



# **Information Technology Digital Strategic Plan (ITDSP)**

## **Final Report**

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February 23, 2024



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# Table of Contents

1.0	Introduction and Background.....	4
1.1	Context.....	4
1.2	Importance of Technology for Municipalities .....	4
1.3	The Importance of this Digital Strategy .....	6
1.4	ITDSP Development Process .....	7
2.0	Current State .....	9
2.1	Key Ongoing Projects .....	9
2.2	Introducing the Municipal Technology Model (MTM).....	9
2.3	Municipal Technology Model Assessment Results .....	12
2.4	Municipal Online Service Assessment (MOSA) .....	14
2.5	Results From the Staff Survey .....	17
2.6	Current IT Organization.....	21
2.7	Benchmarking Results re: Investment and IT Staffing .....	23
2.8	Current State Summary .....	26
3.0	Future State Vision .....	27
3.1	Benefits of Digital Service Delivery .....	28
3.2	Linking to the Customer Service Framework .....	34
3.3	The Vision .....	34
4.0	Preparing for Success .....	39
4.1	The Partnership Between Business and IT .....	39

4.2	Elevating the Role of IT .....	40
4.3	A New IT Governance Model .....	44
4.4	An Inclusive Framework – Encompassing All Information and Technology Decision-Making .....	46
4.5	Proposed Information and Digital Technology Governance Framework – Roles and Responsibilities	47
4.6	Project Portfolio Management Approach to Selection and Execution of Technology Initiatives .....	53
4.7	Change Management.....	75
5.0	Deliverables and the Roadmap .....	80
5.1	Key Initiatives .....	80
5.2	Quick Wins .....	90
5.3	Work Plan .....	90
5.4	Budget.....	105
6.0	Conclusion .....	107
	Appendix 1 – Table of Figures .....	108
	Appendix 2 – Suggested Terms of Reference for Technology Governance Bodies.....	110
	Information and Digital Technology Governance Team (IDTGT).....	110
	Steering Committees (Project-based and Ongoing) .....	111
	Technical Standards / Architecture Team.....	112

# 1.0 Introduction and Background

## 1.1 Context

In 2022, the Town, its residents, staff, management and the Mayor and Council collaboratively developed the 2022-2026 Strategic Plan. The Strategy was developed under seven themes and one of the key objectives was to develop an Information Technology and Digital Strategic Plan (ITDSP).

In 2023, the Town selected Perry Group Consulting through a competitive procurement process to develop the ITDSP.

## 1.2 Importance of Technology for Municipalities

Coming out of Covid, one thing that all municipalities learned was the importance of technology to operate in a virtual setting.

All levels of government very quickly embraced virtual meetings, working from home, counter-less service offerings, etc. to maintain their services to the citizens. Stouffville was no different.

The over-the-counter process for Planning and Building permit applications was quickly moved to online and email-based channels to continue to provide the services with minimum interruption. Council meetings were moved to online virtual meetings. The province and regional governments introduced online vaccine scheduling systems and digital vaccination certificates, etc.

Though some of these digital services were developed out of necessity, they have been in use for some time in the private sector. A customer who wants to get a mortgage or plan a vacation overseas most often use online digital services to perform all required tasks without having to step into an office. Our citizens are used to and are demanding similar service offerings from our governments as well.

Today, most municipalities, including Stouffville, are massively dependent on technology to operate. In fact, you might be surprised by how much technology runs the Town.

Services as diverse as tax and water billing, attending virtual Council meetings, registering for recreation programs, and handling customer enquiries, all rely on information technology working quietly in the background to operate effectively and safely.

While email, messaging and smartphones keep every part of the organization connected, communicating, and collaborating, it is the back-office business solutions that manage the flow of work, allowing managers and staff to pay invoices, run payroll, collect taxes, manage customer requests, or monitor budgets. It is this digitized core or digitized platform that makes the Town work and work efficiently.

The diagram below is an illustration of how the crux of common systems feeds a multitude of areas – internal and external to the Town – such as, back-office staff, customer service agents, field staff, Council and management as well as online customers, face-to-face customers, phone customers and app/social media customers.



Figure 1: Common Systems Making Connections

Using common, integrated systems ensures that inquiries flow from front counters to the back-office and to appropriate field staff for resolution. This increases the potential to deliver expected results consistently and reliably at reasonable cost.

Without technology, most municipalities simply could not operate, even for short periods.

Beyond back-office systems, municipalities are increasingly employing what are referred to as “Smart Town technologies” and more connected Town-wide sensors are being used to monitor critical infrastructure (e.g., detect water leaks, highlight congestion, or report a full garbage can) and alert staff to where problems are anticipated or have occurred.

Data and information is expected to become increasingly more important, providing insights about service delivery that allow Town officials to improve efficiency and improve services. Predictive analytics will likely help municipalities work smarter and more efficiently.

So, though often invisible to citizens, technology is a critical service – the glue if you will – that keeps the Town running 24/7.

## 1.3 The Importance of this Digital Strategy

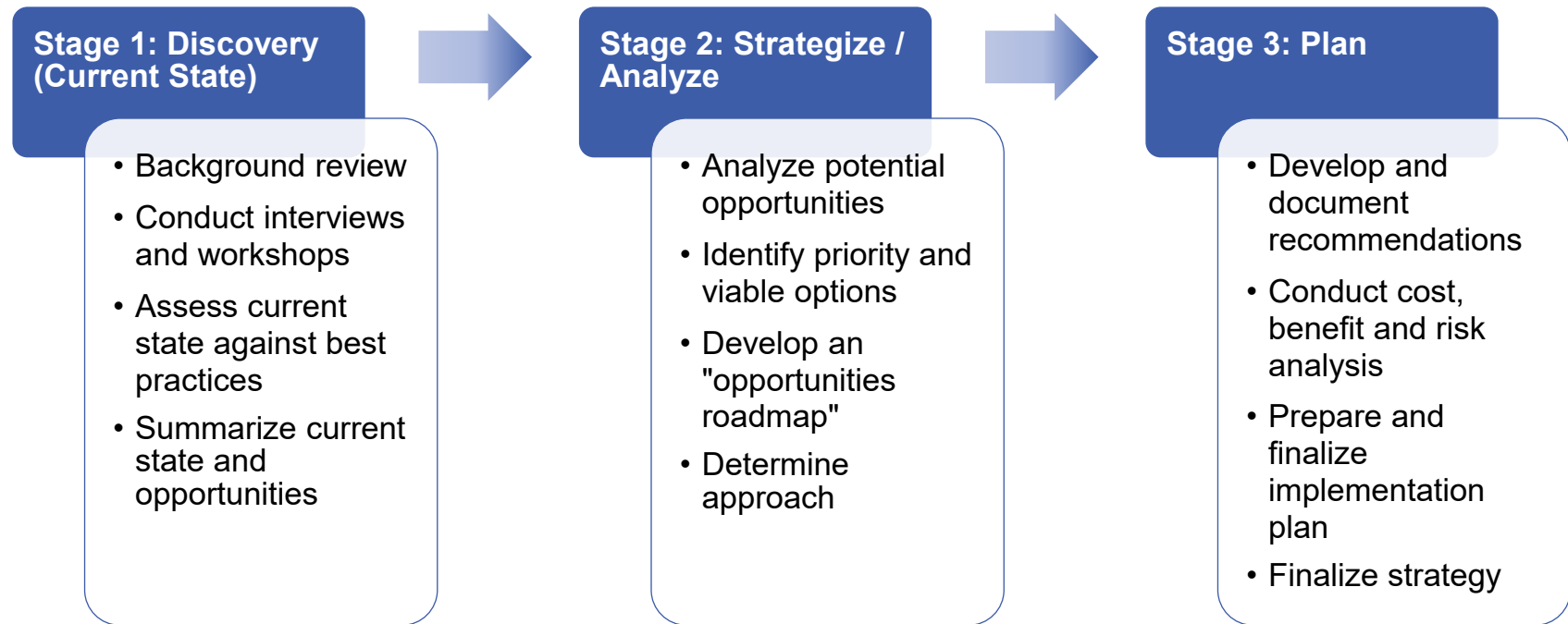
The 2022-26 Strategic Plan indicates that the ITDSP should provide a “*clear vision and an implementation plan*” for the use of technology in the future.

Given the importance of technology and its role in delivering municipal services – and particularly given the many competing demands of the municipal setting – an IT Digital Strategy is crucial. It should address questions that are fundamental to the Town’s future success, such as:

- Are we doing the right things with technology and digital?
- Are we making the right technology and digital investments?
- Is our information technology environment properly managed, maintained, secured and able to support the clients?
- Is it cost-effective?
- What are our future business needs?
- Is our technology environment equipped to meet current and future business needs?

## 1.4 ITDSP Development Process

We used a three-stage approach to developing the ITDSP. This allowed us to check back and validate at each stage of the project to ensure we are going in the right direction and our recommendations are realistic for the Town.



*Figure 2: Three-Stage Approach*

The Perry Group three-stage approach is simplified like this:

### **Stage 1 – Discovery (Current State Assessment):**

- Understand the current situation (conduct the maturity assessment).
- Conduct a background review, interviews, and workshops.
- Seek input of data and documentation from all parts and layers of the organization to assess the current state and compare against industry standards and municipal best practices.

- Identify and document gaps and opportunities that should be addressed.

**Stage 2 – Strategize / Analyze:**

- Establish the future needs and understand the people, process, and technology changes and initiatives that are needed to address the gaps and opportunities identified in Stage 1.
- Identify the existing technology, solutions, process, organization, staffing and governance requirements.
- Analyze potential opportunities and identify and prioritize viable options in an “opportunities roadmap”.
- Determine approach.

**Stage 3 – Plan (Implementation Plan):**

- Plan the implementation and develop and document clear recommendations to support it.
- Prioritize and sequence key activities.
- Conduct cost, benefit, and risk analyses.
- Clearly identify implementation activities, timelines, resource and budget requirements.
- Finalize the Strategy.



## 2.0 Current State

### 2.1 Key Ongoing Projects

The Town had identified two critical areas to be digitized and embarked on selection and implementation of two enterprise systems:

1. CityView system for Planning and Permitting.
2. VIP system for Human Resource Information Management (HRIS).

Both these implementations are going to have impacts across the organization. These projects, though delayed in the past, have been re-initiated with updated timelines, governance and change management.

It must be mentioned that some of the previous key implementations have been successful (e.g., online tax portal, online water billing system, online parking services) and the Town should be proud of them.

### 2.2 Introducing the Municipal Technology Model (MTM)

Perry Group's standardized Municipal Technology Model (MTM), shown below, was the basis for evaluating the Town's technology architecture environment.

The diagram shows four interconnected layers. Each entity noted within a layer relies on the other layers for staff to deliver services to internal and external clients.

Each layer is described in detail below.

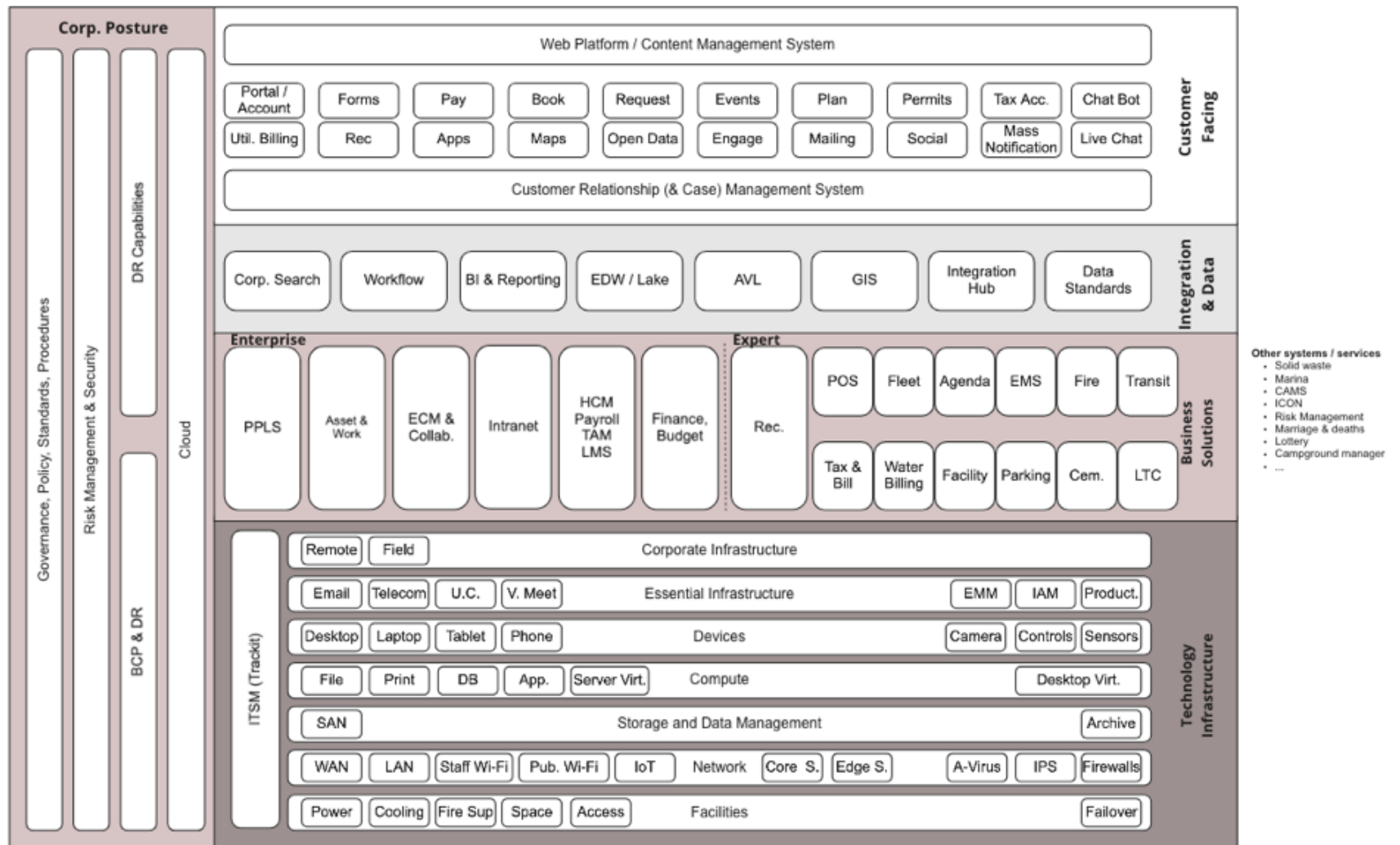


Figure 3: Municipal Technology Model

This is a generalized, conceptual municipal IT model, developed with Canadian municipalities over the last 10 years. The MTM introduces several key concepts that are important for the Town at this time, including:

- There are four main technology layers (labeled as: Infrastructure, Business Solutions, Integration and Data, Customer-Facing). Each requires discrete IT skill sets to be managed effectively. For instance, while technology infrastructure management is deeply technical, project management around business solutions projects requires project experience, change management and soft skills. An organization needs a breadth of skills in various domains to effectively manage the complete environment.
- The Infrastructure layer is the foundation for the entire technology environment. Infrastructure must be robust, high-performing, and dependable because it provides the basis for all other layers. Unreliable or inaccessible infrastructure undermines all the technology that sits above it.
- Appropriate policies, security, data protection and disaster recovery provisions should be in place. In an ideal situation, the IT team will also need appropriate tools to help manage the environment including: a helpdesk request tracking system, a set of systems management solutions and automation tools (e.g., remote support, patch management, mobile device management) to simplify IT management tasks, increase productivity of IT staff and to enable employee self-service (e.g., password resets).
- A municipality should limit the number of corporate business solutions platforms it runs to reduce process and information silos. These business solutions provide the foundations for automated and streamlined business processes. They will gather data to drive analytics capabilities and underpin the effective delivery of online services.
- Business solutions should be integrated allowing for data to be automatically passed between solutions (using integration technologies), thus reducing data duplication and errors, and ensuring auditability.
- Online, customerfacing services should connect / integrate into back-office business solutions, reducing the requirement to re-key information and enabling complete end-to-end digital services.
- The IT architecture should **build from the bottom up** – Infrastructure first, then Business Solutions and so on with the customer and organizational requirements as the main focus.

These are some of the basic tenets under which a well-architected technology environment will operate.

## 2.3 Municipal Technology Model Assessment Results

The figure below illustrates the results of Perry Group’s assessment of Stouffville’s technology environment against the MTM.

The traffic light colour coding highlights where the Town is in good shape (green) and where work is needed (yellow=some work needed; orange=major work needed; red=risk/replace and clear/white=gap).

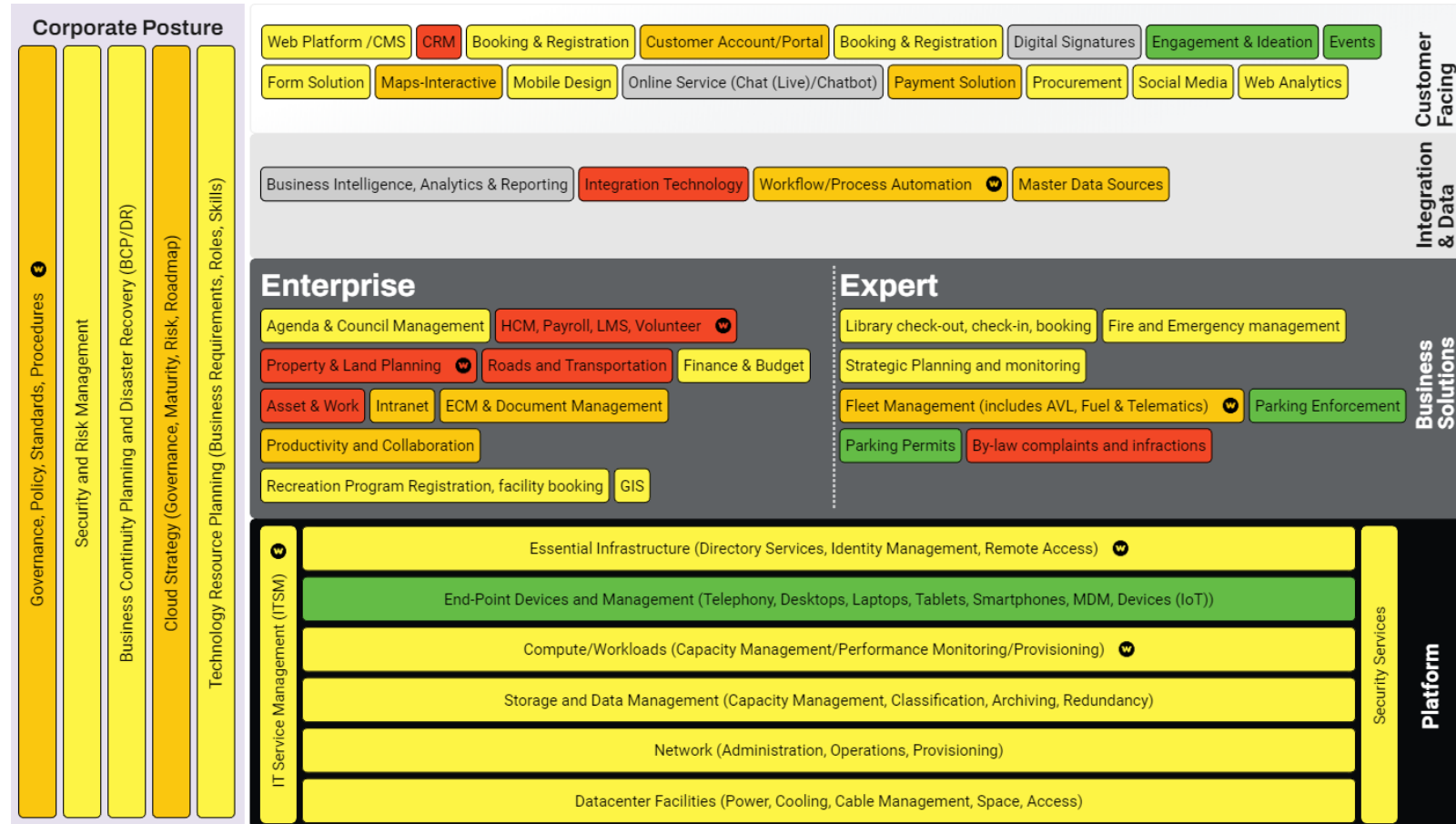


Figure 4: Stouffville's MTM Assessment Results

As you can see in the above summary, the Business Solutions layer needs the most work and the two key inflight projects are also in this layer. T

The Platform (Infrastructure) layer has been maintained in good condition with some areas requiring minor updates. The following table summarizes the MTM current state.

MTM Layer	Highlights	Grade
Customer-Facing	<ul style="list-style-type: none"> <li>• New website through GHD including online forms and payment capabilities.</li> <li>• Some online services exist. tax, water, recreation booking, complaints, service requests, etc.</li> <li>• The current Service Request Management (SRM) system to track customer requests requires replacement.</li> <li>• Citizens don't have a single user profile to receive all online services.</li> </ul>	<b>Some work needed</b>
Integration and Data	<ul style="list-style-type: none"> <li>• Some point to-point integrations are available.</li> <li>• No integration technology/platform in place.</li> <li>• No data visualization tool.</li> </ul>	<b>Some work needed</b>
Business Solutions	<ul style="list-style-type: none"> <li>• Parking, Web, GIS, Finance, Recreation systems are in a good state.</li> <li>• Planning, Permitting, Asset and Work Management, Human Resource Management systems are at risk.</li> <li>• Document management and collaboration platform does not exist.</li> </ul>	<b>Risk/Replace</b>

MTM Layer	Highlights	Grade
Platform	<ul style="list-style-type: none"> <li>• All areas are in good shape with some areas needing improvement: <ul style="list-style-type: none"> <li>▪ Inventory of servers and applications may not be up-to-date and should be reviewed.</li> <li>▪ No storage strategy to address stale data (production servers).</li> <li>▪ Tool(s) to monitor server performance were deferred to 2024.</li> </ul> </li> </ul>	<b>Some work needed</b>

## 2.4 Municipal Online Service Assessment (MOSA)

Perry Group has developed a MOSA that articulates a target state for the digital experiences that municipalities could, and arguably should, deliver to citizens based on industry best practices.

MOSA also identifies typical staff experiences that should be digital experiences (e.g., requesting leave, submitting an expense claim). Modernized digital services not only improve the service experience for external customers but can greatly enhance the experience of internal customers as well.

The consultants reviewed Stouffville’s digital service levels using the MOSA framework. The following table shows the results.

The table shows that, while many services can be received online, there is opportunity to improve the digital experience of the citizens by providing more online services. The Town’s Customer Service Framework also identified online self-service as a key component to improving the customer experience.

Technology Environment	Status
Responsive and Accessible Website	<b>Yes</b>
Content Personalization	<b>No</b>
Single Account	<b>No</b>
Live Digital Service	<b>No</b>

Technology Environment	Status
Customer Knowledge Base	No
Open Data	No
Interactive Digital Maps	Partial
Digital Signatures	No
Alerts, Notifications and Subscriptions	Yes
Engagement Platform	Yes
Municipal App	Yes
Payment Platform	Partial
Social Media Integration	Partial
Search Optimization	Yes
Business Directory	Offline
Business Licenses	Offline
Business Support Programs	Offline
Employment Support Programs	N/A
Film Permits	Offline
Freedom of Information (FOI) Requests	Offline
Grant Programs	N/A
Online Bid Management	Digital
Pay an Invoice	Offline
Request a Service	Online
Council Committees Applications	Offline
Council/Committee Web Streaming	Digital
Online Agendas/Minutes	Digital
Public Meeting Virtual Participation	Online

Technology Environment	Status
Speak at Council Applications	Offline
Tax Billing/ Account Management	Digital
Tax Certificates	Digital
Waste Management Information	Digital
Waste Management Special Services	Offline
Water Billing / Account Management	Digital
Burial and Perpetual Care	Offline
Employment Search and Applications	Partial
Marriage License	Offline
Pet License	Online
Vital Rights Registration	Offline
Road Closures Information	Online
Roads Maintenance Statuses	Offline
Report an Issue	Online
Roads Permits	Offline
Urban Forestry Services	N/A
Building and Development Permits	Offline
Development Applications	Offline
By-law / Property Standards Enforcement	Offline
Septic Systems Permits and Inspections	Offline
Fire / Burn Permits	Online
Parking Tickets	Digital
Parking Permits / Exemptions	Digital
Transit Planning	N/A



Technology Environment	Status
Transit Passes and Tickets	N/A
Book Specialized Transit	N/A
Events Calendar	Digital
Event Permits	Digital
Recreation Programs and Classes	Digital
Tee and Court Times	Digital
Facility Rentals	Offline

## 2.5 Results From the Staff Survey

The Perry Group standard staff survey was slightly modified for the Town of Stouffville. The staff survey was conducted through an online survey tool and a good cross section of the Town's staff was able to respond.

- There were 100 respondents of 370 total staff = 27% response rate.
  - 7 respondents – Senior Leader role.
  - 17 respondents – Manager / Supervisor role.
  - 75 respondents – Staff role.
- This survey opened August 8, 2023, and closed on August 29, 2023.
- A detail Survey Analysis Report was made available to IT leaders and a summary was presented to the management team.

The survey was responded to by staff from across the Town:

### Q1: In which department / division do you work?

Answered: 95 Skipped: 5

- The survey was made available to all departments / divisions.
- One of the goals of the survey was to engage the broader staff population which, for the most part, was achieved.
- There were replies from at least one respondent from every department / division listed.

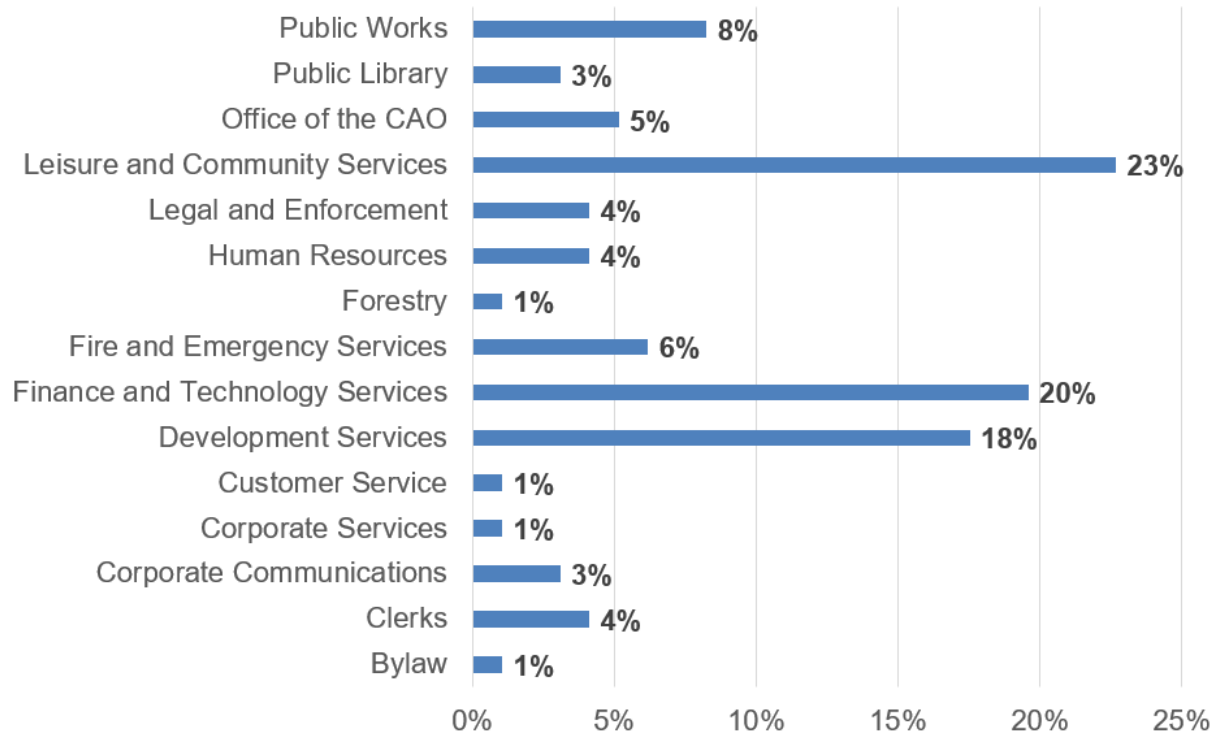


Figure 5: Survey Respondents by Department

The survey showed that over 50% of the staff are spending time on manual redundant tasks that could be eliminated through automation.

## Q30: Identify how frequently your job includes activities that:

Answered: 80 Skipped: 20

- There is substantial reliance (Frequently → Always) on information or data to be forwarded to other staff (83%).
- There is also considerable reliance on manual information-gathering (61%), a requirement to be in-office (58%) and the need for paper (55%).

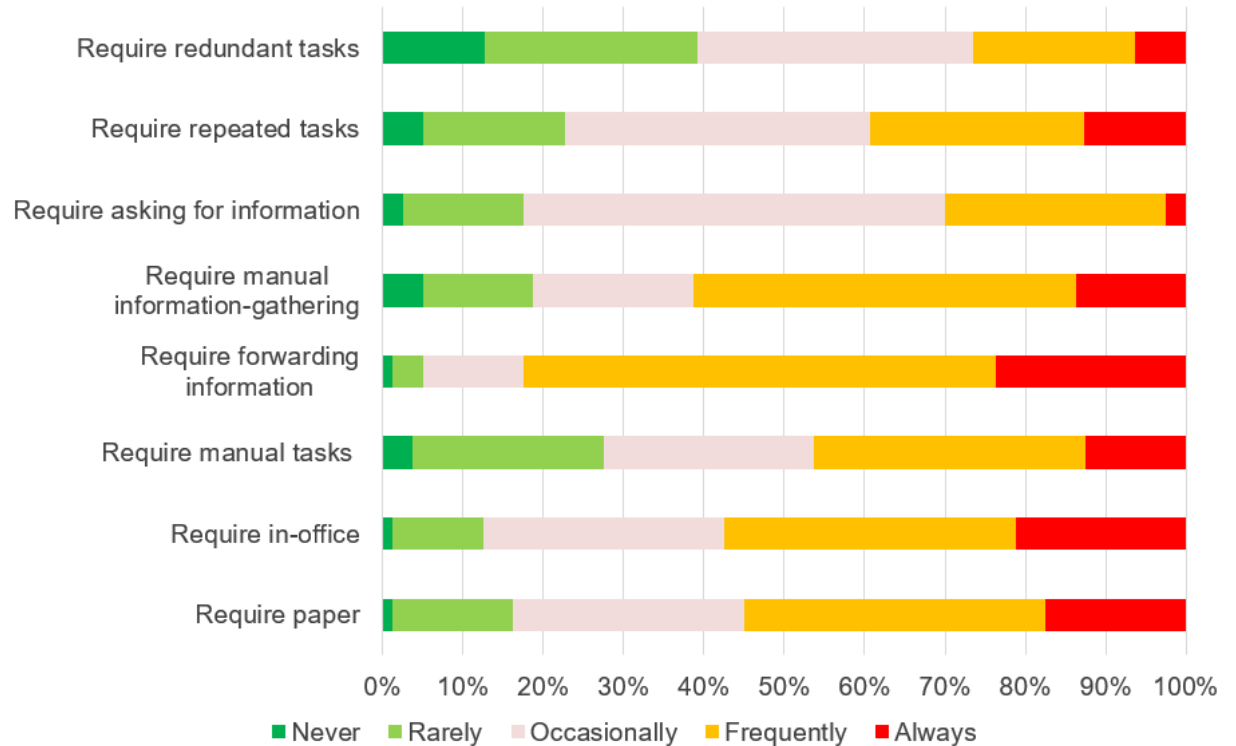


Figure 6: Survey Responses to Manual, Redundant Tasks

Responses to questions regarding frequency of job activities that are manual plus the importance of digital workplace tools indicated overwhelmingly (90%) that staff are ready for the digital age.

## Q31: How important do you consider the following digital workplace tools to be:

Answered: 80 Skipped: 20

- Overall, it was clear that respondents consider digital workplace tools to be of particularly high importance.
- An average of only 8% expressed neutrality and a notable 20% of respondents skipped answering this question.

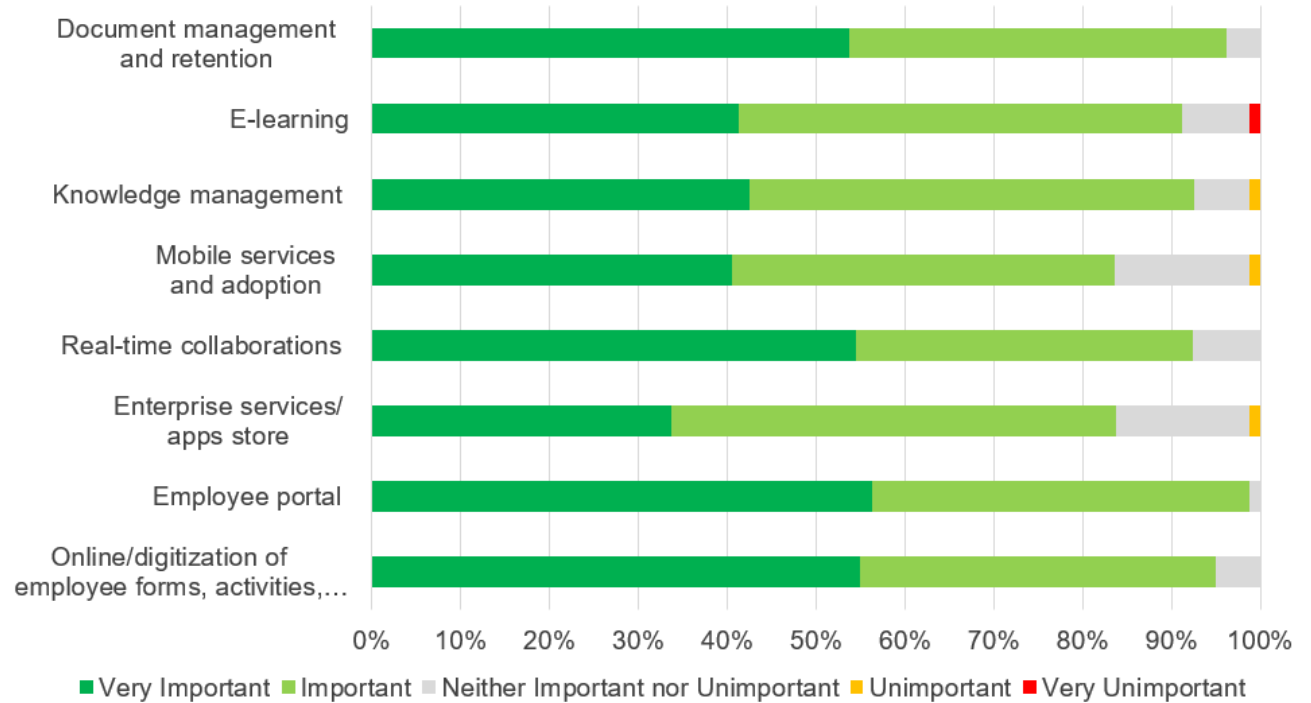


Figure 7: Survey Responses Showing the Importance of Digital Workspace Tools

Similarly, only 45% of staff were satisfied with the current online services provided to citizens. The staff provided a vast array of potential online service opportunities that were considered and included in the ITDSP work plan.

The staff also gave a high rating for the IT services they receive. Over 90% of the staff were satisfied with the current IT services.

## Q20: Please rate your satisfaction with IT's service to you in the following areas.

Answered: 84 Skipped: 16

- Most service areas met the 80% satisfaction target.
- There is room for improvement in “Anticipating Technology Needs and Providing Proactive Support.”

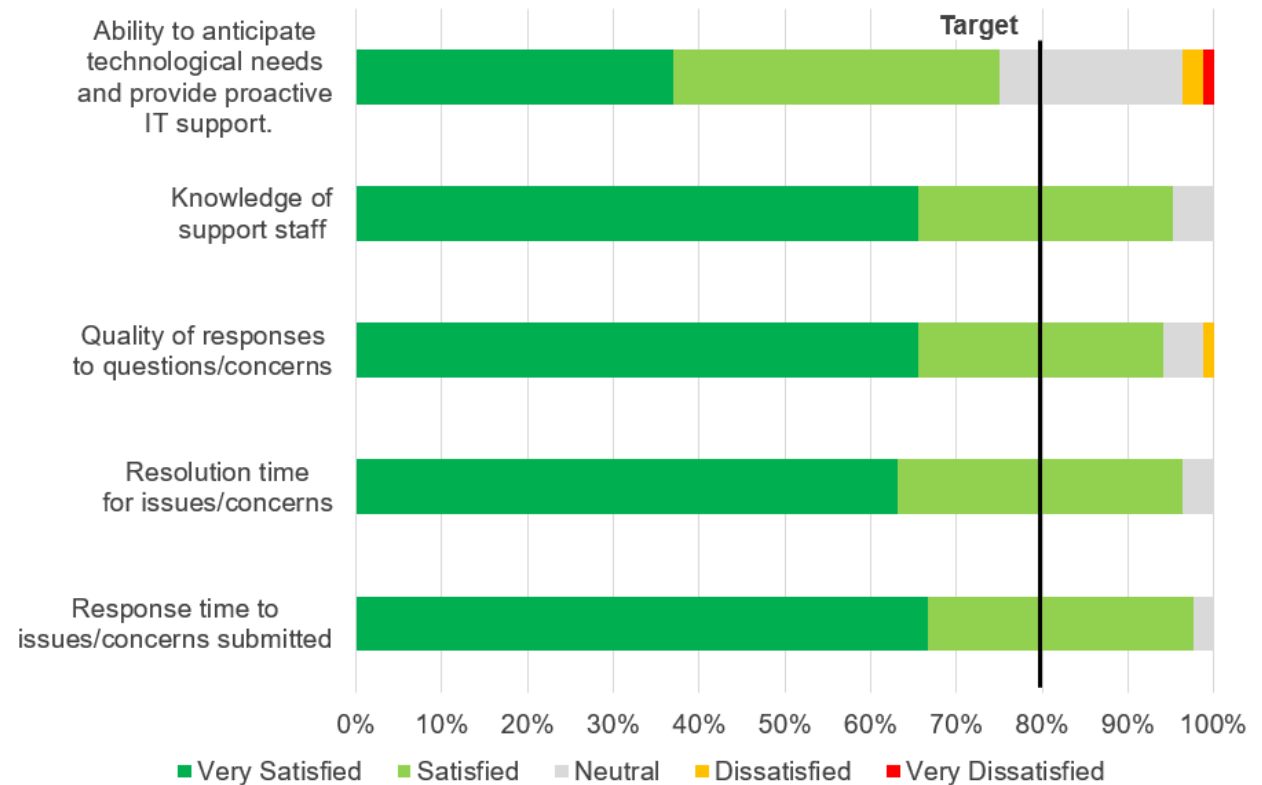


Figure 8: Survey Response Showing Overall IT Service Satisfaction Level

## 2.6 Current IT Organization

The Town's IT team has a flat structure where all IT staff are directly reporting to the Manager, IT Services. This creates a challenge where the IT manager's time is spent mostly on day-to-day administrative tasks rather than focusing on strategic technology decisions.

Having ten direct reports may not be the best model for a team that needs to balance strategy implementation and operational activities.

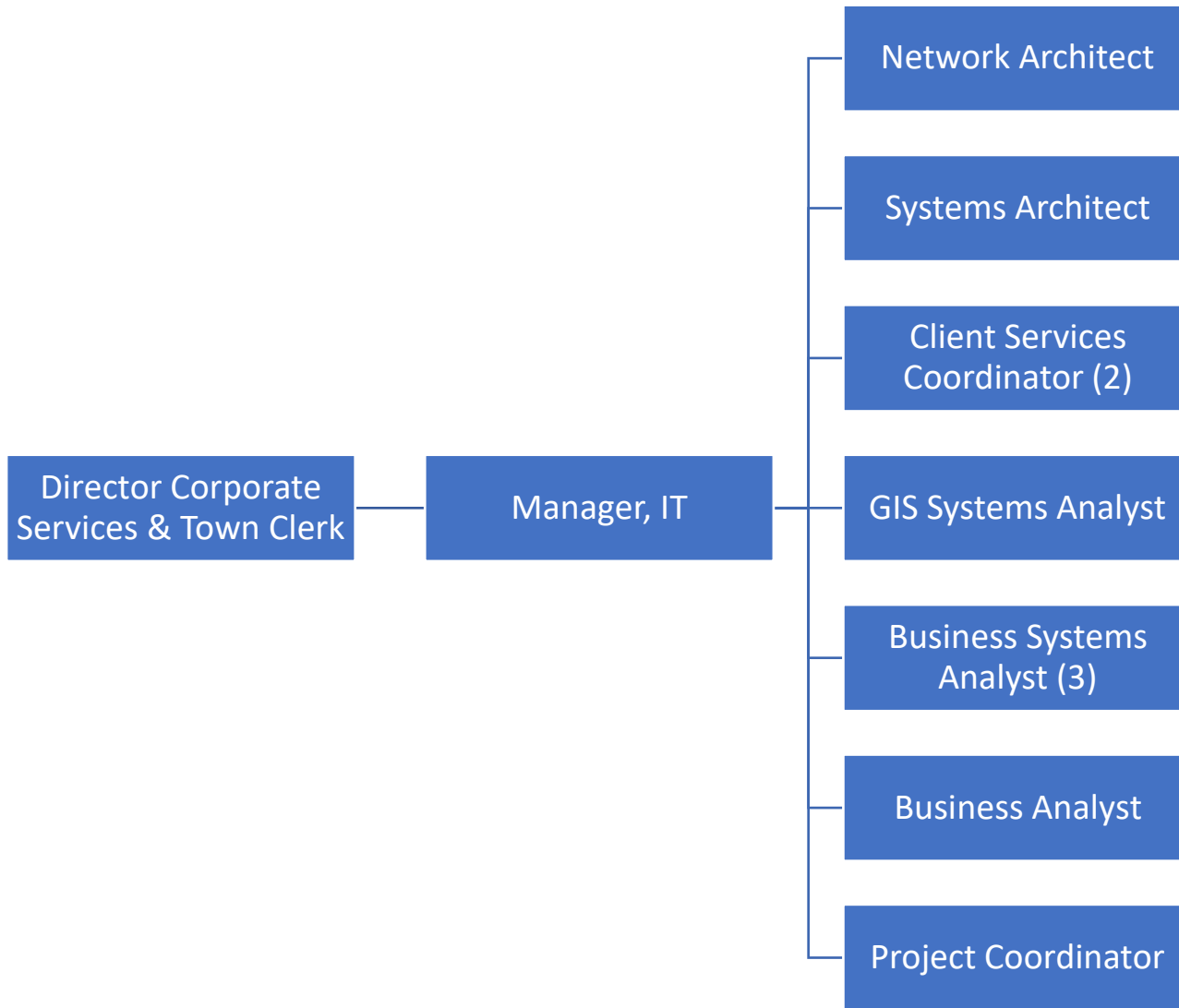


Figure 9: Current IT Organization Structure

While IT services are well-appreciated and rated high by the staff, the organization sees IT as a Solid Utility provider with the responsibility of implementing projects that the business units decide on.

In the progression of an IT unit, this could be charted in between a Solid Utility provider and a Trusted Supplier as shown below:

**IT is integral to how we do business:** IT organization is expected to closely partner with the business to help identify, plan and deliver significant business and community transformation initiatives - plus be a trusted supplier.

**IT delivers critical functionality and services:** IT organization is expected to deliver application projects on time and on budget, based upon the operating units' requirements and priorities - plus be a solid utility.

**Keep the lights on:** The IT organization is expected to provide cost effective reliability with transparent costs.

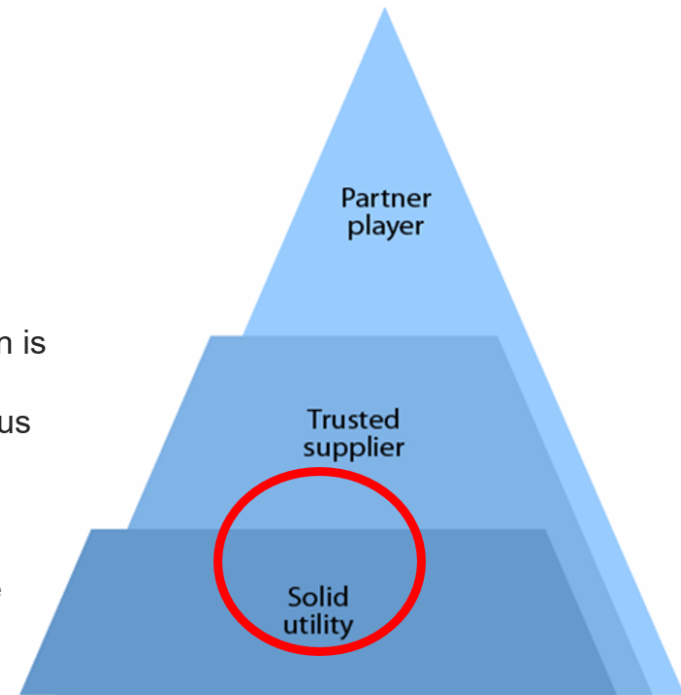


Figure 10: Role of IT Pyramid

There have been multiple instances where a business unit has decided to purchase a specific solution and has asked IT to implement. It is best that IT is at the table to support, inform and guide when the business units are making technology decisions.

## 2.7 Benchmarking Results re: Investment and IT Staffing

In the context of organizational needs, when benchmarked against other Ontario municipalities, the Town's investment in IT staff is within Perry Group's recommended ranges.

The Town also operates within operating expense range in comparison to other Ontario municipalities. The Town's capital expenditure shows high percentage due to hardware replacement and the implementation of key projects:

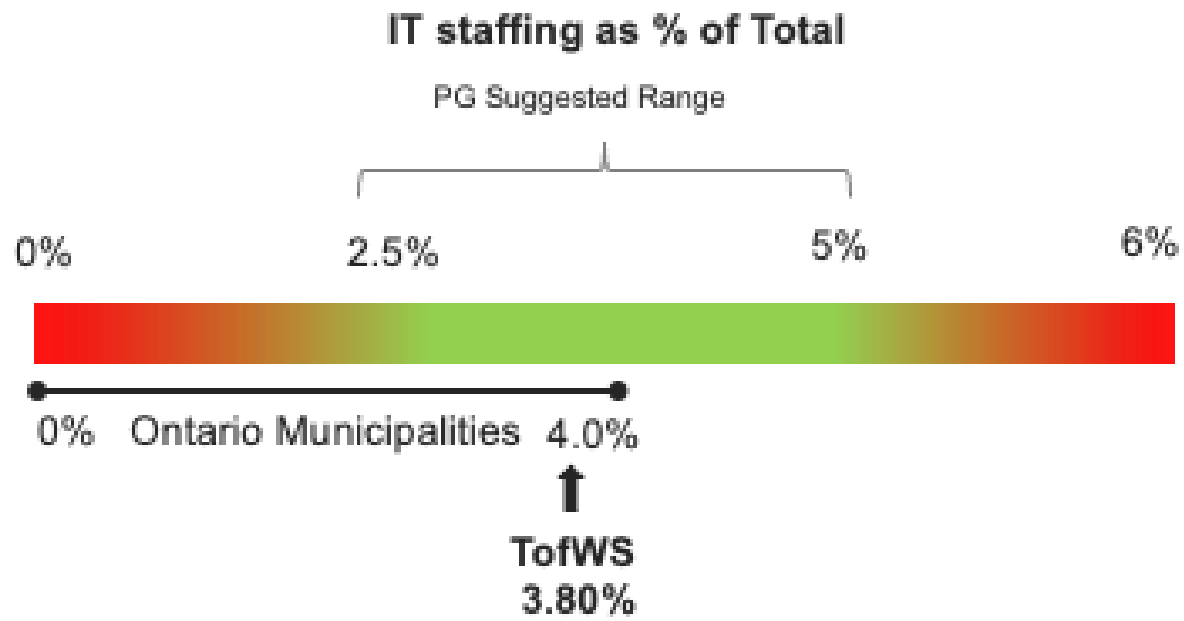


Figure 11: IT Staffing Comparison to Industry Standards



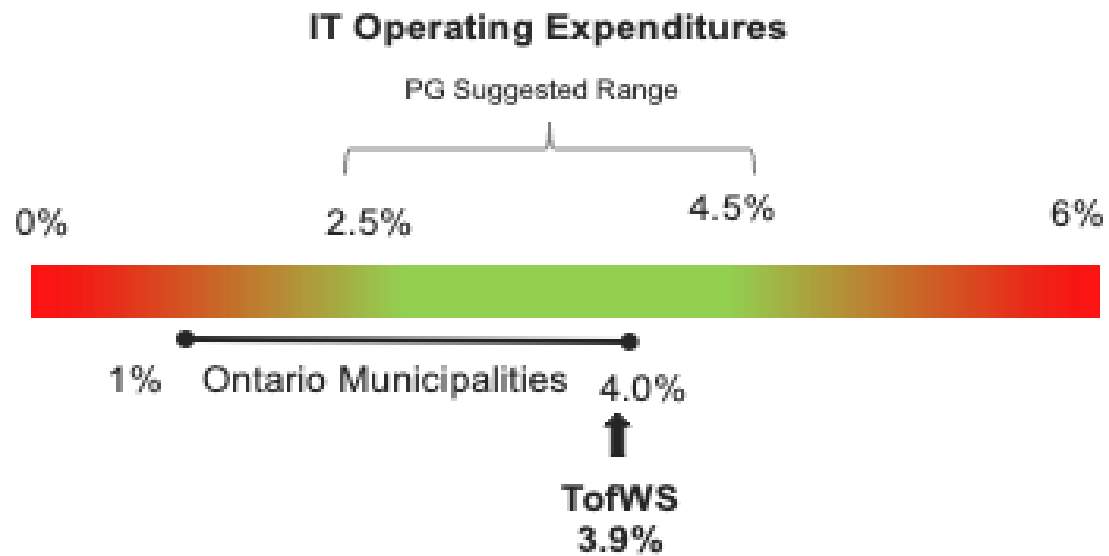


Figure 12: IT Operating Expenditure Comparison to Industry Standards

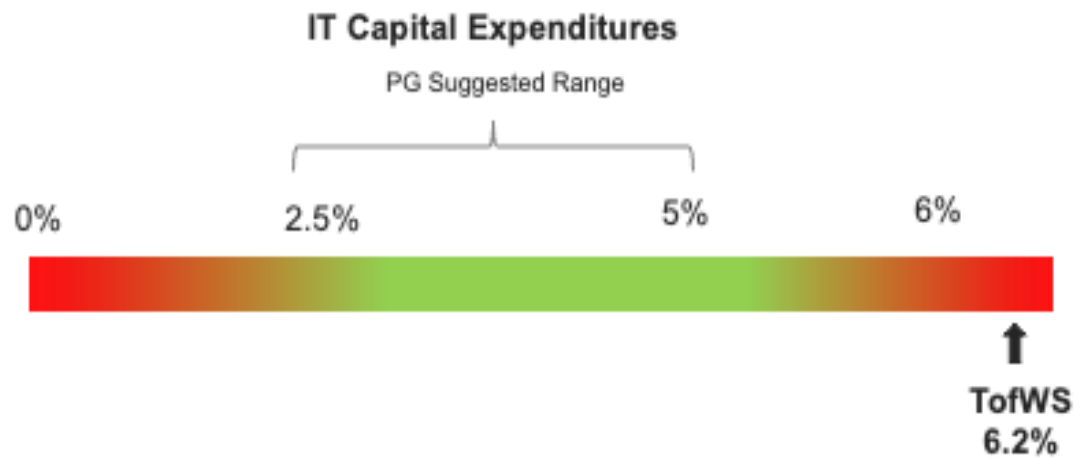


Figure 13: IT Capital Expenditure Comparison to Industry Standards

The above comparisons show that the Town is spending the right amount on technology and the staffing level is appropriate to the current service levels.

## 2.8 Current State Summary

To summarize, the current state of the technology environment has many positives such as a well-maintained Platform (Infrastructure) layer, new website with rich features, some online services and the services provided by IT well-received and rated high by the staff.

The Business Solutions layer is where most of the work is required, which includes the current ongoing and delayed HRIS and the CityView project implementations.

There is no formal IT governance and decision-making structure in place. Similarly, project management and change management requires special attention.

Project budgeting also needs to address the need to budget for implementation staff such as subject matter experts from the business units, project staff and related backfills.

While there are some good online services such as tax and water billing, there are opportunities to grow the online services for citizen self-service.

## 3.0 Future State Vision

Many municipalities are rightly considering moving services online because customer expectations have changed. Not only has Covid reduced the desire for personal interactions and shown how offering services digitally can work, but the reality is also, many citizens today rely on their technology devices as a way of life.

We have all moved from the situation 25 years ago, where booking a flight was so complex, you needed a travel agent to do it for you – to a world in which you can get a mortgage online without meeting an agent in person.

Think of all the service industries and about how technology/digital has changed them:

- Finance – Online and smartphone banking, online trading.
- Media – Netflix, YouTube, Disney+, Prime, CBC Gem, online news.
- Travel – Airbnb, Expedia, aircanada.com.
- Retail – Amazon, Indigo, beer, and wine direct, Skip the Dishes.
- Transportation – Uber, Lyft.
- Insurance – Compare and buy insurance online, report a claim online.
- Exercise – Online classes.
- Education – Online school, remote tutoring.
- Health – Telehealth, virtual medical appointments, online therapies.

Unquestionably, we are in the smartphone and Internet era, and this has changed customers' expectations about what service looks like today and how they wish to access services. Delivering online has become the way that services are delivered in the 21st century.

Governments too are responding to these changed expectations and are rapidly moving services online. Think about the online services that Service Ontario offers, for example, allowing customers to renew health cards or driver's licenses, get their vehicle sticker or fishing license, all while in your PJs using a tablet on the sofa on a Saturday night.

It is important to note that, even when the Town does introduce online services, this does not mean it should stop offering services via existing methods or channels. Customers should still be able to call or drop into Town offices to carry out a transaction, to seek advice, submit an application or pay a bill.

The introduction of digital services can be offered as an additional option that customers can choose – and one we are certain many *will* choose because of its convenience and ease of use.

### 3.1 Benefits of Digital Service Delivery

Investment in technology is typically an investment in staff productivity, community benefit, or improved customer service.

Any investment should be expected to achieve a return on that investment and that return should be measurable. As such, it is recommended that the Town adopt a business case approach to justifying and evaluating proposed technology investments. Following are the typical benefits that the Town can obtain through the implementation of the ITDSP:

- Enables excellent customer service: Digital channel provides convenience to residents, anytime, anywhere
- Improves customer engagement: Social media, online surveys, virtual meetings etc.
- Improves the service delivery timelines: Better turnaround times due to automation, Less duplicate data entry due to integrated systems
- Addresses resident concerns in a timely manner: Automated status updates to applications, concerns, complaints
- Helps the environment: Paperless process reduces the amount of paper (E.g. Tax bills)
- Creates capacity: Automation reduces the need for manual processing by staff
- Increases Transparency: Digitization allows the Town to collect and share data with public, Council and the management
- Reduces the number of complaints received by the Council: Digital business processes can provide automated status updates to customers (E.g. Planning applications, property complaints, Snow issues)
- Helps make informed decisions: Data analytics allow the Council and the Management make decisions based on evidence, data and trends

- Increases the accessibility and availability of services: Driving to a Town office during office hours on week days is not required. The service can be accessed 24/7 from anywhere
- Reduces the service delivery cost: Online service cost is lower than over-the-counter or over-the-phone

Channel	Cost Per Transaction (Service Canada)
Web/Online	\$0.10
Phone	\$4.00
Over the Counter	\$6.50

*Table 1-Cost of Services by Channel: Reference: Anywhere, Anytime, Any Device: Innovations in Public Sector Self-Service Delivery Research Report by Kenneth Kernaghan Brock University 2012*

The above chart shows that there could be a 4000% cost reduction in providing online services compared to over the phone channel.

### 3.1.1 Understanding Benefit Types

It is important to understand that benefits from technology investments typically fall into several categories:

- **Cashable benefits:** Cashable benefits are changes that result in the municipality having more money to spend, either through savings or through additional revenues.
- **Non-cashable benefits:** Non-cashable benefits are changes that do not lead to an immediate cashable benefit, but save money in future budgeting periods, by avoiding adding staff, or avoiding future procurement costs.
- **Wider economic benefits:** These improve things for your customers outside your organization and include things like:
  - Saving users' time or improving their experience.
  - Reducing private sector costs (e.g., time costs associated with waiting for a building permit).

Some projects will deliver all three of these benefit types, however, the typical benefit that we see with the types of technology proposed in this Strategy will result in a combination of non-cashable savings and wider economic benefits.

This means that the benefits are achieved with staff working less on repetitive activities that are suited to computers, and more on higher-value activities; with inspectors and crews getting more done; with applications and licenses processed faster, and these kinds of things.

The benefits manifest themselves in cost avoidances and higher service delivery standards.

### 3.1.2 Examples of Potential Benefits

There are numerous examples of municipalities achieving cashable and non-cashable benefits through the implementation of technology, some of which are highlighted in the examples below.

#### **Digital in Action**

- The City of Mississauga moved its recreation guide fully online, replacing its paper-based version and saving \$230,000 per year in printing and distribution costs.
- The City of London implemented iPads for Fire inspectors. Mobile inspections are now 25% more efficient.
- Similarly, a BC municipality plans to move to a mobile-enabled, paperless process for Fire inspections. It anticipates reduced administrative support needs from 60 days a year to 4 days per year and savings of up to \$185,000 a year in labour savings across the service.
- The City of Hamilton saved an estimated \$360,000 per year by implementing mobile inspection tools for its 37 building inspectors.
- The City of Mississauga, a BILD-acknowledged leader in online development and planning, has seen a 25% decrease in total review time (elapsed time to review applications) and a 57% decrease in time taken to process site plans through the digitization of the Development Approvals process. Customers are no longer required to submit 30 hard copies of each drawing. Continuous improvements related to digitization and lean process review have resulted in over \$1,000,000 in savings.

- The City of Edmonton has trained a Machine Learning model on a decade of data to speed safety inspections. Inspections deemed minimal risk are passed automatically, eliminating unnecessary delays in builder timelines. Since October 2019, the predictive model has reduced the number of eligible inspections by 37%. City inspectors can focus on higher-risk and more complicated inspections, which pose greater threat to safety.
- Corpus Christi, TX implemented mobile work management for its field crews and saw the average number of work orders closed per day increase from 11 to 18, an increase in productivity of 63%.
- The City of Guelph conducted an efficiency review of its mostly-manual time and attendance processes. The process consumed an estimated 54,000 person hours each year at a cost of \$2.5 million. Digitization is anticipated to halve the cost of running the process.
- The City of Cambridge has used its Asset and Work Management system to systematically increase the roads rated “good” by 50% over a 3-year period. This is expected to eliminate over \$71 million in repair backlogs.
- By analyzing their work orders, wastewater staff at Corpus Christi found that nearly 33 percent of the department’s effort was spent resolving problems at just 1.4 percent of customer sites. With this information, the Town developed and implemented a repair plan that resolved these ongoing issues and ultimately significantly reduced costs.
- Implementation of a new digital parking process for paid parking, permits and tickets along with the introduction of Administrative Monetary Penalties has seen one Ontario municipality increase revenues by \$400,000 and reduce staff time to administer the program by over 8,000 person hours valued at around \$500,000.
- The City of Brampton implemented an online Request To Park On Street Overnight. The solution handled over 100,000 requests online per year, which equated to a reduction of 2 FTEs taking calls at the contact centre.
- The Town of Chatham-Kent implemented a virtualized call/contact centre for the delivery of improved customer service experience and increased resolution of customer inquiries at the first point of contact, realizing annual savings of over \$160,000 in service delivery.

In addition to these examples, Perry Group has a team of business process consultants that work with municipalities to optimize processes. The team has been busy with municipal modernization projects funded by the province and, over the last two years, has completed over 200 business process optimization reviews with municipalities across Ontario.

In each case, optimization involves streamlining and simplifying processes and applying process digitization and digital service concepts to redesigned services.

Quantifiable efficiencies identified have ranged from \$20,000 – \$900,000 per year, with an average of \$80,000 per high-volume process/service.

The Town should anticipate that similar savings could be possible across many of the Town’s major processes through optimization and digitization.

### 3.1.3 Growth of Internet Use in Canada

The latest statistics show that Canadians are a growing community that depends on the internet for their day-to-day activities.

During the pandemic, the use of internet and online services increased and continued to grow even post-pandemic. Our citizens expect their governments to also provide services online so they can access Town services online anywhere, anytime.

“With nearly 35 million internet users, Canada counts among the most prominent online markets in the Americas. This figure is equivalent to 92 percent of the country’s population. Additionally, digital audiences in Canada are projected to grow to around 38 million online users, or over 94 percent of the population by 2028”<sup>1</sup>. However, in Ontario, the internet use has reached 95.5% in 2022 according to Statistics Canada<sup>2</sup>. The online user base is also increasing in line with the population growth in Canada.

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<sup>1</sup> Statista report: [Internet usage in Canada - Statistics & Facts | Statista](#)

<sup>2</sup> StatCan report: [Internet use by province and age group \(statcan.gc.ca\)](#)



# Number of internet users in Canada from 2019 to 2028

(in millions)

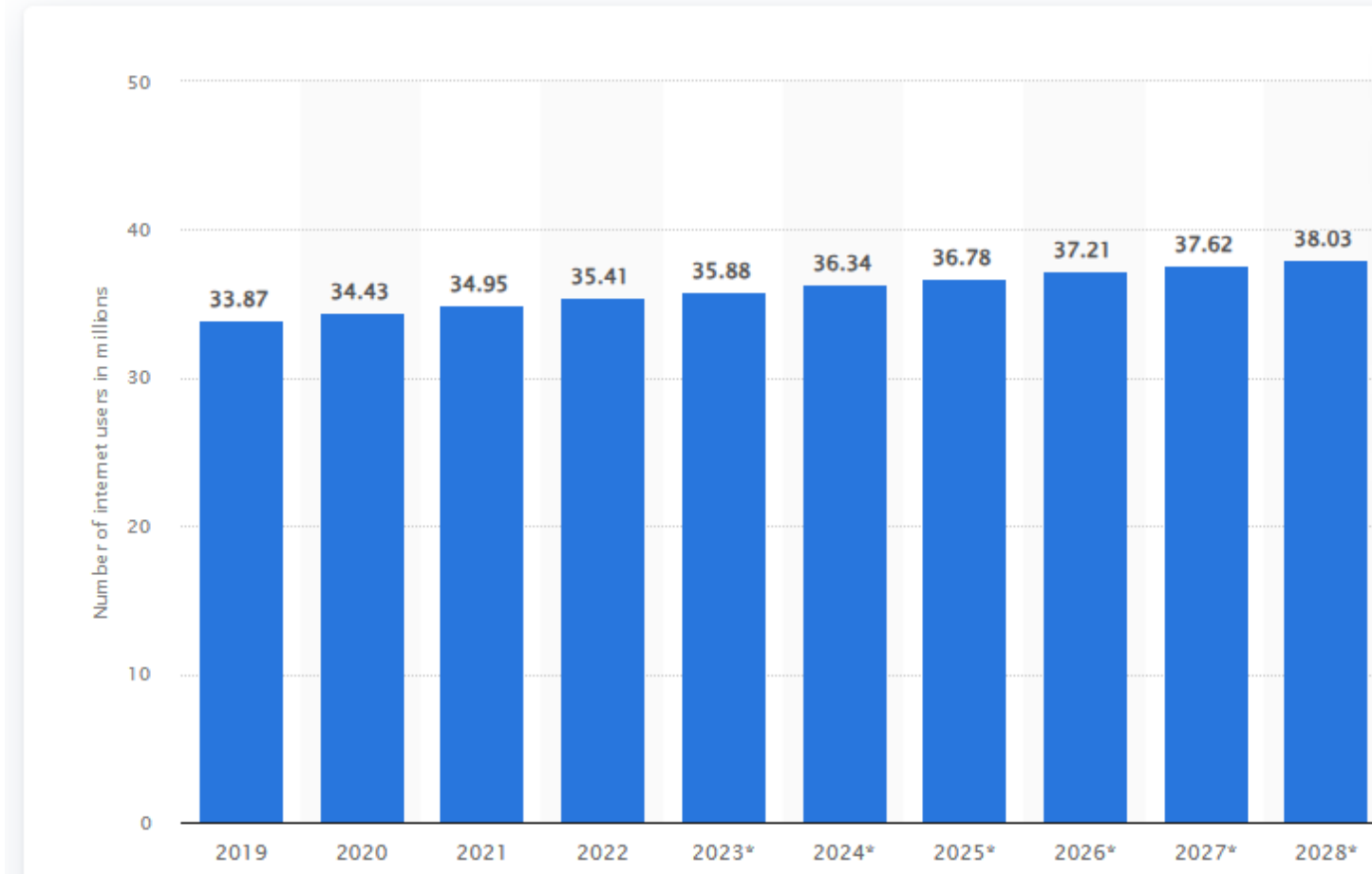


Figure 14: Growth of Internet Users in Canada

Source: <https://www.statista.com/statistics/325649/canada-number-of-internet-users/>

This shows that a positive growth trend among Canadians toward online services exists and, as such, a demand for online services will grow. The Town should position itself to support this growth through providing digital services to its customers.

## 3.2 Linking to the Customer Service Framework

The Town recently developed a Customer Service Framework. The Digital Strategy and the Customer Service Framework need to be in sync.

There is a close relationship between customer service and digital services. In fact, the Town cannot and should not plan the citizen-facing services without thinking about the digital channel.

***“There is no difference between digital service delivery and service delivery. Today, everything is digital. If governments do not recognize this evolution, then any service strategy is flawed at the Concept stage”***

Alex Benay, CIO Canada, 2017-2019

In this context, the Digital Strategy was to fully embrace the Customer Service Framework of the Town to inform the development of the ITDSP.

Following are the technology recommendations of the 2023 Customer Service Framework:

- T1 - Implement Customer Service Initiatives identified through Digital Strategy.
- T2 - Continuously review and update the Town website as it relates to the customer experience.
- T3 - Implement a Customer Relationship Management (CRM) IT system.
- T4 - Expand self-serve / digital options for customers.
- T5 - Continue to update service channels to ensure accessibility for customers.

## 3.3 The Vision

The Town's vision for the ITDSP is three-fold:

- Improve **customer experience** through **integrated digital services**.
- Improve **staff experience** through integrated digital services.
- Increase staff **capacity** through automation.

In addition, the Strategy needs to be practical and should address the current challenges.

What is the true meaning of “***integrated digitally services?***”

In a future in which services are digitally-powered, interacting with the Town should be simple, straightforward and designed around convenience for customers and staff alike.

A service that starts through a digital channel by a customer should seamlessly flow to the internal staff and their back-office systems without having to re-enter information from one platform to another.

Once in the back-office system, information should also seamlessly flow between other supporting back-office systems.

The Town already has implemented some good online services. The online parking payments, permits, online tax and water account management, online program registrations are some examples.



**Pay or Appeal Ticket**

Handwritten tickets may take up to two business days to be available online



**Order a Permit**  
Order a Parking Permit



**View/Manage Account**

View and manage your account

**Ticket Payments**

Please click on [Lookup A Ticket](#) to pay and/or appeal to a current ticket.

**Please note that manual (handwritten) tickets may take up to Three (3) business days to be available for payment online.**

**Parking Permits**

Please click on [Purchase a Parking Permit](#) to purchase a permit.

All information collected is secure and will adhere to the [town's privacy statement](#)

Questions? Visit the parking page at [townofws.ca/parking](http://townofws.ca/parking) or call 905-640-1900 between 8:30 a.m. and 4:30 p.m. Monday through Friday

Parking Cost Schedules

Permit Types

[Violations](#)

Description	Amount	Sales Begin	Active	Expires
On-Street Parking	\$0.00	Available	Selectable + 0 day	Never Expires + 0 day
Lot Parking - 1 Day	\$6.75	Available	Selectable + 0 day	Never Expires + 0 day
Lot Parking - 1 Week	\$20.00	Available	Selectable + 6 days	Never Expires + 6 days

Figure 15: Stouffville's Online Parking Portal

The following examples are provided to help the reader understand the trajectory that the Strategy establishes, if not the exact solutions that will implemented.

*A local developer, Nicole, has received approval for a small townhouse development in a local neighbourhood and is now ready to build.*

*She goes to the Town's website to apply for the necessary building permits where she completes each application, uploads the drawings, and pays for the application.*

*The Town reviews the plans and circulates the digital drawings to various departments and external commentators. The Town requests a number of revisions which are marked up digitally and returned to Nicole. Nicole submits amended drawings online, which are approved, and the permits are duly issued.*

*As building proceeds, Nicole needs the footings to be inspected. Using her smartphone, she books an inspection for the next available slot. Jim, the assigned inspector, meets Nicole on site the next day. Using his tablet to conduct the inspection, he takes pictures and records all the checks directly in the system.*

*With the inspection completed, Nicole's build is greenlit and Jim emails the inspection results to Nicole before heading off to his next inspection.*

End-to-end, real-time transactions are becoming common in the private sector (think about hotel or airline bookings or interactions with your bank) and are increasingly expected by those who interact with the Town. Moreover, significant efficiencies are achieved; in the example above, think of the reduction in paper, elimination of unnecessary customer visits to Town Hall, and reduced costs and delays from mailing out inspection results, to mention just a few.

*At the end of a day of meetings, Chris remembers to book vacation time for an upcoming trip.*

*Chris pulls out the Town-issued smartphone and opens the TownApp, checks the vacation bank to make sure there is enough leave and then makes the request. Chris also fills their daily timesheet in the time recording portion of the App.*

*In the TownApp, Chris routes the leave request to Frank, Chris' boss, who checks the staffing schedule in the TownApp for coverage and, seeing that all is well, approves Chris' leave request.*

It is not just customers who appreciate efficient, simple, and easy-to-use processes.

Staff and managers within the Town are often frustrated by inefficient, slow, paper-based internal processes. Modernizing the employee experience so that frequent interactions and tasks are streamlined and easy-to-use, increases productivity and reduces frustration.

While we are planning to provide digital services, we also need to address a challenge at hand. The Town is in the middle of implementing two key enterprise systems. It is recommended that these two projects be completed before embarking on any other major initiatives.

The CityView project has many capabilities to provide online service to citizens while improving the internal staff efficiencies. This should be used as a trigger point to initiate the digital journey for the Town.

The work plan has identified a few low hanging fruit that could generate the momentum for online services, but the focus needs to be in completing the CityView and HRIS implementations. These are quick wins that allow the Town to showcase the trajectory of the Digital Strategy.

To prepare for the implementation of the Strategy, the Town should focus on setting up an appropriate environment. The following section highlights the required setup for success.

## 4.0 Preparing for Success

### 4.1 The Partnership Between Business and IT

The modern approach to the role of IT is to focus on building strong partnerships between IT and business units; where IT works hand-in-hand with business units to define and build modernized business processes and services, and where the IT division and the application of technology becomes an engine of change and transformation.

To build an effective partnership, IT and business units must both be at the table together in a collaborative mode with a clear understanding of roles and responsibilities. IT should be a partner in advising business units on technology strategy, helping to realize ideas and opportunities; business units should partner with IT by consulting and taking input and advice from IT from the ideation stage onward. These partnerships should be enhanced throughout the lifecycle of a project through the Steering Committee and project team.

IT and business units should actively work on strengthening their relationships so that IT better understands the business and vice versa. Of course, partnerships are built on trust so IT must continue to deliver high-quality core IT services and business units must consult with IT.

In this shift, the departments have more involvement and ownership of their business systems and digitization efforts.

#### 4.1.1 Department Roles and Responsibilities

Departments need staff and management to:

- Be strong digital service owners, with intent-to-offer services built for the 21<sup>st</sup> century.
- Own business and operating models, business processes, their design and re-design.
- Be curious and open to change.
- Have a good knowledge of existing systems capabilities (and emerging / changing / growing capabilities and opportunities).
- Partner with IT early to ideate, conceptualize and propose initiatives (new, changes to existing).
- Play an active sponsor role in key projects (according to an agreed IT project methodology).
- Bring active accountability, leadership, and resourcing to digital initiatives.

- Bring strong, highly-experienced subject matter expertise to digital initiatives.
- Work in partnership with IT as well as vendors and partners to design and implement digital solutions.
- Lead adoption, training and change management programs of business-specific solutions.
- Ensure systems power users and subject matter expertise is assigned and maintained. Backfill staff positions to provide the necessary subject matter expertise and resources to projects.
- Be effective data managers and stewards; to be responsible for data production and consumption activities.
- Fully use and exploit the existing solutions.
- Actively participate in vendor relationship management in partnership with IT.
- Ensure consistent use of business systems across all staff and encourage and enforce the use of systems.

## 4.2 Elevating the Role of IT

The IT division has been treated by a large part of the organization as a back-office, reactive, support function – a Utility Provider charged with keeping the lights on, or a Supplier delivering widgets (in the form of projects handed to them).

A Utility or Supplier type relationship misses opportunities for both sides to learn from each other, to achieve the type of transformation envisaged, and to advance strategically.



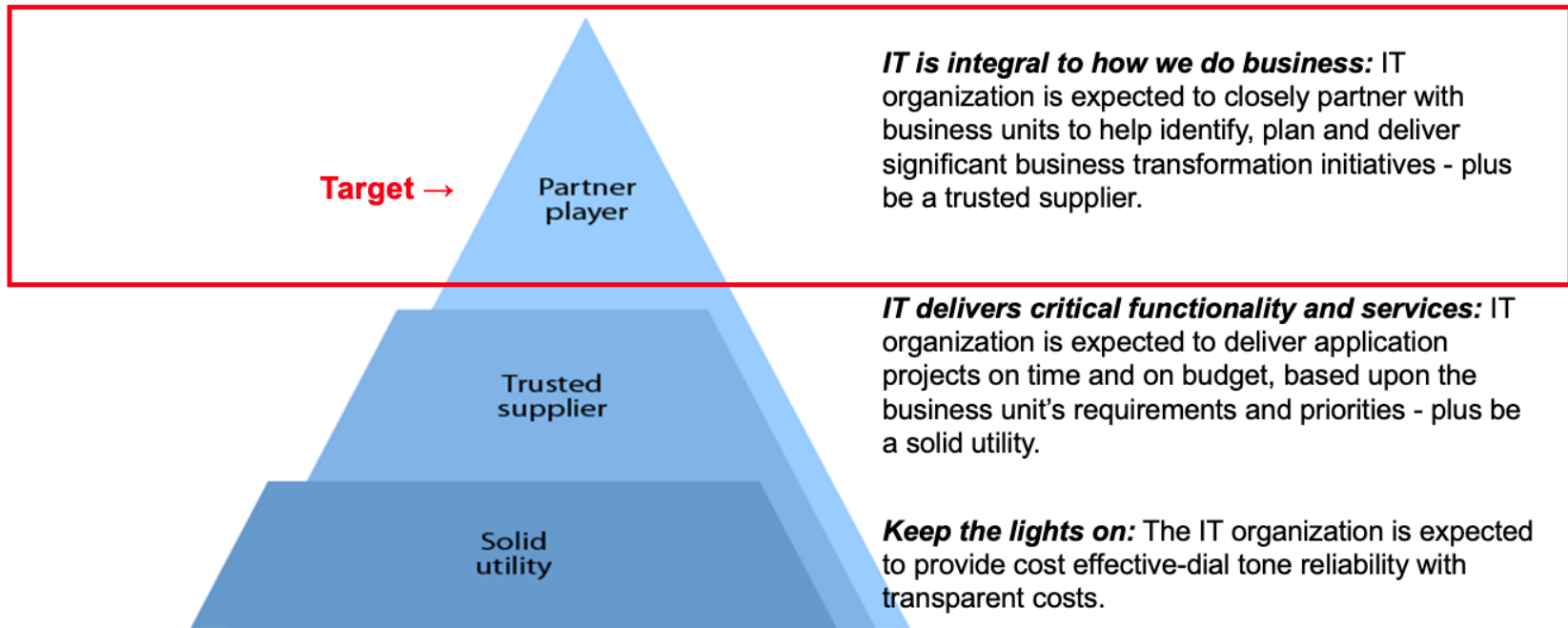


Figure 16: Elevating the Role of IT

#### 4.2.1 IT Organization Structure

For IT to play a strategic role in the organization, the current flat structure of IT needs to change.

The IT leader should be able to focus on strategic initiatives and delegate the day-to-day activities to a second layer. To facilitate this future state, a three-stage approach is recommended with an immediate change to be implemented in 2024. The following color codes were used to identify the current and future proposed changes.

## Current State

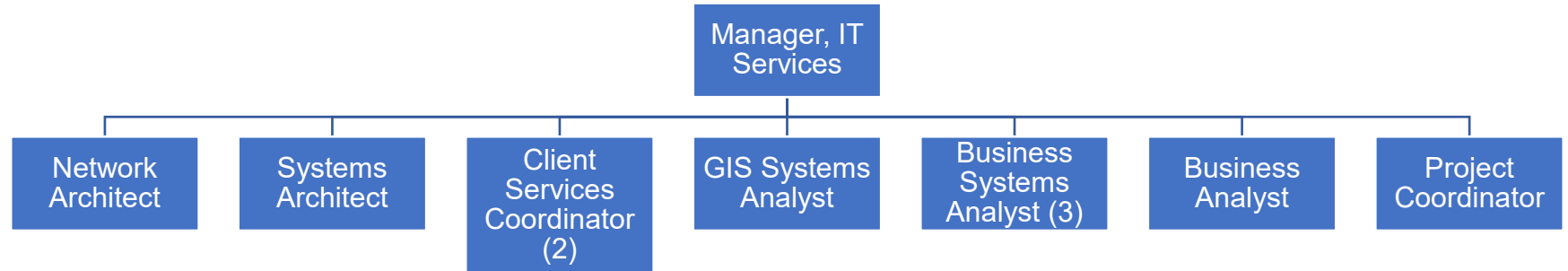


Figure 17: Current State IT Organization Structure

It is recommended that in the long run, a second level of leadership is built within the IT organization. With a supervisor level introduced, the management tasks of the Manager, IT Services should be delegated. This allows the Manager to focus on strategic IT initiatives.

### Responsibilities of the Functional Areas

#### Supervisor, Business Systems

- Applications management including break fixes, configuration, upgrades, expansion of the use, implementing new features.
- Application roadmap management.
- 2<sup>nd</sup> and 3<sup>rd</sup> level incident support, break fixes and problem management.
- Expansion of the use of the application including configuration, implementation of new features, testing.
- Application upgrades, release, and deployment.
- Application vendor management.
- Systems integration.
- Application data management, analysis, and reporting.
- Access and security management.
- Application license management and planning.

- Database management.

### **Supervisor, Infrastructure and Security**

- Technology architecture management.
- Network, telephony, mail, messaging.
- File and print infrastructure.
- Computing platforms including servers.
- Cloud infrastructure.
- Data centre management.
- Security defense (firewall, malware, spam, endpoint, etc.) and access controls.
- 2<sup>nd</sup> and 3<sup>rd</sup> level support including incident and problem management.
- Vendor management.
- Capacity and availability management.
- Backup and restore services.
- Disaster recovery services.
- Service performance monitoring.

### **Supervisor, Client Services**

- Service Desk operations.
- Incident management and 1<sup>st</sup> level support.
- Identity management including user creation and access.
- Productivity software support, e.g., MSOffice, Adobe, etc.
- End user device support including desktops, laptops, tablets, etc.
- Mobile device support.
- A/V support.

- IT Asset Management including productivity software licensing.
- Service catalogue management.
- Operational communications.
- Customer satisfaction surveys.
- Monitoring and improving service desk KPIs.
- After hours and emergency service including triaging.

### **Supervisor, Digital and Data Services**

- Data architecture including standards and roadmap.
- Business Intelligence framework including data warehouse management.
- Master data management.
- Enterprise dashboards.
- Enabling departmental/divisional data analytics and reporting.
- GIS architecture, technology design and development.
- GIS integration, data collection and data presentation including public-facing datasets.
- Development of maps, reports and data analysis.
- Web infrastructure management, support and integration.
- Digital service enablement including online forms, payments, customer portal.
- Online content management in consultation with the corporate communications.

The consultants also reviewed the current job descriptions of all IT positions other than the Manager, IT Services and the Project Coordinator positions which were reviewed recently by the Town.

The job descriptions were updated based on the [SFIA](#) (Skills Framework for the Information Age) framework.

## **4.3 A New IT Governance Model**

Perry Group identified an opportunity to reimagine the purpose and power of effective IT governance at the Town.

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

Perry Group recommends the implementation of a formal ***Information and Digital Technology Governance Team (IDTGT)*** framework. The framework should clearly identify the groups and individuals who are involved in IT decision-making. It should specify which decisions are the responsibilities of which groups.

The goals of the IDTGT framework are to:

- Establish a clear mandate and authority for all technology decisions.
- Engage stakeholders directly in technology decision-making.
- Better coordinate corporate technology initiatives for which wider benefit can be derived.
- Establish a more rigorous process of evaluating and selecting technology projects to ensure a focus on “high-value” projects.
- Track the business benefits and value accrued from investments in technology.
- Ensure more effective resource utilization within IT and the business by focusing on corporately-agreed directions.

The Information and Technology Governance framework should allocate responsibilities for:

- Setting and approving the Town’s IT Strategy.
- Setting technology-related policies and standards.
- Determining prioritization of technology-enabled investment programs in line with the Town’s strategy and priorities.
- Monitoring the status of the IT portfolios and projects and resolving resource conflicts.
- Establishing and following the Town’s technology architecture and standards.
- High-level monitoring of the status of IT assets (e.g., hardware, software, resources).
- High-level monitoring of service levels and service improvements.

As a point of background, Control Objectives for Information and Related Technology (COBIT)<sup>3</sup> an industry standard guide related to IT governance and management, summarizes the purpose of governance as:

*“Governance ensures that stakeholder needs, conditions and options are evaluated to determine balanced, agreed-on enterprise objectives to be achieved; setting direction through prioritization and decision-making; and monitoring performance and compliance against agreed-on direction and objectives”.*

## 4.4 An Inclusive Framework – Encompassing All Information and Technology Decision-Making

The Town’s IDTGT framework should cover all technology, not just that which has historically been considered the domain of IT. The IDTGT framework should define responsibility for decision-making related to all IT technology initiatives.

The definition of *technology* in this context should include:

- Hardware (e.g., server, personal computer, network switches, laptop, bar code readers, point of sale machines).
- Software (e.g., MSOffice, AIMS, Acrobat Reader, GreatPlains, CityView, ActiveNet, developed solutions).
- Web (e.g., content management system, online applications, and services (parking tickets), hosted applications).
- GIS (e.g., data management, processes, systems).
- Telecoms and Unified Communications (phones, email, voicemail, instant messaging, smartphones).
- Data, Information, Information Management Processes (data standards, information-sharing, common process management, information management).
- Technology and Information Security.

Commissioners, managers and staff should be held accountable for ensuring that initiatives in their commissions and divisions involving technology are reviewed by the relevant parties as outlined in the IDTGT framework.

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<sup>3</sup> COBIT 5, A Business Framework for Governance and Management of Enterprise IT, 2012, ISACA (<https://www.isaca.org/>)

For the purpose of clarity, this means that any initiatives that involve information and technology should follow the governance processes as outlined in this document. Thus, the following examples should be subject to the technology governance process:

- Any type of solution where any device (of any kind) is to be connected to the Town's networks, e.g., PCs, fuel system pump readers, RFID readers, sensors, Internet of Things (IoT) devices, bar coding devices, card readers, handheld data capture devices, Automated Vehicle Locator (AVL) devices, building automation, security systems, energy monitoring, in vehicle computing devices, etc.
- Any solution that requires data to be stored in a database (of any kind), regardless of whether the database is stored locally or on the network.
- Any capital or operational initiative that may necessitate changes or additions to existing technology solutions (e.g., upgrades, enhancements, the purchase of an additional module).
- Any RFI, RFP or Tender that includes a technology component.
- Any solution that utilizes the web or Cloud-based systems or that places any Town data into Cloud-based system.
- Any web or digital initiative.
- Any initiative that will require Town IT staff time to be allocated, no matter how small the estimated time allocation may be.

If in doubt, staff should err on the side of inclusion and consult with the Manager of IT Services. The role of the Manager of IT Services in this case is to facilitate fair-value-centred governance, quoting COBIT:

***“Governance is about negotiating and deciding among different stakeholders’ value interests. By consequence, the governance system should consider all stakeholders when making benefit, risk and resource decisions”.***

## 4.5 Proposed Information and Digital Technology Governance Framework – Roles and Responsibilities

The Information and Digital Technology Governance framework should typically include groups and individuals with defined responsibilities. For the Town, the following approach to the framework should be considered.

As this section starts, below is a generic depiction of the COBIT prescribed roles, activities and relationships.

In this depiction the stakeholders are citizens, Council and legislators. Most of the focus of this section will be on how we define our governing body(s) and management.

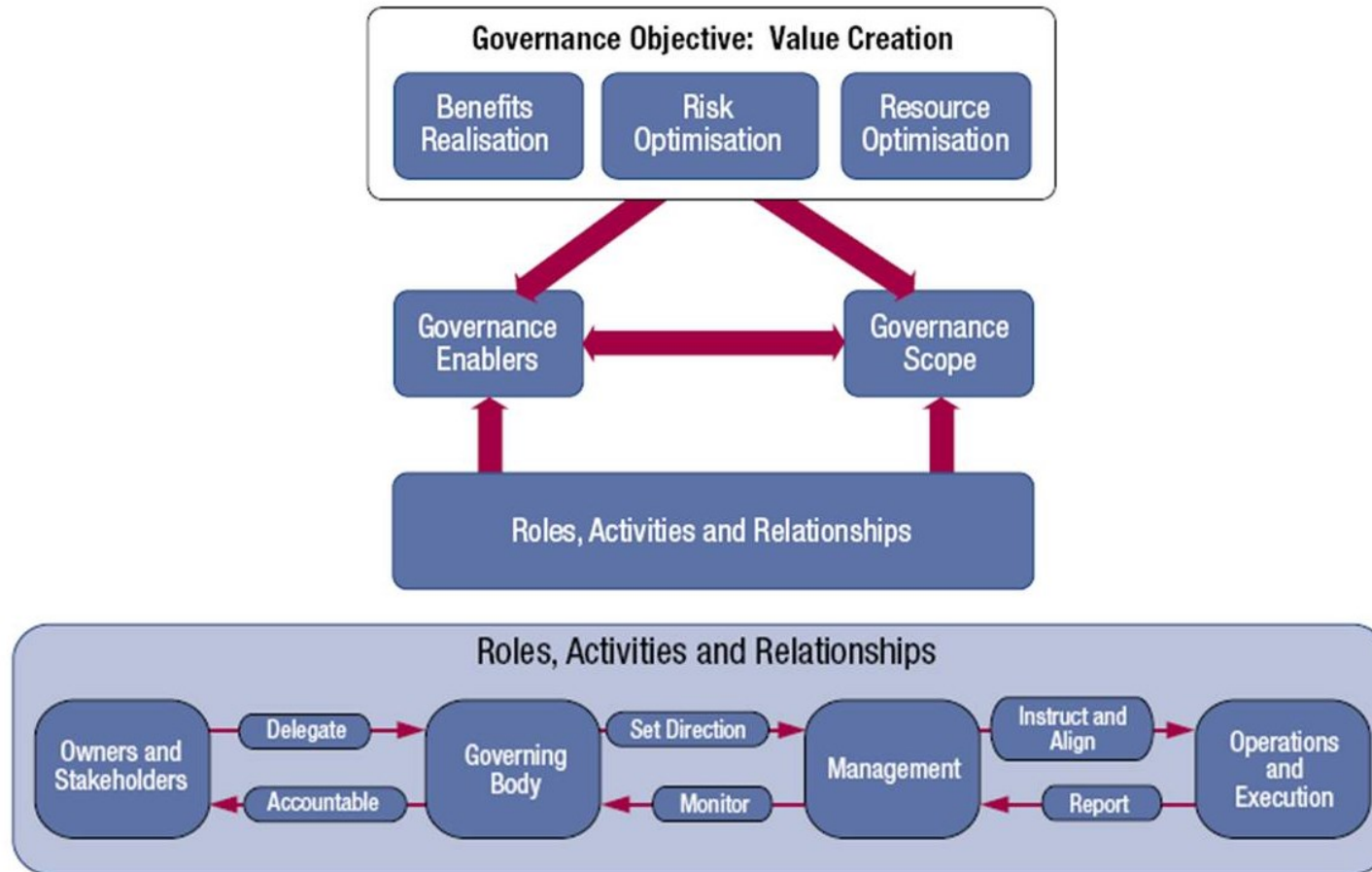


Figure 18: Roles Prescribed by COBIT



At this stage in the Town's journey, the most important function of the governance model will be to keep the Town focused on a small set of priorities that support corporate objectives. This will require the authority of Senior Leadership Team (SLT), in particular the technology initiatives underway. At the same time, the governance model must directly engage senior leadership members in decision-making – ensuring that buy-in can be secured, and that institutional learning about how to effectively deliver enterprise IT programs can be developed.

As a result of these drivers, the following governance bodies are suggested.

#### 4.5.1 Governance Bodies

- **Information and Digital Technology Governance Team:** This team should be comprised of the SLT. Specific key project representatives may be invited as required (to ensure a strong linkage to the SLT agenda). This team will be responsible for reviewing the Technology Portfolio, will address key decisions around technology investments and review *Key Performance Indicators* (KPIs), at a minimum quarterly, more preferably six times per year, with dedicated time allocated to this review (i.e., a dedicated meeting for this purpose). Annually, SLT would be responsible for internally confirming the prioritization of technology initiatives and “approving” the annual, consolidated corporate information and technology budget recommendation into the budget process.
- **Steering Committees:** These types of strategic working groups are convened as required around enterprise systems / projects, land and property processes (e.g., CityView), asset and work management processes (e.g., TBD), Finance and Human Resources (HR) processes (HRIS, and GreatPlains) and/or major work programs (such as mobile working, Digital Service Delivery, Information Management). They are responsible for the more detailed level of determining strategies, work plans and projects (for proposal forward) within program areas – to ensure that projects and initiatives are complementary and aligned. Strategies developed by these working groups are to be reviewed and approved by the Information Technology Governance team.
- **Project Teams:** Project teams are formed and disbanded as needed to tackle business-technology projects. Depending on the size of projects, different roles must be formally assigned, including Sponsor, Project Manager, Business Analyst, Technology Lead, and business subject matter experts. Projects should follow the standard methodology (discussed later), will be responsible for providing regular project status reporting and will be subject to project review by the IT Project Coordinator.

- **Technical Standards Team:** This group may be a “virtual team” or committee that is made up of architecture leads from the IT division (and perhaps some tech-savvy business representatives) staff responsible for defining, developing, and recommending technical and architectural standards to IT management and the Information and Technology Governance Team. This includes the development of lifecycle/roadmaps to ensure that sustainability can be achieved for the Town’s IT environment. The group would also review ideas, concepts, and project proposals for compliance with architectural standards.

#### 4.5.2 Supporting Governance Functions

- **Manager, IT Services:** Responsible for leading the development of technology strategy and policies, overseeing the operation of the Information and Technology Governance framework, and acting as an advisor to the IDTGT regarding most effectively leveraging technology. In addition to governance support, the Manager, IT Services is responsible for overseeing managerial activities which, as quoted by COBIT, have the purpose of, “*Management plans, builds, runs and monitors activities in alignment with the direction set by the governance body to achieve the enterprise objectives.*” For this reason, the Manager, IT Services typically has management responsibility for the governance supporting groups (including an IT PMO and Technical Standards Group) and facilitates IT decision-making by providing insight and transparency to the IDTG Team into the overall IT environment, processes, and resource utilization.

The IT division will need to resource the “architecture” function due to its importance. It is likely that this will mean either creating a role or roles to lead the architecture function or assigning existing staff into architecture lead roles as part of their job role (with some external support).

The Information and Digital Technology Governance framework will be expected to interface with existing corporate groups and processes. Specifically:

- **The Corporate Business Planning and Budget Process:** The IDTG Team should review all technology-related budget submissions (above an agreed threshold), and will approve the corporate IT Capital Budget, before submitting to the **Corporate Budget Process**.

The arrangement of the governance groups is illustrated in the diagram below.

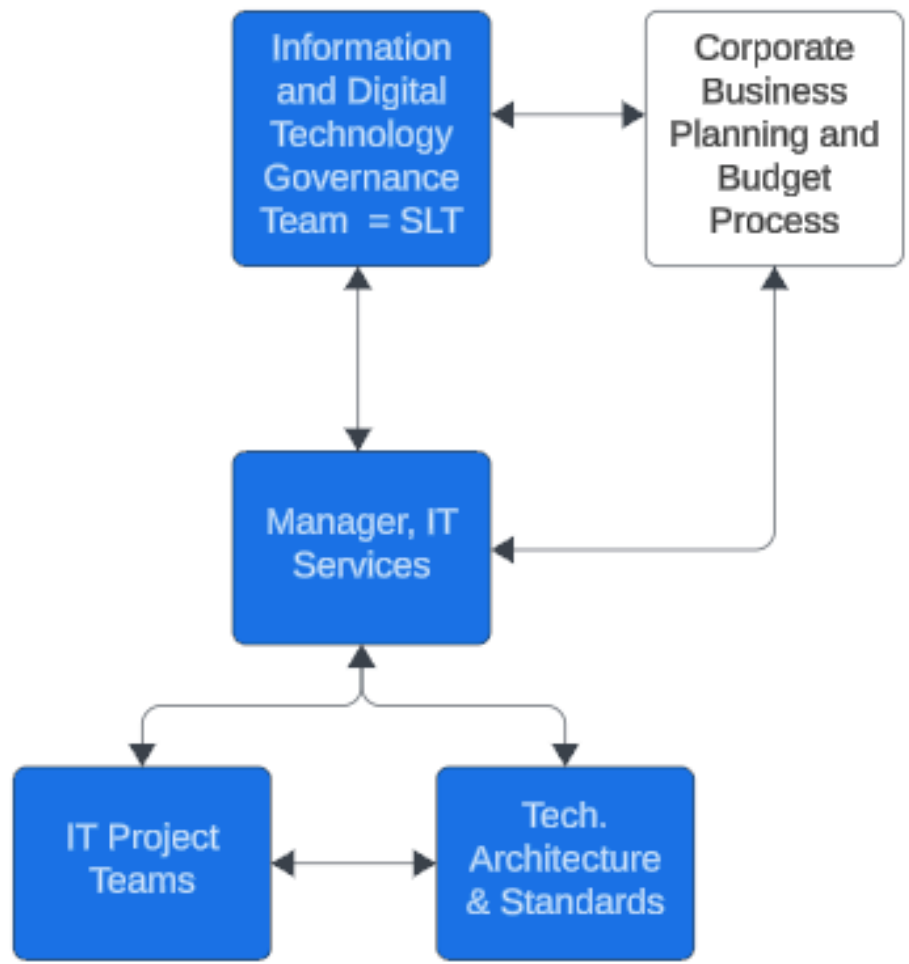


Figure 19: Arrangement of Government Groups

\*Note: See Appendix 2 for suggested [Terms of Reference for Technology Governance Bodies](#)

## 4.6 Project Portfolio Management Approach to Selection and Execution of Technology Initiatives

### 4.6.1 What is Project Portfolio Management?

It is recommended that the Town adopt a Project Portfolio Management approach to select and execute technology initiatives. The term “project portfolio” is used to refer to the collection of projects (the technology work plan) that the Town is planning and undertaking at any one time. The Project Portfolio Management approach is the methodology by which projects are proposed, evaluated, selected and executed.

The goals of the Project Portfolio Management approach are to:

- a. Define the rules by which new projects are initiated.
- b. Create more visibility into the status of projects, so that projects that are facing challenges and delays can be identified and addressed.
- c. Select fewer projects, so that scarce IT resources can be focused on the projects with the highest value, and that the projects selected can be successfully delivered. Though it may be unpopular, the flip side of this approach is to eliminate low value-added technology projects that consume precious resources.
- d. Slow things down. There is often a tendency to jump from idea to execution too quickly without appropriate due diligence. This process should be designed to ensure that ideas get fully thought through with all key stakeholders inputting before the projects are funded.

The annual capital budget cycle should be the driver for the development of the annual IT work plan (Project Portfolio). Annually, in advance of the corporate budget process, the departments (including IT), will be invited to submit project proposals to be evaluated and considered for inclusion in the overall IT Project Portfolio.

Note that all technology projects must be submitted through this process. Technology projects should not be budgeted directly in departmental budgets, without approval and direction of the IDTG Team. This means that projects may be departmentally-funded but should not be included within departmental budgets unless approved to progress by the IDTG Team.

## 4.6.2 Technology Work Types

The IDTGT framework oversees the delivery of IT services, however, the primary focus of the Portfolio Management process is to oversee the major Technology Project Portfolio (the IT work plan). Thus, it is important to make a distinction between various technology work types.

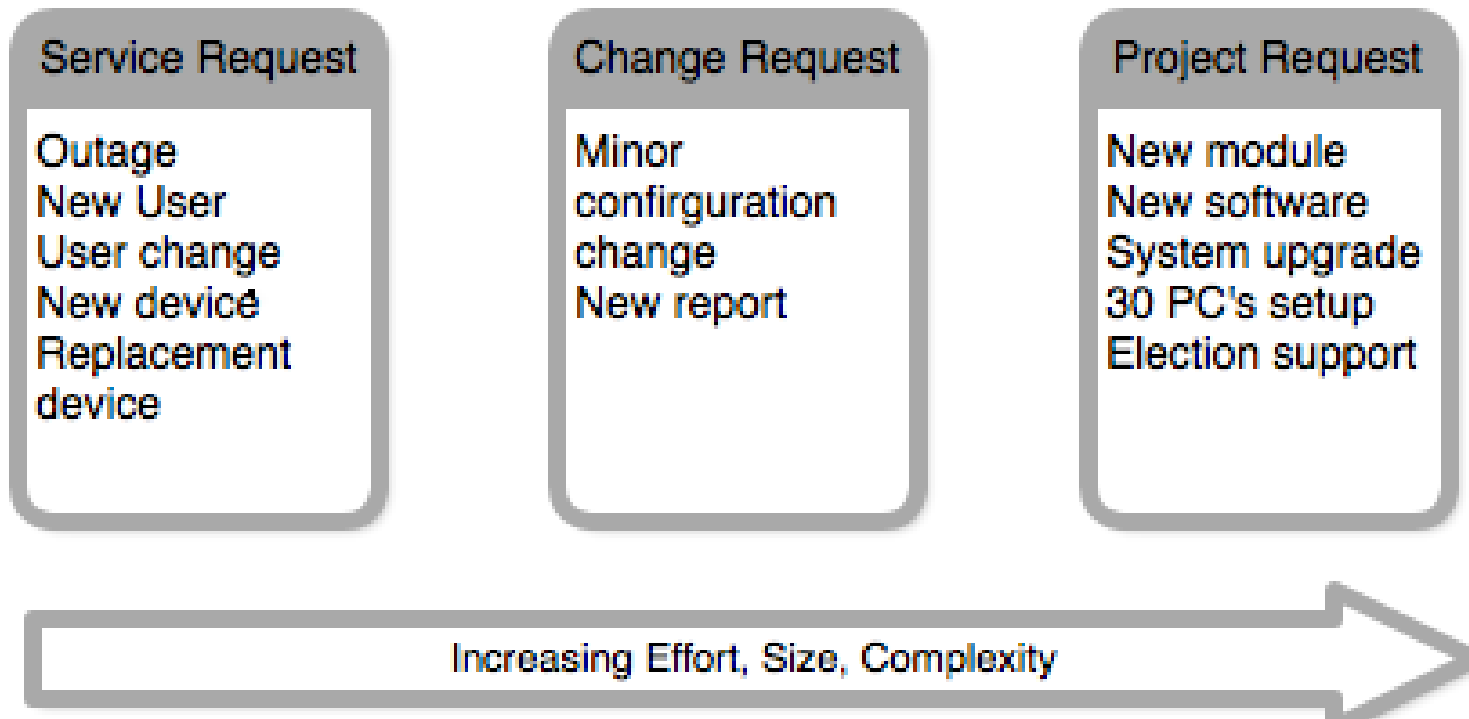


Figure 20: Various Technology Work Types

## *Technology Work Types Explained*

A **Service Request** is typically a requirement that will be dealt with or mediated by the service desk. Often, requests are related to an issue or problem that needs to be addressed, or a new commodity IT requirement, such as access to a drive, a new user, a new device, or the installation of software. Such requests are tracked in the helpdesk management system, monitored by the helpdesk staff, reviewed by the IT Management Team, and with clients in the regular service review meetings and overall performance, reported to the IDTG Team.

A **Change Request** is a small or simple change to a system or solution that is less time-consuming or involved than a project and that can typically be handled by IT staff without the need to plan the resource allocation or to develop a detailed project plan. These may be repeated tasks (e.g., patch application, report change) or one-off tasks (e.g., firewall configuration change). Change requests should also be tracked by IT, monitored by the relevant managers, handled through the change control process, reviewed regularly by the IT Management Team, and with clients in the regular service review meetings and reported to the IDTG Team.

A change request should be no more than five days of effort. The threshold of five days is intended to reflect total product time, not elapsed time – so, if two staff are needed to work three days on the task, this exceeds the five-day threshold.

Both Service Requests and Change Requests are the operational responsibility of the Manager, IT Services, the IDTG Team should expect to see regular performance reports as part of a set of performance KPIs on these topics but would not be involved in their day-to-day management or prioritization.

A **Project** is any set of tasks that exceeds **five days of work** that may be initiated either within IT or outside of IT. This may include new or changed applications, devices, networks or systems, web or GIS projects. All projects will be identified and tracked by the IT Project Office which has the responsibility for reporting on the status of the Technology Project Portfolio. The Technology Project Portfolio is monitored by the IT Management Team, with clients in regular service review meetings and reported to the IDTG Team and SLT on a regular basis.

Thus, the Technology Project Portfolio Management process is concerned only with technology projects.

### 4.6.3 Identification and Intake Process

Before a project can be approved, a set of due diligence activities must be undertaken. Thus, a project moves through multiple stages before it becomes an approved project that is ready to be scheduled and executed.

- a. **Idea:** Someone (staff, manager, commissioner) has an idea or a business problem that needs to be solved, likely using technology. The idea should be discussed with the department's IT contact (with IT and business units involved), explored and fully understood before a decision is made to move forward. If, upon investigation, the idea / opportunity is valid, then it will move to the Concept stage. If not, the idea will be dropped, deferred, or incorporated into an existing or future project.
- b. **Concept:** Once an idea has been validated, the concept is fleshed out in more detail and the concept case developed. The concept is reviewed by key stakeholders, evaluated using agreed criteria and proposed forward to the relevant group for approval to move forward.
- c. **Project:** A project is an approved and funded concept (likely proposed through the budget process), that is ready to be executed. A project does not begin until the required resources are available, assembled and ready to go.

IT is responsible for maintaining a register of all ideas and concepts alongside the [Technology Project Portfolio](#) report shown later.

### 4.6.4 Idea Development

This part of the process is designed to ensure that project ideas are fully thought through before they become fully-funded and committed projects. It is unashamedly designed to slow the idea process down somewhat to ensure that ideas can be appropriately explored and developed, and that stakeholders can be fully engaged.

The process for developing an idea would flow something like this:

- John, a development planner, has an idea to use barcodes on Planning files and letters to simplify data retrieval at the front desk.
- He talks to his boss, Melissa, who also thinks it's a good idea. Melissa speaks to her director, who asks her to talk with Jim, an IT BSA / Relationship Manager / BA.
- Jim, Melissa, John, and a couple of other Planning staff get together to talk about the idea.



- In the discussion, the idea morphs into a slightly different concept; using QR codes and including other file types in the exercise.
- The group also realizes that this idea could be useful for other departments that are involved in managing permit and licensing files.
- Jim, initiates conversations with these teams as well, engaging other IT staff with appropriate expertise or knowledge.
- Jim logs the idea into the IT Project Portfolio, classified as an Idea (this generates the Idea Register) to give a heads up that this is an idea being worked up. If appropriate, the relevant Steering Committee is made aware.
- The Idea Register is published on the intranet, is reviewed regularly by the IT Management Team and with the IDTG Team.
- The details of the idea are captured in the **Idea Form**. A review of the idea is conducted with the Manager, IT Services / commissioner of the area and a decision is made to either move forward or red light the idea.

#### 4.6.5 The Concept Development Stage

If the Idea is accepted, the business team proceeds to the Concept stage where a more detailed Project Proposal is developed.

Further research about approaches, solutions, resource demands and funding needs is conducted. Once the research is complete and the idea is more completely understood, a **Project Proposal Form** is completed.

Projects that are deemed to be large projects will require a business case and resourcing plan to be prepared to accompany the Project Proposal Form. If appropriate, the relevant Steering Committee should review the Project Proposal.

The Commissioner of Corporate Services must approve the Project Proposal Form before it can move forward.

IT will review the Project Proposal Form and rank according to the agreed ranking scheme.

If at this stage of the evaluation, the idea is determined to be a small initiative and funding is available (the concept must be assessed to be both less than \$10k of expenditure, and less than 10 total days of work), the idea may be green-lighted to become a project by the Manager, IT Services, in consultation with the Commissioner, Corporate Services without requiring the project approval of the IDTG Team. The IDTG Team will receive updates on new projects that are approved (by consent) through the IT Project Portfolio reporting that is brought forward by the Manager, IT Services.

Projects above these thresholds, or projects that require funding will require approval by the IDTG Team. The completed and ranked Project Proposal Form will be brought forward to the IDTG Team, with IT identifying impacts to the Technology Portfolio (e.g., delays to other projects to allow the proposal to proceed).

The budget estimation should include the cost of technology, cost of implementation staff including Project Manager, backfill for subject matter experts (SMEs), backfill for technology staff if required, etc. The budgeting exercise also needs to account for ongoing operating impact as well, e.g., annual licensing/subscription cost, systems support staff cost, etc.

If funding is required as part of the annual capital project request process, all proposals will be evaluated and ranked by IT. IT will also conduct a Town management review (resource availability and/or needs) and make recommendations to the IDTG Team on the project priorities. The IDTG Team will use this information to support their decision-making regarding which proposals should go forward as part of the IT annual capital budget.

#### 4.6.6 The Project Stage

Once a proposal has been approved (funded and resourced), a project can be scheduled.

Note that approval and funding of a project does not mean that the project will begin immediately. IT, working with the IDTG Team, the Manager, IT Services and stakeholders will schedule projects to take account of resource availability, dependencies and other factors.

#### 4.6.7 Determining Project Size

At the Idea and Concept stages, three factors should be considered to determine a project size.

An initial estimate should be identified at Idea stage. This should be reevaluated at the end of the Concept stage. The highest rating of the three categories (cost, impact, risk) will determine the project size (e.g., if it's a small cost, but impacts multiple departments and risk is medium, this would be determined to be a large project).

Factor	Small	Medium	Large
Est. Cost (including internal staff costs)	< 10k	>10k <100k	100k+
Impact	Single department	Two or fewer departments	Multi-department or corporate
Risk	Low	Medium	High

#### 4.6.8 Documentation Required

The Town has developed various templates to facilitate the intake, review and reporting of projects in the past but these are not in use in the current environment. It is recommended that these templates are re-introduced as part of Project and Portfolio Management.

The following table suggests the documentation the Town should use as complement to the proposed future governance model – *Information and Digital Technology Governance (ITDG)*.

Stage	SML (Small, Medium, Large)
Idea	ITDG Idea Form
Concept	ITDG Concept Form
Project Sizing	ITDG Sizing Chart
Project Proposals	ITDG Project Proposal Form
Project Prioritization	ITDG Project Prioritization Form
Project Resource Capacity Planning	ITDG Resource Capacity Planning Form

Project Responsible, Accountable, Consulted and Informed (RACI)	ITDG RACI
Project Risks, Actions, Issues, and Decisions (RAID)	ITDG RAID Log
Post Implementation Review	TWS Post Implementation Review Template v1.1
Monthly Project Status Reporting	TWS Monthly Project Status Report Template v1.1
Hardware/Software Request	TWS Hardware Software Request Form
Annual Governance Status	ITDG Annual Status Report Document

Note: Access to all proposed ITDG forms have been made available via the TWS Microsoft Teams site: [TWS - Proposed IT Governance Templates](#)

#### 4.6.9 Project Ranking / Evaluation Process

The IDTG Team is responsible for approving and submitting the IT Capital Budget (the collection of technology projects proposed for the subsequent year) into the corporate budgeting process. To assist in this process, a project ranking process will be instituted. This will allow projects to be compared using a consistent framework.

The IDTG Team will approve the project evaluation criteria (some samples suggested in this document). IT will then apply the criteria to rank the project proposals.

Note that the Town may establish a group of business and IT staff to carry out this assessment to ensure fairness.

Many municipalities have adopted a range of sophisticated evaluation processes that look at different perspectives such as corporate and departmental plan alignment, customer benefits, total cost of ownership (TCO) and Return on Investment (ROI) as key factors in project assessment and selection.

The Town should evolve the sophistication of its evaluation criteria over time to become more outcomes-and-benefits-focused. However, the important thing is to start somewhere. Thus, the following two options are suggested to support the project prioritization process at this time.

#### 4.6.10 “Two-Factor” Evaluation

Unsurprisingly, this method evaluates all projects using two factors – Urgency and Importance.

This methodology has been developed by the Town of Kitchener and applied by many other municipalities. Their evaluation criteria are identified below. Of course, Stouffville may choose to build their own criteria, use the Kitchener criteria as is, or make adjustments to the Kitchener criteria.

##### *Urgency Axis*

Urgency Scale Selection Scoring	5	Most Urgent	Matter of public safety – mitigates issue that could cause a death
			Avoids a catastrophic event
			Avoids major business disruption / shut down
			System failure has occurred or is imminent
			Legislated deadline is quickly approaching
			Technology past end of support lifecycle (no longer supported)
			Other
	4	Very Urgent	Mitigates significant loss of employee knowledge
			Council-imposed deadline is quickly approaching
			Avoids a minor to moderate business disruption
Quick action required to avoid significant revenue impacts			

			Avoids significant liabilities to the Town
			Technology approaching end-of-life
			Other
	3	Urgent	Attention required to satisfy a mandate from a division
			Project is tied to an important and immediate business benefit (e.g., tied to a new web-based service launch)
			Other
	2	Slightly Urgent	Sponsor would like attention to project
			Alleviates growing and inconvenient issues (e.g., automating workflows, new technology that facilitates a minor internal efficiency)
			Other
	1	Not Urgent	Project is opportunistic but not necessary
			Project is not time bound
			Other

**Importance Axis**

Importance Scale Selection Scoring	5	Most Important	Project is legislated
			Project addresses a customer service issue currently deficient
			Generates or sustains significant economic development
			Project needed to meet a legal obligation
			Supports equitable access, social justice and essential quality of life for the public
			Mitigates long-term environmental damage with lasting consequences

			Mitigates unrecoverable loss of mission critical data / information
			Mitigates potential loss of license essential to operate
			Mitigates potential imprisonment of staff
	4	Very Important	Project that has a high probability of driving moderate to modest economic growth
			Meets an important customer need
			Can greatly reduce cost(s)
			Mitigates external exposure of critical / confidential information
			Mitigates public / media outcry for change in administration or Council
			Mitigates potential for integrity breach, resulting in decreased trust in the Town
			Mitigates potential for recurring negative media coverage on national and or international stage
			Avoids sanctions imposed by regulatory bodies
			Avoid under-achievement of business unit goals (<50% achieved)
	3	Important	Project that is likely to reduce cost(s)
			Project that is likely to avoid future cost(s)
			Project that is likely to avoid additional future headcount
			Enables a major enterprise-wide efficiency
			Not doing project results in being unable to perform services deemed important to business or customers, but otherwise a non-essential service
			Mitigates disclosure of non-confidential, but embarrassing information

			Mitigates increase in number of union grievances (>10%)
			Mitigates complaints elevated to CAO / Council level
			Failure to do project results in significantly decreased usefulness of IT infrastructure
			Enterprise system project that addresses inefficient processes in more than one division
	2	Slightly Important	Enables efficiencies (redeployment of staff) of a department, division or function
			Project avoids significant increase in number of errors (>10%)
			Project reduces complaints elevated to commissioner / CAO level
			Project mitigates moderate media coverage or editorial comment
			Failure to do project results in some decreased usefulness of IT infrastructure
	1	Not Important	Failure to do project results in some business unit goals not met (75-90% achieved)
			Project does not contribute to any stated or obvious goal or objective (e.g., business plan)
			Project addresses short-term additional effort required by existing staff to fix a minor situation

Using such a rating scheme allows projects to be plotted in the format illustrated below:





Figure 21: Project Ranking Chart

Projects within the Rank 1 quadrant would be typically prioritized; projects within Rank 2 and 3 quadrants would be attempted to be accommodated. Items in Rank 4 would typically be deferred.

Calculating Urgency and Importance provides an overall score for a project that allows project comparison and a ranked project list.

#### 4.6.11 Multi-Factor Evaluation

A similar approach uses more than two factors – to be determined by the Town – to evaluate projects. For example, the criteria illustrated in the table below are used by the Town of Richmond Hill to rank their projects.

Criteria	Low Score: 2	Medium Score: 4	High Score: 7	Critical Score: 10
<p><b>Organizational Risk:</b> Refers to the risks to the organization in general. Consider organizational, financial, reputational, etc. risks.</p> <p>Balance probability of the risk happening as well as its impact.</p>	<p>Little or no risk to the organization if the project is not done.</p> <p>Low risk probability and reasonably easily managed if the risk came to pass.</p>	<p>Some risk, but generally manageable risks that would not create any significant issues if it came to pass.</p> <p>Some probability that the risk would come to pass.</p>	<p>A significant probability that the risk would happen and/or challenging to manage if it did occur.</p>	<p>Risk has been confirmed and action must be taken.</p> <p>Risk is significant in nature.</p>
<p><b>Corporate Impact:</b> How will the project improve how services are delivered?</p> <p>How does the project positively impact the corporate goals and objectives?</p>	<p>There is little impact beyond the department.</p>	<p>The project will have a substantial benefit to a large number of staff and/or support the delivery of strategic goals.</p>	<p>Impacts most/all staff and/or has a significant impact on the delivery of strategic goals.</p>	<p>Critical to the strategic objectives set by SLT or Council.</p>

Criteria	Low Score: 2	Medium Score: 4	High Score: 7	Critical Score: 10
<p><b>Departmental Impact:</b> How will the delivery of the project have a positive impact on the department making the request?</p>	Little or no impact to the department directly.	Would help a substantial number of people within the department to generally be more efficient, saving time and effort.	Help most/all staff in the department be more efficient saving significant amounts of time and effort that could be redeployed to other areas.	Crucial to department for business continuity.
<p><b>Community Impact:</b> What kind of impact would the community experience?</p> <p>Generally, this should be from a direct impact to how they experience services delivered by the Town.</p>	<p>Little to no direct impact to the residents and community.</p> <p>Impact for a narrow group of users.</p>	<p>Some impact to a portion of the community from the delivery of the project.</p> <p>Usually for multiple special interest groups, a few wards, etc.</p>	<p>Impacts most or all residents or a significant portion of the community.</p> <p>Would have a transformative impact on how service is delivered.</p>	Essential service to all residents or a significant portion of the community.
<p><b>Urgency:</b> What is the speed at which the solution is required? Are there time constraints?</p>	Little or no time constraints.	Some expectation that the solution be in place in the next 1-2 years.	Significant expectation or need to be implemented for current capital year.	Required completion during the current capital year.

Again, the Town could choose to tweak this model or identify alternative factors for their evaluation process. For instance, it may be worthwhile identifying in which layer of the technology architecture the project will have an impact. If the Town is initially aiming to focus on infrastructure and business systems layers, this will help ensure that this is being achieved.

A single approach should be selected.

**The two-factor approach may be most appropriate due to its simplicity and consistency. It is a good starting point that the Town can begin to use “out-of-the-box”. The methodology can be adjusted / altered at a later stage if and as required.**

#### 4.6.12 Balancing the Portfolio

##### *Discretionary and Non-Discretionary Projects*

Discretionary and non-discretionary projects refer to two different types of initiatives within an organization, specifically within the context of project management and resource allocation.

These terms are commonly used to distinguish between projects that are optional or can be chosen at the discretion of management (discretionary), and those that are essential or mandatory (non-discretionary).

Some technology projects will be non-discretionary – infrastructure upgrades, security work, addressing audit recommendations. The Town must be cognizant of discretionary work/projects, ensuring it is accommodated in the work plan before discretionary work/projects are handled.

##### *Run, Grow and Transform the Business*

It is valuable for the Town to understand where its technology budget is being allocated. Organizations often categorize their technology investments into three separate categories.

The typical categories used are:

- **Run:** The investment required to carry out essential enterprise activities that are critical to keeping the business operational and IT infrastructure running.
- **Grow:** Enhancement and expansion of business performance in established areas, improving processes and customer service delivery.

- **Transform:** Radically change services and service delivery, providing new value delivery through technology and business innovation.

The goal is to gradually reduce the investments directed to Run (i.e., reducing IT operating costs), releasing funds for Grow and Transform activities.

Initially, the Town should begin to classify its projects across these categories and begin to measure where it is investing. Over time, the Town should begin to establish targets or funding envelopes for each category to begin to shape its technology investments, with the goal of shifting its technology expenditures toward the growth and transformation portfolios.

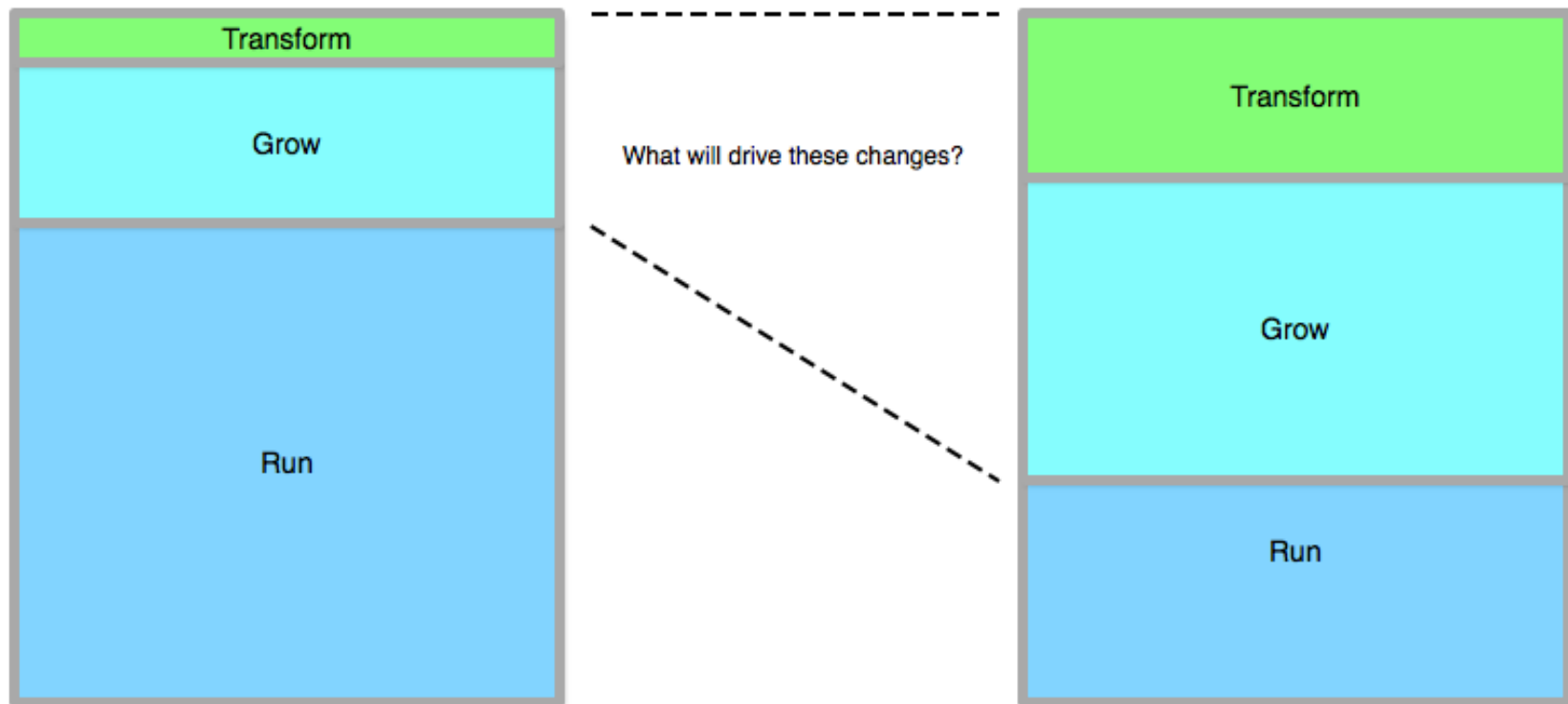


Figure 22: Run, Grow, Transform Change Drivers

#### 4.6.13 Resource Management

The Town needs to understand what resources it has available to complete projects so that it can realistically select a number of projects that it knows can be completed.

The progression from the Idea to Project Proposal stage is designed to provide project teams with more time to develop a thorough understanding of the project resource needs, so that the resource needs can be planned for, rather than hoped for.

IT should begin to record staff time on project and operational work. The importance of this data will grow over time. IT Management must ensure that this data is complete and consistent as it will be a key tool in matching resource capacity to the proposed Project Portfolio.

As part of the annual technology capital budgeting process, IT will be responsible for collating the proposed IT project resource needs (departmental and IT staff) and matching this to available capacity. The Town should plan to backfill subject matter experts as well as IT staff who will be required to provide project implementation support. The cost of backfilling should be included in the project budgets. This practice allows the Town to continue with the regular day-to-day work while implementing projects successfully. One of the key reasons for projects to fail or be delayed is the lack of resource allocation. It should be noted that key enterprise projects cannot be implemented as desk-side tasks.

This information will be made available to the IDTG Team and may necessitate changes to the portfolio or additional funding requirements to cover additional short-term contract staffing needs to deliver the portfolio.

#### 4.6.14 Handling IT Projects Outside the Annual Budget Cycle

Although discouraged, the reality is that some technology needs cannot be anticipated or identified through the annual IT budget process, nor put off. Therefore, projects may be added to the IT portfolio outside of the annual process.

To do this, the following steps must be taken:

1. The project must complete the Idea → Concept process steps.
2. The adjustment to the project schedule must be approved / requested by the department leader and the leader should also recommend a current departmental project to defer or provide necessary funding to reasonably resource the project.

3. Any and all changes to the Project Portfolio must be approved by the IDTG Team.

#### 4.6.15 Handling Projects Where IT is Only a Small Component of a Larger Project

It must also be recognized that there will be large corporate projects that may have a technology component that will require technology assets and resources. In most cases, such initiatives may already be approved at other levels of the organization (Council, SLT) before the technology governance process is engaged.

The Town should strive to ensure that the right IT staff are involved in such projects, with sufficient lead times to ensure a meaningful contribution to the process.

From a review and approval perspective, the technology components of these projects should be routed through the technology governance process, preferably in advance of the overall approval. This is to evaluate fit and alignment with broader technology strategy and to consider the resource impacts.

However, from a Project Portfolio perspective, such projects may need to be treated as non-discretionary projects, as they have already been pre-approved.

Caution must clearly be exercised to balance the number of non-discretionary projects.

#### 4.6.16 Streamlining Decision-Making Processes Through Delegation

If the governance process is to be a success, then no exceptions can be allowed.

SLT and the Manager, IT Services must ensure that there are no back doors; or ways around the agreed process. Any initiatives that are allowed to route around the governance processes will undermine them and may result in “death by a thousand cuts”, as the organization loses faith in the process.

Thresholds may be defined and adjusted over time to ensure that the project approval process can be as efficient and effective as possible. This ensures that, where appropriate, the Manager, IT Services may be empowered to allocate resources and make technology decisions in consultation with the Commissioner, Corporate Services that are in keeping with the corporate priorities and principles.

So, for example, where IT resources are available and can be allocated to smaller projects (determined to be less than \$10K expenditure or 10 days total effort and meet the “small” criteria in the project sizing tool), then they may be approved at the discretion of the Manager, IT Services in consultation with the Commissioner.

These smaller projects are still treated as part of the overall IT portfolio and will be reported as such to ensure that the IDTG Team is fully apprised of where technology resources are being allocated.

This threshold should be monitored over time to ensure the appropriate balance can be maintained. The point of the overall technology governance process is to ensure a sharper resource focus on the high-value, high-priority projects.

If high-priority projects are suffering because of the discretionary allocation of resources to small projects, the IDTG Team should review this practice.

#### 4.6.17 Executing Projects

Selecting the right projects and ensuring that these projects have been carefully thought through is an important step in improving the Town's success rate with its IT investments.

But it is only the first step! Once selected, the projects must be executed successfully if the Town is to realize the returns on its investments.

The Town should adopt and apply a project management methodology to all technology projects. The Project Management Institute (PMI) and Project Management Body of Knowledge (PMBOK) best practices provide standards that the Town can adopt.

The methodology should define standard project phases, documentation requirements, and checkpoints at the end of each stage to ensure the project is progressing satisfactorily.





*Figure 23: Typical Phases of a Project*

The IT Project Coordinator/Manager will play an important role in refreshing the methodology, communicating it throughout the organization and assisting IT and departmental staff in managing projects using the methodology.

The IT Project Coordinator/Manager should also carry out project checkpoint reviews. This should be carried out as a “helping hand” not an authoritarian checkpoint process.

#### 4.6.18 Business Process First

When tackling initiatives, it is critically important that the Town review and redesign business processes before it determines the technology solution that must be implemented.

Preparing the as-is and to-be business processes ensures that the Town can fully understand what the implementation of a new system will take – from a people, process and technology perspective – and will ensure that it is prepared when the vendor arrives for implementation.

Planning for business process work as part of the project plan, developing in-house skill sets to conduct business process analysis and redesign, and using external resources to assist in this area are tactics that will help the Town begin to embed this practice into its project processes.

#### 4.6.19 Technology Project Portfolio Reporting

IT is responsible for reporting on the status of all Technology Portfolio projects (web, digital, GIS, business technology, technology infrastructure) in a way that provides visibility into the projects and provides IT management, stakeholders and the IDTG Team with information that can help them intervene if necessary to keep projects on track.

A sample portfolio report is shown below.

Project Name	% Completion	Target Finish	Project Key Performance Indicators					
			Priority	Overall Status	Budget	Resources	Schedule	Scope
PRM Phase 1	100%	30/06/2018	High	●	On Track	Sufficient	On Track	On Track
Maximo evolution phase 1	50%	30/12/2017	High	●	On Track	Sufficient	On Track	On Track
ActiveNet implementation	90%	30/09/2017	Medium	●	On Track	Sufficient	On Track	Off Track
eScribe Implementation	20%	14/11/2017	High	●	On Track	Insufficient	At Risk	On Track
Develop a GIS strategy	80%	21/03/2018	High	●	On Track	Sufficient	On Track	On Track
Primary systems integrations	80%	21/12/2019	Low	●	On Track	Sufficient	On Track	On Track
Establish Master Data Management strategy	60%	03/03/2018	Low	●	On Track	Sufficient	On Track	On Track
Develop IT Risk Management Framework	20%	25/05/2018	Medium	●	On Track	Sufficient	On Track	On Track
POS strategy & systems replacement	60%	30/10/2017	Low	●	At Risk	Sufficient	On Track	On Track
Future Asset Management systems strategy	10%	30/03/2018	High	●	Over Budget	Sufficient	On Track	On Track
Primary systems integrations	0%	21/12/2019	Low	●	On Track	Sufficient	On Track	On Track
Establish Master Data Management strategy	0%	03/03/2018	Low	●	On Track	Sufficient	On Track	On Track
Develop IT Risk Management Framework	20%	25/05/2018	Medium	●	On Track	Sufficient	On Track	On Track
POS strategy & systems replacement	49%	30/10/2017	Low	●	At Risk	Sufficient	On Track	On Track
Future Asset Management systems strategy	10%	30/03/2018	High	●	Over budget	Sufficient	On Track	On Track
Enterprise Content Management (ECM) Strategy	0%	01/05/2018	High	●	On Track	Sufficient	On Track	On Track

Figure 24: Sample Portfolio Reporting Template

The recommendation is that the project management standards be prepared and maintained by the Project Coordinator/Manager in consultation with the Manager, IT Services.

These standards should be enforced on the projects and the methodology should be continuously reviewed for the best fit to the Town.

## 4.7 Change Management

The single most common reason for technology projects to fail is lack of change management. Organizations tend to pay more attention to the technology end product than the impact on the organization. This is common in the government sector as well.

The Town does not currently practice a standard change management methodology. This may cause challenges in successfully implementing large-scale projects, especially technology projects. When we are embarking on implementing the ITDSP, a formal change management practice is recommended.

Perry Group provided change management assistance to the CityView implementation project that included a training session with the CityView team and templates for the change management exercise including a change management plan template.

It is recommended that the CityView project – and all other key projects in the Town – use this information to implement change management practices in the future.

The following framework provides a practical approach to leading change. It will align your understanding of the vision and benefits of the transformation and prepare you to visibly and actively lead change.

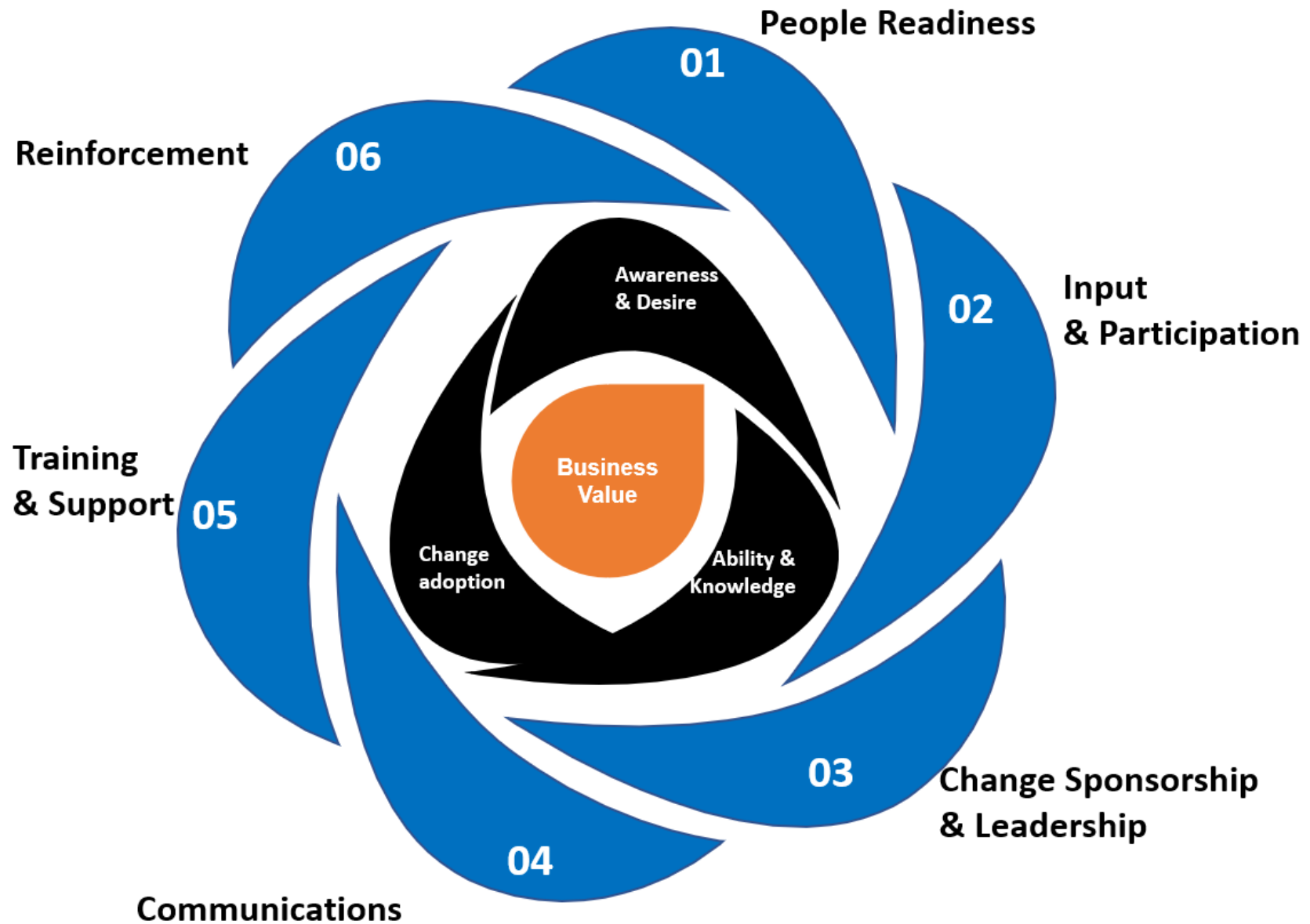


Figure 25: Typical Change Management Framework

### 4.7.1 Business Value

At the centre of the framework is business value.

Business value is about understanding what the change is the project hopes to achieve, what risks it will address and why we need to make the changes.

As a change leader, all your change activities should be designed to influence the realization of business value.

### 4.7.2 Goals

Spanning outward from business value are three desired goals of an optimal change program: building awareness and desire, providing knowledge and ability and supporting change adoption (based on the Prosci ADKAR™ Model).

### 4.7.3 Critical Areas of Focus

The framework has six areas of focus, or elements in which change management activities occur:

Areas of Focus	Change Management Activities
People Readiness	These activities ensure potential people-related risks are clearly understood and mitigated. Change readiness activities are in place to assess and monitor the degree to which the Town is prepared to accept, support, and execute the new ways of working.
Input and Participation	These activities are about two-way engagement of internal stakeholders to ensure successful implementation of change. Activities focus on gathering input and encouraging participation to increase commitment and decrease resistance.

Areas of Focus	Change Management Activities
Change Sponsorship and Leadership	These activities are about ensuring active and visible sponsorship for the change project's goals and objectives. Activities also focus on supporting leaders to effectively lead their teams through change.
Communications	These activities include traditional and non-traditional ways of both broad and targeted communications to stakeholders using a variety of channels.
Training and Support	These activities help to develop and/or implement training and build support structures in order to closely assess current and future state skill and competency gaps.
Reinforcement	These activities aim to recognize, and reward needed new behaviours that support desired changes and help achieve planned outcomes as well as sustain the change.

This information shows the level of involvement needed in a formal change management practice. The change leaders will need more detailed planning and training to execute a formal practice in the Town.

## 5.0 Deliverables and the Roadmap

### 5.1 Key Initiatives

#### 5.1.1 Completing the Ongoing Projects

A priority for the Town is to complete the two projects it has ongoing at the moment.

These two projects have a vast array of digitization opportunities for citizens and the internal staff. Both projects are going to impact multiple departments and hence require a conscious change management program to be in place. Both the projects have been re-assessed and a new plan has been implemented.

##### *Ongoing Project #1 – CityView Implementation*

The CityView project has moved forward with the new plan and timelines. The testing has been complete and the go-live of the first phase is scheduled for this spring.

The CityView project is able to provide a wide range of online capabilities to external customers. It is recommended that the Town implements the system to the back-office staff first and then extend the online services through a customer portal to the citizens in a secondary phase.

This approach allows the Town to manage the amount of change and the required resources to support the new platform in manageable chunks.

In the long-run, the Town should consider CityView as a workflow automation platform. This approach allows the expansion of the solution to other business areas in the future.

The project, once fully implemented, should provide the following capabilities:

- Ability for customers to request online Building permits, Planning applications, By-law complaints, licenses and Public Works permits including uploading of required supporting documents.
- Ability to pay online for the above requests, where necessary.
- Ability for customers to check the status of their applications online.
- Ability to correspond, receive alerts, provide updates, and collaborate on documents with staff digitally.
- Provide secure access to customers through the portal using a user ID and a password.



- Self-service to maintain the customer profile.
- Ability for the public to request services and/or see status of permits online without logging in.
- Ability for staff to manage the entire workflow digitally including approvals, reviews etc.
- Ability for the system to automatically calculate fees and track payments.
- Automated alerts, time tracking, reminders, deadlines etc.
- Ability to circulate application information to other internal and external agencies including receiving feedback directly in the system.
- Ability for the Town to update the workflows in the future when the business processes change.
- Ability to analyze data generated from the transactions through dashboards, reports, and business intelligence tools.
- Ability for field staff to use the system for field inspections including recording of inspection results while in the field, accessing application details and documents, and communicating with the back-office staff and customers remotely.
- Ability to integrate with the GIS platform, payment service provider, M365 platform, GreatPlains financial system and a future Records and Document Management system.

### ***Ongoing Project #2 – HRIS Implementation***

The HRIS project has been re-initiated with the vendors and stakeholders engaged. The agreement has been signed and the project kickoff scheduled in the spring.

The HRIS solution should automate all aspects of employee data management-related business processes from “hire to retire”. The solution should enable staff self-service and improve the efficiency for HR staff.

A paperless future state should be the goal. Once fully implemented, the HRIS should provide the following capabilities:

- Ability for hiring managers to initiate a hiring request.
- Ability to post vacancies online for candidates to apply.
- Ability to track the hiring and onboarding process.

- Ability to manage the performance management process including reviews, scoring, goal tracking, etc.
- Ability to maintain employee core data in a secure manner including personal information.
- Ability to track banks for benefits, vacation, sick, lieu.
- Ability to process payroll including various bargaining unit contracts, non-union, contract, volunteer staff types.
- Self-service for staff for vacation requests, timesheets, time tracking, scheduling, absence, and time reporting, requesting employment records, updating personal information, etc.
- Self-service for managers to approve timesheets, vacations, update performance records, etc.
- Training and certifications tracking.
- Learning management.
- Automated step upgrades, compensation tracking.
- Ability to analyze staff data including reports, dashboards, and statistical analysis.
- Ability to develop projections reports.
- Ability to integrate with other Town systems to receive staff time, update GreatPlains salary accounts, etc.

### 5.1.2 New Enterprise Solutions

While the CityView implementation takes care of a major portion of permits, Planning applications, complaints and licensing business lines, there are a few other areas where the Town would benefit from having more automation.

These are core municipal business areas that require systems to automate the manual work and the Town does not have the necessary solutions in place.

#### ***Asset and Work Management System***

Asset and work management is a core service that the Town provides. There are regulated requirements for the asset management business including reporting to the province. The Asset and Work Management system space is a mature industry where many systems exist and have been implemented by municipalities.

A typical Asset and Work Management system automates multiple business areas and should provide the following capabilities:

- Ability to manage the physical asset inventory for multiple business areas: Roads, Water and Sewer, Buildings, Parks, Fleet, Fire, etc.
- Ability to maintain asset details for each asset, e.g., original cost, depreciation rate, date of commission, asset class, sub classes, asset rollup, geo-reference, warranty information, related drawings, and manuals, etc.
- Ability to receive and manage service orders including customer requests online.
- Ability to create and assign work orders from service requests.
- Field staff access through mobile technology to receive and complete work orders in the field.
- GIS integration to facilitate geo-referencing of assets.
- Ability to perform inspections and record results from the field.
- Ability to configure preventive maintenance when the system automatically alerts staff when it's time to perform.
- Ability to maintain asset conditions.
- Ability for data analysis and reporting including projecting future capital funding requirements and the ability to identify most important capital projects based on a fixed budget.
- Ability to capture staff time, equipment time, inventory use, etc. by activity.
- Ability to integrate with other Town systems such as HRIS to send staff time for payroll.

Above are a list of high-level features to be expected in a typical Asset and Work Management system. A detailed user requirements analysis should be performed prior to procurement.

### ***Records and Documents Management System***

The Town receives and generates a large number of official records on a daily basis. Most of these records are generated in electronic format and then saved in hard copy format.

With the Town moving toward more electronic document use, a Records and Documents Management system is needed. Since there are a significant number of physical records, it is important to digitize these historical records as well.

The good news is that the Town already has the necessary technology for records and document management. Microsoft 365 (M365) is a licensed productivity suite that the Town is using today. A component of M365 is the SharePoint platform that has the capabilities for document and records management.

Some Town departments are already using SharePoint to store their documents. The recommendation is to expand the use of SharePoint to be the Town's corporate Document and Records Management system including records retention rules, automated meta data capture, etc.

The staff survey responses show that, most of the time, staff are looking for information to perform their daily tasks.

### Q30: Identify how frequently your job includes activities that:

Answered: 80 Skipped: 20

- There is substantial reliance (Frequently → Always) on information or data to be forwarded to other staff (83%).
- There is also considerable reliance on manual information-gathering (61%), a requirement to be in-office (58%) and the need for paper (55%).

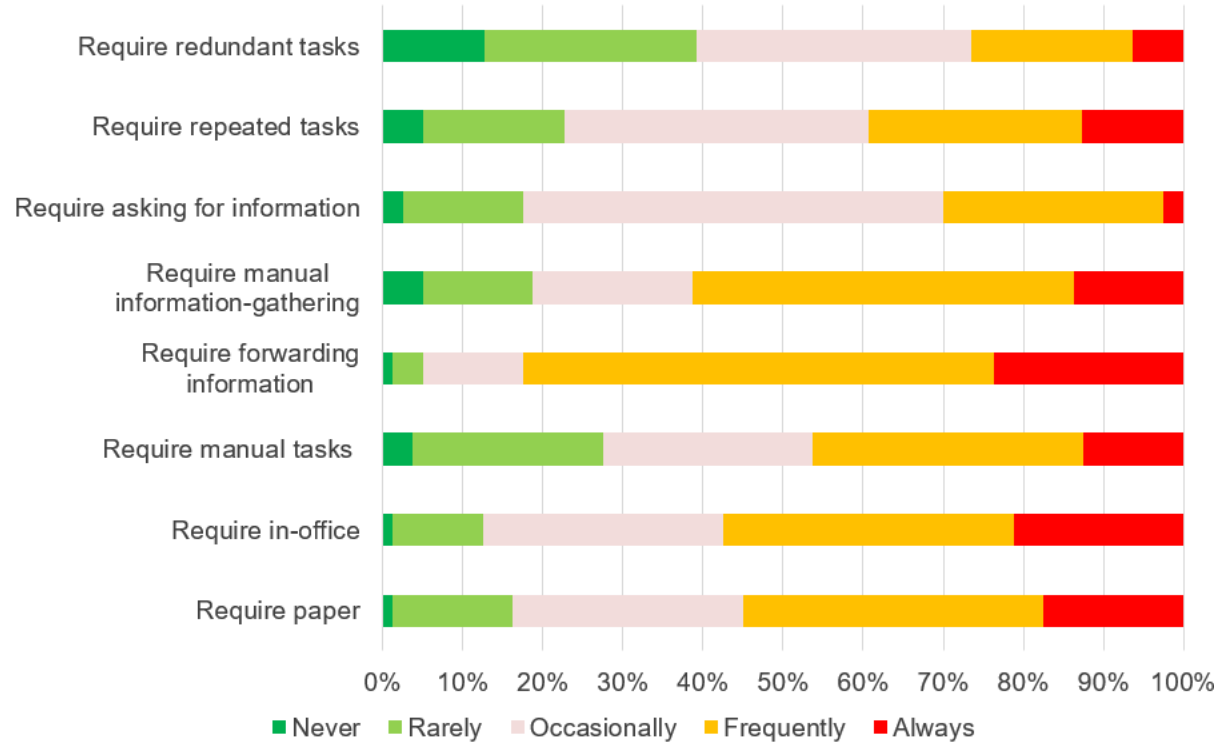


Figure 26: Staff Survey Results for Information-Sharing

In the same survey, staff showed a very high-level of interest in using digital technologies for collaboration and information-sharing:

**Q33: Re collaboration technologies – please rate your agreement with the following statements. The Town enables collaboration across the organization by providing:**

Answered: 78 Skipped: 22

- Respondents strongly agreed that digital tools exist to enable virtual meetings and, to a lesser extent, virtual connection.
- Several respondents recognize that digital platforms enable concurrent collaboration.
- The lower rating for access may be an area to address.

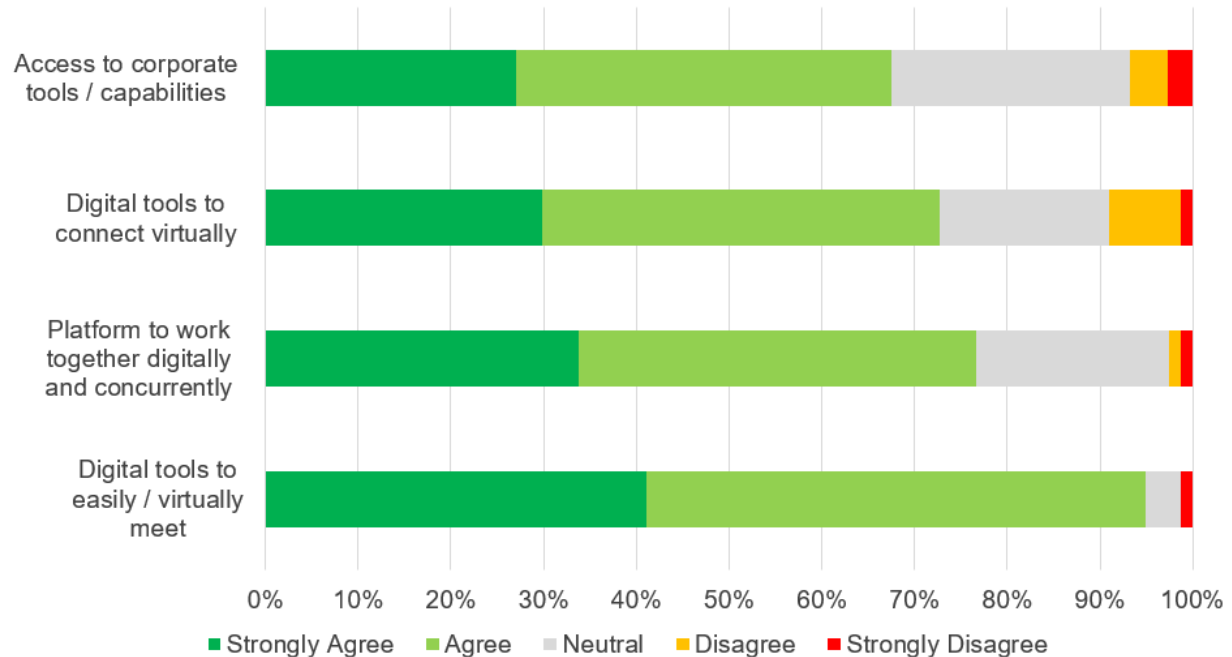


Figure 27: Staff Survey Results Relating to Collaboration Technologies

The M365 platform has many capabilities to enhance staff productivity, some of which are noted below. The Town should be looking at using these features in the future.

- **Intranet:** The Town should consider replacing its current intranet with SharePoint’s built-in intranet feature.
- **PowerAutomate:** Allows automation of manual activities.

- **Forms, Lists, and Workflows:** A combination of data capture forms with digital workflows are a powerful tool set in M365. Anywhere that the Town needs to collect information and process internally but does not have a system to do it, M365 can be utilized.

### *Customer Relationship Management (CRM) System*

The Town has an approved budget to replace the current SRM system. It was appropriately decided to move this project to a future year allowing the existing projects to be completed before initiating any new projects.

The Town has the opportunity to review the use of existing systems such as CityView, and the Asset and Work Management system (once fully implemented) and understand the capabilities of these systems before investing in a CRM product. There could be opportunities to expand the use of existing systems as the Town's CRM as well. This needs further detailed review before deciding on the future path.

A fully-implemented CRM should allow multi-channel service capabilities that can provide the following features:

- Ability to manage a master customer database.
- Ability to receive, track and respond to all customer inquiries.
- Online, phone, email, social media, and counter service capabilities.
- Ability for bi-directional integration with other customer-facing and back-office systems in the Town, e.g., CityView, ActiveNet, GreatPlains, AIMS, etc.
- Ability to maintain a knowledge base for customers and customer service staff.
- The system should be deployed to all departments where a request could be received at any point/staff and transferred to any department/business unit for action.
- Customer portal with self-service, single customer ID, password for multiple Town services. A seamless integration between the CRM portal and other system portals, e.g., CityView, ActiveNet, etc.
- Modern technology features such as chatbot, AI (Artificial Intelligence) powered answers, routing of requests, automated replies to customer queries, etc.
- Ability to integrate with the Town's GIS environment, master property database.
- Ability to exchange customer details between other Town systems.

These are some high-level features to look for in a CRM implementation. A more detailed requirements analysis and review of existing systems should be done before going out to market.

### 5.1.3 Key Infrastructure Layer Improvements

Overall, the Infrastructure layer is in good shape with several key elements functioning at a high level (e.g., security services, network administration, and endpoint device management). However, the following few key areas require improvement and should be considered as prioritized projects in 2024:

#### *Storage and Data Management*

The organization currently has sound backup processes that include a recent move to air-gapped processes to add an additional layer of protection. However, there is no formal process for archiving stale/inactive data.

The Town needs to assess the current situation (inactive/stale data) and develop a strategy to implement archiving that eliminates the proliferation of stale/inactive data.

This process will provide the following benefits:

1. Mitigate the risk of a data breach that impacts sensitive data.
2. Lower the costs associated with the storage and management of inactive/stale unstructured data on production storage systems.
3. Lower the licensing and management costs associated with the backup/recovery of inactive/stale data.
4. Lower the licensing, management, bandwidth costs associated with replicating stale/inactive data to offsite production storage systems.
5. Lower the costs associated with the recovery of inactive/stale data as part of the Town's Disaster Recovery service.

#### *IT Service Management*

**Service Catalogue Management** processes to ensure that a service catalogue or a list of all the services has been produced or maintained by IT staff – including accurate information on all operational services – needs to be developed.

This includes processes that define, negotiate, and agree on IT services targets.



The objective is to control and monitor a Service Level Agreement (SLA) with precise measures to provide better quality services and/or product. The services should be regularly checked to measure whether they meet the expectation level.

**Asset and Configuration Management** – The municipality currently utilizes Kace (Dell) for IT Service Management (ITSM) services with desktops and servers managed within the system. However, firewalls, switches, etc. are manually tracked in spreadsheets.

Asset and configuration management processes should be defined to ensure that the assets involved in service delivery are properly measured and the integrity of configuration items are maintained.

#### 5.1.4 Key Corporate Posture Layer Improvements

Several areas within the corporate posture layer require attention.

##### ***Security and Risk Management***

An **IT Risk Assessment** has never been performed to identify threats and vulnerabilities, all of which are captured in a formal risk register. This process should be implemented to support the Business Continuity Disaster Recovery (BCDR) program.

##### ***Business Continuity and Disaster Recovery***

Although the Town has developed a Cloud-based disaster recovery solution, there has never been a formal **business impact analysis (BIA) or risk assessment (RA)** to support the initiative. This is a critical step to properly define recovery time objectives (RTOs) for business services.

It is recommended that the Town leverage the third-party disaster recovery provider to initiate a BIA and IT RA. An alternative would be to perform these activities in-house. Either way, *the business must be involved in the BCDR process.*

##### ***Cloud Strategy***

Workloads continue to be migrated to the Cloud, but there is neither a formal Cloud governance in place nor a supporting Cloud Strategy.

A 1-3 year Cloud roadmap should be developed as part of the implementation of a formalized Cloud Strategy.

## 5.2 Quick Wins

During the project Discovery phase, we identified many quick wins as well.

While the major deliverables require more involvement, resources and funding approval, the quick wins allow the Town to move forward with some digital initiatives that require minimum investment. The Town should be able to start and implement the following items in a short time frame.

- Implement a digital approval solution where a document is routed to internal and/or external parties to capture a signature, e.g., DocuSign, Adobe, PandaDoc, etc.
- Digitize the marriage license application form to be an online data capture form with the ability to generate the license without having to re-enter the same data.
- Similar to the marriage license, Council delegations and FOI requests could be digitized to be online forms.
- Create two GIS layers for Official Plan core areas and Easements.

## 5.3 Work Plan

The key outcome of the ITDSP is the Work Plan that shows the implementation of the ideas gathered during the project.

The initiatives are scattered across 5 years to ensure that the Town is able to absorb the amount of change and the investment at a practical pace. Initiatives are also categorized based on the size of the project.

As discussed previously, the immediate priority for the Town should be to complete the work in progress of the CityView and HRIS implementations. The other major initiatives are spread in a way to mitigate the resource crunch, while quick wins are inserted between the major initiatives to build the momentum.

The Town identified three key objectives for the ITDSP:

- Improve customer experience through integrated digital services (CustX).
- Improve staff experience through integrated digital services (StaffX).
- Increase staff capacity through automation (Capacity).

The work plan items are linked to each objective as well.

There are some initiatives that depend on others. These items are also identified for sequencing purposes. It is important to note that if an item is moved, the impact on the dependencies should be reviewed accordingly.

This should be a working document and the IT Steering Committee should review the status and performance of the implementations quarterly. The [governance framework](#) has the necessary reporting requirements.

The following table is the proposed list of work plan items for the next five years. It is recommended that the work plan be reviewed and supported by the IT Steering Committee once the governance structure is established.

**Legend**

\*\*Already approved projects

\*Quick Wins

Large = Complex projects with wide impact requiring formal project and change management effort; cost over \$100,000; time to implement over 1 year.

Medium = Can be implemented within a year; cost is less than \$100,000; impacts one or two departments.

Small = Quick wins; mostly impacts one department; mostly implemented by Town staff.

ID#	Objective	Opportunity	Description	Size	Year
1	Capacity	Implement Stage 1 of the IT reorg	As recommended, implement the IT reorganization Stage 1 activities.	Small	2024
2	Fundamental	Implement the IT governance framework including decision-making for key strategic technology projects	A governance framework with approval processes and responsibilities to be defined and implemented.	Medium	2024

ID#	Objective	Opportunity	Description	Size	Year
3	Fundamental	Implement a change management practice	Using a standard methodology (e.g., ADKAR) introduce a change management practice to be used in all large and medium projects as appropriate.	Large	2024
4.1	StaffX, Capacity	Implement CityView back-office functionality**	<p>Implementation of CityView system in Planning, Building, By-law, Licensing and Public Works permitting business areas.</p> <p>In this phase, only Town staff will be using the system including mobile inspections.</p> <p>In the next phase, online self-service will be available to citizens.</p>	Large	2024
4.2	CustX	Implement the CityView customer portal**	<p>Implementation of the CityView customer portal for citizen self-service in Planning, Building, Licensing, By-law, and public works permitting business areas.</p> <p>This will allow the public to apply, pay, check status, etc. of their applications online.</p>	Large	2024

ID#	Objective	Opportunity	Description	Size	Year
5	StaffX, Capacity	Complete the implementation of the new HRIS system**	<p>Reinitiate and complete the HRIS implementation providing online time entry, vacation requests, payroll processing, self-service for staff requests, performance management, etc.</p> <p>The end goal should be to track all aspects of people management from hire to retire in the new HRIS system.</p>	Large	2024
6	StaffX, Capacity	Develop the easement GIS data layer*	<p>Digitize the Town easement information into a GIS layer so it can be available to Planning, Building and other relevant departments for various approval processes.</p> <p>Make it available through the CityView system to internal staff and through the Town website to citizens.</p>	Medium	2024
7	CustX	Online FOI request*	Enable a self-service online form to capture FOI requests. Request data should be available in a back-office system for processing.	Small	2024
8	CustX	Online Council delegation and requests to speak*	<p>Enable residents to request to speak or delegation at a Council meeting via a self-service online form.</p> <p>Receive the data into a back-office tracking system for the request management.</p>	Small	2024

ID#	Objective	Opportunity	Description	Size	Year
9	StaffX	ESO (vendor) to replace Fire House system	This upgrade is being led by Richmond Hill and the Fire House system will be replaced by the new ESO Cloud-based solution	Medium	2024
10	StaffX	Implement a suitable digital authorization solution (digital signatures)*	<p>Digital authorizations can take place in multiple ways.</p> <p>Use a digital signature where a signature is absolutely required or a more simple but effective way of digital approval by a logged in user (citizen or staff), e.g., marriage license may require a signature using a digital signing tool, where as a Building permit may be accepted via a user sign on portal without a signature.</p>	Small	2024
11	Capacity	Implement Stage 2 of the IT reorg	As recommended, implement the IT re organization Stage 2 activities.	Small	2025
12	Fundamental	Build an IT Service Catalogue*	Using the current ITSM solution (Kace), build out a formal IT Service Catalogue that is accessible via a portal for the end user, providing a list of available service offerings.	Small	2025
13	CustX	Online services menu access to the Parks services from the corporate website	Ability for customer self-service for all Parks services.	Medium	2025

ID#	Objective	Opportunity	Description	Size	Year
14	CustX	Review Wi-Fi access needs and stability at Libraries	Understand the business requirements of Library Wi-Fi access and propose future improvements as needed.	Medium	2025
15	StaffX	Pilot the use of AI at the workplace with Microsoft Copilot*	Execute a pilot program to enable staff to find information through the Microsoft Copilot AI tool.  Allowing staff find answers to their day-to-day questions, e.g., how to collect participant votes in a Teams meeting?	Small	2025
16	StaffX, Capacity	Accounts Payable approval process automation	Ability to receive, code, approve and pay invoices with PO link and approval authority enforcement using internal digital workflows.	Medium	2025
17	Fundamental	Server Monitoring	Implement a tool to monitor/manage server performance and capacity.  Note: This was budgeted in 2023 and deferred to 2024.	Medium	2025

ID#	Objective	Opportunity	Description	Size	Year
18	StaffX, Capacity	Implement a data analysis and visualization tool*	<p>This tool will allow the Town to build dashboards, interactive reports, data analysis and business intelligence functions.</p> <p>The Town has access to PowerBI by Microsoft. Tableau is another similar product. ESRI GIS platform also has some capabilities.</p>	Medium	2025
19	Fundamental	Implement a project status reporting standard*	Develop and implement a standard project status reporting practice and templates so that the project governance is adhered to by the project managers.	Small	2025
20	Fundamental	Implement a project management methodology	Implement project classification, project phases, project reporting requirements, project plan requirements, project governance needs, Terms of Reference, artifacts and templates, issue management including escalation processes, etc. so that the key projects are managed in a way that the scope, schedule, and budget overruns are mitigated.	Large	2025



ID#	Objective	Opportunity	Description	Size	Year
21	StaffX, Capacity	Digitize the paper-based historical records	<p>The Town has a considerable amount of paper records that the staff need to refer to, find, search for and extract information from.</p> <p>These activities take staff time and are not efficient. Digitize the most-used paper records and make them available for easy search, e.g., property files for Planning and Building.</p>	Large	2025
22	StaffX	Implement single-sign-on for staff for back-office systems	<p>Staff should be able to use the network login credentials to automatically sign onto business systems.</p> <p>This improves the staff experience and security and access management.</p>	Medium	2025
23	Fundamental	Develop a Cloud Strategy	Implement formalized Cloud governance coupled with a Cloud roadmap.	Small	2025
24	CustX, StaffX	Conduct a review of the program registration system (ActiveNet)	Continue the current exploration efforts and complete the review of the current system (ActiveNet) capabilities and a market scan to determine the next steps.	Small	2025
25	CustX, StaffX	Online Accounts Receivable payments	Enable Accounts Receivable (AR) payments using the existing capabilities of Virtual Town Hall (VTH).	Medium	2025

ID#	Objective	Opportunity	Description	Size	Year
26	Fundamental	Review the platform roadmap and suitability of GreatPlains	<p>Microsoft announced end-of-life extended support for the GP platform to 2028.</p> <p>This project is to review the status and identify any risks as well as the suitability of the platform beyond 2028.</p>	Medium	2025
27	StaffX, Capacity	Digitize the paper-based historical records	Continue the digitization of hard copy records (Project #22).	Large	2026
28	StaffX	Implement single-sign-on for staff for back-office systems	Continue the expansion of single-sign-on (Project #23).	Medium	2026
29	Fundamental	Conduct a BIA and IT RA to support the current Disaster Recovery initiative	Engage the business to provide a list of core services and RTOs in the event of a service disruption.	Medium	2026
30	Fundamental	Formalize the after hours IT support service*	<p>There is an informal understanding of after hours service from IT.</p> <p>An after hours policy created in 2019 is also available with incident priority setting. This standard operating procedure should be reviewed for the current state and communicated to the business units.</p>	Medium	2026

ID#	Objective	Opportunity	Description	Size	Year
31	Fundamental	Formalize the emergency response plan for high-priority IT incidents*	<p>The current after hours response policy includes built-in emergency incident procedures.</p> <p>IT management should review the current policy document based on the current state and share with all business units.</p>	Medium	2026
32	CustX	Enable online marriage license applications*	<p>Allow customers to digitally apply for a marriage license and use the same data to prepare and print the license. This reduces the chance of error and time spent by staff in data entry.</p>	Small	2026
33	StaffX, Capacity	Develop the Official Planning GIS layer*	<p>Digitize the most commonly used Official Plan Schedules into an interactive GIS layer and make the layer available through the CityView system to internal staff and through the Town website to citizens.</p>	Medium	2026
34	StaffX	Enable the use of non-Windows products such as Macs	<p>Some departments are in need of using Apple products and this initiative is to review and enable non-Windows products on the network.</p>	Medium	2026

ID#	Objective	Opportunity	Description	Size	Year
35	CustX	Enable online facility booking	<p>Enable residents to book Town facilities through online self-service.</p> <p>All facilities are already listed with a good level of information on the website. The ability to see availability, pay and book should be enabled.</p> <p>In addition, enable event revision and schedule modification capabilities (Leisure and Community Services expressed this need).</p> <p>Libraries have also asked for this capability. They have tried ActiveNet, however it presented limited capability.</p>	Medium	2026
36	StaffX, Capacity	Implement an Asset and Work Management system**	<p>Implement a system to track all physical assets, materials, inventories, and the maintenance activities of the assets such as service requests, work orders, schedules maintenance, inspections, condition tracking, warranties, retirement, replacement, assumption etc.</p>	Large	2026
37	CustX	Fire-related online services	<p>Develop online integrated forms for fire works, fire routes, fire safety training type of requests. Evaluate CityView and the new Fire system (ESO)</p>	Medium	2026

ID#	Objective	Opportunity	Description	Size	Year
38	Capacity	Implement Stage 3 of the IT reorg	As recommended, implement the IT re organization Stage 3 activities.	Small	2027
39	StaffX	Develop a needs-based training and education program for technology platforms	Develop for staff various channels of training related to technology and related tools.	Large	2026
40	StaffX, Capacity	Digitize the paper-based historical records	Continue to digitize hard copy records (Project #22).	Large	2027
41	StaffX	Implement single-sign-on for staff for back-office systems	Continue to expand single-sign-on (Project #23).	Medium	2027
42	Fundamental	Implement a project intake process including a project prioritization methodology*	Build a pipeline process to welcome new digital ideas and a standard prioritization methodology to move the idea to an approved project.	Small	2027
43	Fundamental	Implement an IT asset management process	Using the current ITSM solution (Kace), build out a formal IT asset management process (move away from manual spreadsheets).	Medium	2027
44	StaffX	Landscape architecture software – Parks	Implement a new software for the landscape architecture group.	Medium	2027

ID#	Objective	Opportunity	Description	Size	Year
45	StaffX, Capacity	AR approval process automation	Ability to request, issue and receive payments for Town-issued invoices through a digital workflow.	Medium	2027
46	StaffX	Implement a modern collaboration, information-sharing, document and records management environment through a new intranet	Expand the Town's M365 environment to enable modern collaboration, information-sharing, document and records management functions using the SharePoint platform.  SharePoint can be extended for simple workflows and approvals within the Town as well.	Large	2027
47	StaffX	Virtual programming and communications between Library branches/facilities	Ability for Library staff to collaborate between branches.	Small	2027
48	StaffX	Expand GPS for the fleet of vehicles	Enable the location tracking for the fleet by expanding the use of the GeoTab solution across the organization.	Medium	2027
49	StaffX, Capacity	Digitize the paper-based historical records	Continue to digitize hard copy records (Project #22).	Large	2028
50	StaffX	Implement single-sign-on for staff for back-office systems	Continue to expand single-sign-on (Project #23).	Medium	2028

ID#	Objective	Opportunity	Description	Size	Year
51.1	CustX	Implement online chat feature for residents	<p>Using the capabilities of the new CRM, incorporate an online chat feature for residents to ask common questions and receive answers.</p> <p>This could be through a chatbot. If an answer is not available, automatically generate a service request in the CRM for staff action and/or route to live chat with a staff member.</p>	Large	2028
51.2	CustX	Virtual Chat – Library(ies)	Ability to chat online with customers.	Medium	2028
52	Capacity	Integrate online payments with back-office systems	<p>Enable online payments with the ability to easily reconcile the payment with the purpose as well as integrated with the back-office tracking systems, e.g., payment made for permit #1234 automatically updates the back-office permit system as paid and the GreatPlains financial system as a payment received.</p> <p>Leisure and Community Services expressed concern with cash handling/closing processes and the lack of digital integration. Libraries also expressed the need for this capability, e.g., fee collections.</p>	Large	2028

ID#	Objective	Opportunity	Description	Size	Year
53	Fundamental	Data Assessment/Archiving Strategy	Perform a data assessment on all servers to identify stale/inactive unstructured data and develop a plan to move stale, inactive data off production storage.	Large	2028
54	StaffX	Auto-sensing for Parks	This capability will enable Parks to measure parameters for fields and how to line them.	Small	2028
55	CustX, StaffX	Replace the SRM system with a modern CRM**	The Town has outgrown the capabilities of the SRM system. A Council approved budget is available to replace with a modern CRM solution.	Large	2028
56	Capacity	Develop a roadmap for the use of IoT	Enable the Town to embark on research pilots based on IoT devices. Some examples include traffic counts, automated garbage cans, infrastructure condition tracking, noise/light pollution, water use/leaks, etc.	Medium	2028



ID#	Objective	Opportunity	Description	Size	Year
57	CustX	Implement a single customer portal for all citizen requests	Review the capabilities of various portal solutions the Town has, e.g., CityView, Virtual Town Hall (GP), CRM (new), ActiveNet, Asset and Work Management system (new), etc. and come up with a single portal solution that connects all individual portals in a way that a single-sign-on to the Town allows citizens to interact with multiple systems in the background seamlessly and transparently.	Large	2028

## 5.4 Budget

The cost of projects has been estimated based on publicly-available data incorporated with a very high-level resource requirement. These estimates could vary depending on the selected solution, features and the number of users at the time of implementation.

It is recommended that formal business cases be prepared with more detailed cost estimates each year prior to the budget request/approval.

The following table summarizes the annual cost for the next four years. Estimating for the fifth year is not practical due to multiple reasons (such as the technology available and the related costs could be vastly different to what is in the market today; also, the Town's ability to implement the initiatives for the first four years may dictate what is pending in the fifth year).

The Town's business needs also may have changed by 2028. Due to these reasons, 2028 cost estimates are more suitable to be prepared in 2027.

Year	Capital Estimate	Operating Estimate	Cost Description
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2024	\$30,000 – 50,000	\$2,000 – 5,000	The main focus for 2024/25 is to complete the CityView and HRIS projects. Since the budget for 2024 has already passed, projects that require minimum funding have been included. Changes to IT organization may incur operating budget costs to be determined.
2025	\$85,000 - \$100,000	TBD	No enterprise projects are included in 2025 due to CityView and HRIS implementations.
2026	\$65,000 - \$75,000	\$20,000 - \$35,000	Asset and Work Management system is the main focus and the largest cost for 2026.
2027	\$235,000 - \$290,000	\$6,000 - \$10,000	Document and records management and the expansion of SharePoint is the largest initiative for 2027. Changes to IT organization may incur operating budget costs to be determined.
2028	\$25,000		No estimates for 2028 due to reasons provided above. The \$25,000 is the annual estimate for the 4-year project to digitize paper records. The largest undertaking for 2028 is the CRM system implementation.
<b>Total</b>	<b>\$440,000 – 540,000</b>	<b>\$28,000 – 50,000*</b>	

\*Note that the IT Organization Review and the resulting three-stage recommendation will incur additional operating costs. These costs are to be determined after a job evaluation by HR.

## 6.0 Conclusion

In conclusion, the Town has many aspects of the current technology environment to be proud of.

A well-managed Infrastructure layer, an up-to-date website with some good online services, a well-appreciated IT team and a management team that supports digitization of business processes are some of the positive aspects of the current technology environment.

The IT Digital Strategy is developed in sync with the Town's Strategic Plan and the Customer Service Framework. The main objectives of the ITDSP are to enhance the customer and staff experience and to increase the capacity through integrated digital services.

To be successful in implementing the ITDSP, the Town needs to prepare by building the following fundamental pillars:

- IT governance structure.
- Project and change management practices.
- Elevate the role of IT from "Solid Utility" provider to "Strategic Partner".

The implementation of the above success factors will establish a solid ground for the implementation of the ITDSP work plan.

The work plan is developed to first address the current challenges with the two delayed project implementations. 2024 and 2025 are the years to complete these two projects. The Town has already re-assessed the strategy for these two projects and a realistic plan has been put in motion.

The rest of the work plan items have been spread among the next 5 years to facilitate a gradual growth based on budget, resources, and the amount of change the Town can absorb in any year. The work plan also identifies quick wins, also spread across the five years to build the momentum and to showcase the outcomes in a quick turnaround while the major projects take a longer time period to implement.

The work plan should be a live document. The Town should be flexible to review, add, update, and move initiatives around to facilitate the needs of the Town.

The governance structure has recommended that the Senior Leadership Team be the sponsor of the ITDSP allowing the ITDSP to be aligned with the Town's vision and priorities.

## Appendix 1 – Table of Figures

Figure 1: Common Systems Making Connections .....	5
Figure 2: Three-Stage Approach.....	7
Figure 3: Municipal Technology Model .....	10
Figure 4: Stouffville's MTM Assessment Results .....	12
Figure 5: Survey Respondents by Department.....	18
Figure 6: Survey Responses to Manual, Redundant Tasks .....	19
Figure 7: Survey Responses Showing the Importance of Digital Workspace Tools.....	20
Figure 8: Survey Response Showing Overall IT Service Satisfaction Level .....	21
Figure 9: Current IT Organization Structure .....	22
Figure 10: Role of IT Pyramid .....	23
Figure 11: IT Staffing Comparison to Industry Standards .....	24
Figure 12: IT Operating Expenditure Comparison to Industry Standards.....	25
Figure 13: IT Capital Expenditure Comparison to Industry Standards .....	25
Figure 14: Growth of Internet Users in Canada .....	33
Figure 15: Stouffville's Online Parking Portal .....	36
Figure 16: Elevating the Role of IT.....	41
Figure 17: Current State IT Organization Structure.....	42
Figure 21: Roles Prescribed by COBIT .....	48
Figure 22: Arrangement of Government Groups.....	52
Figure 23: Various Technology Work Types .....	54

Figure 24: Project Ranking Chart.....	65
Figure 25: Run, Grow, Transform Change Drivers.....	69
Figure 26: Typical Phases of a Project .....	73
Figure 27: Sample Portfolio Reporting Template .....	75
Figure 28: Typical Change Management Framework .....	77
Figure 29: Staff Survey Results for Information-Sharing.....	85
Figure 30: Staff Survey Results Relating to Collaboration Technologies .....	86

# Appendix 2 – Suggested Terms of Reference for Technology Governance Bodies

## Information and Digital Technology Governance Team (IDTGT)

### Mandate

The **Information and Digital Technology Governance Team** (or Steering Committee – Town leadership will decide on the final formal language) is responsible for setting strategic directions for technology and technology services based on corporate and Council priorities.

The Governance Team will determine technology funding and project prioritization and make decisions or recommendations regarding large-scale investments and strategic approaches.

The Team will be responsible for monitoring the delivery of the Technology Portfolio and IT service delivery, ensuring that service delivery meets the needs set out in the Town's Corporate Strategic Plan and Departmental Business Plans.

Ultimately, this group operates much like Council does – receiving advice and input from experts and determining priorities and strategic directions.

### Duties and Responsibilities:

1. Owns the corporate IT Digital Strategy.
2. Accountable for developing / recommending annual IT capital priorities and budget.
3. Oversees and monitors the IT Project Portfolio.
4. Approves IT annual work plan and approves significant changes to the work plan throughout the year.
5. IT policy review, approval and recommendation.
6. Technical standards review and ratification from Technical Standards Team.

7. Approval of multi-year strategic work programs from application and program working groups (individual projects within the plans will be routed through the IT Project Portfolio Evaluation Committee).
8. Strategic IT KPIs monitoring (financial, resource and infrastructure utilization, standards).

## Meetings

Monthly meetings (suggested 1-1.5 hours)

## Membership

Membership and changes to the membership of the IDTGT must be approved by the CAO.

## Steering Committees (Project-based and Ongoing)

### Mandate

Steering Committees may be established by the IDTGT to support long-standing initiatives or programs. They may be established with a limited life span to address a program of work or project (e.g., implementing an Enterprise Resource Planning (ERP) system or a Town teleworking strategy), which may be dissolved once the work program is concluded, or they may be long-standing groups to oversee work in a particular area (e.g., Financial and HR processes (GreatPlains, HRIS) and land and property-based processes (CityView)), work and asset management processes (TBD).

These collaborative groups are established to develop corporate approaches in strategic areas to ensure that all corporate effort is aligned, that solutions meet wider corporate objectives, and that benefit can be widely shared.

The development of a Terms of Reference document describing the scope of work should be the first task of any newly-formed committee. These groups are intended to be strategic, direction-setting groups, not user groups.

### Duties and Responsibilities

1. Develop strategy, roadmaps and work plans to deliver against overall program objectives.
2. Collaboratively prioritize initiatives within the program area, identifying collaborative opportunities across departments.

3. Involved in the delivery of projects as part of the program.
4. Monitor progress against projects and plans.
5. Members of the working group are expected to evangelize the program or application, to ensure that opportunities are aligned with wider program or application objectives.

## Meetings

As required, meeting frequency will be determined by the activity associated with the group.

## Membership

Membership or changes of membership of the Steering Committees is to be approved by the IDTGT, as required. Typically a manager-level committee that may be chaired by the appropriate business sponsor or staff member.

## Examples

1. ERP Project Steering Committee.
2. Work and Asset Management Steering Committee.
3. Land and Property-based Processes Steering Committee.
4. Mobile and Remote Working Steering Committee.
5. Web and Digital Services Steering Committee.

## Technical Standards / Architecture Team

This is a virtual team drawing on appropriate managers and staff within IT. The group is responsible for identifying and recommending the adoption of best practices and standards regarding data, applications, software, hardware, and integration and:

- Develop integrated lifecycle plans to identify which work is non-discretionary.
- Recommend standards and lifecycles forward for review/debate/challenge at Technology Transformation Governance Team.



- Identify, review and document exceptions to standards.
- Information Security (note a subcommittee including representatives from Legal, HR, Clerks, IT may be worthwhile to consider broader corporate impacts around security considerations).

Corporate technology standards are to be developed and reviewed by this team (in consultation with the appropriate business partners and/or working groups) and recommended forward to the IDTGT for review and ratification.

The Manager, IT Services, will be responsible for bringing forward items from the Technical Standards/Architecture Team to the IDTGT.

Note: Most data standards, for example, will likely require project teams to be established, with significant departmental contributions. These standards should be reviewed by this group for awareness and endorsement before proceeding to the Information and Digital Technology Governance Team for approval.