OTTAWA POLICE SERVICE
SERVICE DE POLICE D'OTTAWA

The Trusted Leader in Policing
Le chef de file de confiance dans la police

BUSINESS CASE

Information Management & Data Analytics (IM&DA)

Version 1.0 – January 2022

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Latest revision date: Jan 19, 2022

1   Executive Summary

Improving data collection and reporting has been identified as a strategic priority by the Police Service and reinforced by the board (based on the advice received from Strategy Corp).

The purpose of this investment program is to improve community service and identify saving opportunities by optimizing staffing, resource allocation and deployment of police personnel through better data and analytics.

An investment in this area is a key enabler for the multi-year service efficiency program and strategic priorities of the Board. Central to this investment is augmenting internal capacity and capability. This capital investment will use existing technology and tools. Investing in data and analytics will help the organization and Board improve the effectiveness, efficiency, and economy of policing services in Ottawa.

2   Business Need

With rising calls for police reform and increasing demands on policing, the need for quality data has never been greater. Investing to improve information management and data analytics is a risk management strategy to drive business performance.

At a strategic level, data is a key enabler to effective oversight and good governance. Investments in this area are required to support each priority in the Boards Strategic Plan (Advance Neighbourhood Policing, Modernize the Workforce, Meaningful progress towards Equity, Diversity, and Inclusion, and Support our Members).

The investment will assist the OPS in the collection, analysis and ethical use of disaggregated race and demographic based data. This will allow the OPS to better work in support of the City of Ottawa's "Anti-Racism and Ethno-Cultural Relations Secretariate". This will also better enable the OPS to comply with the Provincial government's new requirements for race and demographic based data collection and analysis for use of force reports.

The new Comprehensive Ontario Police Service (COPS) Act legislation requires all police service in Ontario to actively support their municipal/regional government in the creation, implementation, and evaluation of a Community Safety & Well-Being (CSWB) plan. The City of Ottawa has just approved its CSWB plan. This investment will enable the OPS to share more data in a more relevant, timely and transparent manner, all in support of the CSWB.

It will also improve the ability of the OPS to form effective problem solving partnerships – where more effective information management/data analytics will enable the OPS to work more effectively in a "community co-production" mode with community stakeholders through a full cycle of problem analysis, planning, implementation and evaluation.

The general trend in policing and the recently expressed position of the Ottawa Police Service Board is have police services integrate their operations with other City/social service providers and/or to fully refer calls to such agencies.

Open data and analytics are enablers to co-producing innovative solutions to complex social challenges with the community. Expanding community access to OPS data also requires improved information management and data analytics for greater transparency in policing.

Financially, improved data analytics will help the police service be more efficient with resource deployment, inter-agency coordination/service integration all of which will improve service, safety and ROI.

Leveraging data is key to improving operational outcomes such as preventing crimes and reducing victimization.

Information management and data analytics investments will reduce absenteeism, improveme the turnout rate, support early intervention, and improve member health/wellness.

3   Strategic Alignment

Each of the Board's four strategic priorities requires an investment in information management and data analytics – this will also improve the ability of the Board to oversee and govern the OPS.

The OPS will be better able to baseline existing processes, diagnose problems and opportunities, and make reasonable forecasts about the impact of future changes. This investment will also support and enable all of the other OPS enterprise priority projects.

Finally, this investment will also help the Service deliver "neighborhood policing through trust-based community partnerships that co-produces improved community safety and wellbeing. Building a police service that allows every community member and every Service member to feel and be more healthy, safe, supported and respected."

4   Options or Solutions Analysis

Option 1: Continuation of status quo

Pros	Cons
Cost of analytics	Multiple data sources, no 'one source' of truth which leads to uninformed decision making and lack of agility
	Inconsistent data and poor information quality

	Lack of alignment with strategic direction
	Lack of transparency which leads to diminished public trust
	Inefficient and labour-intensive manual processes
	Cost and sustainment of analytics solutions in the Cloud
	Inability to optimize service delivery and achieve Board and Community expectations
	Lack of clarity regarding data management and reporting ownership

Option 2: Proceed with an Information Management and Data Analytics Program

Pros	Cons
Ability to provide reliable data for OPS, OPSB & Community	Cost and sustainment of analytics solutions
Improved understanding and use of existing data to make informed business decisions	
Near real time, timely, convenient accessibility to assistance for members	
Improved employee satisfaction and engagement reducing manual tasks	
Strategic alignment and ability to course correct with greater agility	
Increased operational efficiency through more effective allocation and deployment of personnel.	

Trusted and governed data	

1 Financial and/or Non-Financial Benefits

[Instruction: Underline, at the minimum, the cost estimates for each of the recommended options designed to address the business need in terms of capital requirements, revenue and expenditure projections.

This multi-year program will be funded through a capital investment. The money will be used to increase analytic capacity and capability and is aligned with the management efficiency program. The Information Management and Data Analytics program is an enabler for the OPSB and OPS to optimize the allocation and deployment of personnel.

5 Risk Analysis

[Instruction: Highlight the risk events or conditions that can create uncertainty (positive or negative) on your ability to successfully implement your project or a variation from the expected outcomes over time (i.e. the urgency of the issue), including the risk of not completing the project and the risk of delaying the project for one year. Risks may be related to a number of factors, including operational considerations, funding/financial, staffing, exposure to claims/litigation, public safety, public confidence, service levels and working with contractors and other external parties.]

No.	Risk Description	Probability (H/M/L)	Impact (H/M/L)	Planned Mitigation	Responsibility
1.	Insufficient organizational Alignment	M	M	Work with executive and Board to align with strategy and efficiency program.	Strategy and communications
2.	Lack of management adoption	M	M	Establish change management and training	Strategy and communications

No.	Risk Description	Probability (H/M/L)	Impact (H/M/L)	Planned Mitigation	Responsibility
3.	Product development / sustainment	M	M	Establish analytic strategy and technology roadmap	Strategy and communications / Information technology services
4.	Poor data quality	H	H	Development data quality plan and mechanisms to ensure key variables are accurate.	Strategy and communications
5.	Azure Cloud Costs	H	H	OPS budgetary pressures continue to drive cost efficiencies	ITS Infrastructure Azure Stack on prem project for existing Cloudera configuration and data pipelines
6.	Change management	M	H	An internal engagement strategy	Strategy and Communications / ITS
7.	Vendor management	M	M	Executive sponsorship and project management	Strategy and Communications / ITS
8.	Protection of Personal Privacy	L	H	Conduct Privacy Impact Assessments (PIA) across all project phases	Strategy and Communications / ITS

6   Recommendation

6.1   Recommendation

[Instruction: State clearly why the organization will benefit from the recommended option]

It is recommended that the organization proceed with option two – Information Management and Data Analytics. Based on internal and external research, standard practices, desires of the Board and OPS membership, this investment is required to address the data analytics capability gap and support the strategic priorities of the Board.

6.2   Deciding Factors

7   Implementation Plan

[Instruction: Describe a high-level implementation or rollout strategy. Identify significant planning]

A great deal of effort has gone into preparing for the Information Management and Data Analytics program. As part of a previous work package through the Information Management Foundation Modernization (IMFM) Project, a change management and organization readiness assessment was documented. The report identified several requirements for the successful launch of an advanced analytics technology platform. This included: improved governance (data and analytics program), processes (process and project management) and people (team capability and capacity). This budget allocation will be used to begin addressing these go-live requirements in the report to maximize existing investments.

This is a multi-year program. The **first year** will focus on key deliverables to establish foundational IM & DA elements to begin the transformation. This includes securing a prime vendor and business partner. The vendor will conduct a current state assessment and gap analysis with a focus on program design and capacity building. This will also include an IM/IT data analytics strategy to guide future investments and budget directions. This capability and capacity will be scalable and future iterations will expand to public audiences.

Important to note that each phase of the Information Management and Data Analytics program will include Privacy Impact Assessment (PIA). The protection of personal privacy is a critical element and will form a foundational requirement for each step as this work moves forward.

Deliverable	Timeline (2022)
Current State Assessment and Business Prioritization: - Assessment of the OPS analytic technology platform. - Conduct capability and capacity gap analysis to develop recommendations.	Q1

Program design and capacity building:
 	
- Analytics vision and program governance.
- Develop performance framework (KPI), including:
  • The objectives of measurement and analysis such that they are aligned with identified information needs and objectives.
  • The measures, analysis techniques, and mechanism for data collection, data storage, reporting, and feedback.
  • Implementing the collection, storage, analysis, and reporting of the data.
  • Providing objective results that can be used in making informed decisions and taking appropriate corrective actions.
 	
- Internal engagement strategy to support change management and analytics adoption.
- Training and development program tailored to organizational roles (Analyst, Uniformed Officer, Senior Officer, Board)
	Q2

Business mapping and architecting to operating model: Develop internally focused analytic performance monitoring solution that is prioritized and aligned with strategic objectives and the operating model. - Operational (Ex: Homicide; Shooting; Assaults; Break & Enter, Collisions) - Financial (Expenditures, revenue, etc.) - Human Resources (Turnout rate; Absences, etc.)	Q3
Information Management and Data Analytics Strategy:	Q4

- Three to five-year roadmap developed and approved for 2023-2025 budget process.	

8 Performance Measurement

Describe how we will measure the success of the project and the impact of the change over time. Consider both qualitative and quantitative metrics to measure success over time.

Over the life of this program, service improvements are expected both inside and outside the organization. Benefits realization plans, including efficiency and saving forecasts, will be reported to the Board as part of the first quarter financial report.

The results of this effort will include a transformation to a more informed, intelligent organization that effectively deploys policing services in alignment with the CSWB. This will ensure a coordinated, sustainable, EDI-compliant, and integrated process for sharing information, conducting risk assessments, and creating, implementing, and evaluating integrated risk mitigation plans.

9 Documentation

[Instruction: Describe any supporting documentation prepared to enable decision-making, the documents and source should be listed here.]

10 Acceptance Sign-off

[Instruction: The business case should be signed and dated by the approving person(s), indicating whether or not the business case is approved. If applicable, approval conditions should be identified. If the business case is not approved, reasons for the decision should be documented.]

Business Case Author:

Prepared By:		**Date:**	[month][day], [year]
Signature:			

Approved By:	[name], [title]	**Date:**	[month][day], [year]
Signature:			

Approved By:	[name], [title]	**Date:**	[month][day], [year]
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