# Digital Markham Strategy

PRESENTATION TO GENERAL COMMITTEE Jan. 16, 2017

MARKHAM

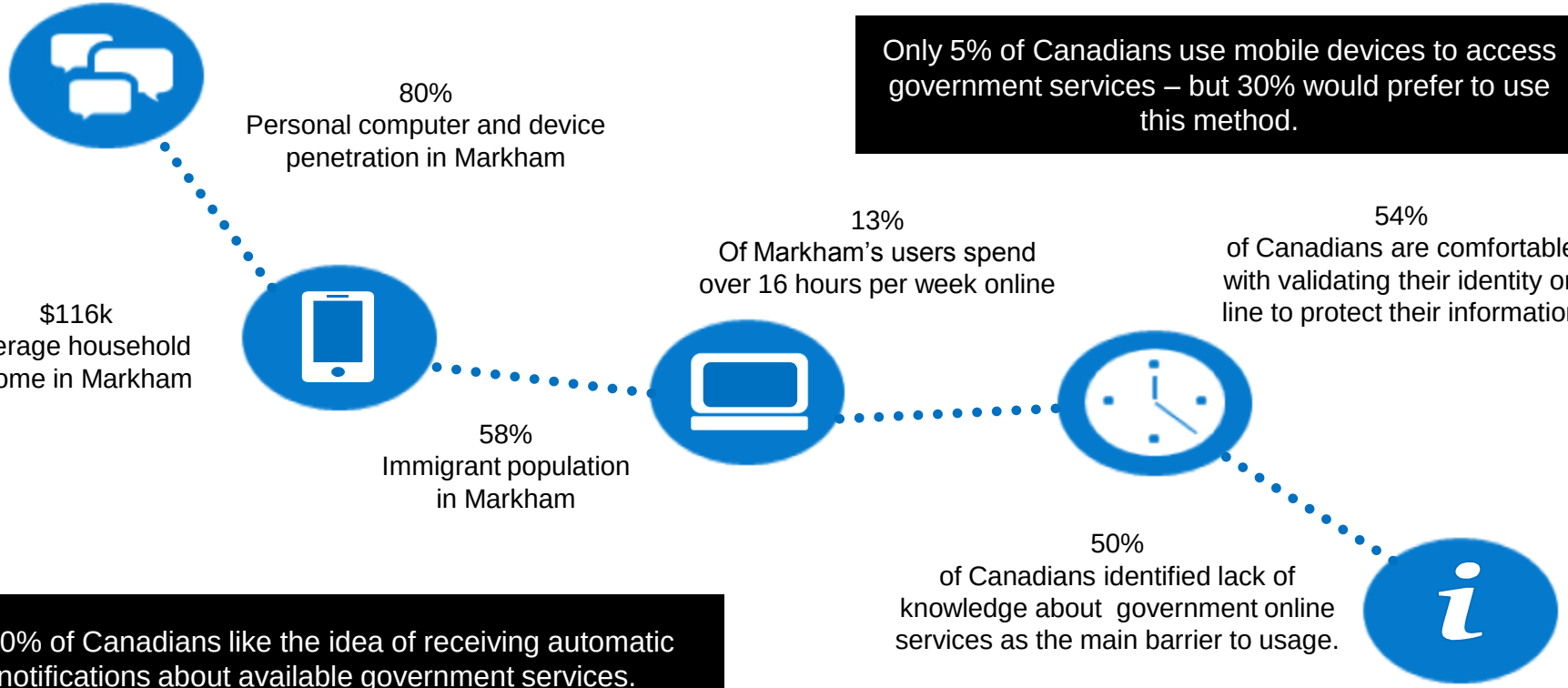
## Agenda

- Background
- Current State Assessment
- The Vision
- The Roadmap
- Opportunities
- Recommendations

# Background: What is digital change?

- The shift has increased individuals' expectations, transforming the way society behaves and interacts.
- This is enabled by rapid technology advances in mobile, cloud computing, "Internet of Things", and real time analytics
- Digital has created a new, agile method to manage and access personal, public and corporate information.
- As a result, organizations are now investing significantly in Digital Change programs to keep up with the fast paced demands and reap the benefits of the digital revolution.

# Background: Markham citizens are ready for digital



80%
Personal computer and device penetration in Markham

$116k
Average household income in Markham

58%
Immigrant population in Markham

13%
Of Markham's users spend over 16 hours per week online

54%
of Canadians are comfortable with validating their identity on line to protect their information

50%
of Canadians identified lack of knowledge about government online services as the main barrier to usage.

Only 5% of Canadians use mobile devices to access government services – but 30% would prefer to use this method.

> 80% of Canadians like the idea of receiving automatic notifications about available government services.

**Based on 2014 data, when the #DigitalMarkham strategy was initiated.**

# Background: Project phases

Markham engaged the consulting firm pwc to develop the City's Digital Strategy (as approved by Council in 2014)
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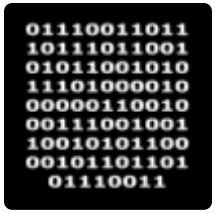



**DIGITAL**

**A broad range of technology that enhances citizen engagement, improves employee collaboration, & optimizes service delivery.**

The Digital Strategy Project spanned 3 phases:

**1**

## Current State Assessment

Consult with City staff and management to complete a Current State Assessment to determine our Digital Maturity

*(June – November 2014)*

**2**

## Define Future Vision

Gather input from internal and external stakeholders and thought leaders to design the Future Vision for Digital Markham

*(February – July 2016)*

**3**

## Develop Roadmap

Work with the City's senior management to develop the Digital Strategy and Digital Roadmap with specific initiatives for the next 3-5 years to enable the vision

*(July – August 2016)*

# Background: The Digital Readiness Assessment

Markham's current state digital maturity level was assessed against the 5 digital dimensions below and scored from Level 1 (lowest) to Level 4 (highest).

## Online

- Online presence and integration
- Search capability
- Multimedia capability
- Stakeholder interaction and communication
- Online governance

## Social

- Social strategy
- Presence and usage
- Monitoring & resolution capability
- Social policy
- Social governance
- Social engagement

## Mobile

- Mobile strategy
- Presence and integration
- Stakeholder data and insights
- Application development capability
- Mobile governance
- Usage statistics

## Infrastructure & Data

- Data and integration
- Networks
- Open data
- Customer data and insight
- Security and disaster recovery
- Data privacy and protection
- Digital policy

## Organization

- Executive sponsorship
- Senior team involvement
- Strategy
- Organizational alignment
- Change management

- Business process automation
- Staff demographics
- Procurement
- Culture

# Current State: Initial investments in digital show results

## MarkhamVotes

First online voting in North America

**6,000**
Average daily visits

- returning visitor
- new visitor

51%
49%

10% via tablet

45% via mobile

55% via desktop

Live Chat

**50**
Average Per Day

*Early adopters of* VoIP

**100%**
Broadband Connectivity to City Facilities

## Today

The City is actively executing digital initiatives

**75%**
Online recreational activity registration

**100%**
of City Facilities offer Wi-Fi access

**126,000**
eBooks available online @ Markham Public Library

**47%**
of staff are equipped to be mobile

**50%**
IP-enabled LED

## Digital Services on markham.ca

**77**
Services available

**65%**
Integrated with back-end systems

## Social Markham

9,433 followers

1,646 followers

11,403 views

5,363 likes

130,019 views

**9,000+**
downloads of **Access Markham** mobile app

## BYOD

Across popular platforms

CLICK with MARKHAM
Make Your Opinion Count!

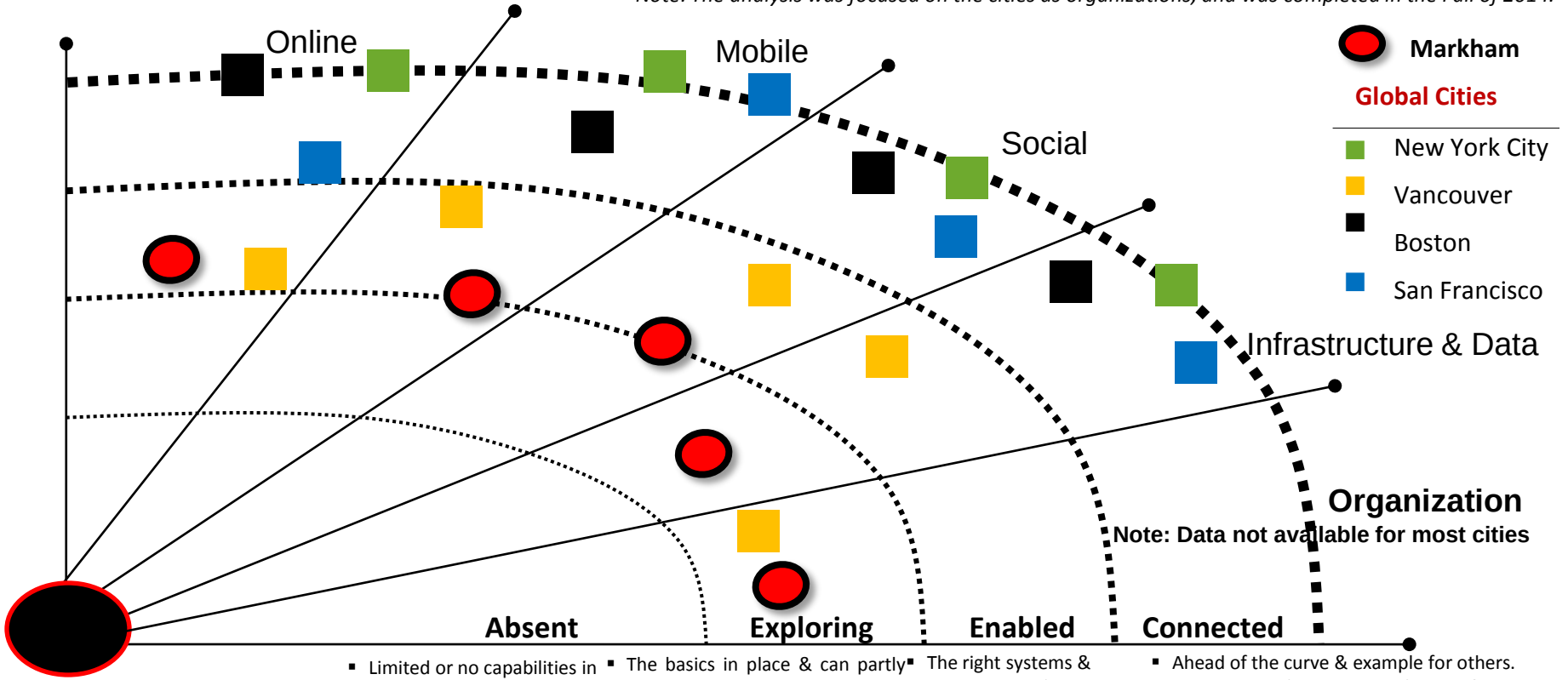
**6,000+**
*residents engaged online*

*Vehicles equipped with AVL* **100%**

# Current State: How Markham compares to others

The following depicts a relative comparison of digital capabilities against 4 global cities.

*Note: The analysis was focused on the cities as organizations, and was completed in the Fall of 2014.*




- Limited or no capabilities in this area.
- The basics in place & can partly integrate with other stakeholder
- The right technology can enable to perform better.
- The right systems & processes in place to integrate majority of user
- Considered a digital city.
- Ahead of the curve & example for others.
- Government, business, employees, & citizens are all connected & serviced through desired channel.

# Current State: Opportunity areas identified for Markham

## Online

- Robust search capability
- More single-sign-on to access services
- Fully integrated end-to-end workflow
- Stakeholder interaction, blogs

## Social

- Social media strategy
- Data analanalytics for decision /customer information etc.
- Use for public meetings & polling

## Mobile

- Mobile strategy
- Data analytics for decision
- Mobile marketing
- Capacity building and innovation

## Infrastructure and Data

- Cloud strategy
- Open data policy & implementation
- Data analyse from multiple sources
- Data privacy and communication

## Organization

- People, processes, systems, partners in digital value chain
- Change management
- Governance and digital champion
- Digital corporate culture

# The Vision: Consultation and key results

To shape Markham's digital vision, the City consulted with industry insiders, digital thought leaders, business executives, citizens and staff. Priorities and topics that emerged are shown below:

PlaceSpeak 35

**Ideas Forum**
**Citizens posted views re digital government on an online crowdsourcing platform**

**Priorities:**

- Real-time alerts (e.g. power outages, road closures, events)
- Report parking infractions on app

**Key topics:**

- Online voting
- Online By-law information
- Public Wi-Fi in historic main streets and downtown core
- Calendar of local & City events

70

**Focus Groups**
**Community groups & City Staff provided ideas for a technologically innovative community and future vision**

**Priorities:**

- Seamless customer experience
- Addressing the 'Digital Divide'
- Internet of Everything

**Key topics:**

- Open data
- Smart buildings / traffic
- Digital workplace
- High speed internet / Wi-Fi
- Innovation (Partnerships)

37

**Catalyst Session**
**Innovative workshop with thought leaders to explore initiatives and scope digital strategy for the City**

**Priorities:**

- 'Smart' infrastructure
- Re-imagined public spaces
- Frictionless city

**Key topics:**

- Secure access to citizen data
- Enhanced Community Centres
- Customizable city service offerings
- Access & mobility
- Shared & sustainable transportation

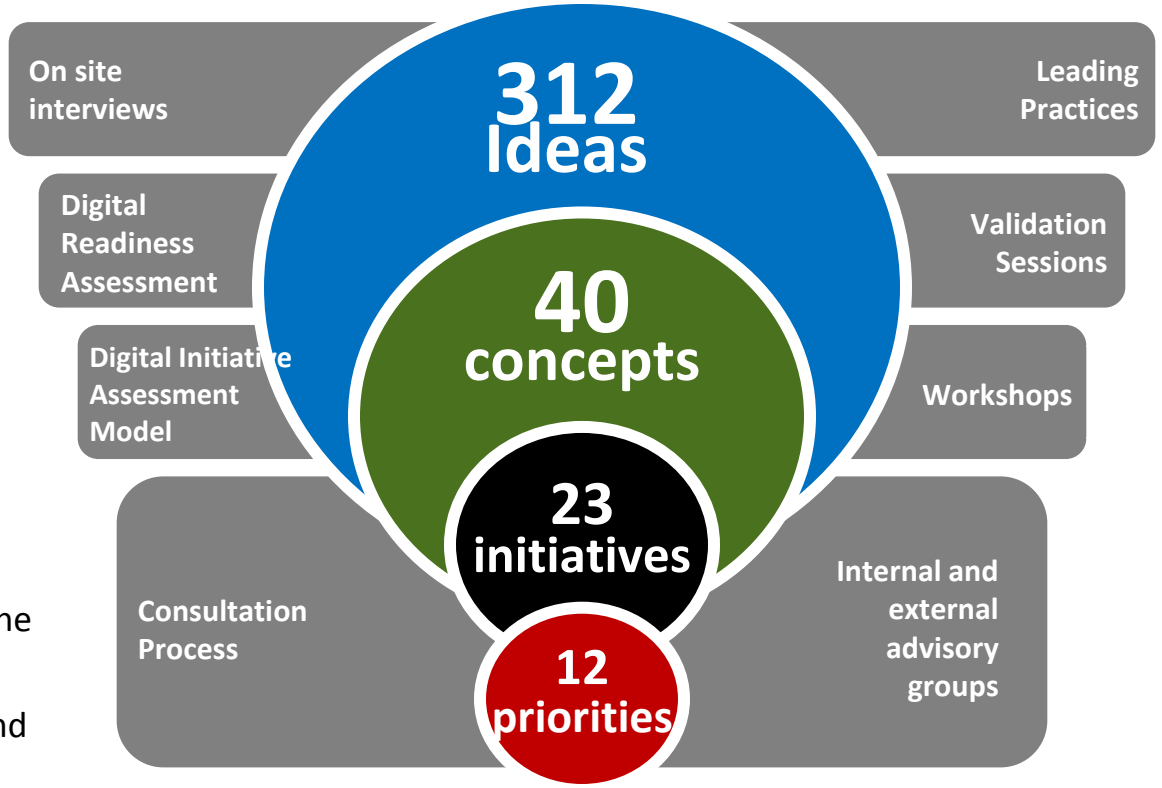
# The Vision: From ideas to priorities

## The Goal:

- Condense ideas and feedback into a Digital Strategy and Roadmap
- Create specific initiatives/ priorities to move Markham into the digital future

## Initiatives/Priorities for the Roadmap must:

- Align with the corporate goals
- Meet predefined guiding principles
- Move Markham forward in at least one Digital Maturity area
- Be defined as a priority by internal and external stakeholders




**12 key priorities were chosen for the roadmap**

# The Vision: Guiding Principles for the Strategy

## Guiding Principles:

- developed by Leveraging Technology Steering Committee & confirmed at Catalyst Session
- criteria for selecting priority digital initiatives for the Digital Strategy Roadmap

# The Vision: Markham in 2025

## #Digital Markham. Frictionless City.

The City of Markham is a platform for digital innovation and collaboration between citizens, business, and government that contributes to the overall quality of life in the city.

# The Vision: Digital initiatives and objectives

## Engaging and Serving the Community

- Continue to enhance the suite of fully integrated online and mobile service offerings
- Promote collaboration through digital tools
- Build on the library as a center for excellence in digital literacy
- Continue to develop Markham's role as a leader in Digital Democracy

## The Digital Differentiator for Business

- Create a favourable regulatory environment that facilitates digital innovation, agility, and economic development
- Create a framework for engaging strategic partners in achieving the #DigitalMarkham vision

**Vision: Frictionless City**

## The Digital Workplace

- Drive digital transformation to enable business integration across business units
- Create the capacity to leverage data as an asset
- Establish the foundation of a digital culture and a Digital Operating Model at the City

## The City as a Platform

- Create "Living Lab" and innovation hubs
- Implement an open data platform and the ongoing governance model
- Establish Markham's identity as a Digital Destination

# The Roadmap

| Priority | Digital Initiative | 2017 | 2018 | 2019 |
|---|---|---|---|---|
| 1 ** | **Create "Living Lab" and innovation hubs** | Meet with DAG to identify action plan; Pilot the Living Lab | Full Living Lab environment at Markham Centre | Additional Living Labs Go-Live |
| 2 ** | **Create a favourable regulatory environment that facilitates digital innovation, agility, and economic development** | Updated procurement policy, Identify quick win for smart infrastructure, Identify new business partners | Changes to bylaw policy implemented | |
| 3 | **Implement an open data platform and the ongoing governance model** | Identify open data platform, Publish quick win data sets | Governance model established, Engaging public using open data | Open data as part of daily activities, Host hackathon |
| 4 ** | **Create a framework for engaging strategic partners in achieving the #DigitalMarkham vision** | Digital Alliance Group founded | Go-live with small business procurement process, Talent plan established | Introduce Civic Tech Advocate, New partnership framework implemented |
| 5 | **Drive digital transformation to enable business integration across business units** | Enterprise PMO established, Workplace personas envisioned | Test out an Enterprise Architecture (EA) quick win | Implement EA solution, Pilot a new digital process across business units |
| 6 | **Promote collaboration through digital tools** | Digital collaboration standard established; Tool procured | Content Strategy | Collaboration is BAU, Using sentiment tools |

Initiatives anticipated to have a high impact on establishing Markham's identity.

** Priorities recommended by the consultant

# The Roadmap...cont'd

| Priority | Digital Initiative | 2017 | 2018 | 2019 |
|---|---|---|---|---|
| 7 ** | **Establish the foundation of a digital culture and a Digital Operating Model at the City** | Identify a Digital Champion, Establish Digital Operating Model | Pilot work-from-home for one business unit, Develop internal dashboard | Mobile work fully enabled |
| 8 | **Create the capacity to leverage data as an asset** | Information arch design, MDM strategy; Business analytics strategy | Answer a business question using current data, Roll out IM team and governance model | |
| 9 ** | **Continue to develop Markham's role as a leader in Digital Democracy** | Strategy for election day online voting established | Election day | Hold Summit on Online voting learning's, Plan for 2022 vote |
| 10 | **Continue to enhance the suite of fully integrated online services and mobile service offerings** | Procure user experience Team, Quick fix on Portal, Digital Service Roadmap | Go-Live Portal and Mobile App refresh | CRM accessible across business units |
| 11 | **Establish Markham's identity as a Digital Destination** | New digital identity established and communicated | | Launch new Markham 2020 strategy including digital initiatives, Establish innovation award |
| 12 | **Build on the library as a center for excellence in digital literacy** | Collab hub with digital tools & infra, Strategy for Digital Literacy | Go-Live with new Digital Literacy curriculum online | Roll out more collab hubs after test & learn |

Initiatives anticipated to have a high impact on establishing Markham's identity.

** Priorities recommended by the consultant

# The Roadmap: City digital initiatives underway

## Online

- Robust CRM to manage citizen inquiries **
- Complete rdesign of markham.ca **
- CLASS Program Registration system replacement **
- Point of Sale (POS) cashiering system replacement**
- Electronic Plan Review (ePlan) implementation **

## Social

- New intranet employee portal with collaboration capabilities

## Mobile

- Mobile app functionality enhancements and updates

## Infrastructure and Data

- Document Management system pilot
- Implementation of system for records management ,storage & retrieval
- Open data policy & implementation

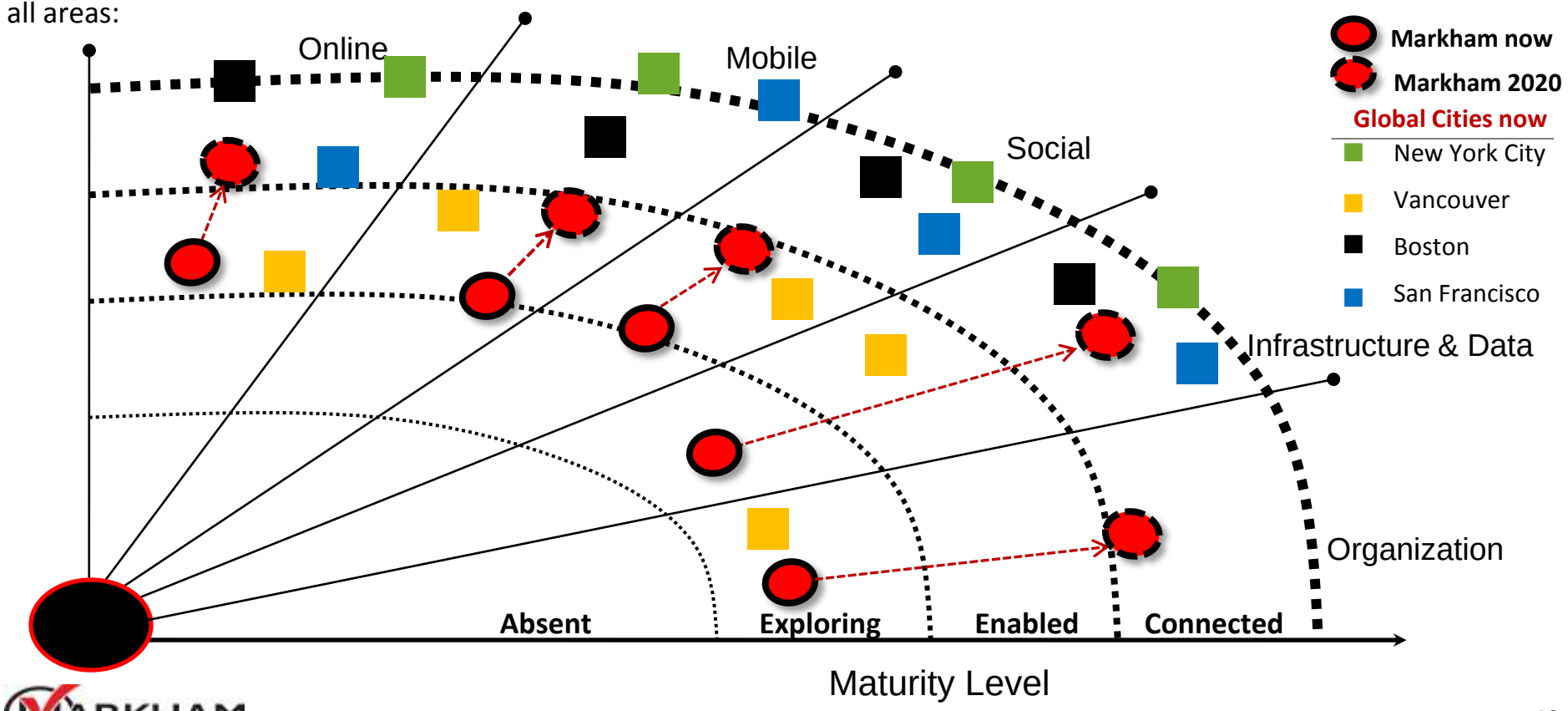
## Organization

- Corporate Content Management System for all City facilities **
- Replacement of user computing equipment across the City **
- Learning Management System replacement **
- Human Resource System implementation **
- Work-order / Enterprise Asset Management system implémentation **

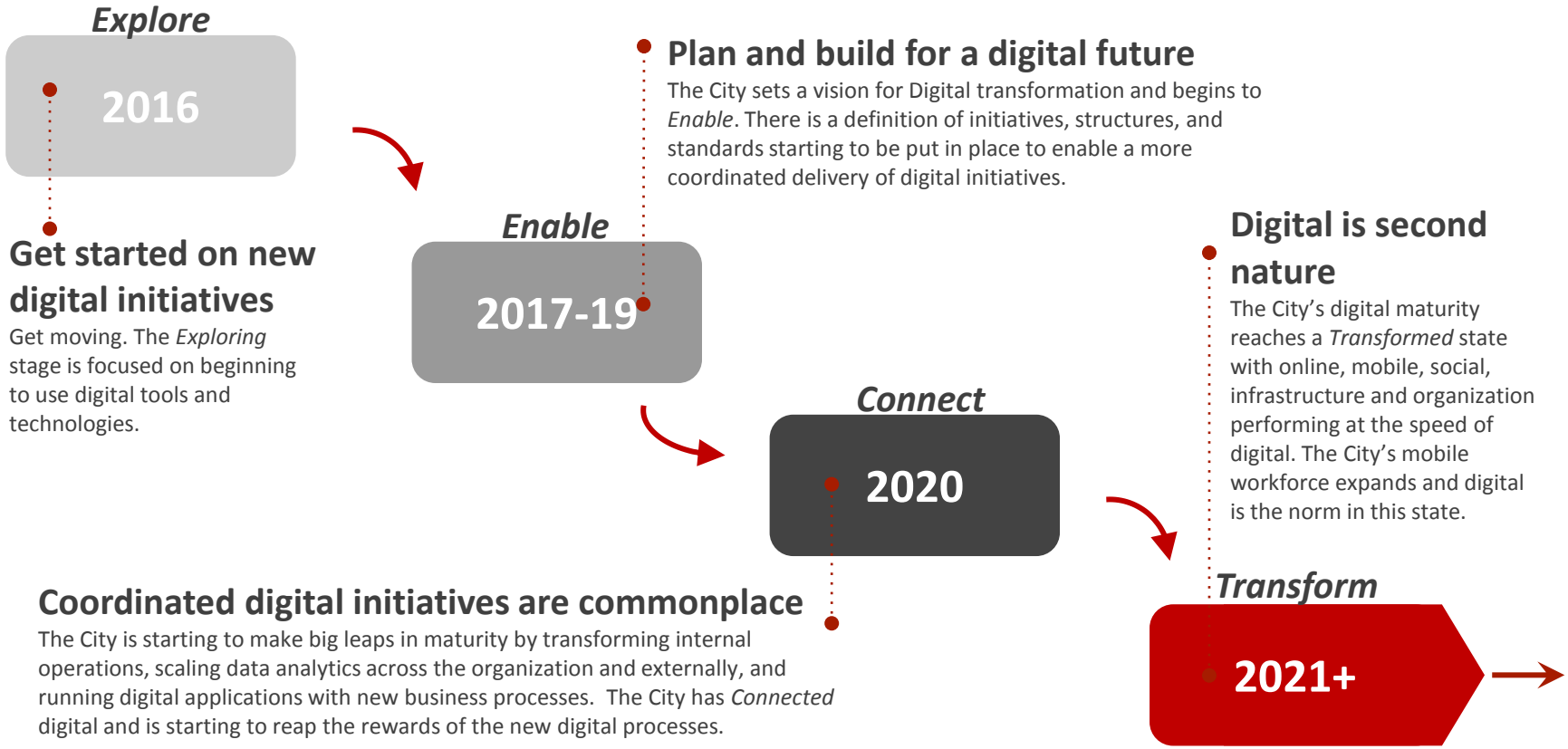
** initiatives that could advance more than one area of maturity

# The Roadmap: 2020 Outlook for Markham

If the City of Markham achieves its objectives as outlined in this strategy, the outlook for digital maturity will ADVANCE in all areas:



# The Roadmap: Summary



# The Roadmap: Digital City Benefits for Markham

- **Economic differentiator**
  - Renewed digital vibe attracts/retains business, residents & creates jobs
  - Opportunity to be a recognized leader in digital innovation
  - New working partnerships
  - Leverages York/Seneca and high tech sector
- **Customer/citizen experience**
  - Improved customer experience & satisfaction
  - Real time, increased citizen engagement & collaboration; leader in digital democracy
- **Service delivery**
  - More sustainable & efficient business processes, better service delivery
  - Data-driven decision -making
  - Digital work environment and that is agile/responsive and ready for next generation
- **Keeping pace and staying relevant**
  - Doing nothing is not an option

# Opportunities

## ❑ Funding

- Existing approved budget of $900K for implementation of aspects of the strategy (obtained through lifecycle)
- Direct 2018 – 20 annual technology capital budgets to initiatives that advance the strategy, as a priority
- Long-term sustainable investment strategy to enable strategy to be developed

## ❑ Partnerships

- City can't do this alone; support from new strategic partners and business in the community is needed

## ❑ Business Imperatives

- Leverage existing development and "greenfield" opportunities :
  - Markham Centre and Future Urban Area
- Promote "Digital First" thinking

# Recommendations

- THAT the Digital Markham strategy presentation be received; and
- THAT the Digital Markham strategy & roadmap be endorsed as a go-forward approach to support achievement of Markham's digital goals by 2020 in the following areas:
  - engaging and serving the community;
  - becoming the digital differentiator for business;
  - enabling a digital workforce; and
  - making the city a platform for innovation; and
- THAT Staff be directed to develop a detailed implementation plan, including a funding strategy for the Digital Markham roadmap and report back to General Committee by the end of June 2017; and
- THAT Staff provide an annual update to General Committee on the status of the implementation of the roadmap