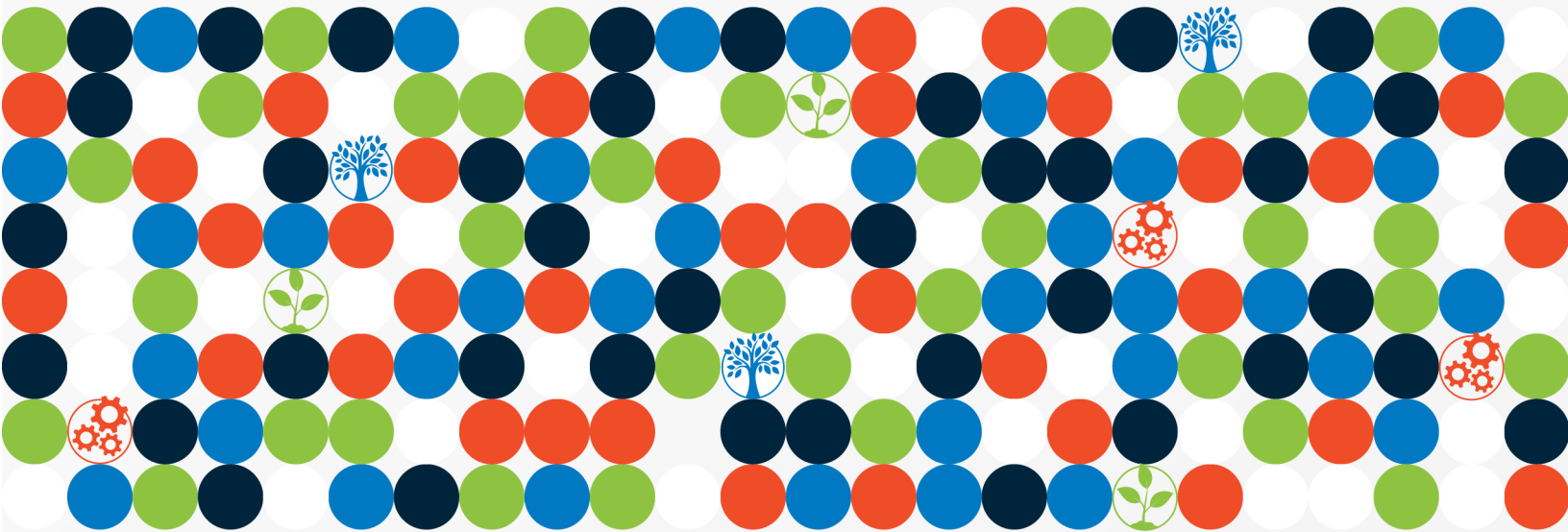


*Clarington*

# Clarington Information Technology (IT) Strategy

2025-27



## Strengthen, Innovate, and Transform

A strategy to fortify Clarington's Information Technology (IT) foundations, adopt modern technologies for greater efficiency, and reshape the IT landscape to support future business models and goals.

## Foreword

As the Chief Information Officer of the Municipality of Clarington, I am pleased to present our IT Strategy for 2025-27, which establishes a clear roadmap to enhance our technological capabilities, improve operational resilience, and foster innovation.

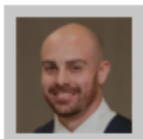
This strategy is built upon three guiding principles: **Strengthen, Innovate, and Transform**. **Strengthen** ensures that our foundational IT infrastructure is stable, secure, and resilient. **Innovate** focuses on leveraging new technologies to drive efficiency and service excellence. **Transform** is about reshaping Clarington's digital future, ensuring our IT environment aligns with Municipal priorities and community expectations.

Our approach has been deeply informed by extensive engagement with stakeholders across the organization. We have listened carefully to the needs and priorities of Municipal departments, elected officials, and residents to craft an IT roadmap that is both practical and ambitious.

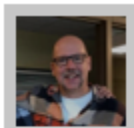
This strategy is the result of a collaborative effort led by Clarington's dedicated IT leadership team, whose expertise, commitment, and vision have been instrumental in shaping this plan. Their collective insight ensures that our technological advancements align with Municipal goals, enhance service delivery, and empower our community.

Technology is not just a tool; it is an enabler of progress. Whether through modernizing our cybersecurity posture, enhancing data-driven decision-making, or supporting smart city initiatives, this strategy will serve as a catalyst for positive change.

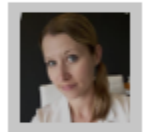
**Together, we will build a more connected, innovative, and resilient Clarington.**



Dave Cachia,  
Chief Information Officer



Rob Van Dyk,  
Manager of IT



Brandi Carlton,  
Supervisor of Business  
Development



Jason Douglas,  
Supervisor of Network &  
Security



John Zheng,  
Supervisor of Client and Application Services

## Table of Contents

Foreword.....	2
Executive Summary .....	4
Listening and Feedback Gathering .....	5
1. Outreach to stakeholder and leadership groups .....	5
2. Summary of departmental-wide exercises .....	5
3. Outreach to All Staff (Staff Wide Survey) .....	7
4. Results of all staff (Staff-wide survey).....	8
5. Elected Council Engagement:.....	9
Current State Summary .....	10
People: .....	10
Team responsibilities:.....	11
Vision .....	11
Commitments .....	11
1. Deliver IT excellence: Aligning with Clarington’s corporate mission.....	11
2. Enhance operational resilience and business support .....	11
3. Foster innovation and digital transformation .....	12
Information Technology Strategy 2025-27 .....	12
Goals .....	13
2025-27 Roadmap .....	14
Risk Management .....	17
Governance and Performance Measurement .....	18
Governance Structure:.....	18
Performance Measurement and KPIs:.....	18
Appendices.....	19

## Executive Summary

The Municipality of Clarington's Information Technology (IT) Strategy for 2025-27 is built on three core pillars: **Strengthen, Innovate, and Transform**. This strategy aims to enhance operational resilience, drive technological advancements, and modernize Municipal services to better serve residents and staff.



**Strengthen**



**Innovate**



**Transform**

The Clarington IT Strategy 2025-27 is designed to empower the Municipality through **resilient, innovative, and transformative** technology solutions. It aligns directly with Clarington's corporate strategy to **enhance Municipal operations, modernize public services, and strengthen digital resilience**.

Our approach focuses on three core pillars:

- **Strengthen:** Ensuring a secure, stable, and future-ready IT infrastructure to protect Municipal operations and safeguard community services.
- **Innovate:** Leveraging new technologies to enhance service delivery, improve data-driven decision-making, and optimize Municipal processes.
- **Transform:** Driving digital transformation to enable a smarter, more efficient Municipality that meets evolving community needs.

By investing in cyber resilience, digital modernization, and service innovation, Clarington is building a future-ready IT ecosystem that improves efficiency, security, and citizen engagement.

## Listening and Feedback Gathering

The IT department's vision, goals, and priorities are shaped by organizational needs, making feedback the foundation of a business-aligned strategy. This essential step establishes legitimacy, ensures transparency, and creates a functional strategy.

A series of listening and feedback gathering exercises started in November 2024 and completed in January 2025. These were based on three fundamental actions:

### 1. Outreach to stakeholder and leadership groups

- Chief Administrative Officer, and the **CAO's Office** delegates from Economic Development, Strategic Initiatives, and Communications.
- Deputy Chief Administrative Officer of **Public Services** and delegates from Emergency and Fire Services, **Public Works**, and Community Services.
- Deputy Chief Administrative Officer of **Legislative Services** including the Clerk, Deputy Clerk, and Human Resources.
- Deputy Chief Administrative Officer of **Finance and Technology** and delegates from Accounting, Financial Planning, Taxation Services, and Procurement.
- Deputy Chief Administrative Officer of **Planning and Infrastructure**, including delegates from Community Planning, Buildings, Parks, Development Review, Development Engineering, and Construction and Inspections.

### 2. Summary of departmental-wide exercises

Following five departmental-wide exercises, several key themes, trends, opportunities, risks, and pain points emerged across all departments. The feedback collected highlights critical areas for improvement and collaboration, providing a clear roadmap for addressing shared challenges and leveraging opportunities across the Municipality of Clarington.

#### a) Data-driven decision making and reporting

- **Challenge:** Departments face barriers in accessing and analyzing data effectively.
- **Needs:**
  - Advanced reporting tools for more insightful decision-making.
  - Targeted training programs to enhance data literacy among staff.
  - Expanded access to data expertise to support Municipal operations.
- **Strategic opportunity:** Establish a Municipal Decision Support Group to enhance analytics capabilities and drive informed decision-making across all departments.

#### b) Seamless system integration

- **Challenge:** Critical Municipal applications lack seamless communication, leading to inefficiencies.
- **Needs:**
  - Enhanced system integration solutions to streamline workflows.
  - Assessment and prioritization of key applications to ensure interoperability.
- **Strategic opportunity:** Develop a Centralized Integration Framework to ensure secure, efficient, and reliable interconnectivity between essential applications to improve service delivery.

**c) Technology lifecycle management and standardization**

- **Challenge:** Inconsistent technology refresh cycles and non-standardized devices create inefficiencies.
- **Needs:**
  - Structured technology lifecycle management to ensure timely equipment updates.
  - Standardized IT provisioning for peripherals and work-from-home (WFH) equipment.
  - Expansion of device standardization for mobile, specialized, and fleet technology needs.
- **Strategic opportunity:** Implement a Lifecycle and Standardization Policy to optimize IT investments, extend asset longevity, and enhance productivity across departments.

**d) Technology training and adoption**

- **Challenge:** Staff report uncertainty in effectively utilizing technology tools.
- **Needs:**
  - Standardized onboarding and training programs for Municipal technology tools.
  - A self-service knowledge base offering user-friendly resources for troubleshooting and learning.
- **Strategic opportunity:** Foster a Culture of Digital Empowerment through structured training, accessible support tools, and proactive technology engagement initiatives.

**e) Connectivity and network optimization**

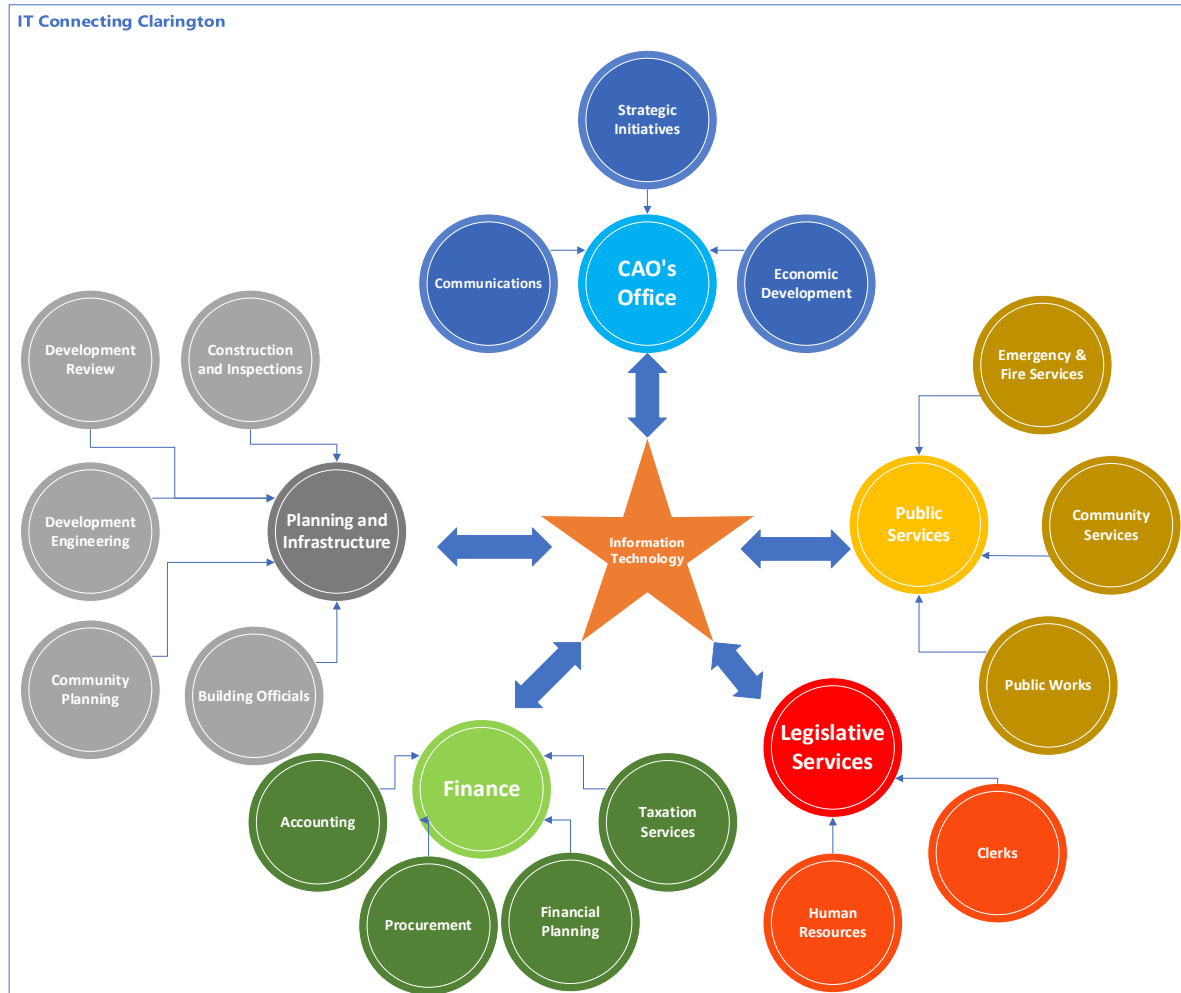
- **Challenge:** Geographic dispersion of sites and mobile workforce requirements create network reliability issues.
- **Needs:**
  - Enhanced network infrastructure to address connectivity gaps.
  - Reliable mobile access solutions for field staff and remote locations.
- **Strategic opportunity:** Invest in modern, scalable network solutions that align with Clarington's corporate strategy for enhanced cellular and internet coverage, ensuring uninterrupted service across all sites.

**f) Maximizing GIS potential**

- **Challenge:** Limited governance and integration restrict the full utilization of GIS capabilities.
- **Needs:**
  - Advanced GIS automation tools for process efficiency.
  - A centralized governance model to clarify roles and enhance interdepartmental collaboration.
- **Strategic opportunity:** Establish a GIS Innovation Hub to integrate spatial data into Municipal decision-making to improve infrastructure planning and service delivery.

### g) Enhancing IT and business collaboration

- **Feedback:** Departments seek more structured IT engagement to align technology solutions with operational needs.
- **Strategic opportunity:** Introduce Regular IT Engagement Sessions to build stronger partnerships, facilitate two-way communication, and collaboratively address challenges and opportunities.



### 3. Outreach to All Staff (Staff Wide Survey)

- A staff-wide survey, conducted in December 2024, aimed to gather insights and feedback on the following areas of discussion: IT tools and systems
- IT support and services service improvements
- Communication and collaboration
- Training and skill development
- Future needs and innovation
- IT department performance
  - Perception of its role in achieving departmental goals
- Vision for technology use

#### 4. Results of all staff (Staff-wide survey)

The IT department conducted a two-week feedback campaign from January 13 to January 27, 2025, inviting input from all staff. A total of 97 employees participated out of approximately 500 full- and part-time staff. The following findings and observations have been gathered.

#### Key findings and observations:

##### 1. Strong preference for self-service model

- 44 per cent of respondents wish to empower themselves, wherever possible.
  - Presents opportunities and challenges (i.e. no support available after business hours).

##### 2. Teams chat usage for IT ticket engagement

- 29 per cent of respondents indicated that they use Teams for IT Support interactions.
- **Improvement opportunities:**
  - Integrate Teams with Fresh Service (ticketing system) for better live interaction tracking.
  - Current live interactions are not being tracked effectively.

##### 3. Resolution satisfaction

- **Feedback:** 80 per cent of respondents indicated that their issues and concerns were understood and addressed effectively
  - *Opportunity:* Review the remaining 20 per cent of respondents' tickets to identify and address recurring issues.

##### 4. Insufficient resources for self-resolution

- 31 per cent of respondents indicated that there are not enough resources (FAQ, Knowledge Base Articles, FAQs) available to help resolve simple IT issues independently
- **Challenges:**
  - Limited and inaccessible resources for solving simple IT issues.
  - Knowledge requires:
    - Cleaning and reorganization.
    - Adding meta-data to documents to improve discoverability during ticket creation.

##### 5. Fresh Service portal

- **Improvement plan:**
  - Complete a "2.0" redesign of the portal.
  - Increase awareness and usage of the redesigned portal.
  - Consider implementing integrations with Teams or offer a live chat support feature, ensuring it integrates seamlessly with the existing ticket system.



**6. Inadequate or dated technology and hardware:**

- Desktop and laptop fleet:
  - Increase resources (hardware is not sufficient).
  - Implement an evergreen strategy for frequent updates – some devices are well beyond their lifecycle.
- Phone system:
  - Significant dissatisfaction across the board; unresolved issues.

**7. Processes and coverage:**

- Onboarding and offboarding:
  - Requires a complete rebuild.
- Service gaps:
  - After-hours and weekend support are insufficient.
  - Library-specific challenges anticipated.

**8. Education and awareness:**

- Underutilization of tools due to lack of knowledge and training.
- Strong desire for Lunch and Learn sessions, comprehensive knowledge bases, and formal technology training (i.e. SharePoint).

**9. Artificial intelligence:**

- Strong desire to explore use of AI tools.
- IT to develop training, access, and frameworks to enable effective AI use.

**5. Elected Council Engagement:**

The CIO conducted a feedback exercise with Mayor Adrian Foster on February 11th, 2025. The Mayor and CIO discussed the need for the following:

**Increased IT education and training:** A stronger focus on user education, including best practices for IT tools, technology, and software.

**Artificial intelligence exploration:** Assessing AI's role in decision-making, automating manual processes, and enhancing meetings (e.g., committee meetings), along with establishing governance and deployment strategies.

**Cybersecurity and risk management:** Implementing risk registry, developing dashboards and heatmaps for better visibility, and introducing regular cybersecurity reporting to the Council.

**Business intelligence and data utilization:** Expanding data collection efforts, exploring monetization opportunities, and leveraging big data for strategic initiatives.

## Current State Summary

### People:

The IT department consists of 17 individuals and is represented by four teams:

#### 1. Information Technology Leaders

- 1 x Chief Information Officer
- 1 x IT Manager
- 3 x Supervisors

#### 2. Business Development

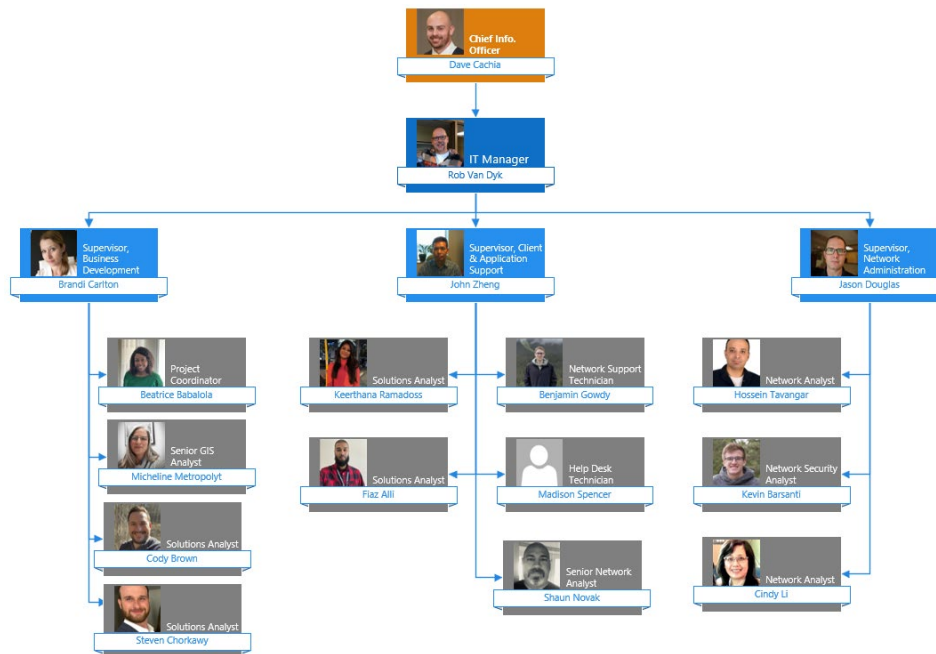
- 1 x Project Coordinator
- 1 x Senior GIS Analyst
- 2 x Solutions Analyst

#### 3. Client and Application Support

- 1 x Senior Network Analyst
- 3 x Solutions Analyst (\*1 new role vacant starting in 2025)
- 1 x Help Desk Technician
- 1 x Network Support Technician

#### 4. Network Administration

- 3 x Network Analyst (\*1 new role vacant starting in 2025)
- 1 x Network Security Analyst



## Team responsibilities:

Business Development	Client and Application Support	Network Administration
<ul style="list-style-type: none"> <li>• Project management</li> <li>• Corporate business development</li> <li>• Geographic information systems (GIS) administration</li> </ul>	<ul style="list-style-type: none"> <li>• IT service management</li> <li>• IT Helpdesk</li> <li>• Applications support</li> </ul>	<ul style="list-style-type: none"> <li>• Network and infrastructure</li> <li>• Cyber security</li> <li>• Disaster recovery and auditing</li> </ul>

## Vision

At the Municipality of Clarington's IT department, we envision a robust, adaptive, and forward-thinking digital environment that empowers our community and workforce. By strengthening our IT foundation, we ensure stability, security, and resilience in all our systems, safeguarding our assets and enabling reliable services. Through innovation, we embrace the power of emerging technologies, fostering an agile, efficient organization prepared to meet the future's challenges. With transformation as our guiding principle, we are committed to reimagining our digital landscape to support Clarington's strategic goals, harnessing data-driven insights to drive progress, and delivering impactful solutions for our citizens.

## Commitments

### 1. Deliver IT excellence: Aligning with Clarington's corporate mission

- Stakeholder-centric engagement:** Strengthen relationships through proactive communication and collaboration.
- Service excellence:** Enhance user experience (UX) and IT service management (ITSM) to drive efficiency.
- Empowered workforce:** Expand self-service capabilities, provide intuitive digital tools and technology training for staff.
- Continuous learning and development:** Foster a culture of ongoing professional growth, ensuring staff remain adaptable to emerging technologies.

### 2. Enhance operational resilience and business support

- Strategic IT partnership:** Position IT as a key enabler of Municipal success, aligning technology with business needs.
- Optimized IT operations:** Drive process efficiency, automation, and performance improvements.
- Risk mitigation and cyber resilience:** Strengthen cybersecurity frameworks, compliance measures, and proactive risk management.
- Business continuity and disaster recovery:** Enhance IT resilience to ensure uninterrupted Municipal services and operational stability.

### 3. Foster innovation and digital transformation

- a. **Technology-enabled service delivery:** Leverage emerging technologies to modernize Municipal services and drive citizen engagement.
- b. **Smart city and data-driven governance:** Implement intelligent solutions that improve infrastructure, analytics, and decision-making.
- c. **AI and automation adoption:** Explore AI-driven efficiencies to optimize operations and reduce manual workloads.
- d. **Future-ready IT investments:** Ensure technology initiatives align with Clarington's strategic priorities and long-term sustainability goals.

## Information Technology Strategy 2025-27



**Strengthen:** Reinforcing Clarington's IT stability, security, and resilience by addressing technical debt, optimizing infrastructure, and securing critical applications. In addition to enhancing cybersecurity and infrastructure, the focus will be on integrating robust disaster recovery and business continuity strategies to ensure operational resilience.



**Innovate:** Enhancing efficiency and agility through the adoption of new technologies, modernization efforts, and a culture that encourages creative experimentation. By piloting emerging technologies, establishing strategic partnerships with other municipalities, educational institutions, and technology providers, we will foster a culture of innovation. The IT department will strive act as a business partner, ensuring that innovative priorities fuel creativity and inspire continuous improvement across the organization.



**Transform:** Reshaping the IT landscape to align with evolving business models, leveraging digital transformation and data-driven insights to support Clarington's strategic vision. IT will proactively identify technology solutions that directly contribute to corporate strategic pillars.

## Goals

Strengthen	Innovate	Transform
<b>S.1</b> Establish and operationalize a comprehensive disaster recovery and business continuity framework to ensure Clarington's resilience against disruptions.	<b>I.1</b> Enhance service delivery and resident engagement through the implementation of modern digital solutions (i.e. LMS, CRM, ERP).	<b>T.1</b> Foster continuous workforce development through an adaptive learning culture that supports digital proficiency and leadership growth.
<b>S.2</b> Implement evergreen lifecycle management for IT infrastructure, ensuring sustainable technology investments and proactive system refreshes.	<b>I.2</b> Optimize service delivery and process automation through modernization efforts, leveraging CI/CD and emerging technology frameworks.	<b>T.2</b> Enhance data governance, quality, and reporting by developing an Innovation Lab, Business Intelligence, and Decision Support program to inform strategic decision-making.
<b>S.3</b> Protect the Municipal information assets and infrastructure through a continuously improved cyber security program.	<b>I.3</b> Pilot and scale smart city initiatives, leveraging technology to drive sustainability, efficiency, and improved Municipal services.	<b>T.3</b> Replace manual and outdated digital processes with automated, intelligent systems that drive efficiency, reduce redundancy, and improve service delivery.
<b>S.4</b> Expand cross-sector IT partnerships with Municipal institutions, regional agencies, and public-private entities to enhance service integration and digital collaboration.	<b>I.4</b> Establish strategic partnerships with government agencies, academia, and industry leaders to drive technology innovation, knowledge-sharing, and collaborative solutions.	<b>T.4</b> Develop a responsible AI governance framework, identifying AI-driven opportunities to optimize Municipal operations while ensuring ethical and transparent AI adoption.

## 2025-27 Roadmap

The IT initiative roadmap outlines the activities, projects, and processes that serve as key components of Clarington's IT Strategy, ensuring alignment with the Municipality's corporate strategy.

The IT initiative roadmap outlines the activities, projects, and processes that serve as key components of Clarington's IT Strategy 2025-27, ensuring alignment with the Municipality's corporate strategy.

Each IT initiative is connected to a 'Strengthen', 'Innovation' or 'Transform' goal. Each of these goals reflect a broader corporate strategic goal to ensure alignment with the Corporate Strategy and Vision. Goals are assigned an estimated start and end date, along with a weight score, to aid in prioritization and execution.

Weighted scores are calculated by the following parameters:

- **Alignment with strategic goals:** Does this initiative have a clear connection with the Municipal corporate strategy?
- **Critical business need:** Is a deficiency critically detrimental to current or future operations?
- **Risk:** Is the potential for losses, disruptions, or negative outcomes significant if not remediated?
- **Urgency and time sensitivity:** Reflects the degree to which a delay could lead to adverse consequences, or, has a strict timeline that would have greater impact if delayed.

IT INITIATIVES															
#	IT Initiatives	INITIATIVE INFORMATION				Initiative Alignment with IT Strategy	INITIATIVE PRIORITIZATION						Project Team		
		(Optional)	(YYYY-MM-DD)	(YYYY-MM-DD)	IT Strategy Goal		Weight by Criteria				Priority				
		Organizational Strategic Goals	Start date	End Date			Alignment with Strategic Goals (30) High = 30 Medium = 20 Low = 10	Critical Business Need (30) High = 30 Medium = 20 Low = 10	Risk (25) High = 25 Medium = 16 Low = 8	Urgency / Time Sensitivity (15) High = 15 Medium = 10 Low = 5	Overall Priority (ranked score) Weighted score	Initiative Rank Lower the number, more important	Departmental Owner	Individual	IT Owner
1	Implement a IT Staff Development Program	L.1.1 (Attract, Retain and Develop Talented Staff)	2025-01-15	2025-04-01	T.1 Foster continuous workforce development through an adaptive learning culture that supports digital proficiency and leadership growth	Transform	High	Medium	Medium	Low	71	6	Information Technology	David Cachia	David Cachia
2	Procure and Deploy a Process Mapping Solution with Strategic Initiatives Department	L.2.2 (Use Technology & Process Improvement to Modernize)	2025-01-15	2025-09-01	I.2 Optimize service delivery and process automation through modernization efforts, leveraging CI/CD and emerging technology frameworks	Innovate	High	Medium	Low	High	68	11	Strategic Initiatives	Justin Maclean	David Cachia + Brandi Carlton
3	Procure and Deploy a Learning Management with Human Resources	L.1.2 (Promote a culture of corporate excellence)	2025-01-15	2025-09-01	I.1 Enhance service delivery and resident engagement through the implementation of modern digital solutions (i.e. LMS, CRM, ERP)	Innovate	High	High	Low	Low	73	4	Human Resources	Lisa Wheller / Rob Maciver	Brandi Carlton
4	Develop and Operationalize a Cyber Security Program (Cybersecurity Awareness, Cyber Strategy based on NIST, Risk Registry, Incident Response Plan, Disaster Recovery Plan)	L.2.5 (Maintain, protect, and invest in Municipal Infrastructure and Assets)	2025-01-01	2027-01-01	S.3 - Protect Municipal Information Assets and Infrastructure Through a Continuous Improved Cyber Security Program	Strengthen	Medium	High	Medium	Medium	75	3	Information Technology	Jason Douglas	Jason Douglas
5	Procure, Build, and Replace CRM	L.2.2 (Use Technology & Process Improvement to Modernize Services)	2025-02-01	2027-01-01	I.1 Enhance service delivery and resident engagement through the implementation of modern digital solutions (i.e. LMS, CRM, ERP)	Innovate	High	High	Low	Medium	78	2	Community Services and/or Executive Office	Lee-Ann Reck and/or Mary-Ann Dempster	David Cachia + Brandi Carlton
6	Procure, Build, and Replace ERP	L.2.2 (Use Technology & Process Improvement to Modernize Services)	2025-10-01	2027-01-01	I.1 Enhance service delivery and resident engagement through the implementation of modern digital solutions (i.e. LMS, CRM, ERP)	Innovate	Medium	Medium	Medium	High	71	6	Finance	Trevor Pinn / Michelle Pick	David Cachia + Brandi Carlton
7	Refine and Improve IT Service Management (ITSM)	L.3 (Exceptional Program and Service Delivery)	2025-01-01	2026-01-01	I.1 Enhance service delivery and resident engagement through the implementation of modern digital solutions (i.e. LMS, CRM, ERP)	Innovate	Medium	Low	Low	Low	43	17	Information Technology	John Zheng	John Zheng

*Snippet of part of the IT Initiatives List*

The full Strategy Workbook is a supplementary to this document. The initiatives, based on their initiative rank are as follows:

- **Develop and operationalize IT evergreen and device standardization program**
  - Continuous lifecycle management for IT hardware and software – leveraging ‘just-in-time’ deployments and replacement.
- **Procure, build and replace the CRM**
  - Evaluating organizational requirements, selection of a CRM tool, and deploying a solution to improve customer service at Clarington.
- **Develop and operationalize a cyber security program**
  - Develop a cyber security strategy.
  - Alignment with a known best-practice framework (NIST CSF v2, ISO 27001, COBIT, ITIL, PCI DSS).
  - Enhance cybersecurity awareness.
  - Operationalize Incident Response and a Risk Registry.
- **Procure and deploy a Learning Management System in conjunction with Human Resources**
  - Collaboration with Human Resources to implement and utilize a Learning Management System.
- **Telephony modernization**
  - Migrate fully to Microsoft Teams and implement a Contact Centre solution for front-line facing operations.
- **Implement an IT staff development program**
  - A structured framework to enhance technical, leadership, and soft skills through a 1-day-per-month development opportunity. At the end of each year, do a training showcase where each participant presents what they learned and how we could apply it at Clarington.
- **Explore artificial intelligence opportunities**
  - Build an AI Governance framework, and identify areas where AI can drive innovation, efficiency, or improved decision-making.
- **Procure, build, and replace Enterprise Resource Planning (ERP) Solution**
  - Selecting a suitable ERP solution through evaluation, procurement, and implementation.
- **Create and operationalize an IT Disaster Recovery Plan (DRP)**
  - A comprehensive strategy to ensure rapid restoration of IT systems, data, and operations after disruption or disaster.

- **Procure and deploy a process mapping solution with Strategic Initiatives department**
  - Collaborate with Strategic Initiatives to select a tool to implement, analyze and optimize business processes.
- **Explore integration of CLMA IT into Clarington IT**
  - Conduct a review of systems, resources and processes to investigate feasibility into consolidating infrastructure and resources where possible.
- **Review Password Vault (Secret) solution – change to best-in-breed.**
  - Evaluate best-in-breed alternatives and implement a tool that enhances security and user experience.
- **Support the development of the South Bowmanville Recreation Centre (SBRC) and the Operations, Fire Station and Training Center (CODEFS)**
  - Provide IT expertise in infrastructure architecture, design, network connectivity, and smart building integrations.
- **Improve data quality and reporting by developing an innovation lab, business intelligence, or decision support program**
  - Improve data quality and reporting by establishing an innovation lab or business intelligence program to foster data-driven decision-making. This involves implementing modern Business Intelligence (BI) tools, developing data governance policies, and training staff to generate actionable insights that drive operational and strategic improvements.
- **Improve network resilience to all Clarington facilities (using public or private infrastructure)**
  - Enhance network resilience by upgrading connectivity to Clarington facilities through public or private infrastructure, implementing redundancy measures, and optimizing network configurations. This ensures reliable and secure communication to support uninterrupted operations and service delivery.
- **Refine and improve IT service management (ITSM)**
  - Refine and improve ITSM by implementing enhancements and align ourselves with ITIL best practices. Implement change management, service-level-agreements, and enhance access to service.
- **Establish partnerships with municipalities and educational institutions**
  - Identify shared goals, fostering collaboration, and developing initiatives that leverage combined resources and expertise. This includes joint projects, knowledge sharing, and co-development opportunities to drive innovation and community impact.
- **Support smart city initiatives**
  - Support smart city initiatives by implementing technology solutions that enhance urban efficiency, sustainability, and citizen engagement. This includes deploying Internet-of-Things (IOT) infrastructure, improving data analytics, and integrating systems to support smart transportation, energy, and public services.



- **Initiate and complete a GIS strategy**

- Clarington has opportunities to leverage existing GIS technology to enhance outcomes in multiple areas within the Municipality (Planning, Public Works, Emergency Services).

## Risk Management

The Municipality of Clarington's IT Strategy 2025-27 faces several key risks that could impact implementation and service delivery. The risk management framework focuses on proactive identification, assessment, and mitigation strategies to minimize disruptions and ensure strategic objectives are met.

### Key risks and mitigation strategies:

#### 1. Cybersecurity threats:

- **Risk:** Increasing cyber threats such as ransomware, phishing attacks, and data breaches.
- **Mitigation:**
  1. Implement a comprehensive cybersecurity program aligned with industry frameworks (NIST CSF version 2).
  2. Conduct regular vulnerability assessments, implement best practice identity and access management, and enhance employee cybersecurity awareness training.
  3. Explore Security as a Service with the procurement of a Security Operations Centre (SOC).

#### 2. Funding constraints:

- **Risk:** Limited financial resources could hinder the execution of IT projects.
- **Mitigation:**
  1. Prioritize high-impact, cost-effective initiatives.
  2. Leverage grants, inter-municipal partnerships, and shared services to optimize budget utilization.

#### 3. Business continuity and disaster recovery (BC/DR) gaps:

- **Risk:** Inadequate resilience planning could lead to service disruptions during emergencies.
- **Mitigation:** Operationalize a robust Disaster Recovery Plan (DRP) and Business Continuity Plan (BCP), incorporating regular testing and updates to ensure preparedness.

#### 4. Talent acquisition and retention:

- **Risk:** Difficulty in attracting and retaining skilled IT professionals.
- **Mitigation:** Implement an IT staff development program, offer competitive compensation, and create career growth opportunities to retain top talent.

## 5. Technology obsolescence:

- **Risk:** Outdated IT infrastructure and systems hinder efficiency, service efficiency, and pose a security risk.
- **Mitigation:** Establish an IT evergreen lifecycle management program to ensure timely upgrades and replacements of aging technology assets.

## Governance and Performance Measurement

Effective governance and performance measurement ensure that IT initiatives align with Clarington's strategic goals and deliver measurable benefits.

### Governance Structure:

- **IT business partners:** IT leadership, in collaboration with various departmental leadership groups, will meet regularly to ensure IT strategic alignment, investment priorities, and risk management.
- **Project governance:** Establish project management best practices, leveraging Information Technology Infrastructure Library (ITIL) and Project Management Body of Knowledge (PMBOK) methodologies for structured execution and accountability.
- **Policy and Compliance Framework:** Regularly update IT policies to ensure security, compliance, and operational effectiveness.

### Performance Measurement and KPIs:

To track progress and demonstrate the impact of the IT Strategy 2025-27, the following key performance indicators (KPIs) will be used:

#### 1. Cybersecurity and Compliance:

- Number of cybersecurity incidents reported and mitigated.
- Percentage of staff completing cybersecurity awareness training.
- Monthly phishing test results and remediations.

#### 2. Operational efficiency and service delivery:

- IT service request resolution time (average time to close tickets).
- User satisfaction scores from IT support surveys.
- Annual staff survey to inform qualitative indications on services provided, innovative activity, and conduct pulse checks.
- System uptime and availability metrics.

#### 3. Technology modernization and adoption:

- Percentage of IT infrastructure and applications refreshed per the evergreen strategy.
- Number of business processes automated or enhanced through technology.

#### 4. Innovation initiatives:

- Collaboration initiatives with departments, other municipalities and institutions.
- Impact assessment of new technology pilots.

## 5. IT talent and development:

- Employee engagement and retention rates in IT roles.
- Number of professional development initiatives completed.
- Percentage of IT workforce with updated certifications and training.

## Reporting and Continuous Improvement:

- IT performance reports will be presented to senior leadership and Council annually.
- Regular strategy reviews will be conducted to adapt to emerging trends and challenges.

By integrating strong risk management practices and a structured governance model, Clarington's IT Strategy will drive meaningful improvements in Municipal operations, service delivery, and community engagement, ensuring a sustainable and forward-thinking technology environment.

## Appendices

[IT Engagement - Departmental Meetings - Aggregate Questions and Answers.xlsx](#)

[IT Engagement - ALL User Feedback 2025.pdf](#)

[The NIST Cybersecurity Framework \(CSF\) 2.0](#)