



Guidance Document: Agency Data Strategy Development

Parent Document

State of Indiana Policy: Information Quality.

Introduction

A data strategy is a practical plan for how your agency will collect, manage, share, and use data to achieve its mission. An effective data strategy turns scattered data into reliable information leaders and frontline teams can use. It aligns limited resources to mission outcomes by setting clear priorities, roles, and safeguards. This document guides you through the process of developing a comprehensive data strategy for your agency. Each section builds from assessment to strategic planning to implementation, resulting in an intentional data strategy that positions data as a key enabler of your agency's mission.

This document is organized around three key pillars of data strategy: people, process, and technology. These pillars help agencies structure their approach by clarifying who is responsible for data, how work is performed, and which tools support secure and effective use of data.

Revision History

Version	Date	Name	Revision Description	Supersedes
1.0		C. Weiland J. Stark	Initial version.	n/a

1. Overview

1.1 Purpose

This document supports State of Indiana agencies in developing a comprehensive data strategy that aligns with the State's mission to serve Hoosiers effectively and efficiently. Data strategies prioritize data initiatives to enhance service delivery, optimize operations, and elevate decision-making through evidence-based approaches.

Strategic Intent

By committing to a data-driven culture, your agency will:

- **Enhance Decision-Making:** Replace intuition-based decisions with evidence-driven analysis to improve outcomes and reduce risk.
- **Optimize Operations:** Streamline processes through better data utilization, reducing manual effort and improving efficiency.
- **Improve Service Delivery:** Use data insights to better understand constituent needs and deliver more targeted, effective services.
- **Demonstrate Value:** Provide clear key performance metrics (e.g. KPIs) and analytics that show the agency's impact and return on investment.



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- **Balance:** Balances near-term wins (such as enhancing existing reporting structures and addressing immediate data quality issues) with longer-term transformational goals [2] (such as embedding analytics into frontline operations and building a truly data-driven culture).

1.2 Audience and Scope

Before drafting a data strategy, agencies should identify their intended audience, meaning who needs to use and understand the strategy. A clear audience helps you decide how technical the language should be, how much implementation to include, and how to balance high level outcomes with specific actions.

To determine the primary audience and key secondary readers, agencies can ask:

- Who needs to approve and champion this strategy?
- Who will be responsible for carrying out the activities in the strategy?
- Who needs to understand the approach, even if they are not managing the work (for example, oversight bodies, partners, or the public?)

A data strategy may be an internal-facing document to drive agency improvement through well-communicated goals and articulated activities for staff to complete. Examples include:

- **Goals:** Improve data quality in key systems, reduce manual reporting, strengthen privacy protections.
- **Activities:** Establish data stewardship roles, standardize data definitions, implement quality checks, update policies and training.

Alternatively, a data strategy may outline your agency's methodology for managing data and related continuous quality improvement efforts. In this case, the data strategy should include necessary context and details for a lay person to understand the concepts.

Before agencies begin outlining goals and activities, they should first understand their current state and data capabilities. A structured current state assessment, such as the Data management Capability Assessment Model (DCAM) described in Section 2, helps agencies identify strengths, gaps, and realistic starting points for their strategy.

The scope of a data strategy is organized by three core pillars:

- **People (audience):** The roles and responsibilities of those who collect, manage, and use data.
- **Process:** The policies, procedures, and workflows that govern how data is collected, stored, shared, protected, and used for decision-making.
- **Technology:** The systems, tools, and platforms that host data and enable reporting, analytics, and information sharing.



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A data strategy applies to all data collected, stored, and used across your agency's programs and services, from operational systems and citizen records to performance dashboards and external data partnerships. The strategy establishes clear priorities about which data domains receive immediate attention and how different organizational levels will benefit from improved data practices.

Data Domains in Scope:

Process focused domains

- **Operational Systems:** Core business applications that support daily agency functions.
- **Key Performance Metrics:** Data used for monitoring agency effectiveness and reporting to stakeholders.

Technology focused domains

- **Citizen Data:** Information collected through service delivery and program participation.
- **External Partnerships:** Data sharing arrangements and third-party data sources that enhance agency capabilities.

1.3 Core Principles

The following foundational principles should guide every policy, process, and project within the data strategy, ensuring that all initiatives reflect the agency's values and maintain consistency over time. Your agency should try and prioritize these principles according to the agency's overarching goals and capacity. Keep in mind that this list is not exhaustive.

Strategic Principles:

- **Data as Enterprise Asset:** Treat data as a valuable organizational resource that is governed centrally for consistency and quality but used flexibly by all programs to meet specific mission requirements [1].
- **Privacy and Ethics First:** Embed privacy protection, security considerations, and ethical data use principles from initial design through deployment, ensuring that data initiatives enhance rather than compromise trust [2].
- **Accessibility and Usability:** Prioritize clarity and accessibility in all data products so that all stakeholders can leverage insights effectively, democratizing data access while maintaining appropriate controls. [1]
- **Collaborative Accountability:** Foster a culture of shared responsibility where all stakeholders understand their role in data quality and governance, with transparent decision roles, rights, and clear escalation paths defined. [1]
- **Continuous Improvement:** Commit to ongoing enhancement through regular capability assessments, stakeholder feedback loops, and iterative improvements that respond to changing organizational needs and technological capabilities [3].



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2. Preliminary Assessment

Before developing strategic objectives, it is essential to understand where your agency stands in terms of data management capabilities. If you have not done so already, conducting a capability assessment will help you identify the current strengths and areas of opportunity which assist in creating an effective data strategy catered to your agency's current needs and abilities.

2.1 Data Management Capability Assessment Model (DCAM) Overview

DCAM is a standardized framework for measuring organizational capabilities across several aspects of data management. It offers a comprehensive framework that helps agencies identify existing strengths, areas of opportunity, and readiness factors that will influence your overall approach [3].

DCAM Components

1. **Data Strategy & Business Case:** How well your agency articulates the value of data and aligns data initiatives with business objectives.
2. **Data Management Program & Funding:** The presence of dedicated resources, governance structures, and sustainable funding for data initiatives.
3. **Business & Data Architecture:** How effectively your agency designs and documents business processes and data flows to support strategic objectives.
4. **Data & Technology Architecture:** The technical infrastructure, platforms, and systems that support data collection, storage, and analysis
5. **Data Quality Management:** Formal processes and controls for ensuring accuracy, completeness, consistency, and reliability.
6. **Data Governance:** Policies, procedures, and organizational structures that guide decision making and accountability.
7. **Data Control Environment:** Security measures, access controls, and compliance frameworks that protect data assets and ensure appropriate use.
8. **Analytics Management:** Capabilities for gathering insights from data, including analytical tools and business intelligence.



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DCAM Maturity Assessment Scale

Level	Description	Characteristics
1 - Not initiated	Ad hoc, no formal approach	Handled informally by individual staff members
2 - Conceptual	Recognizing the need	Discussions have begun but no formal processes established
3 - Developmental	Creating formal processes	Some documentation and defined roles; inconsistently applied
4 - Defined	Formal processes in place	Documented procedures with defined roles; policy-driven
5 - Achieved	Fully implemented	Leadership endorsement; coordinated responsibilities; monitored compliance; dedicated funding
6 - Enhanced	Continuous improvement	Fully embedded in agency culture; regular reviews and enhancement

2.2 Conducting Assessment

Agencies should approach a DCAM assessment objectively and systematically to establish baseline measures, track progress, identify capability gaps, and identify opportunities for improvement.

Agencies wanting to conduct a DCAM assessment are encouraged to contact the Management Performance Hub (MPH) for assistance in conducting a detailed assessment. The procedure typically adheres to the following steps:

1. Initial Meeting: Meet with MPH for DCAM overview and approach discussion
2. Information Dissemination: Share DCAM information and materials with employees involved.
3. Define Expectations & Scope: Align on the assessment's purpose and scope, including goals, organizational level, assessment perspective, and stakeholder involvement
4. Identify Participants: Identify key participants, confirming an executive sponsor, DCAM facilitator, and selecting core data practitioners.
5. Assessment: Conduct a thorough DCAM Sub-Capability assessment.
6. Sentiment Analysis: Identifies resistance points, validates assessment findings, highlights leadership-practitioner disconnects, and prioritizes resource allocation to critical areas.
7. Recommendations & Discussion (Completed during Sentiment Analysis): Provides Strategic Priority Guidance that focuses initial efforts on Components with the largest gap between current and desired levels.

For agencies wanting to start with a smaller scope, MPH can also provide customized resources to meet unique needs.



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3. Strategic Planning

This section connects your mission to strategic goals and helps create meaningful objectives that will drive your agency forward. A key aspect of a strategic plan is a defined timeline in which the outlined activities are identified and are to take place. Be sure to identify a reasonable timeframe that is agreeable to your agency's stakeholders.

3.1 Data-Enabled Strategic Objectives Framework

Connecting your data strategy to the core agency mission ensures that data initiatives deliver meaningful business value [1]. This alignment provides the basis for prioritizing investments of time and resources, performance measures, and maintaining stakeholder support.

Develop three to five strategic objectives that directly connect data improvements to measurable business outcomes. Focus on the most high-impact opportunities where value is measurable within your implementation timeframe. The following three components are important in structuring your agency's objectives:

Strategic Intent: Define the specific business outcome and how it connects to your agency's mission. Focus on what the agency will achieve through enhanced data capabilities rather than technical implementation.

Example: Strengthen interagency collaboration

Data Enablement Approach: Specify how data capabilities will enable the desired outcome. Include required data, analytical capabilities, process improvements, or quality enhancements that will drive results.

Example: Implement integrated data platforms with shared standards

Success Metrics: Establish both quantitative measures where possible and qualitative indicators that showcase meaningful progress. Include leading indicators for implementation progress and lagging indicators for business impact.

Example: Cross agency project completed; shared data utilization rates



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3.2 Initiative Prioritization Framework

Systematic prioritization ensures resources focus on initiatives with the greatest strategic value relative to implementation complexity. This framework balances business impact against organizational capacity, enabling realistic implementation planning.

Evaluating Business Impact

A strategic impact assessment requires evaluation of initiatives against documented organizational priorities and operational requirements. Focus on measurable business outcomes rather than technical capabilities or perceived innovation value.

Evaluation Criteria:

- **Strategic Alignment:** Assess direct connection to agency strategic objectives, legislative mandates, and documented operational priorities established through formal planning processes.
- **Stakeholder Scope:** Evaluate extent of internal and external stakeholders affected, including program managers, operational staff, executive leadership, and constituent service delivery.
- **Operational Value:** Determine potential for measurable improvements in decision-making speed, process efficiency, service delivery quality, compliance adherence, and risk mitigation.

Evaluating Implementation Effort

Implementation effort must be assessed to determine whether initiatives can be realistically executed. Evaluating effort involves examining resources, organizational change, technical restraints, and risks.

Implementation Assessment Components:

- **Resource Requirements:** Staff time allocation, technology infrastructure needs, budget implications, external vendor support (if needed), and ongoing maintenance.
- **Organizational Change:** Changes to workflow, skill development, new policies, etc.
- **Technical Requirements:** data migration needs, security compliance, and infrastructure prerequisites.
- **Risk Factors:** Implementation timeline constraints, stakeholder resistance, technical challenges, or external risks.



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Strategic Prioritization

Resource allocation decisions should balance strategic impact against implementation feasibility while maintaining organizational capacity for operational effectiveness and competing priorities.

Prioritization Categories:

	High Impact	Low Impact
High Effort	High-impact initiatives requiring substantial organizational commitment. Ensure executive sponsorship, dedicated project management, and adequate resource allocation before implementation.	Pursue when resources permit or when supporting other strategic initiatives.
Low Effort	High-impact initiatives with manageable resource requirements. Implement immediately to demonstrate strategy value and build stakeholder confidence.	Avoid unless required for compliance obligations or as prerequisites for higher-priority initiatives.

4. Governance and Resources

Effective strategy execution requires clear organizational structures, decision-making authority, and resource allocation frameworks [2]. This section establishes the governance foundation necessary for coordinated implementation.

4.1 Decision Rights & Authority Matrix

Effective data strategy implementation depends on both clear decision rights and visible support from agency leadership. Executive sponsors provide top down direction, approve priorities, and resolve conflicts, while defined roles prevent delays and gaps in accountability. [2]. The RACI matrix establishes who is responsible for executing activities, accountable for results, consulted for input, and informed of decisions.



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Data Strategy Decision Rights Matrix (Example):

Decision Category	Data Steward	Executive Sponsor	Agency Privacy Officer	IT	Program Managers
Strategic direction and priorities	R	A	C	C	C
Resource allocation and budget	C	A	I	C	R
Data quality standards and policies	A	I	C	C	R
Privacy impact assessments	C	I	R,A	I	C
Technology architecture decisions	C	C	I	R,A	C
Data sharing agreements	C	C	A	C	R
Performance monitoring and reporting	A	I	C	C	R
Policy compliance enforcement	R	C	A	C	C

RACI Legend:

- **R** (Responsible): Executes the work and activities
- **A** (Accountable): Ultimately answerable for completion and success
- **C** (Consulted): Provides input and expertise before decisions
- **I** (Informed): Kept updated on progress and decisions

4.2 Resource Planning

Strategic success depends on realistic assessment of organizational capacity and support requirements [3]. Evaluate the following areas when developing your implementation approach.

- **Data Steward Capacity:** Confirm that Data Steward responsibilities have been formally established in accordance with [State of Indiana Policy: Information Quality](#). Then determine what percentage of the Data Steward role can realistically be dedicated to data strategy coordination, considering existing responsibilities and the scope of planned initiatives.



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- **Support Requirements:** Identify additional support essential for success, including technical expertise, subject matter knowledge, administrative assistance, and training support for organizational change.
- **Executive Engagement:** Assess the level of executive sponsorship required for strategy success. Strategies with broader scope or significant process changes typically require more active executive involvement for resource decisions and barrier removal.
- **Organizational Dependencies:** Identify which stakeholders and organizational functions must be engaged for success. Consider both formal reporting relationships and informal influence networks that could impact implementation.
- **Change Management Considerations:** Evaluate organizational readiness for required changes. Agencies with limited change experience may need additional support and longer implementation timeframes.

5. Success Measurement

Measuring success requires both quantitative metrics that demonstrate business value and qualitative indicators that track organizational change and capability development [1]. This framework enables data-driven strategy management and continuous improvement.

5.1 Strategic Performance Tracking

Strategic metrics track progress toward the business objectives established in Section 3 and provide accountability for strategy outcomes. These metrics should demonstrate concrete value creation rather than activity completion.

Monitor the business outcomes your data strategy aims to achieve rather than the activities undertaken to achieve them. Focus on results that demonstrate tangible value to agency mission and strategic priorities.

Business Impact Indicators:

- **Decision-Making Quality:** Metrics showing improved outcomes from data-driven decisions
- **Operational Efficiency:** Measures of process improvements, cost reductions, and productivity gains
- **Service Delivery:** Customer satisfaction, response times, and service quality indicators
- **Risk Reduction:** Compliance improvements, error rates, and risk mitigation effectiveness

5.2 Implementation Progress & Continuous Improvement

Track both capability development and organizational change to ensure strategy implementation stays on course and adapts to changing conditions. [3]



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Capability Development Progress:

- **Monthly:** Review initiative completion, resource utilization, and immediate obstacles
- **Quarterly:** Assess capability maturity improvements and strategic objective progress
- **Annually:** Comprehensive strategy review and adjustment based on results and environmental changes

Success Indicators:

- **Process Maturity:** Implementation of formal processes and systematic approaches

Staff Engagement: Training completion, skill development, and adoption rates

- **Stakeholder Satisfaction:** Feedback from executives, users, and program managers
- **Technology Utilization:** System usage, integration success, and performance improvements



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6. References

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5. *State of Indiana Policy: Information Quality*.



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