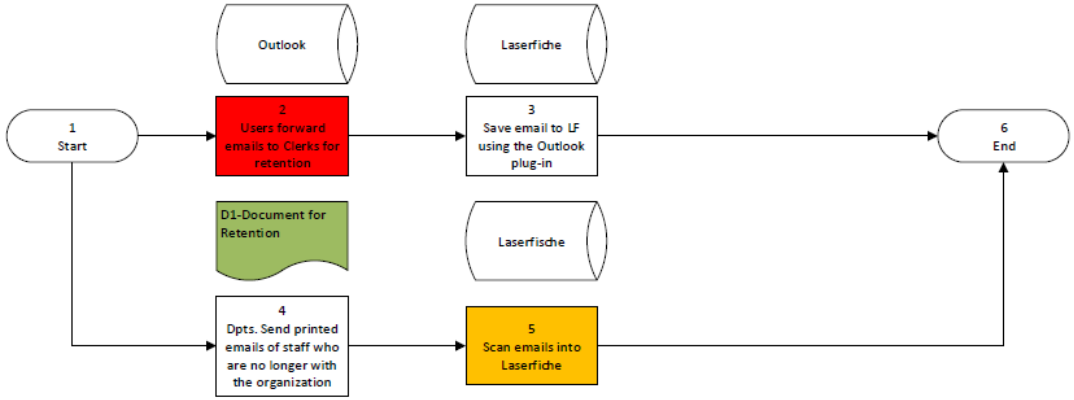
Page 2

Kincardine: As-is Process Flow With Savings-Document Management	February, 2021

Freedom of Information Requests



Emails for Retention



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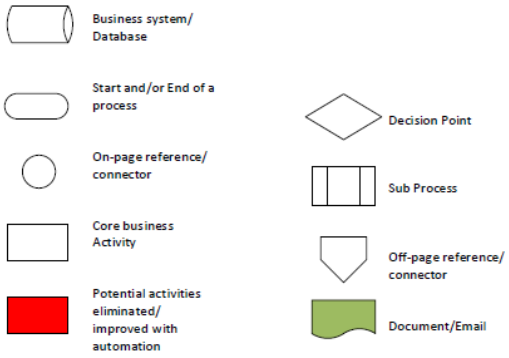
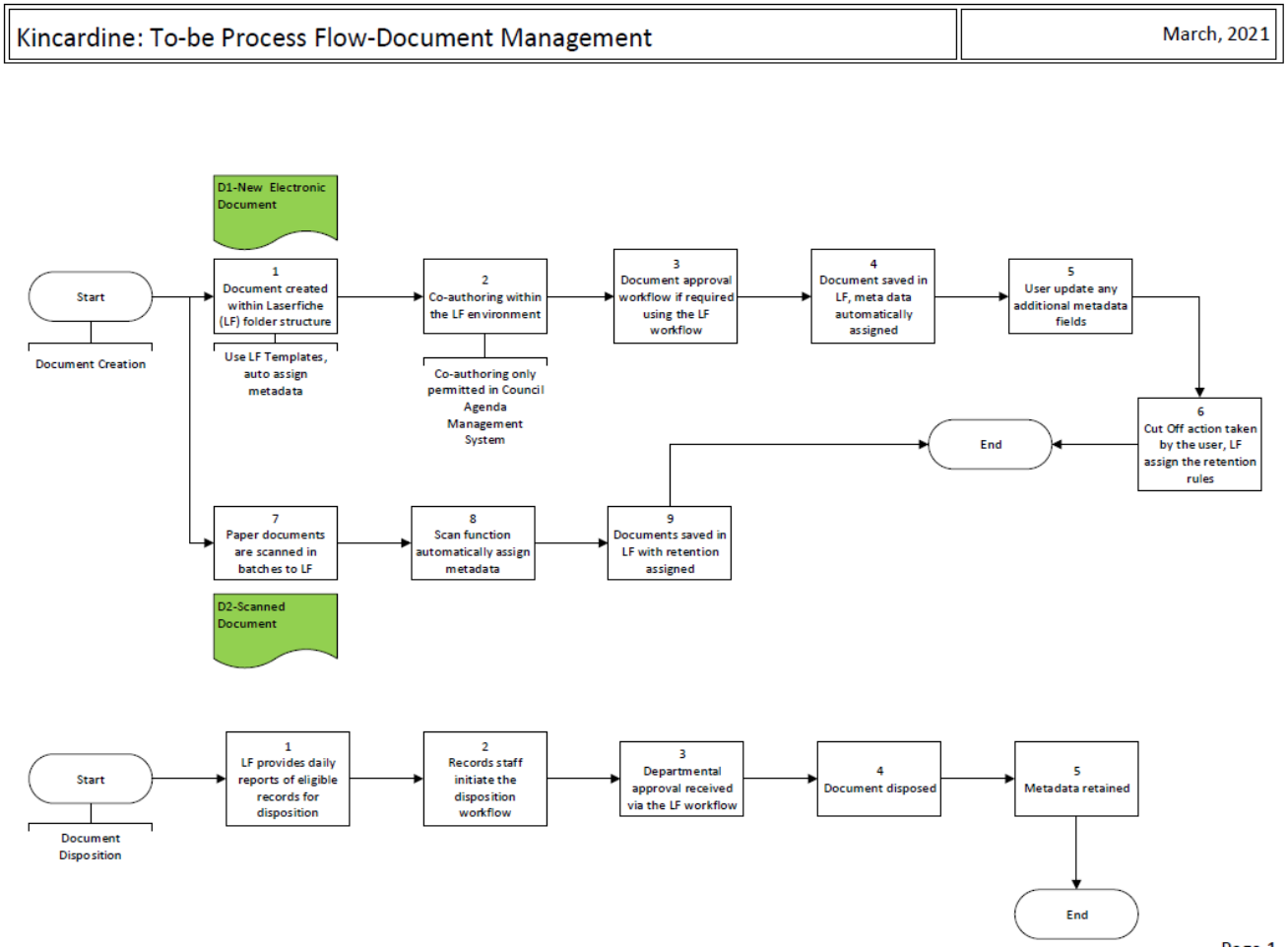
FOI – Freedom of Information

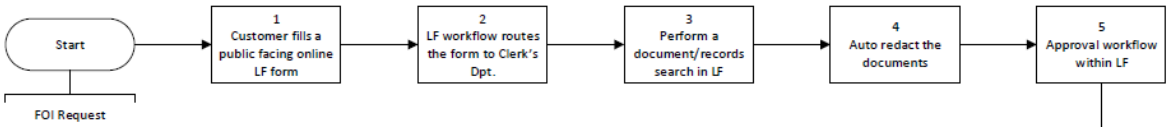


Page 4

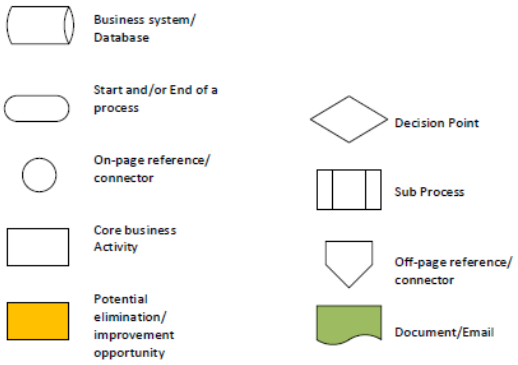
8.0 Appendix 3 – Records and Document Management : To-be Process map



Kincardine: To-be Process Flow-Document Management	March, 2021

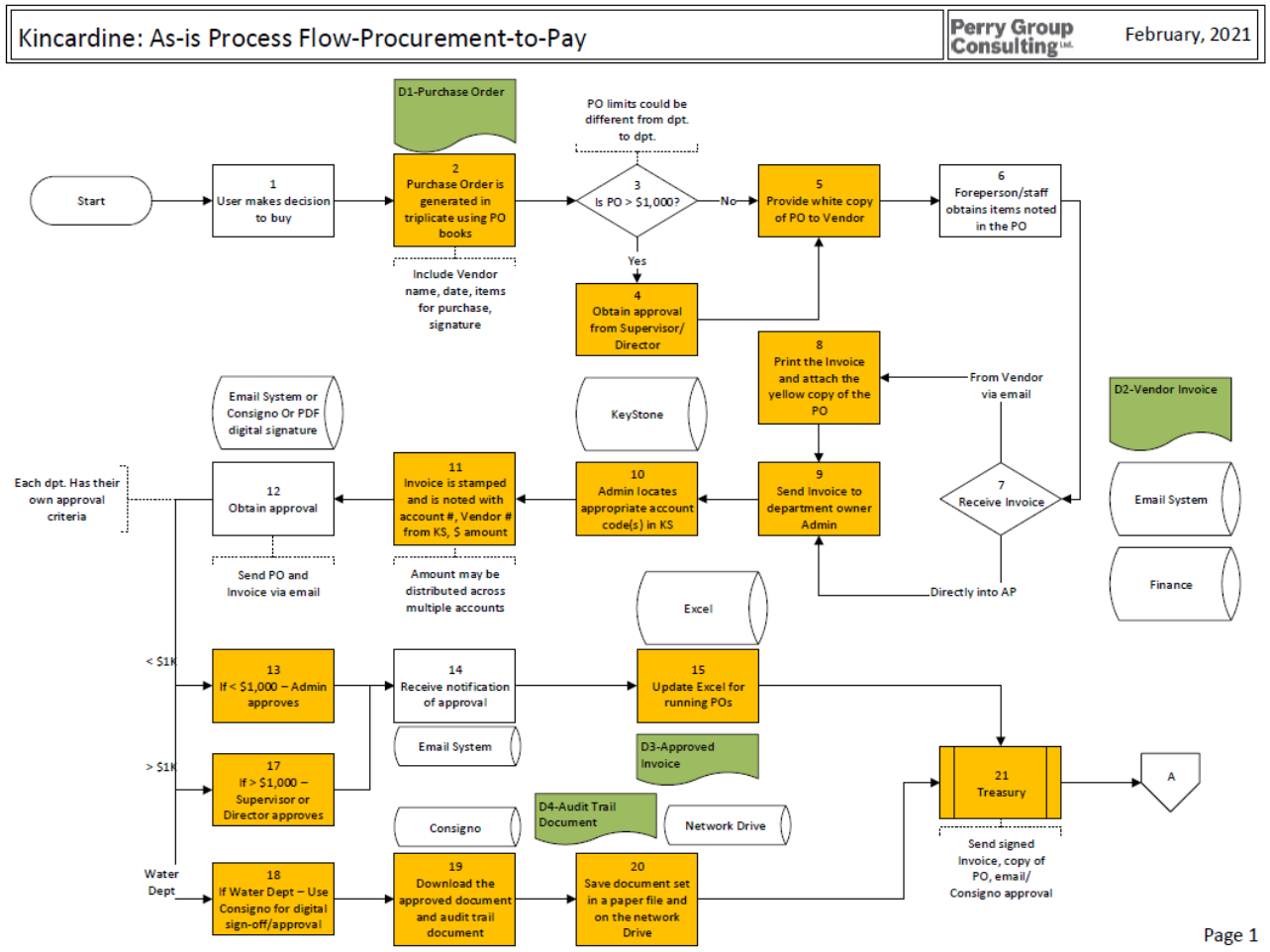


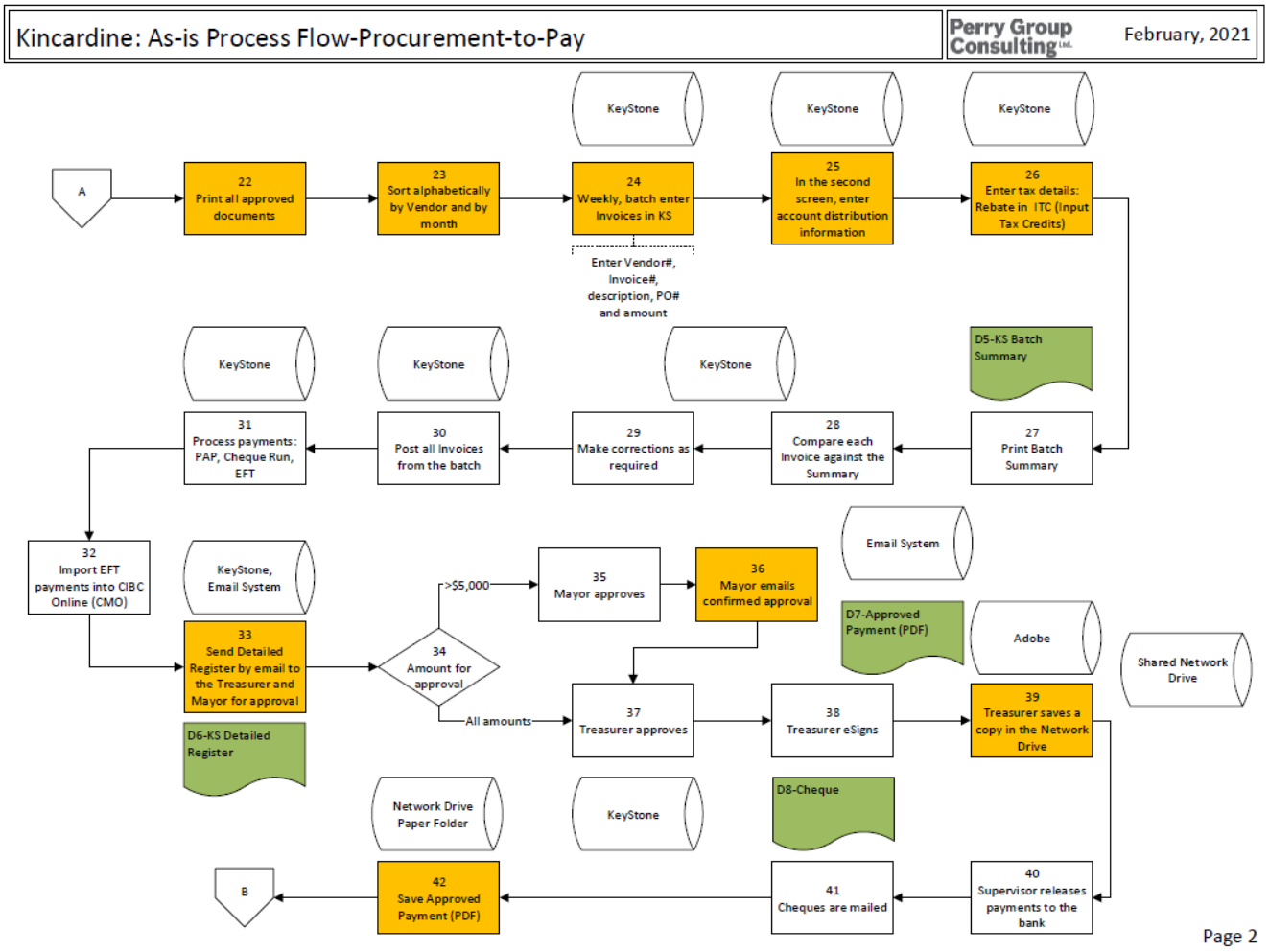
FOI – Freedom of Information



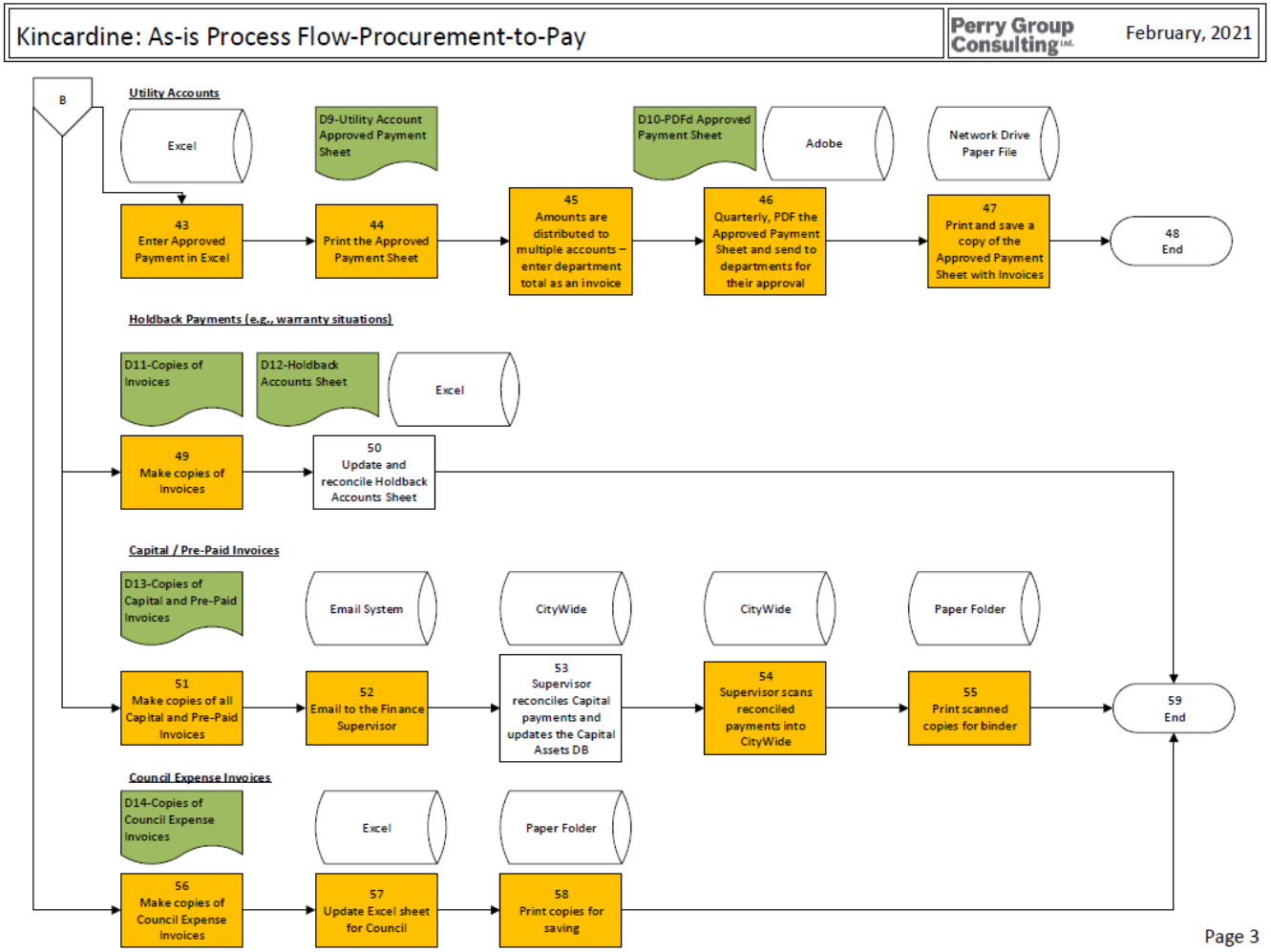
Page 2

9.0 Appendix 4 – Procure-to-Pay: As-is Process flow



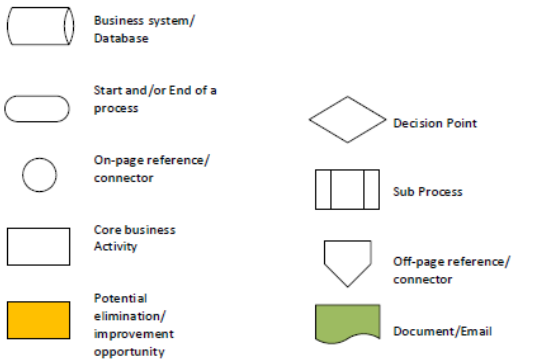

Kincardine: As-is Process Flow-Procurement-to-Pay
Perry Group Consulting Ltd.
February, 2021
A
22 Print all approved documents
23 Sort alphabetically by Vendor and by month
24 Weekly, batch enter Invoices in KS
Enter Vendor#, Invoice#, description, PO# and amount
25 In the second screen, enter account distribution information
26 Enter tax details: Rebate in ITC (Input Tax Credits)
27 Print Batch Summary
28 Compare each Invoice against the Summary
29 Make corrections as required
30 Post all Invoices from the batch
31 Process payments: PAP, Cheque Run, EFT
32 Import EFT payments into CIBC Online (CMO)
33 Send Detailed Register by email to the Treasurer and Mayor for approval
34 Amount for approval
>$5,000
All amounts
35 Mayor approves
36 Mayor emails confirmed approval
37 Treasurer approves
38 Treasurer eSigns
39 Treasurer saves a copy in the Network Drive
40 Supervisor releases payments to the bank
41 Cheques are mailed
42 Save Approved Payment (PDF)
B
KeyStone
KeyStone
KeyStone
KeyStone
KeyStone
KeyStone
KeyStone, Email System
Network Drive Paper Folder
Email System
Adobe
Shared Network Drive
D5-KS Batch Summary
D6-KS Detailed Register
D7-Approved Payment (PDF)
D8-Cheque

Page 2


Kincardine: As-is Process Flow-Procurement-to-Pay
Perry Group Consulting Ltd.
February, 2021
B
Utility Accounts
Excel
D9-Utility Account Approved Payment Sheet
D10-PDFd Approved Payment Sheet
Adobe
Network Drive Paper File
43 Enter Approved Payment in Excel
44 Print the Approved Payment Sheet
45 Amounts are distributed to multiple accounts – enter department total as an invoice
46 Quarterly, PDF the Approved Payment Sheet and send to departments for their approval
47 Print and save a copy of the Approved Payment Sheet with Invoices
48 End
Holdback Payments (e.g., warranty situations)
D11-Copies of Invoices
D12-Holdback Accounts Sheet
Excel
49 Make copies of Invoices
50 Update and reconcile Holdback Accounts Sheet
Capital / Pre-Paid Invoices
D13-Copies of Capital and Pre-Paid Invoices
Email System
CityWide
CityWide
Paper Folder
51 Make copies of all Capital and Pre-Paid Invoices
52 Email to the Finance Supervisor
53 Supervisor reconciles Capital payments and updates the Capital Assets DB
54 Supervisor scans reconciled payments into CityWide
55 Print scanned copies for binder
59 End
Council Expense Invoices
D14-Copies of Council Expense Invoices
Excel
Paper Folder
56 Make copies of Council Expense Invoices
57 Update Excel sheet for Council
58 Print copies for saving

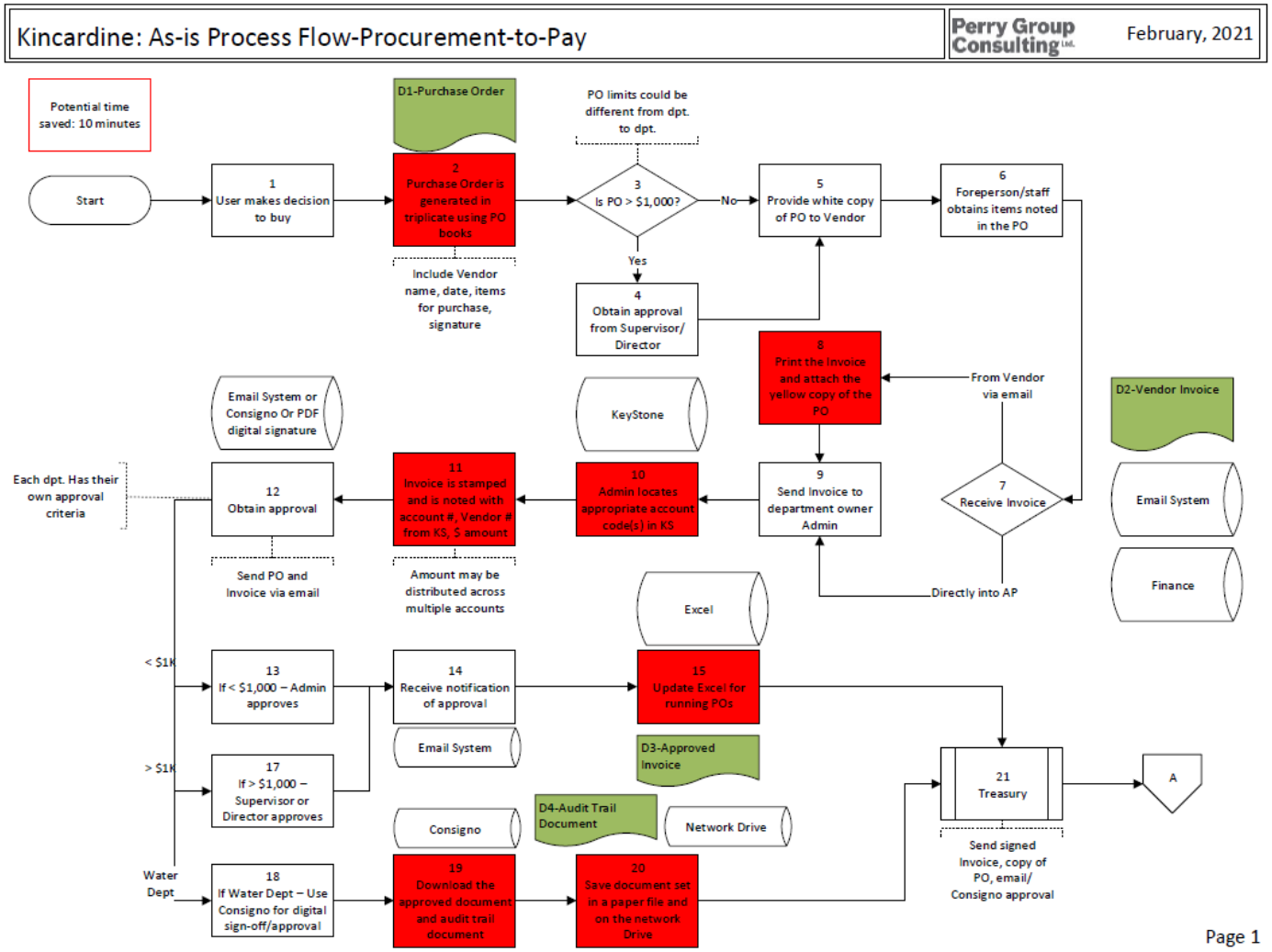
Page 3

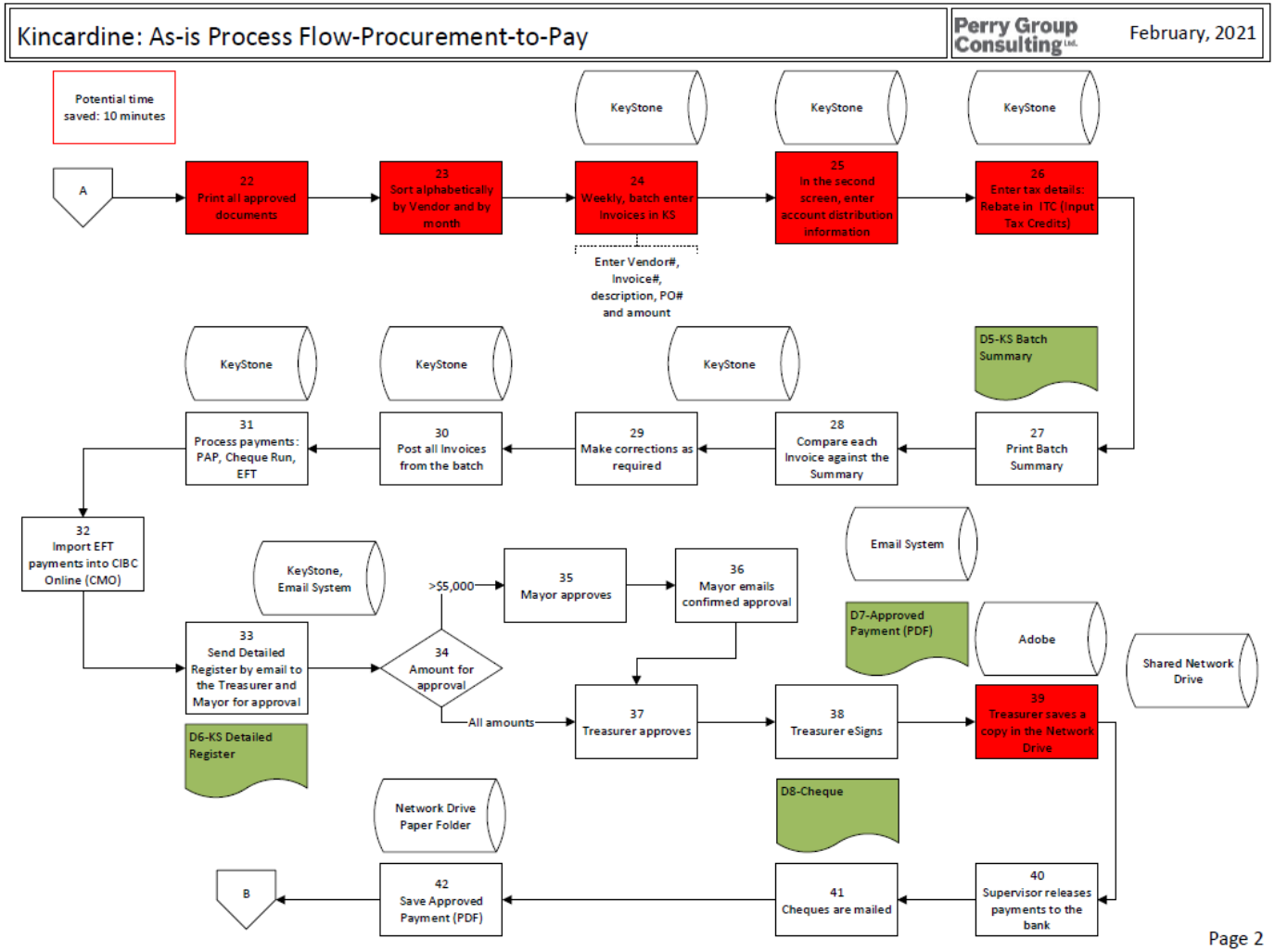
PO – Purchase Order
PO in triplicate – White to Vendor; Pink stays in the book; Yellow stapled to Invoice
AP – Accounts Payable
KS – KeyStone ERP system
Consigno – Cloud system for Water Dept eSignatures
PAP – Preauthorized Payment
EFT – Electronic Funds Transfer



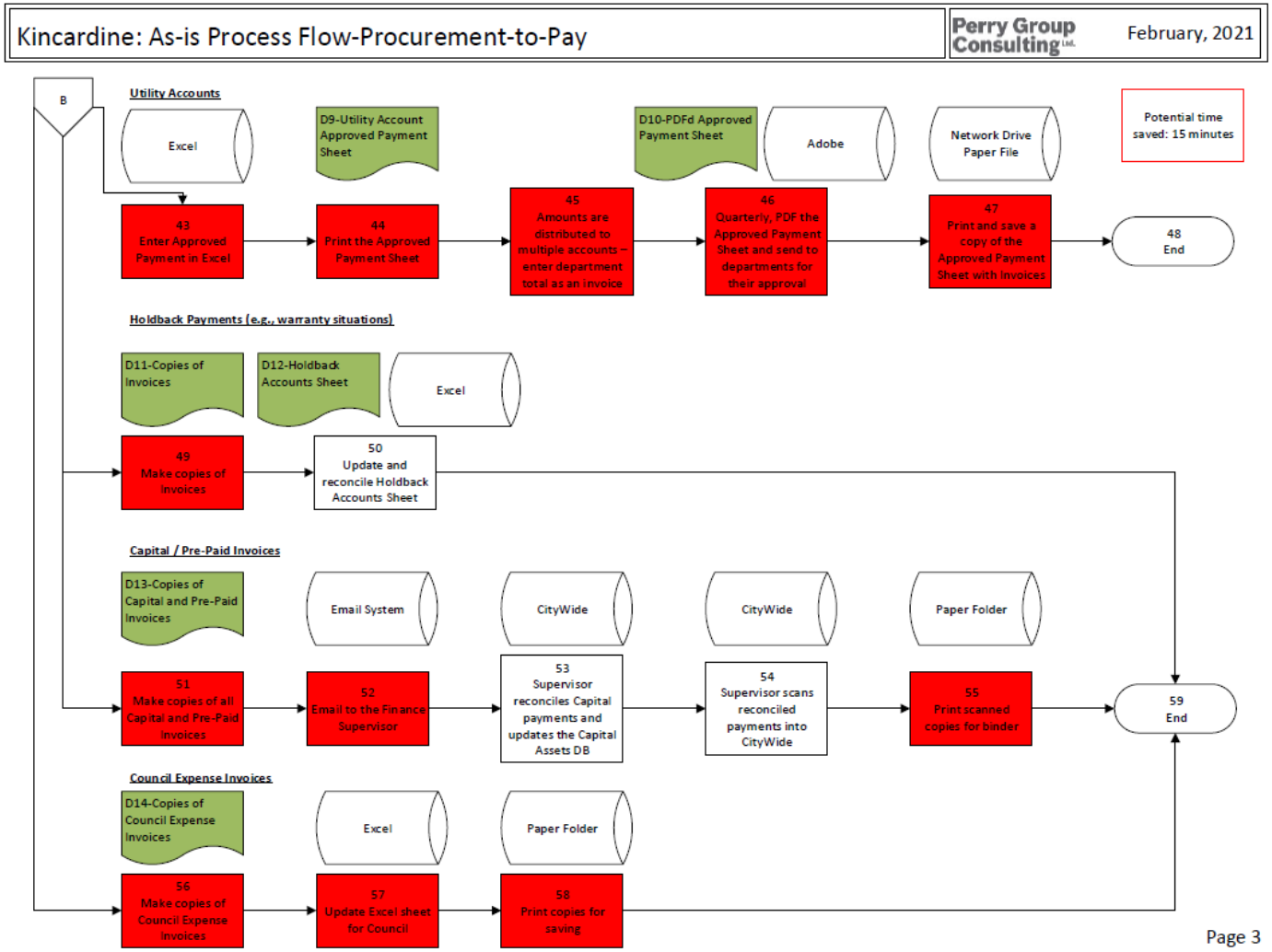
Page 4

10.0 Appendix 5 – Procure-to-Pay: As-is Process Flow With Savings



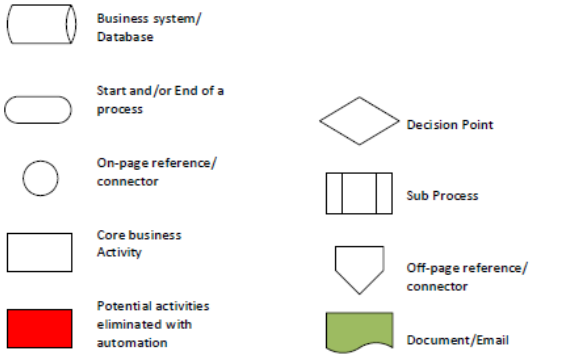

Kincardine: As-is Process Flow-Procurement-to-Pay
Perry Group Consulting Ltd.
February, 2021
Potential time saved: 10 minutes
A
22 Print all approved documents
23 Sort alphabetically by Vendor and by month
KeyStone
24 Weekly, batch enter Invoices in KS
Enter Vendor#, Invoice#, description, PO# and amount
KeyStone
25 In the second screen, enter account distribution information
KeyStone
26 Enter tax details: Rebate in ITC (Input Tax Credits)
D5-KS Batch Summary
27 Print Batch Summary
28 Compare each Invoice against the Summary
KeyStone
29 Make corrections as required
KeyStone
30 Post all Invoices from the batch
KeyStone
31 Process payments: PAP, Cheque Run, EFT
32 Import EFT payments into CIBC Online (CMO)
33 Send Detailed Register by email to the Treasurer and Mayor for approval
D6-KS Detailed Register
KeyStone, Email System
34 Amount for approval
>$5,000
35 Mayor approves
36 Mayor emails confirmed approval
Email System
All amounts
37 Treasurer approves
38 Treasurer eSigns
D7-Approved Payment (PDF)
Adobe
39 Treasurer saves a copy in the Network Drive
Shared Network Drive
D8-Cheque
40 Supervisor releases payments to the bank
41 Cheques are mailed
42 Save Approved Payment (PDF)
Network Drive Paper Folder
B

Page 2


Kincardine: As-is Process Flow-Procurement-to-Pay
Perry Group Consulting Ltd.
February, 2021
B
Utility Accounts
Excel
D9-Utility Account Approved Payment Sheet
D10-PDFd Approved Payment Sheet
Adobe
Network Drive Paper File
Potential time saved: 15 minutes
43 Enter Approved Payment in Excel
44 Print the Approved Payment Sheet
45 Amounts are distributed to multiple accounts – enter department total as an invoice
46 Quarterly, PDF the Approved Payment Sheet and send to departments for their approval
47 Print and save a copy of the Approved Payment Sheet with Invoices
48 End
Holdback Payments (e.g., warranty situations)
D11-Copies of Invoices
D12-Holdback Accounts Sheet
Excel
49 Make copies of Invoices
50 Update and reconcile Holdback Accounts Sheet
Capital / Pre-Paid Invoices
D13-Copies of Capital and Pre-Paid Invoices
Email System
CityWide
CityWide
Paper Folder
51 Make copies of all Capital and Pre-Paid Invoices
52 Email to the Finance Supervisor
53 Supervisor reconciles Capital payments and updates the Capital Assets DB
54 Supervisor scans reconciled payments into CityWide
55 Print scanned copies for binder
59 End
Council Expense Invoices
D14-Copies of Council Expense Invoices
Excel
Paper Folder
56 Make copies of Council Expense Invoices
57 Update Excel sheet for Council
58 Print copies for saving

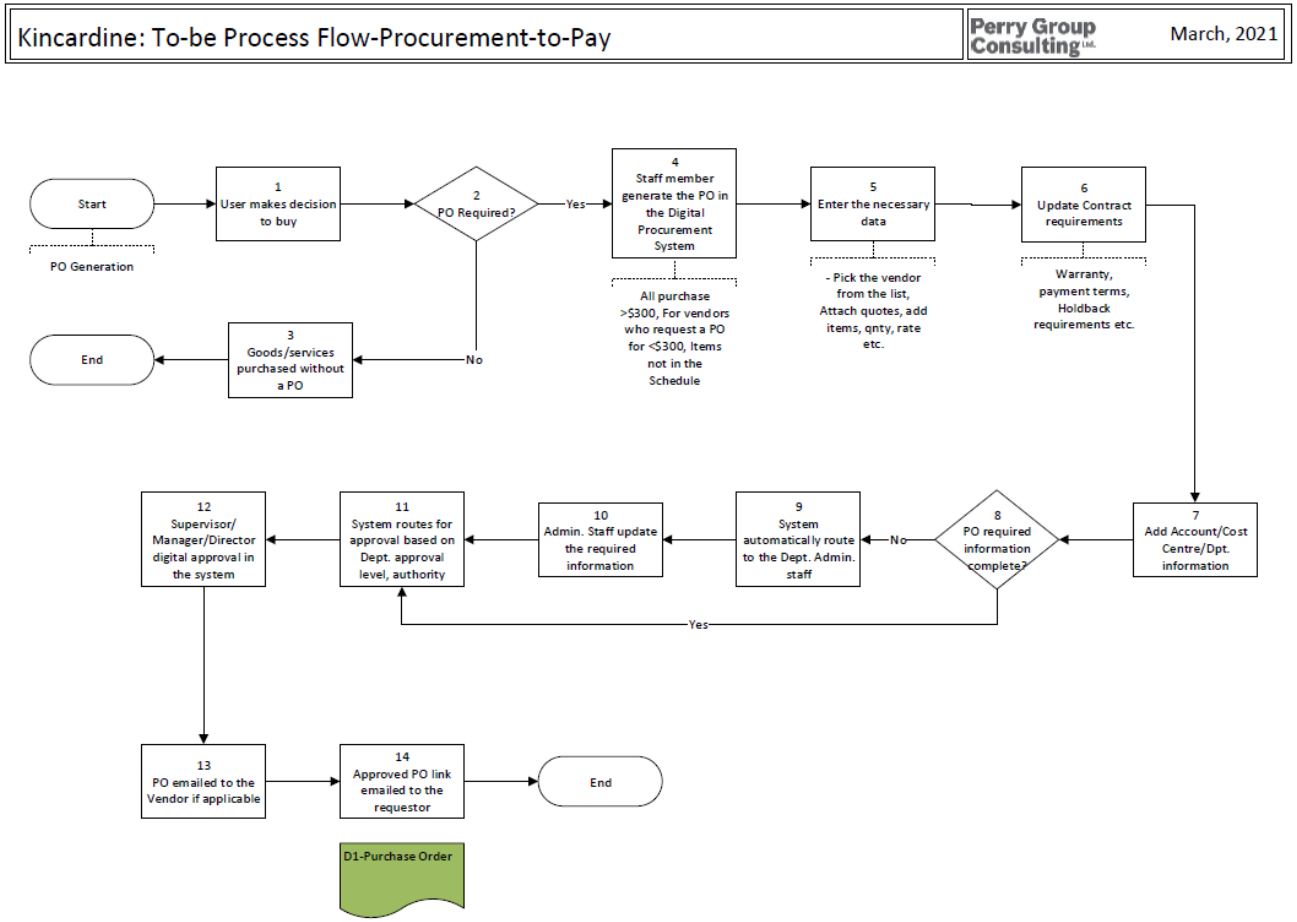
Page 3

PO – Purchase Order
PO in triplicate – White to Vendor; Pink stays in the book; Yellow stapled to Invoice
AP – Accounts Payable
KS – KeyStone ERP system
Consigno – Cloud system for Water Dept eSignatures
PAP – Preauthorized Payment
EFT – Electronic Funds Transfer

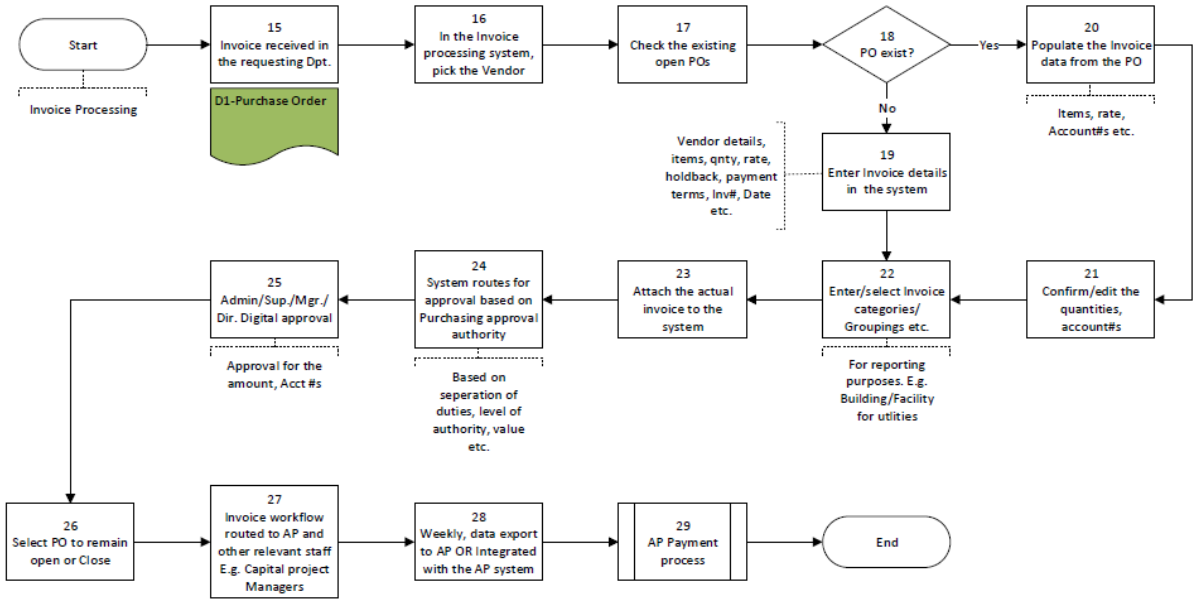


Page 4

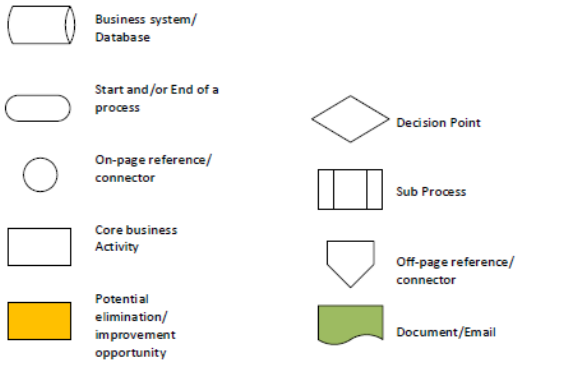
11.0 Appendix 6 – Procure-to-Pay: To-be Process flow



Page 1


Start
Invoice Processing
15
Invoice received in the requesting Dpt.
D1-Purchase Order
16
In the Invoice processing system, pick the Vendor
17
Check the existing open POs
18
PO exist?
Yes
No
20
Populate the Invoice data from the PO
Items, rate, Account#s etc.
Vendor details, items, qnty, rate, holdback, payment terms, Inv#, Date etc.
19
Enter Invoice details in the system
21
Confirm/edit the quantities, account#s
22
Enter/select Invoice categories/ Groupings etc.
For reporting purposes. E.g. Building/Facility for utlities
23
Attach the actual invoice to the system
24
System routes for approval based on Purchasing approval authority
Based on seperation of duties, level of authority, value etc.
25
Admin/Sup./Mgr./ Dir. Digital approval
Approval for the amount, Acct #s
26
Select PO to remain open or Close
27
Invoice workflow routed to AP and other relevant staff E.g. Capital project Managers
28
Weekly, data export to AP OR Integrated with the AP system
29
AP Payment process
End

PO – Purchase Order
PO in triplicate – White to Vendor; Pink stays in the book; Yellow stapled to Invoice
AP – Accounts Payable
KS – KeyStone ERP system
Consigno – Cloud system for Water Dept eSignatures
PAP – Preauthorized Payment
EFT – Electronic Funds Transfer



Page 3

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