City of PICKERING

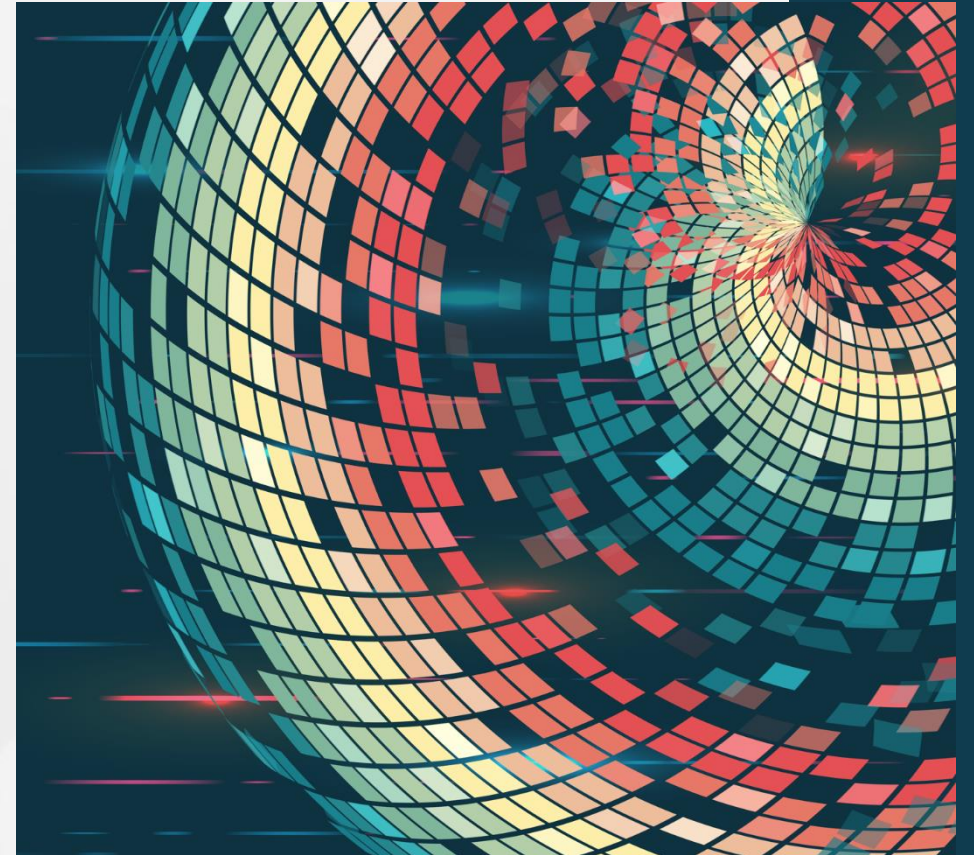# Digital Readiness and Strategy

Digital Strategy

September 2023

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City of PICKERING

Digital Readiness and Strategy

The City of Pickering is embarking on a transformation journey to become a municipal leader in citizen-centred digital services. Through the development of a Digital Readiness Assessment and Strategy, the City has set the foundation for future service delivery by establishing an organization-wide commitment and clear accountability and actions.

It is important to note that a Digital Strategy encompasses more than the traditional role of Information Technology within an organization.
A Digital Strategy guides an organization's business and digital transformation through the integration of digital technology into all areas of a business, fundamentally changing how organizations operate and deliver value to citizens and other stakeholders. It is about using technology to make processes more efficient, improving the customer experience, and identifying new ways to deliver services.

Modern Municipalities

Expectations of municipalities around the world have changed. They are faced with operating in a period of **rapid change**, and citizens today want a more **open, integrated, digital and interactive experience**. As a result, they are shifting towards a **citizen-centric service delivery model** that applies an **integrated and iterative approach** to delivering services to the community.

Municipalities across the world have adopted digitization efforts in attempts to provide high quality services to stakeholders through diverse platforms. In addition, the COVID-19 pandemic forced many organizations to quickly **embrace technology** and shift services and operations to a **digital environment**. More and more, citizens want to access **relevant** and **timely information** through **transparent** and **convenient** digital means. As a result, exceptional services that are **centralized, accessible and available through digital channels** is emerging as a top priority for local government organizations.

Project Overview

Digital transformation is a key strategic initiative that municipalities around the world are undertaking to modernize their technology and enhance their use of data and innovation in order to meet the changing needs and expectations of their citizens, businesses, community stakeholders and employees. Digital cities hold the promise to creating more accessible, inclusive, and collaborative urban spaces that are resilient, healthy, and vibrant.

The City of Pickering's future is exciting and transformational – and this Digital Strategy is helping us get there by focusing on using technology, data, and innovation to drive stronger connections and enhance the delivery of programs and services.

Our team worked through the activities shown right to ensure this Digital Strategy was reflective of our diverse community needs as well as learnings from other organizations who are also undergoing service transformations.

Thank you to all those who were involved in the creation of the City of Pickering's Digital Strategy. From our project team, City employees and City leadership to the many community members and other stakeholders who shared their perspectives and ideas, we are appreciative and grateful for your time and contributions.

NOVEMBER – JANUARY 2023
Data Gathering and Analysis

↓

JANUARY – FEBRUARY 2023
Internal Stakeholder Engagement

↓

MARCH – APRIL 2023
Public and Community Engagement

↓

APRIL – SEPTEMBER 2023
Digital Strategy Report

What We Heard Summary

A key component of the development of the Digital Strategy was **engagement with both internal City staff and diverse community stakeholders**. A comprehensive engagement plan was developed to enable **effective connections and discussions** to gather valuable information that drove the development of a **meaningful and relevant Digital Strategy**.

Outlined below is a summary of the key findings from engagement with stakeholders, with a full **What We Heard Report** available in the Appendix.

- The City of Pickering is experiencing significant economic and residential growth that is expected to continue over the next several years. There is an understanding that **digital opportunities can be leveraged** to ensure the needs and **expectations of the community are met**.

- Digital can be utilized to **enable connections and engagement** between the City and community; however, consideration must be given to various demographics and the related accessibility and digital literacy challenges.

- There is an importance related to ensuring technology is **user-friendly and accessible** for the people who are utilizing it. Tools and service delivery must be intuitive to **drive adoption** and **engagement** through **digital channels.**

- The balance of an **omnichannel approach** is critical to meeting the diverse community's **needs and expectations** (i.e. seniors).

- Opportunities can be provided to **increase** the **digital literacy**, **skills, adoption, and perception** throughout the **community, including focusing on building trust and reliability with digital services.**

Current State Summary

Like many municipalities and public sector organizations, the City of Pickering has traditionally operated using a **decentralized approach** to **managing technology and data** for the organization. This means that business areas outside of the Information Technology Division will typically manage and oversee their own business applications with **limited or no oversight or involvement** from IT. It has also led to a **lack of standardization** when it comes to **business processes, procedures, expectations, and guidelines**, including the ability for IT to manage cyber security risks and for the organization's data to be recognized as a corporate asset.

Additionally, the IT Division is limited in their ability to provide enhanced support to the organization due to **resource capacity constraints**.

With the **implementation of a Corporate Digital Governance structure**, the City will be able to proactively **increase collaboration** between departments and the IT Division when it comes to making **technology investment and sourcing decisions**.

The City is not alone in this situation. Historically, **many public sector organizations** have **limited funding** for technology in favour of investing funds into direct service areas. This has resulted a **significant gap** in how to meet the **demand from citizens and the community for a streamlined digital experience** as well as the ability to **effectively manage and use data and information** for **strategic and operational decision-making**.

Trends have started to show an **increase in spending on digital transformation**, third party hosted applications, cloud infrastructure, and data analytics across the public sector as organizations embark on their journey to **modernize and embrace the digital future**.

Municipalities across Canada and the world are digitizing their business processes and interactions with citizens, as well as becoming leaders with Open Data and Smart City initiatives through the adoption of **innovative and disruptive technologies** as well as the movement to **more open and transparent digital governance models**.

Digital Vision and Outcomes

A future state vision helps to purposefully and clearly articulate an organization's **future Digital direction and aspirations**. It is meant to **unite** and **generate support** from employees and other stakeholders by providing a clear, concise statement on the **future of the organization.**

Vision

Advancing **digital service delivery** and **citizen experience** that is **accessible, trustworthy, and convenient** and supports our **diverse population and growth**.

Outcomes

1. Digital services are **accessible, inclusive, age-friendly**, and **reflective of diverse community needs**, with a focus on **adapting and responding** as those needs evolve.

2. Digital services and information are **reliable and trustworthy**, building **stronger relationships** between the City and community.

3. **Digital literacy and skills** are supported through **awareness-building** and **community partnerships**, leading to more relevant digital connections.

4. Internal **processes and tools are streamlined** and **automated** in order to facilitate **reliable, timely, and consistent** service delivery.

5. Employees have the **skills, capacity and resources** to understand and use data and information to achieve a culture of **data-driven decision-making**.

Benefits of Digital Transformation

Many municipalities are undergoing **significant digital transformations** to **drive innovation and enhance direct service delivery in their communities.** Though it requires dedicated time and resources, digital transformation **drives operational efficiency, fosters connections, and will enable the City to match the pace of growth and development.**

- Increased **operational efficiency** results in a more **streamlined and efficient citizen experience**

- Enhances the ability to meet the **needs of the community** and **increase accessibility** from a digital lens

- Enables the City to **match the pace of community growth** through digital tools and processes

- Fosters **digital connections and engagement** within the community

Digital transformation focuses on leveraging modern technology to **standardize, streamline and automate processes** in order to deliver greater value to the community. It results in employees being able to focus their time and energy on **higher value activities** rather than manual tasks which in turn results in **greater, more efficient service delivery**. It also enables the City to **reimagine how services are delivered** in order to meet the changing needs and expectations of the people they serve.

A specific focus on **digital service delivery** empowers the organization to make decisions that will **transform the way the public interacts** with the City and within the community they live in. As digital becomes intertwined in everyday life, municipalities are faced with **growing community needs** and desires to **utilize technology** to conduct business. In addition, increasing digital service delivery can increase **integration of accessibility features** that meet the diverse needs of community members.

When municipalities effectively leverage digital tools, they have the opportunity to **enhance internal processes** to gain efficiencies by reducing the manual effort needed. This is critical to municipalities that are experiencing **significant growth** as it mitigates the need to hire additional resources that solely focus on processing an increasing number of manual transactions.

Lastly, many municipalities discover an increase in **community engagement** throughout and after digital transformation initiatives as individual and groups are able to easily access what they need, when and how they need it. An increase in community engagement and connections is key to **empowering and strengthening the City** as a whole.

Our Digital Strategy

Our Digital Strategy sets the direction for the **City of Pickering's digital journey for the next eight years**. It is comprised of **six Work Streams**, with each Stream consisting of a **number of Activities**. Activities will encompass **projects, initiatives, and ongoing tasks** that will contribute to the achievement of the outcomes described earlier in this report.

The following pages provide an overview of each Work Stream as well as a Roadmap of Activities, including **resource estimates and timing**.

The implementation of a Digital Strategy is a large undertaking for the City. There are many components and activities that must be completed to **enable short- and long-term effectiveness** and success for the City and community. The transformation and sustainment of a Digital Strategy requires **organization-wide commitment, clear accountability and dedicated resources**.

It is recommended that the City **establish a Digital Transformation Office** that will **lead the implementation** of the Digital Strategy and related projects over the next five years. The Digital Transformation Office will **foster communication and integration** across the City to effectively manage and execute various projects and activities. This structure will enable the City to **establish appropriate accountability** for progress towards the City's digital vision and outcomes while prioritizing collaboration and effectively supporting ongoing operations.

The organization will need to determine the most appropriate placement of the Digital Transformation Office within the **organizational structure**.

There are **foundational elements** that are required in order to support the successful implementation of a Digital Strategy. This includes ensuring **adequate resourcing** for such areas as **technology project management, application oversight, technology infrastructure management, and cyber security**. A review of the adequacy of the resourcing within these areas was not within the scope of this project.

Digital Strategy Work Streams

Based on key findings and opportunities, the following work streams have been identified to implement and sustain digital transformation initiatives. A key factor in leveraging the following opportunities is effective resource management and investment to successfully implement and sustain transformation initiatives.

Digital Governance and Leadership

The corporate-wide framework and tools that guide the City's digital future and experience, ensuring programs and services are effective in meeting the needs of all internal and external stakeholders.

Technology Risk Management

A formal corporate-wide mechanism to understand, articulate, mitigate, and track technology risk at both a strategic and operational level in order to support and sustain the digital transformation.

Data and Information Accessibility

Effective management and analysis of current and future municipal data to increase transparency and establish a culture of data driven decision making.

Business Applications

Effective sourcing, selection, and management of the City's applications with necessary functionalities and capabilities to enable employees to serve citizens seamlessly.

Citizen Platforms and Experience

Digital technologies and initiatives that enable the City to provide citizens and other external stakeholders with high quality digital services and engaging interaction.

Digital Literacy

Enhancing the knowledge, skills and capabilities of employees, citizens, and other external stakeholders to access, manage, integrate, analyze and evaluate information, grow knowledge and skills, and create and communicate with others.

Digital Governance and Leadership ✅

The corporate-wide framework and tools that guide the City's digital future and experience, ensuring programs and services are effective in meeting the needs of all internal and external stakeholders.

#	Activity	New FTE Requirements	New FTE Costs	External Consulting Estimated Effort	External Consulting Costs	Implementation Year
DGL-1	Create and Resource Digital Transformation Office	2 new FTEs	$275,000 annually	-	-	2-3
DGL-2	Develop Corporate Digital Governance Framework, including:	-	-	*Outlined below*	*Outlined below*	2-3
DGL-2A	• Digital Investment Framework	-	-	85 hours	$17,000	2-3
DGL-2B	• Technology Vendor Management Framework	-	-	40 hours	$8,000	2-3
DGL-2C	• Data Governance Framework	-	-	50 hours	$10,000	2-3
DGL-2D	• Citizen Digital Platform Governance Framework	-	-	45 hours	$9,000	2-3
DGL-2E	• Technology Risk Management Framework	-	-	30 hours	$6,000	2-3
	Total Work Stream Cost	2 new FTEs	**$1,787,500**		**$50,000**	**$1,837,500**

Note: New FTE placement within the organization will need to be determined.

Digital Governance and Leadership ⬡

The following summarizes the role and job description for the new FTEs identified for Digital Governance and Leadership.

Senior Staff Resource, Digital Transformation

The Senior Staff Resource for Digital Transformation will be responsible for leading the implementation of the Digital Strategy initiative and related activities.

- Lead the planning and successful implementation of complex strategic and transformational digital initiatives as outlined in the Digital Strategy roadmap
- Lead the development, implementation, and sustainment of effective digital governance structures for the City
- Work with the City's leadership team to enable and support organization-wide collaboration for the advancement of digital activities and initiatives
- Lead the planning and execution of a strong change management and communications plan to drive internal and external engagement, create positive momentum, and sustainment
- Remain current with industry trends and emerging technologies and determine their potential impact on the digital citizen experience

Staff Resource, Digital Transformation

The Staff Resource for Digital Transformation will support the implementation of the Digital Strategy initiative and related activities.

- Collaborate with stakeholders to advance activities within the Digital Strategy roadmap
- Support the development, implementation, and sustainment of effective digital governance structures for the City
- Support project management activities, including defining scope of work, schedules, timelines, milestones, and required resources to meet the goals and objectives
- Gather, analyze, and interpret quantitative and qualitative data, and develop strategic recommendations
- Support the preparation and distribution of communications to leadership on project progress and status
- Support change management and communications efforts related to the Digital Strategy implementation

Data and Information Accessibility

Effective management and analysis of current and future municipal data to increase transparency and establish a culture of data driven decision making.

#	Activity	New FTE Requirements	New FTE Costs	External Consulting Estimated Effort	External Consulting Costs	Implementation Year
DIA-1	Develop Corporate Data Strategy	-	-	300 hours	$60,000	2-3
DIA-2	Develop Data Inventory and Gap Analysis	2 new FTE	$250,000 annually	150 hours	$30,000	4-5
DIA-3	Develop Data and Information Privacy Program in accordance with Data Privacy and Protection regulations	-	-	300 hours	$60,000	2-3
DIA-4	Digitization of Corporate Records	-	-	300 hours	$60,000	4-6
DIA-5	Identify Business Intelligence and Data Analytics Opportunities	-	-	150 hours	$30,000	2
DIA-6	Develop Business Intelligence and Applied Data Roadmap, including pilot rollout	-	-	250 hours	$50,000	2
DIA-7	Identify Digital Tools for Data Analytics	-	-	100 hours	$20,000	3
DIA-8	Create Corporate Open Data Internal Working Group	1 new FTE	$100,000 annually	30 hours	$6,000	3
DIA-9	Create Open Data Citizen Advisory Committee	-	-	30 hours	$6,000	4
DIA-10	Develop Open Data Citizen Toolkit	-	-	100 hours	$20,000	4
DIA-11	Enhance Open Data Portal	-	-	300 hours	$60,000	4
DIA-12	Identify Open Data Partnerships	-	-	60 hours	$12,000	5
	Total Work Stream Cost	3 new FTEs	**$1,450,000**		**$414,000**	**$1,654,000**

Note: New FTE placement within the organization will need to be determined.

Data and Information Accessibility

The following summarizes the role and job description for the new FTEs identified for Data and Information Accessibility.

Senior Staff Resource, Corporate Data

The Senior Staff Resource for Corporate Data will be responsible for ensuring City data and information is consolidated, useable and available for relevant stakeholders.

- Manage the implementation of the Corporate Data Strategy and Data Governance Framework

- Ensure data is treated as a strategic asset and oversee organizational data governance standards and activities in alignment with Data Governance Framework

- Ensure data plays an integral role driving ongoing analytics and business intelligence to drive data driven decision making

- Work closely with business areas to ensure data is of high quality, follows expected standard, and has consistent meaning

- Maintain and evaluate roadmap for use of data through alignment of business strategy, technology, and data sources

- Provide leadership to the development of the City's Open Data Program and partnerships

- Identify information to be made publicly available through Open Data portal

Staff Resource, Corporate Data and Information

The Staff Resource for Corporate Data and Information will support the implementation of the Corporate Data Strategy.

- Use a variety of systems to collect, organize, blend and analyze organizational data and information, including the development of data analysis, dashboards and reports

- Work with stakeholders to identify scope of data and information analysis, dashboards and reports to ensure that dashboards and reports meet the needs of the organization

- Independently validate the data for completeness, accuracy and relevance. Seek validation from a variety of perspectives to continuously improve the accuracy of the analysis

- Research new reporting styles and techniques including visual presentation best practices and assist with the development of standard practices and processes for data collection

- Identify data issues; work with the business and IT to recommend solutions, initiate resolutions

- Identify information to be made publicly available through Open Data portal

Data and Information Accessibility

The following summarizes the role and job description for the new FTEs identified for Data and Information Accessibility.

Staff Resource, Data Accessibility

The Staff Resource for Data Accessibility will be responsible for the publication of the City's data to the Open Data platform.

- Coordinates the development of data visualizations and other data-oriented solutions that consume open data

- Structuring datasets for publication, reviewing them to ensure compliance with City policies (including privacy), ensuring data and metadata quality, and supporting open data users

- Build relationships with leaders across the City to co-develop new opportunities for using data and analysis to improve the delivery and help measure the performance of City services

- Develop and train open data stakeholders internally and externally

- Build and maintain relationships with civic technology organizations and seek to develop partnerships that leverage City open data to help solve community issues

- Foster a data-driven culture, helping to develop capacity to understand data and use it in decision-making

Citizen Platforms and Experience

Digital technologies and initiatives that enable the City to provide citizens and other external stakeholders with high quality digital services and engaging interaction.

#	Activity	New FTE Requirements	New FTE Costs	External Consulting Estimated Effort	External Consulting Costs	Implementation Year
CPE-1	Enhance City Website, including:	-	-	*Outlined below*	*Outlined below*	1-2
CPE-1A	• Conduct Content Inventory and Audit	-	-	75 hours	$15,000	1-2
CPE-1B	• Conduct Useability Review, including User Research	-	-	75 hours	$15,000	1-2
CPE-1C	• Develop Content Strategy	-	-	100 hours	$20,000	1-2
CPE-1D	• Redesign the User Experience	-	-	225 hours	$45,000	1-2
CPE-1E	• Document Website Requirements, including Accessibility	-	-	125 hours	$25,000	1-2
CPE-1F	• Develop Procurement Strategy and Documents	-	-	75 hours	$15,000	1-2
CPE-1G	• Procure and Contract Website Vendor	-	-	75 hours	$15,000	1-2
CPE-1H	• Develop and Implement Website	-	-	500 hours	$100,000	1-2
CPE-1I	• Migrate Content	-	-	250 hours	$50,000	1-2
CPE-1J	• Develop Website Management Plan	-	-	125 hours	$25,000	1-2

Work Stream Activities continued next page.

Citizen Platforms and Experience *(continued)*

Digital technologies and initiatives that enable the City to provide citizens and other external stakeholders with high quality digital services and engaging interaction.

#	Activity	New FTE Requirements	New FTE Costs	External Consulting Estimated Effort	External Consulting Costs	Implementation Year
CPE-2	Develop Citizen Portal and Streamline e-Commerce, including:	-	-	*Outlined below*	*Outlined below*	1-2
CPE-2A	• Identify Scope of Citizen Portal, including specific opportunities for streamlining payments and increasing self-service opportunities (i.e. new property tax solution)	-	-	275 hours	$55,000	1-2
CPE-2B	• Document Citizen Portal and e-Commerce Requirements	-	-	300 hours	$60,000	1-2
CPE-2C	• Develop Procurement Strategy and Documents	-	-	90 hours	$18,000	1-2
CPE-2D	• Procure and Contract Portal Vendor	-	-	90 hours	$18,000	1-2
CPE-2E	• Develop and Implement Citizen Portal	-	-	1200 hours	$240,000	1-2
CPE-2F	• Streamline Citizen Payment Process	-	-	500 hours	$100,000	1-2
CPE-2G	• Identify and Implement Necessary Website Portal Integrations	-	-	425 hours	$85,000	1-2
CPE-3	Identify Additional Digital Tools or Add-Ons to above to Enhance Citizen Experience	-	-	-	-	3-8
CPE-4	Create Citizen Digital Transformation Community of Practice	-	-	250 hours	$50,000	4-8
	Total Work Stream Cost				**$951,000**	

Technology Risk Management

A formal corporate-wide mechanism to understand, articulate, mitigate, and track technology risk at both a strategic and operational level in order to support and sustain the digital transformation.

#	Activity	New FTE Requirements	New FTE Costs	External Consulting Estimated Effort	External Consulting Costs	Implementation Year
TRM-1	Implement Cyber Recommendations	2 new FTEs	$300,000 annually	100 hours	$30,000	2-3
TRM-2	Document and Enhance Cyber Security Program	-	-	200 hours	$60,000	2-3
TRM-3	Document and Enhance Disaster Recovery Plan	-	-	200 hours	$40,000	2-3
TRM-4	Document and Enhance Business Continuity Plan	-	-	200 hours	$40,000	2-3
TRM-5	Strengthen Cyber Security Practices	-	-	200 hours	$60,000	4-6
	Total Work Stream Cost	2 new FTEs	**$1,975,000**		**$230,000**	**$2,205,000**

Technology Risk Management

The following summarizes the role and job description for the new FTEs identified for Technology Risk Management.

Senior Staff Resource, Cyber Security

The Senior Staff Resource for Cyber Security will define and implement the Cyber Security Program for the City.

- Engage with the City's leadership team and business areas to raise awareness and understanding of cyber risks and threats
- Lead the development of the cyber security risk register
- Ensure required controls are in place to mitigate cyber threats
- Ensure controls are consistently applied and reviewed on a regular basis
- Drive City-wide adoption of secure behaviors resulting in a high performing security organization and culture
- Remain informed of the changing landscape of preventative cyber security
- Provide quarterly cyber security report to the City's leadership team.
- Work with third-party vendors to ensure proper security controls and processes are in place
- Manage risk of emerging technologies

Staff Resource, Cyber Security

The Staff Resource for Cyber Security will be responsible for supporting the City's cyber security program.

- Conduct cyber security risk assessments, including risk identification, analysis, and evaluation
- Understand and work to mitigate residual risks identified in the cyber security risk register
- Track remediation activities with key business and technical stakeholders
- Facilitate scoped and scheduled cyber security risk assessments of select business applications and platforms

Business Applications

Effective sourcing, selection, and management of the City's applications with necessary functionalities and capabilities to enable employees to serve citizens seamlessly.

#	Activity	New FTE Requirements	New FTE Costs	External Consulting Estimated Effort	External Consulting Costs	Implementation Year
BA-1	Develop Business Applications Inventory	3 new FTEs	$350,000 annually	-	-	3-4
BA-2	Document and Enhance Application Lifecycle Management Plan	-	-	75 hours	$15,000	3-4
BA-3	Streamline Business Application Functionality	-	-	450 (150 hours per year)	$90,000	5-7
BA-4	Enhance Business Application Integrations	-	-	750 (250 hours per year)	$150,000	6-8
	Total Work Stream Cost	3 new FTEs	**$1,800,000**		**$255,000**	**$2,055,000**

Business Applications

The following summarizes the role and job description for the new FTEs identified for Business Applications.

Senior Staff Resource, Corporate Business Applications

The Senior Staff Resource for Corporate Business Applications is responsible for developing the City's business application inventory, ensuring effective lifecycle management, and streamlining and enhancing business application integrations and functionality.

- Oversee the delivery of enterprise-wide applications and associated custom and third-party integrations for all business areas across the City

- Maintain a comprehensive understanding of applicable business processes and systems to identify where technology will enhance efficiency and effectiveness in service delivery

- Manage the team responsible for analysis, design, development, configuration integration, implementation and support of enterprise applications including supporting technologies as well as custom and third-party integrations that support the City's business processes

- Lead the development, maintenance, and ongoing support of application architecture which includes defining and implementing standards, continuous refinement activities, maintenance, change requests, risk management, and reporting

Staff Resource, Corporate Business Applications (2)

The Staff Resource for Corporate Business Applications works to support the City's business application inventory, ensuring effective lifecycle management, and streamlining and enhancing business application integrations and functionality.

- Manage the maintenance of various business applications across the City throughout the complete lifecycle from requirements definition to implementation and transition to support to eventual decommissioning

- Manage multiple business applications throughout the organization, which vary in size and complexity and span domains

- Provide an enterprise-wide view of all IT initiatives, investigate solutions, apply business acumen, and develop quality deliverables to support investment decisions

Digital Literacy 🔗

Enhancing the knowledge, skills and capabilities of employees, citizens, and other external stakeholders to access, manage, integrate, analyze and evaluate information, grow knowledge and skills, and create and communicate with others.

#	Activity	New FTE Requirements	New FTE Costs	External Consulting Estimated Effort	External Consulting Costs	Implementation Year
DL-1	Identify Digital Literacy Partnership Opportunities, including Resources and Connections for Community Members Needing Digital Literacy Support	-	-	60 hours	$12,000	2-3
DL-2	Develop Internal Communications and Change Management Plan for Digital Strategy Implementation	1 new FTE	$100,000 annually	250 hours	$50,000	2-3
DL-3	Implement Internal Communications and Change Management Plan for Digital Strategy Implementation	-	-	600 hours	$120,000	2-5
DL-4	Develop External Communications for Digital Strategy Implementation in alignment with Citizen Platforms and Experience Work Stream, including Digital Services Toolkit and How-to Videos	1 new FTE	$100,000 annually	250 hours	$50,000	2-3
DL-5	Implement External Communications or Digital Strategy Implementation	-	-	300 hours	$60,000	2-3
DL-6	Develop Internal Training Plan for Digital Strategy Implementation	-	-	250 hours	$50,000	2-3
DL-7	Implement Internal Training Plan for Digital Strategy Implementation	-	-	600	$120,000	2-5
	Total Work Stream Cost	2 new FTEs	**$1,300,000**		**$462,000**	**$1,762,000**

Note: New FTE placement within the organization will need to be determined.

Digital Literacy 🔗

The following summarizes the role and job description for the new FTEs identified for Digital Literacy.

Staff Resource, Internal Change Management and Communications

The Staff Resource for Internal Change Management and Communications will be responsible for the development and delivery of internal change management, communications, and training in support of the Digital Strategy implementation.

- Apply a structured methodology to drive change management, training, adoption and communications activities related to digital transformation projects and initiatives

- Provide support to align vision, outcomes, and culture through targeted change efforts, sponsor commitment, leadership alignment, stakeholder engagement and other strategic interventions

- Create holistic change management strategies and integrate change management activities into project plans, including assessing the change impact related to transformation initiatives and creating actionable deliverables such as communications, sponsor roadmap, coaching plan, training plan, resistance management plan, and benefits realization

Staff Resource, External Change Management and Communications

The Staff Resource for External Change Management and Communications will be responsible for the development and delivery of external change management and communications in support of the Digital Strategy implementation.

- Execute and sustain citizen and stakeholder-focused communication and engagement efforts that supports overall digital adoption

- Develop strategy to build awareness and understanding of digital service offerings, that includes building and delivering presentations to targeted stakeholder audiences and potential partners as needed

- Develop communication materials for the public

- Create toolkits and how-to guides to support citizens and other stakeholders in using the City's digital services

Digital Strategy Total Cost Summary | 8 Year Implementation

The following table outlines the **total estimated cost for implementing** the City's Digital Strategy by workstream by year. The following pages break down the costs by one-time investment and proposed FTE resources.

Work Stream	Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven	Year Eight	Total Cost by Work Stream
Digital Governance and Leadership	-	$162,500	$300,000	$275,000	$275,000	$275,000	$275,000	$275,000	$1,837,500
Data and Information Accessibility	-	$60,000	$60,000	$185,000	$335,000	$436,000	$402,000	$386,000	$1,864,000
Citizen Platforms and Experience	$450,500	$450,500	-	$10,000	$10,000	$10,000	$10,000	$10,000	$951,000
Technology Risk Management	-	$260,000	$385,000	$320,000	$320,000	$320,000	$300,000	$300,000	$2,205,000
Business Applications	-	-	$157,500	$257,500	$380,000	$430,000	$430,000	$400,000	$2,055,000
Digital Literacy	-	$256,000	$356,000	$275,000	$275,000	$200,000	$200,000	$200,000	$1,762,000
Total Cost by Year	**$450,500**	**$1,189,000**	**$1,258,500**	**$1,322,500**	**$1,595,000**	**$1,671,000**	**$1,671,000**	**$1,571,000**	**$10,674,500**
Conservative Estimate (+10% rounded to the nearest $1000)	*$496,000*	*$1,308,000*	*$1,385,000*	*$1,455,000*	*$1,755,000*	*$1,839,000*	*$1,779,000*	*$1,729,000*	*$11,746,000*

Digital Strategy One-Time Cost Summary | 8 Year Implementation

The following table outlines the **estimated one-time costs** for implementing the City's Digital Strategy by workstream by year.

Work Stream	Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven	Year Eight	Total One-Time Cost by Work Stream
Digital Governance and Leadership	-	$25,000	$25,000	-	-	-	-	-	**$50,000**
Data and Information Accessibility	-	$60,000	$60,000	$35,000	$85,000	$86,000	$52,000	$36,000	**$414,000**
Citizen Platforms and Experience	$450,500	$450,500	-	$10,000	$10,000	$10,000	$10,000	$10,000	**$951,000**
Technology Risk Management	-	$85,000	$85,000	$20,000	$20,000	$20,000	-	-	**$230,000**
Business Applications	-	-	$7,500	$7,500	$30,000	$80,000	$80,000	$80,000	**$255,000**
Digital Literacy	-	$156,000	$156,000	$75,000	$75,000	-	-	-	**$462,000**
Total Cost by Year	**$450,500**	**$776,500**	**$333,500**	**$147,500**	**$220,000**	**$196,000**	**$142,000**	**$96,000**	**$2,362,000**
Conservative Estimate (+10% rounded to the nearest $1000)	*$496,000*	*$854,000*	*$367,000*	*$162,000*	*$242,000*	*$216,000*	*$156,000*	*$106,000*	*$2,599,000*

Digital Strategy FTE Summary | 8 Year Implementation

The following table outlines the **estimated cost for new FTEs** for the implementation of the City's Digital Strategy by workstream by year.

Work Stream	New FTE	Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven	Year Eight	Total FTE Cost by Work Stream
Digital Governance and Leadership	2 FTEs	-	$137,500	$275,000	$275,000	$275,000	$275,000	$275,000	$275,000	**$1,787,500**
Data and Information Accessibility	3 FTEs	-	-	-	$150,000	$250,000	$350,000	$350,000	$350,000	**$1,450,000**
Citizen Platforms and Experience	-	-	-	-	-	-	-	-	-	-
Technology Risk Management	2 FTEs	-	$175,000	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000	**$1,975,000**
Business Applications	3 FTEs	-	-	$150,000	$250,000	$350,000	$350,000	$350,000	$350,000	**$1,800,000**
Digital Literacy	1 FTEs	-	$100,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,300,000**
Total	**11 FTEs**	**-**	**$412,500**	**$925,000**	**$1,175,000**	**$1,375,000**	**$1,475,000**	**$1,475,000**	**$1,475,000**	**$8,312,500**
Conservative Estimate *(+10% rounded to the nearest $1000)*	*11 FTEs*	*-*	*$454,000*	*$1,018,00*	*$1,293,000*	*$1,513,00*	*$1,623,000*	*$1,623,000*	*$1,623,000*	*$9,147,000*

Appendix

What We Heard Report

One of the **key inputs** to the development of this Digital Strategy was **stakeholder engagement**. The goal was to **reach as many diverse citizens and stakeholders** in the City of Pickering as we could over the course of a number of months. A plan was developed to connect with internal team members at the City, City Council members, and the various citizens, businesses and other stakeholders that make up the Pickering community.

It was important to try and **gain as many perspectives as possible** – not just those who are tech-savy – so the plan encompassed **leveraging existing community hubs** such as the Rec Centre and Library as well meeting with adults in the 55+ age group and at a retirement home. Also included were **workshops, open houses, and surveys on LetsTalkPickering.ca** for the general public and youth.

Engagement Approach

A significant focus was placed on ensuring stakeholders across the organization and within the community had the opportunity to share their perspectives, ideas, challenges, and opportunities in order to develop a Digital Strategy that is effective and valuable for the City and those they serve.

The following pages outline key themes and findings from engagement. Perspectives and information shared was utilized to drive the development of the Digital Strategy.

Elected Officials

- Completed Interviews with all City Council members

Public and Community

- Digital Strategy Pop-Up Booth at Recreation Complex
- Digital Strategy Pop-Up Booth at Central Library
- Facilitated Discussion with Adults 55+ Group
- Facilitated Discussion with Retirement Home Residents
- Virtual Meeting with Accessibility Advisory Committee
- Virtual Meeting with Cultural Advisory Committee
- Workshop with Pac For Teens Volunteer Group
- LetsTalkPickering Surveys for Community, Youth and Businesses (170 responses)

City Staff

- Completed 11 Steering Committee Interviews
- Completed 6 Interviews with Additional City Directors
- Analyzed 122 Responses to Employee Survey
- Completed 7 Department Workshops (approximately 70 staff members)
- Completed 6 Digital Maturity Discussions with IT Division
- Completed 8 Cyber Maturity Discussions with IT Division

City Council Engagement

As part of engagement with key stakeholders, City Council members were interviewed to understand their perspectives on the **City's strategic direction and key priorities.** The key themes outlined on this page encompass the **ideas, opportunities, and challenges** that City Council members shared as a result of their vision for Pickering combined with what they have heard from residents.

City Council members recognized the **tremendous growth** the City is facing and acknowledged that **digital can be leveraged** to ensure the needs and **expectations of the community are met**. In addition, many members spoke about utilizing digital to **enable connections and engagement** between the City and community, as well as connections between community members.

A key part of digital is the experience of its users. Council members identified the importance of ensuring technology is **user-friendly and accessible** for both internal and external stakeholders. As well, **leveraging data and information** to drive effective decision making for the City to continuously improve.

Pickering Growth and Development	Community Connections and Engagement	User Friendly, Accessible Digital Experience	Data Driven Decision Making

Public Engagement | In-Person Discussions

Members of the public were engaged in discussions at the Pop Up Booths at the Recreation Complex and Central Library. Key information from the perspectives shared are outlined below.

Balance of human interaction and digital services

Digital services allow for timely and convenient access

Intuitive search functions and clear website navigation enables enhanced access to information

Lack of clarity around services delivered by the City versus the Region and how best to support a streamlined service experience

Access to technology support and education drives enhanced digital literacy and skills

Desire for additional digital community signage

Public Engagement | In-Person Discussions

Members of the public were engaged in discussions at the Pop Up Booths at the Recreation Complex and Central Library. As part of the discussions, participants were asked to complete an interactive poll outlining what digital means to them. Within the word cloud shown below, words that were used more often appear larger which outline common themes and perspectives from the public.
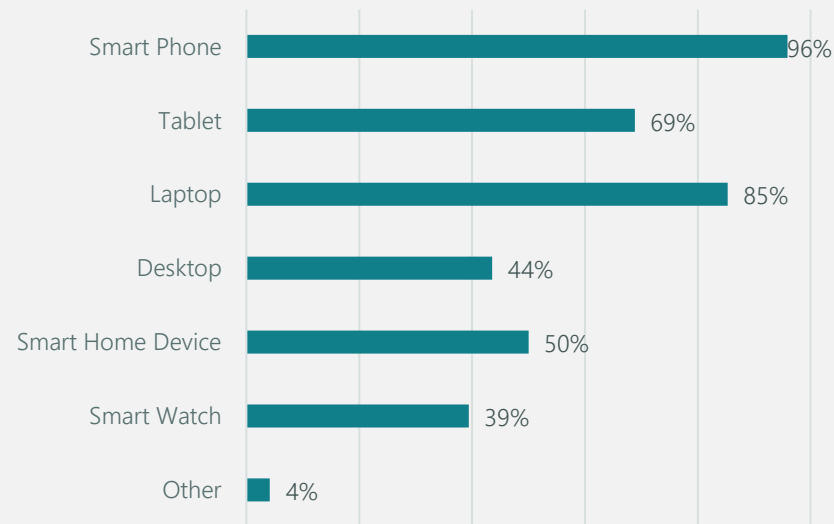
What does digital mean to you?

Public Engagement | Community Survey

A Community Survey was developed to gather public perspectives. The survey was publicly available on LetsTalkPickering. Results from the 170 responses are outlined below.

What kind of technology devices do you use (please select all that apply).

Device	Percentage
Smart Phone	96%
Tablet	69%
Laptop	85%
Desktop	44%
Smart Home Device	50%
Smart Watch	39%
Other	4%

From your perspective, what are the benefits of digital services? (Please select your top three choices)

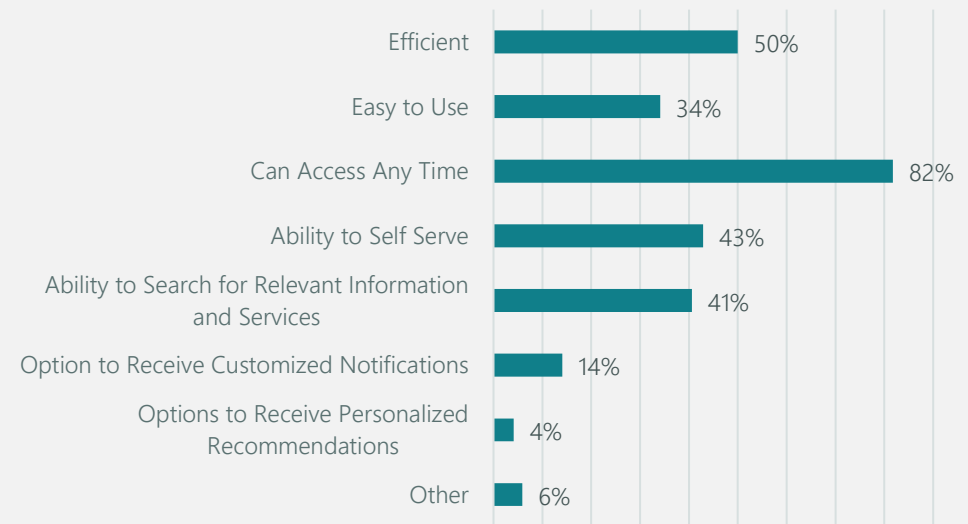| Benefit	Percentage
Efficient	50%
Easy to Use	34%
Can Access Any Time	82%
Ability to Self Serve	43%
Ability to Search for Relevant Information and Services	41%
Option to Receive Customized Notifications	14%
Options to Receive Personalized Recommendations	4%
Other	6%

Public Engagement | Community Survey (continued)

A Community Survey was developed to gather public perspectives. The survey was publicly available on LetsTalkPickering. Results from the 170 responses are outlined below.

What are your preferred methods for accessing information from the City of Pickering? (Please select your top three choices)

Method	Percentage
In-Person	16%
Phone	23%
Email	70%
Online Chat	12%
Website	70%
Mobile App	26%
Social Media	29%
eNewsletter	24%
Digital Community Signs	3%
Other	3%
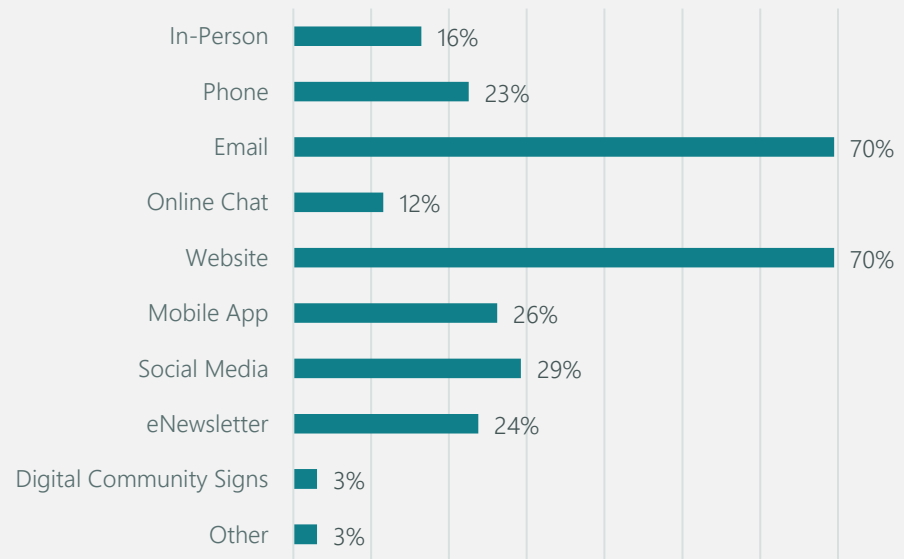
What barriers prevent you from accessing digital services? (Please select all that apply)

Barrier	Percentage
Do Not Have Smart Device to Access Services	1%
Do Not Have Access to the Internet	2%
Do Not Know How to Use a Smart Device	1%
Do Not Know How to Access Digital Services	2%
Do Not Trust Digital Interactions	9%
Prefer Face to Face Interactions	11%
I Do Not Experience Any Barriers	74%
Other	13%

Public Engagement | Community Survey (continued)

A Community Survey was developed to gather public perspectives. The survey was publicly available on LetsTalkPickering. Results from the 170 responses are outlined below.
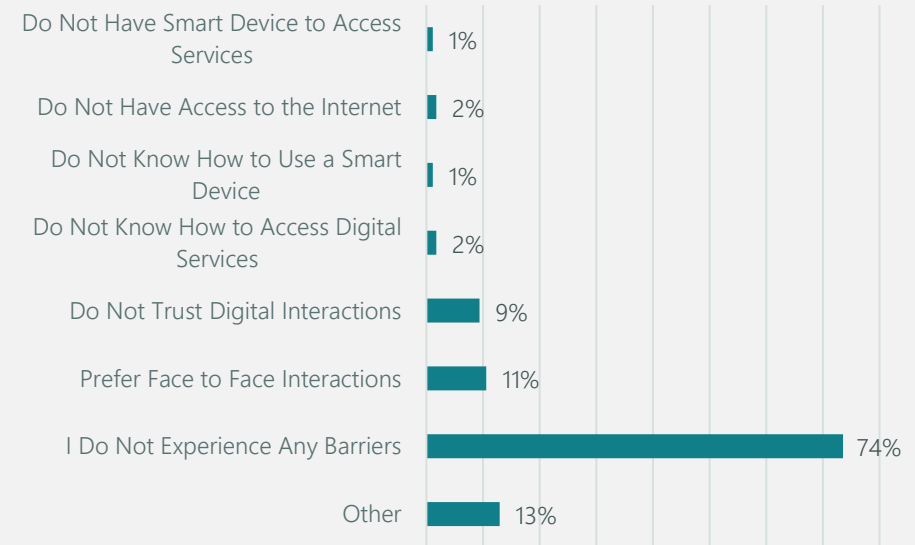
Please rate your current experience using the following digital services available at the City of Pickering.
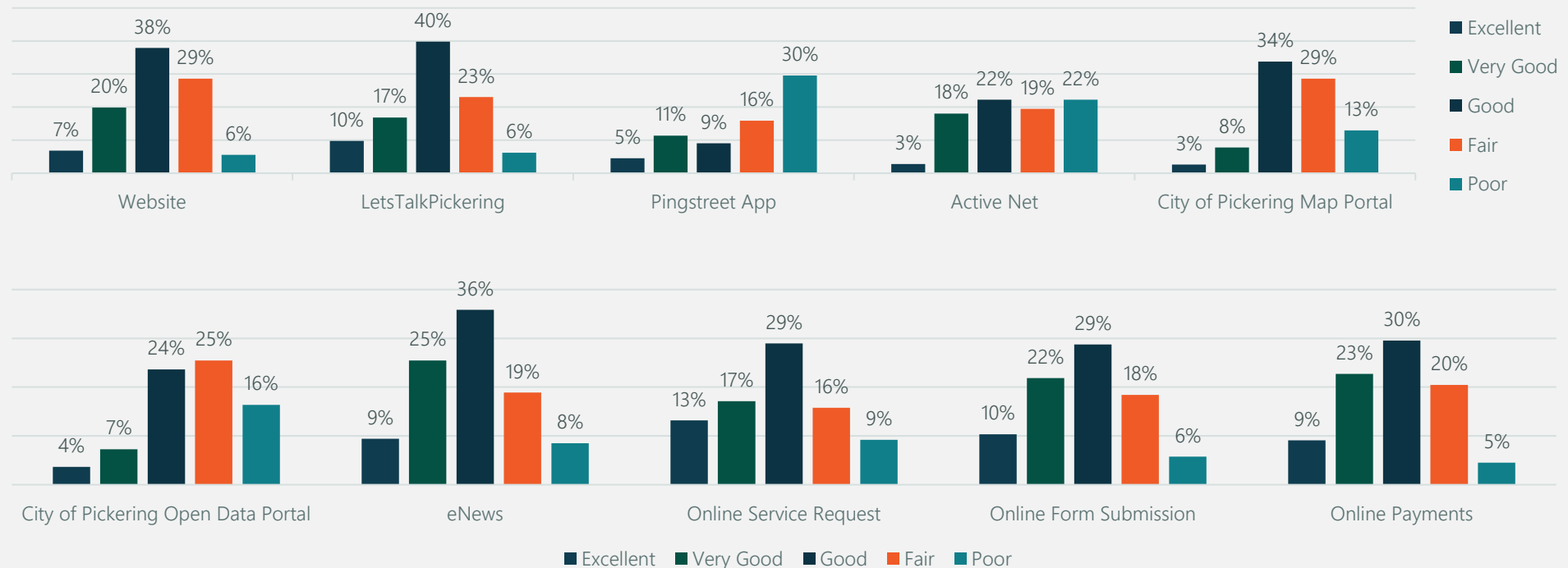
Public Engagement | Community Survey (continued)

A Community Survey was developed to gather public perspectives. The survey was publicly available on LetsTalkPickering. Results from the 170 responses are outlined below.
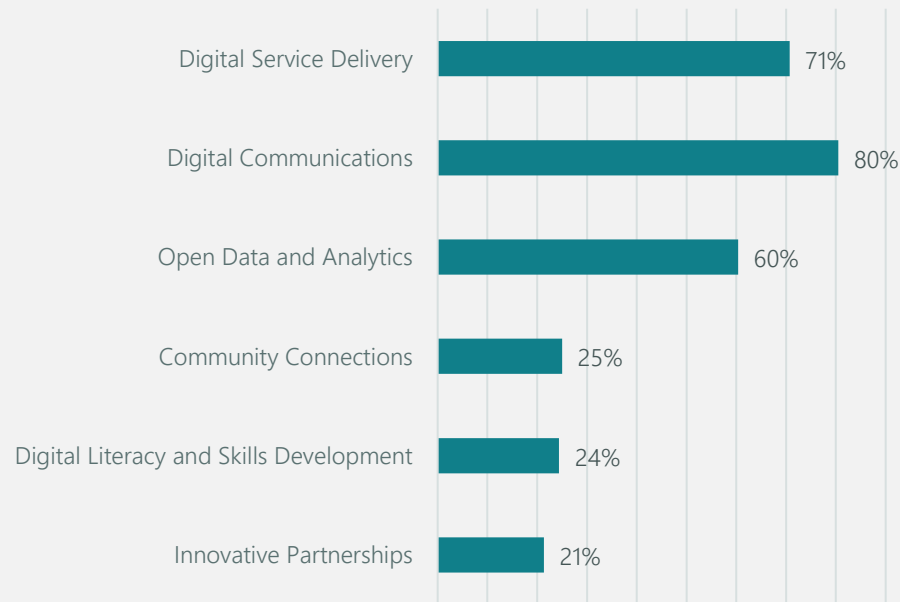
The City must work to prioritize digital initiatives both now and in the future. From your perspective, select your top three (3) focus areas from the six (6) below.

Focus Area	Percentage
Digital Service Delivery	71%
Digital Communications	80%
Open Data and Analytics	60%
Community Connections	25%
Digital Literacy and Skills Development	24%
Innovative Partnerships	21%

Digital Service Delivery - Making civic services available to the community from a consolidated and user-friendly digital platform

Digital Communications - Streamlining way in which information is shared through digital means, including an easy to navigate and accessible website

Open Data and Analytics - Ensuring data is openly accessible to the public, increasing transparency and opportunities for community innovation

Community Connections - Enabling people to stay connected to one and another through the use of technology and data

Digital Literacy and Skill Development - Supporting the knowledge, skills and capabilities within the community to access digital services)

Innovative Partnerships - Finding ways to partner with businesses, community organizations, post secondary institutes, etc. on digital initiatives

Public Engagement | Community Survey (continued)

A Community Survey was developed to gather public perspectives. The survey asked the community share their ideas and suggestions on what the City should include in the Digital Strategy.

- Provide the option to push notifications to end user through mobile app or email or newsletter. Citizens should be able to select preferences and Notifications pushed to their phones or emails.
- You must continue to contact people through regular channels.
- Encourage community engagement by advertising on all digital signs around Pickering. Include digital news and education at all Town Hall meetings. Education sessions frequently at library's. Ask Pickering businesses to educate their staff.
- Ease of use, including accessibility of information; that is not 'hiding' information or making it an electronic scavenger hunt to find information
- Create a Digital Employment Hub teaching skills and employing in our community - nurturing our own talent.
- One should be able to fulfill services via a web, without having to install multiple apps for different tasks. Should be able to go to the website on desktop or on a phone a preform the required task. The app should collect minimum data required for the task. Of course, one would expect the city to provide maximum privacy and security.
- Digitize wherever possible, but have a person to talk to when a task cannot be fulfilled online.
- Digital Archiving strategy to preserve and rely the information for long term.
- Data Privacy and security as there are lots of cases where banking/tax-related information is available within the system.
- Accessible and intuitive UI - while data is available online, it's at times a nightmare to navigate through the websites...
- Clearer and more transparent manners of raising issues, communicating the various services provided will be helpful
- Resident's personal information will keep confidential and not be used for any purposes without my permission.
- Ability for the public to participate in council voting on any matter using digital technology.
- More Surveys like this would also help. The more the city knows, the better for both the city and the public.
- I think there also needs to be a "directory" of sorts. Who to contact for what, who is connected to Provincial and Federal politics.

- Make sure the data being provided is up to date
- Incentivizing young adults (18-35) to participate in town halls and other various local government events, through the promotion on digital platforms (Instagram, TikTok). Allow and accommodate for the increase in participation of local matters and issues by young adults.
- Easy to use and no registration / login information required. Prompt responses from a live human.
- Investigate the possibility of adding more interactive services as they relate to fire and life safety.
- Need to watch the digital divide. Many elderly miss out and Pickering and area have a lot of precariously housed. So while some homes have multiple devices, others struggle with next to none. The library is a huge resource in this area.
- The experience needs to be mapped holistically to city services. Stop band-aid solutions where each service gets independently addressed. Look at the big picture and road map this product.
- Make it easier to self serve, find all in one place, facilitate services and renews online, allow for business partnership and offer the community opportunities to save.
- The senior community need to feel confident using online digital services. Ensure fraud prevention to make them feel that their savings and homestead are safe.
- Ensure it is useable across all platforms, devices, iOS etc. Also it is key to ensure it can be used by all abilities and ages.
- Plan for partnering with schools - especially high schools. This could make students aware of services provided and engagement with the city including digital initiatives.
- Ensure lobbyist registry is fully open and transparent to the public via digital access.
- Please include strong IT process framework (like ITIL) and cybersecurity. The last thing you want is to launch new services and have them plagued by lack of quality, ransomware, or lost personal information
- The technology needs to be accessible to people with a variety of disabilities, physical and cognitive, there is a socioeconomic issue that needs to be addressed as well in terms of access to devices and internet to get the information posted digitally.
- Pickering should incorporate AI into all forms and methods of communication.

Public Engagement | Seniors (55+) In-Person Discussions

Members of the public within the Adults 55+ Group were engaged in a facilitated discussion. Key information from the perspectives shared are outlined below.

Desire to learn and utilize digital

Personalized education and training is critical

Frustration with time consuming navigation on City website

Difficulty identifying potential scams and phishing

Open to simplified self-service model

Digital literacy and skills cannot keep pace with technology changes

Public Engagement | Seniors Retirement Home In-Person Discussions

Residents at a Seniors Retirement Home were engaged in a facilitated discussion. Key information from the perspectives shared are outlined below.

In-person, human interaction first is preferred

Desire for City and event information (i.e. personalized, relevant e-newsletters or emails)

Digital services can be viewed as increasing the disconnect between City and seniors

Open to digital community signs with relevant information

Personalized 1-1 training and support is needed

Frustration performing basic tasks using technology

Public Engagement | Youth In-Person Discussions

Members of the youth community were engaged through a facilitated discussion with the Pac for Teens volunteer group, as well as through discussions with Community members at the Pop Up Booths at the Recreation Complex and Central Library. Key information from the perspectives shared are outlined below.

Prefer digital when connecting with the City

Utilize social media for awareness of City events and news

Identifying and finding the information that is relevant to them is key

Useful, intuitive app with City information and services would be beneficial

Public Engagement | Advisory Committee Presentations & Discussions

The following information was gathered and analyzed through facilitated virtual discussions at the Accessibility Advisory Committee and Cultural Advisory Committee meetings. Key information from the perspectives shared are outlined below.

Limited device and economic access can be a barrier to digital

City website and digital services must accommodate accessibility tools
(i.e. screen readers, text-to-speech, described images, language translation, etc.)

Omnichannel approach and balance is key

Intuitive and simple tools can assist in reducing digital intimidation or fear

Opportunity for partnerships for digital literacy education and support

Internal Engagement | Employee Survey

City of Pickering employees were invited to participate in a survey to share their perspectives. The survey asked employees to rate their level of agreement with the following statements.

I understand how to use the technology systems and tools that are required for my job.
- 6%
- 45%
- 49%

I have received adequate training and support to use these technology systems and tools.
- 3%
- 30%
- 43%
- 25%

Legend: ■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

I am comfortable learning how to use and apply new technology systems and tools in my job.
- 1%
- 7%
- 40%
- 53%

I know where to access relevant technology support and resources at the City
- 1%
- 18%
- 52%
- 30%

I find it easy to get help when something is not working with the City's technology.
- 23%
- 48%
- 29%

Legend: ■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

Internal Engagement | Employee Survey (continued)

City of Pickering employees were invited to participate in a survey to share their perspectives. The survey asked employees to rate their level of agreement with the following statements.
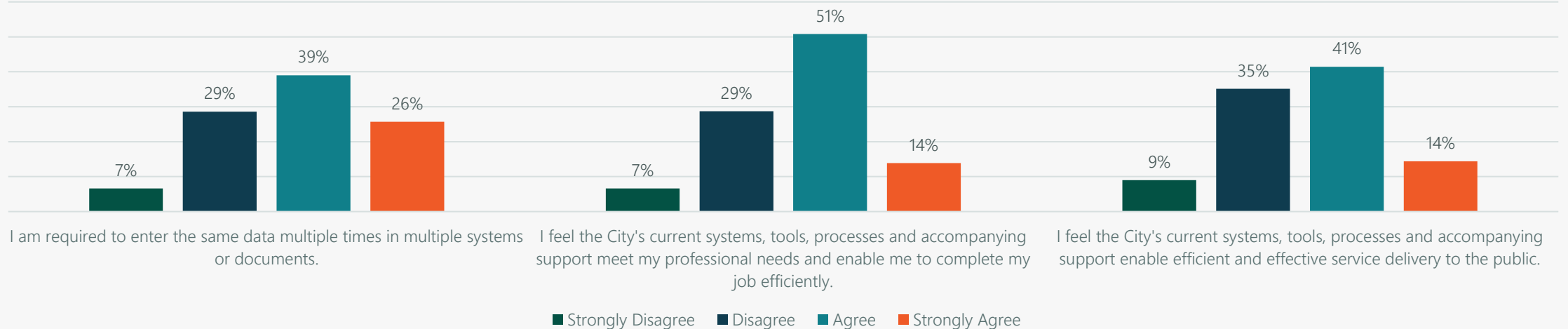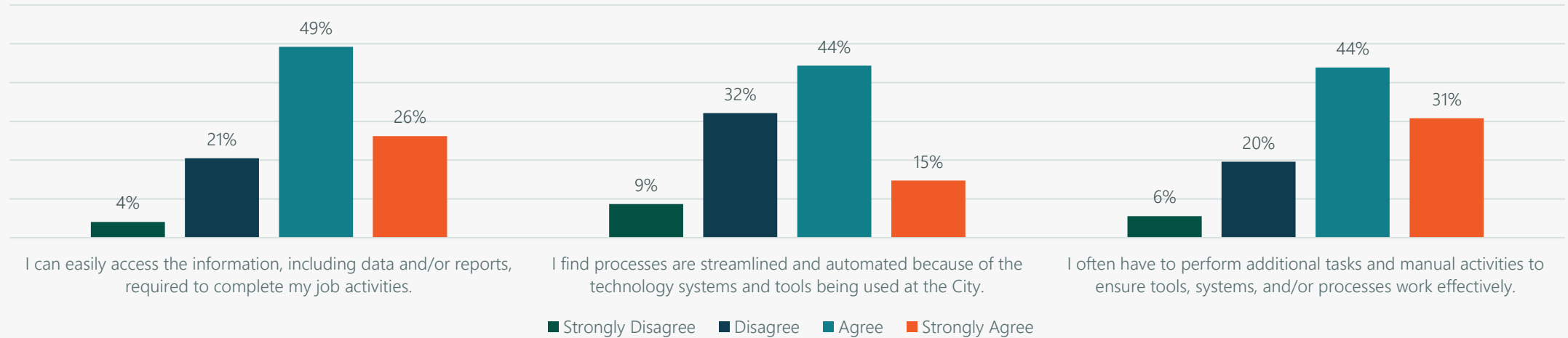

I can easily access the information, including data and/or reports, required to complete my job activities.
- 4% Strongly Disagree
- 21% Disagree
- 49% Agree
- 26% Strongly Agree

I find processes are streamlined and automated because of the technology systems and tools being used at the City.
- 9% Strongly Disagree
- 32% Disagree
- 44% Agree
- 15% Strongly Agree

I often have to perform additional tasks and manual activities to ensure tools, systems, and/or processes work effectively.
- 6% Strongly Disagree
- 20% Disagree
- 44% Agree
- 31% Strongly Agree

Legend: ■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

I am required to enter the same data multiple times in multiple systems or documents.
- 7% Strongly Disagree
- 29% Disagree
- 39% Agree
- 26% Strongly Agree

I feel the City's current systems, tools, processes and accompanying support meet my professional needs and enable me to complete my job efficiently.
- 7% Strongly Disagree
- 29% Disagree
- 51% Agree
- 14% Strongly Agree

I feel the City's current systems, tools, processes and accompanying support enable efficient and effective service delivery to the public.
- 9% Strongly Disagree
- 35% Disagree
- 41% Agree
- 14% Strongly Agree

Legend: ■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

City of Pickering employees were invited to participate in a survey to share their perspectives. The survey asked employees share their ideas and suggestions for how to improve the City's use of technology, data, and innovation.

"An online portal for citizens to view their information and conduct services (i.e. payments) would reduce amount of work for employees."

"Improve coordination, streamline processes and improve information sharing organization-wide."

"Opportunity to invest in other technologies (i.e. applicant tracking system, learning management system, etc.).."

"Integrate systems to limit data entry."

"Understanding how systems work together (integration of software and databases)."

"Streamline processes and implement smart city solutions."

"We could use data visualization tools to display information to be reviewed at a glance and data analytics for decision making."

"The website is outdated and difficult to navigate. We could Upgrade and modernize website so employees and citizens can navigate more efficiently and increase user-friendliness."