

Date: 2021-02-03

Subject: Data and Analytics Strategy Implementation Update

Contact: Kumanan Gopalasamy, Chief Information Officer (CIO), Corporate Support Services

Report Number: Corporate Support Services-2021-192

Recommendations:

1. That the report titled: **Data and Analytics Strategy Implementation Update**, to the Audit Committee Meeting of February 23rd, 2021, be received.

Overview:

- A Data and Analytics Strategy Report was created and delivered in 2019 by an external consultant to provide a roadmap for implementation.
- Due to resource constraints and COVID-19 priorities the development of an implementation plan was delayed and has now started.
- Utilizing the 'Data and Analytics Strategy Report', a high-level action plan has been developed for year 1(2021) of a 3 year plan to address data governance, data management and analytics.

Background:

Internal Audit's 2018 IT Risk Assessment identified data governance and architecture as high risk. Subsequently, DI&IT engaged an external consultant to build a vision, strategy, metrics and proposed operating model to manage and extract value from Data & Analytics across the City of Brampton. The 'City of Brampton Data and Analytics Strategy Report' identified key activities that needed to be undertaken with detailed descriptions of outcomes required. That report will be used to guide, develop, and implement a long-term strategy for Data and Analytics.

Current Situation:

The 'City of Brampton Data & Analytics Strategy Report' provides an appropriate basis for an action plan suitable for the City to develop and mature a Data & Analytics Program across the City. Using the report as a reference, the process has been adjusted to be able to complete all activities in phases, starting with a proof of concept and working with a business unit and an identified business initiative. The developed methodology from the proof of concept will then be used to create a framework for the remainder of the organization.

For the proposed roadmap to be successful, several key elements are required:

1. Responsible parties need to be identified, provided delegation, and be held accountable for outcomes.
2. Appropriate resourcing is required to enable activities to be successfully undertaken.
 - a. Complete a review of existing data functions and align/restructure appropriately.
 - b. Identify any resource and skills gaps.
3. Business partners need to understand that they are the data owners and DI&IT are the data custodians.
 - a. DI&IT is responsible for managing the data.
 - b. Business owners are responsible for maintaining the quality of the data.

The roadmap has been adjusted, with a focused proof of concept in terms of strategy development and implementation. This will help lay the foundation and build momentum through iterative process improvement and rollout throughout the organization. This is to avoid a costly 'big bang' approach in tackling the entire initiative in one go. The approach we have adopted is to develop and rollout the strategy using a smaller group of business units and then tweak the strategy and roadmap to extend it to the entire organization. The report did not specifically speak to the Open Data initiative; however, as an overall data and analytics strategy we will be including it in the plan. The plan is now re-adjusted to the following:

1. Year 1 Plan – Laying the foundation and building momentum: Limited Scope. Involve a limited set of business data owners to develop a strategy and do a proof of concept.
2. Year 2 Plan – Refinement of strategy and roadmap, roll out to wider scope.
3. Year 3 Plan – Formalize Data Governance and Continuous improvement.–

Please refer to appendix 1 for the Year 1 Plan.

Corporate Implications:

Financial Implications:

None.

Other Implications:

None.

Term of Council Priorities:

This report achieves the Term of Council Priority of 'Brampton is a well-run City' through the development of a Data and Analytics Strategy that will deliver data management, governance and analytics capabilities to extract value from data across the City of Brampton.

Conclusion:

DI&IT has created an action plan for year 1 of the Data & Analytics Strategy implementation and will work with various business units to complete a proof of concept.

This will serve as a basis to further define the plan for subsequent years and roll out the strategy for data governance, data management and analytics to the rest of the Corporation.

Authored by:

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Attachments:

Presentation - Data Analytics Strategy Update – Audit Committee

Appendix 1

Data & Analytics Strategy - Implementation Plan

Year -1 Plan: Laying the foundation and building momentum for D&A Strategy

2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
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Elaborate on the Data & Analytics Strategy (January – March)

- Develop an Action Plan with timelines (January, 2021)
- Engage a small set of business units (e.g., CAO's Office, Strategic Communications) to review and further develop the action plan
- Align Proof of Concept with an agreed upon Business Outcome/Initiative. (February - March 2021)
 - Document and agree on the business need and scope for Proof of Concept.
- Review datasets and processes for Open Data and collaborate with Strategic Communication to build awareness.

2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
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Develop Data and Analytics Strategy – Proof of Concept (April – June)

- Create Proof of Concept Project charter to document and define scope, deliverables, stakeholders, and timeline
- Assess Business and Data capabilities for identified scope of Proof of Concept
- Align the business value for Proof-of-Concept scope with data capabilities to build out the data and analytics strategy.
- Define the data management and data governance components required to deliver the proof-of-concept business value. Including, but not limited to, data quality, access, analytics, visualization, controls.
- Assess existing enabling technologies, identify gaps, and define plans to address them.
- Assess staff skills against the notional target operating model and develop a strategy for improving skills and capabilities
- Assess, improve, and formalize processes for governance, information lifecycles to support the Strategy
- Develop Governance Framework specific to the Proof of Concept, identifying standards, roles, responsibilities, controls, and decision criteria including privacy.
- Estimate budgetary and resource requirements for future phases.

Open Data Engagement - Awareness Campaign

- Work with Strategic Communication to build out the awareness plan; continue to engage internal City Staff and the Public to raise awareness.

2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4
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Pilot the Governance Framework and D & A Strategy Rollout for Proof of Concept (July – December)

- Deliver defined business outcome and aligned Data & Analytics Strategy components for the proof of concept.
- Gather lessons learned and refine the Strategy and Governance framework as needed
- Develop the plan for Year 2.
- Request any necessary funding through Budget process.
- Assess and commit resources as required.