



Township of Uxbridge Technology Modernization Assessment

Prepared by the Regional Municipality of Durham

August 2020

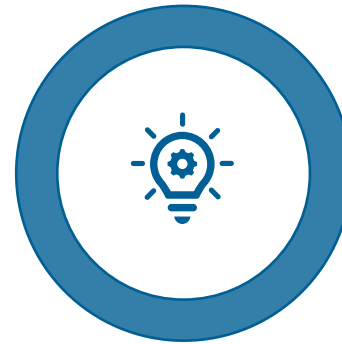
Scope of Engagement

The Township of Uxbridge engaged the Region of Durham to conduct a service delivery and modernization review of their existing information technology infrastructure and telecoms services.

This engagement identified efficiencies and modernization opportunities through:



A review of the existing technology, telecoms infrastructure and hardware to document the current state.



Analysis of current state architecture, requirements and industry available technology to provide infrastructure and telecom modernization recommendations.



Production of reports detailing the current state, future recommendations and a high-level implementation plan.

Note: This assessment was created, and recommendations formed, based on information collected from multiple sources at a high level.



Project Overview

Project Goals

Goal 01

Review technology infrastructure, telecoms infrastructure and hardware, documenting the current state.

Goal 02

Analyze current state architecture, requirements and industry available technology to provide recommendations to modernize the infrastructure and telecom environments.

Goal 03

Develop final report that includes current state, recommendations and high-level implementation plan.

Program Deliverables

- ✓ Contract/Agreement
- ✓ Current State
- ✓ Detailed PowerPoint report containing assessment, recommendations and implementation plan

Project Scope

In Scope

- ✓ Current State Assessment
- ✓ Recommendations report
- ✓ Final presentation

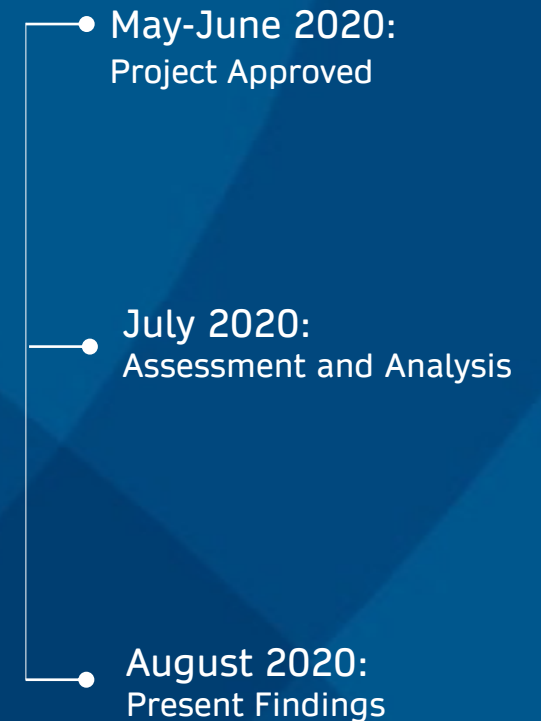
Out of Scope

- × Implementation
- × Long term maintenance
- × Purchasing

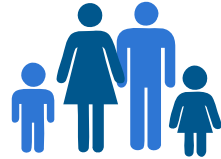
Areas of Focus

- ✓ Telephony Infrastructure
- ✓ Network Infrastructure
- ✓ Server Infrastructure
- ✓ End-User Infrastructure

Project Timeline



Technology Assessment - Statistics



20,623 People

Living in the
Township of
Uxbridge



80% of staff use laptops

Replaced desktops to enable a mobile
workforce

8

Locations at the
Township of
Uxbridge

Uxbridge Swimming Pool

Uxbridge Public Library

Uxbridge City Hall

Uxbridge Arena & Recreation Center

Uxbridge Fire Hall

Uxbridge Public Works

Uxbridge-Scugog Animal Shelter

Uxbridge Historical Center



84 Cellular Plans

With approximately 65 allocated to
phones and the remaining to IoT devices



24 Networked Printers

Varying Models

21%

Of servers decommissioned
but not shutdown



Daily backup

For production servers



Observations & Findings

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351  
352 /* =Menu  
353 -----  
354  
355 #access {  
356   display: inline-block;  
357   height: 69px;  
358   float: right;  
359   margin: 11px 28px 0px 0px;  
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366   margin: 0 0 0 -0.8125em;  
367   padding-left: 0;  
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Observations of Current Technology Successes



Actively endorse future modernization for the Township of Uxbridge using new technology approaches.



Exceptional customer service and engagement with citizens



Advanced technology solutions despite no dedicated IT department



Quick deployment of laptops to enable a mobile workforce during COVID-19



Make use of some advanced software that is on par with larger municipalities



Utilize comprehensive technology such as backup as a service and DR as a service in collaboration with IT vendor



Applications in some respects are current



Excellent collaboration with the vendor and the Township of Uxbridge leadership

Opportunities Identified

Observations and Impact

Technology Strategy



- Guidance, advice and decision making led by vendor.
- No cloud strategy and limited standardization on platforms of choice.
- No long term consistent approach to purchasing, infrastructure and hardware implementations.

Impact

- Mixture of systems, processes and infrastructure.
- Reactive approach to system failures and mandatory upgrades.

Collaborative Practices



- Limited evidence of partnership working for hardware purchases and infrastructure projects.
- Reliance of options presented from core vendors.
- Additional Townships and Municipalities contracts/partnerships could be leveraged.

Impact

- Higher implementation costs.
- Greater reliance on researching than learning from others.

Technology Age and Versions



- Mixture of personal computers in use.
- Mixture of models of cellphones.
- Use of unsupported Windows applications.
- Devices often not on the network.
- End of life telephony system.

Impact

- Inefficient problem resolution due to number of types of devices.
- Risk to organization; unsupported products may fail

Network



- No solid foundation to support a modern Uxbridge.
- Equipment is old, and poorly maintained.
- Independent sites do not participate in the WAN
- Unable to monitor network performance

Impact

- Increased probability of network failure
- Unable to monitor network resources

Telephony System



- Vendor no longer supports or sells parts for telephony system
- Does not allow for call forwarding to all locations
- Can not add additional phone lines at some locations.

Impact

- No room for expansion
- If system fails used parts will likely be required to mend existing solution

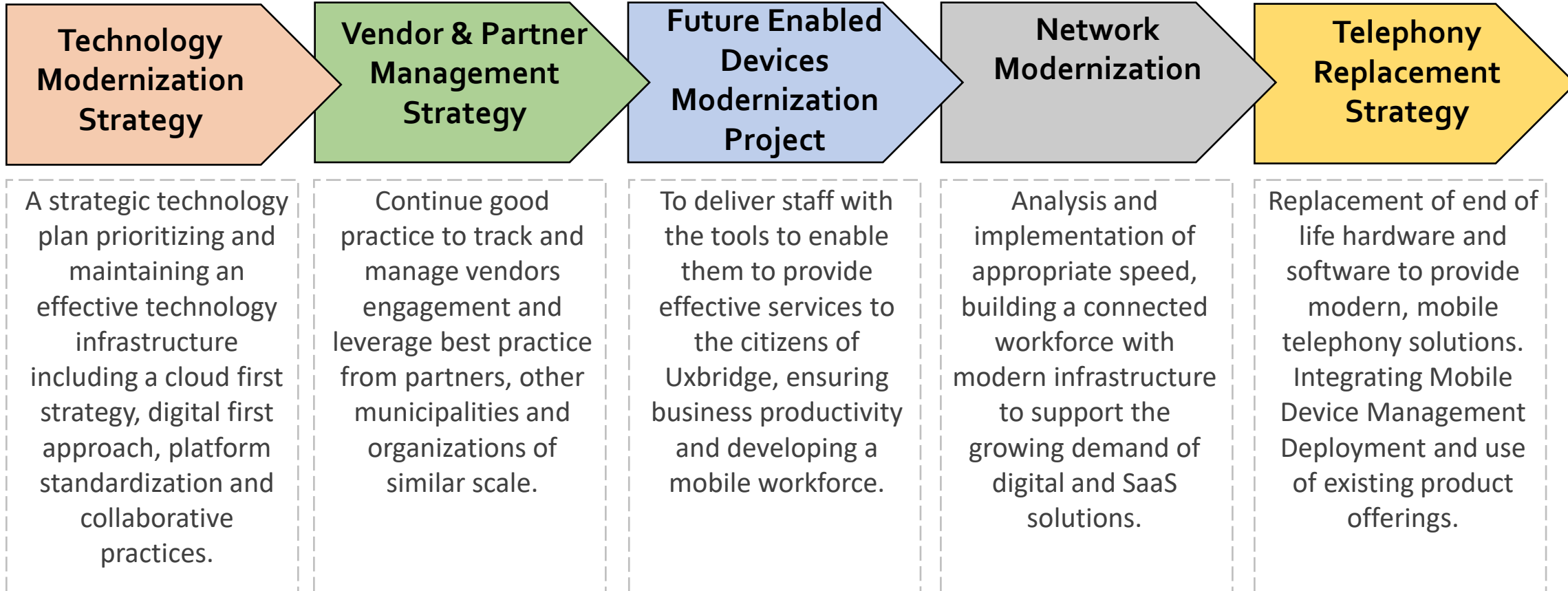


Recommendations & Roadmap

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Recommendations



Project Resourcing and Operational Support



Project Resourcing

- Planning and implementation of the work streams will require both partner resources as well as coordination and oversight from Uxbridge staff.
- Project resourcing should include a qualified Uxbridge staff member or contracted resource to manage partner activities and quality.



Operational Support

- The modernization initiatives will introduce enhanced capabilities for Uxbridge, as well as new complexities to manage on an ongoing basis.
- Uxbridge will need to determine an appropriate operational support model to ensure the Town can maximize the value of these investments:
 - Expand the scope of services for existing support services providers
 - Assign technology services responsibilities to internal staff
 - Engage a partner to provide overall support services and oversight, through Durham Region or an external, 3rd-party

Next Steps



Starting Activities

- Review in detail the proposed projects and their documentation.
- Develop the Township of Uxbridge Technology Modernization Plan to guide future projects and decisions.



Project Selection and Budget Allocation

- Determine budget and project selection while considering initiative dependencies.
- Align and allocate the required resources where necessary.



Begin Detailed Project Initiatives

- Confirm and define detailed scope and timeline of work for upcoming projects.
- Obtain formal quotes, ensure complete funding is available when required and assign project resources.
- Proceed through projects in the proposed order to reduce rework and additional costs.

The Region of Durham welcomes to opportunity to continue to work with the Township of Uxbridge to support this modernization agenda.

Closing Remarks

- A multiyear IT Strategy & Modernization Plan must be defined. It will be used for guidance, and a vision for all Uxbridge IT systems, services, and future decisions.
- The IT industry has shifted to a subscription-based, “as a service” model. Financial spending will need to adapt from lump sum, to subscription based.
- Standardization across all systems is ideal to reduce all overhead costs with managing many unique systems.
- With a higher demand on IT systems, it is extremely important upgrading and maintenance takes place prior to failure.
- Implementing a defined system lifecycle where equipment is replaced at set intervals would ensure budgets are in alignment, with the refresh of aging IT systems.
- Financial and operational risks associated to security breaches, system outages, and loss of functionality outweigh the benefits of running equipment until failure.
- **With an IT Strategy & Modernization Plan Uxbridge will be capable of taking a proactive stance, across all areas of IT, and ultimately providing improved service to their citizens.**



Prepared by:
The Regional Municipality of Durham
Corporate Services – Information Technology

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