



Gartner®

# The IT Roadmap for Data and Analytics

Excerpt

## **How do successful organizations implement data and analytics initiatives to drive differentiation and growth?**

Today, business success and digital initiatives are fueled by data and analytics strategies that scale with business ambitions. According to Gartner experts, “the need for more accurate contextual awareness enabled by capabilities to scenario plan, optimize, prioritize and focus investments are now priorities.” Agile data and analytics capabilities are essential to build sense-and-respond capabilities and are leading organizations to unprecedented cycles of rapid innovation to meet the new requirements.

From our expert research and interactions with thousands of companies in a wide range of industries, we've compiled smarter data and analytics best practices into a customizable roadmap. Your organization can use this roadmap to understand the key stages, resources and people required to plan and execute an effective data and analytics initiative.

### **Some of the top questions of the data and analytics initiative are:**

- 1** Is the scope of the initiative strategic, operational or governance?
- 2** What are the key stages and activities?
- 3** Which leaders and teams need to be involved?

## **What are the key stages?**

This best-practice insight is distilled from interactions with clients who have successfully implemented data and analytics initiatives. This roadmap shows the sequence of objectives and desired outcomes and is useful for aligning all stakeholders.

A few key milestones and a sample of associated Gartner resources are highlighted below, but the full roadmap will include complete details of all milestones and resources for each stage.



## Create vision and strategy

Establish stakeholder buy-in for the data and analytics program

### Selected tasks include:

Understand key business priorities and how data and analytics aligns with delivering business value

Establish a current-state baseline to serve as a foundation for continuous improvement

Identify opportunities to monetize and exploit data assets via use cases from other enterprises

Design an agile data and analytics strategy that responds to a changing landscape of business and technology opportunities and risks

+ more

### Sample of associated Gartner resources include:

- Analyst inquiry: Engage with an analyst on deriving business value of data and analytics
  - IT Score for CIOs
  - Research: Dare to Dream! Give Your Data and Analytics Programs a Mission to Transform Business and Improve the World
  - Consultation by phone: Introduction to the Gartner [BuySmart™](#) process and review of strategic, financial and technical requirements to identify where spend management is needed
- + more



## Establish operating framework

Develop a balanced operating model with enhanced operational efficiencies

### Selected tasks include:

Identify the roles and competencies and target the operating model needed to create a data-driven organization

Create a two-tiered organizational model: centralized team working with decentralized teams

Design the architectural framework for the data and analytics platform

Create distinct stewardship bodies to oversee strategic concerns versus tactical data solution imperatives

+ more

### Sample of associated Gartner resources include:

- Research: To staff key activities, data and analytics leaders should focus on the new operating model for digital
- The New IT Operating Model for Digital
- Toolkit for Chief Data Officer Job Description
- Analyst inquiry: Engage with an analyst to discuss maturity model or data and analytics programs
- Data & Analytics Sample Strategy Presentation

+ more



## Establish governance

Implement governance standards and procedures for data risk mitigation structure

### Selected tasks include:

Establish consistent data definitions standards and define governance policies

Develop data management and integration framework to meet emerging challenges

Measure accuracy, non-duplication, competitiveness, relevance and timeliness of data

Develop framework for resisting data hoarding, preventing data hijacking and combating privacy shaming

+ more

### Sample of associated Gartner resources include:

- Analyst inquiry: Understand how organizations can apply analytic capabilities to improve performance and optimize decision making
  - On-site workshop: Best practices for implementation of a governance program
  - Research: Understand tools, data models and data warehouse/lake that are used in both business intelligence and analytics scenarios
  - Unified Toolset for Business Intelligence and Analytics
- + more



## Continuous intelligence

Demonstrate quick wins derived through data-driven insights

### Selected tasks include:

Integrate data and analytics capabilities of digital business platforms and ecosystems to support enterprise growth, speed and agility

Derive quick wins by equipping business users with analytic models to understand present realities and predict future states

Automate process of visualizing and analyzing data by using augmented analytics

+ more

### Sample of associated Gartner resources include:

- Facilitated networking: Meet with a peer member
- Analyst inquiry: Create a narrative linking program outcomes to corporate goals
- Consultation by phone: Review the entire engagement and address future state and other critical priorities

+ more



## Refine and progress

Continuously improve and enhance data and analytics maturity

### Selected tasks include:

Track metrics: Seek feedback to assess and improve program effectiveness

Reassess data and analytics strategy in light of emerging technologies such as the Internet of Things, artificial intelligence, machine learning, etc.

Devise new enterprise processes roles and skills: Plan is informed by maturity, culture and risk appetite

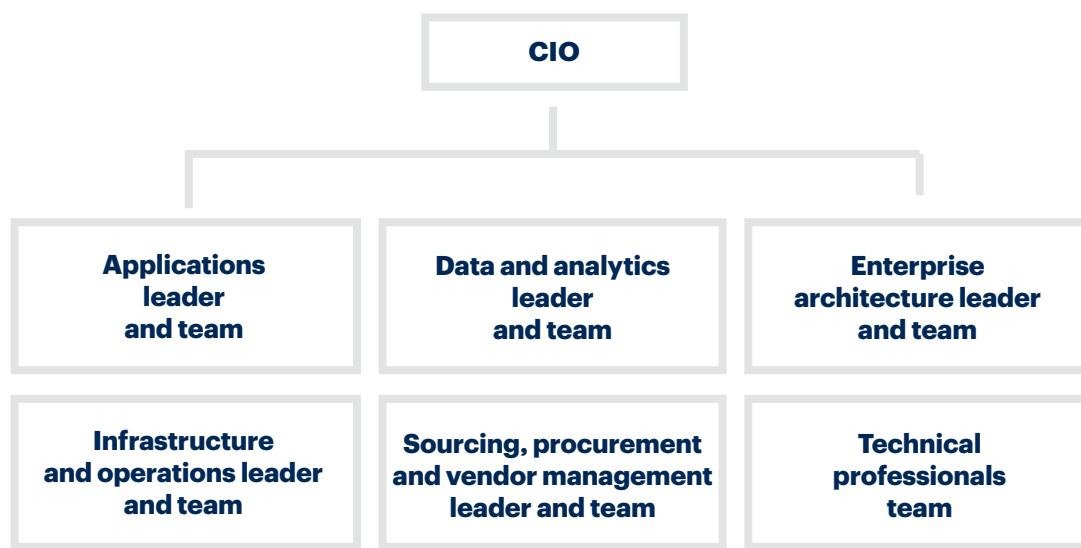
+ more

### Sample of associated Gartner resources include:

- Research: Learn about new approaches to managing data and analytics programs and how leaders can master them
  - Use Bimodal Enterprise Information Management for Data and Analytics Program Innovation
  - Research: Rewire organizational culture for an AI-infused future
- + more

## Who needs to be involved?

The most successful companies establish cross-functional teams for their data and analytics initiatives. We have outlined the recommended functions to involve and their roles to ensure the best success in hitting the milestones.



## What are the critical roles the team plays?

**CIO:** Plays a part in the progressive data movement by creating a collaborative working structure with the strategic document outsourcing (SDO) and chief analytics officer with clear responsibilities for each group; allows collection of data from sources and helps data and analytics teams establish infrastructure for the data and analytics domain

**Applications leader and team:** Identify data assets in application logs or transactional databases that can be used for business value; coordinate with enterprise architecture (EA) teams to improve data access and interactivity with API-driven applications

**Data and analytics leader and team:** Set the foundations and day-to-day governance of the data, working aligned with the IT and business teams; create data literacy program and work with leaders on defining vision and strategy

**Enterprise architecture leader and team:** Consider information and data architecture as part of the overall EA and not as an afterthought

**Infrastructure and operations leader and team:** Establish and maintain new types of assets related to data and analytics and budgeting

**Sourcing, procurement and vendor management leader and team:** Work with data and analytics leaders to allow for faster experimentation with third-party vendors while the infrastructure is being decided on and revised

**Technical professionals team:** Plan a data and analytics technical roadmap, design the data pipeline and stores, select tools and vendors, and architect and implement data and analytics solutions

## Client success story: Data at the Core and the Power of Analytics to Transform

### Mission-critical priority

Watercare undertook a large, accelerated strategic transformation effort focused on people, which included its workforce and customers, to deliver changes across technology, process and data to better anticipate and respond to customer needs.



### How Gartner helped

Gartner was an independent voice guiding the Watercare team of executives through the planning and execution stages, including:

- Data strategy support
- Asset management strategy guidance
- Planning workshops with experts
- Strategy execution and delivery of plan advice
- Future-looking research, thought leadership materials and tactical delivery elements
- Best-in-class templates or toolkits
- Third-party partner negotiation strategy and relationship planning
- Gartner conferences for tactical advice, future agendas and networking



### Mission accomplished

By working with Gartner, Watercare was able to:

- Increase customer centricity and service
- Optimize business with technology, increased organizational pace and agility
- Use real-time data for risk mitigation and fraud detection
- Drive decisions with data, data visualization and predictive insights



**Contact us to explore the complete IT Roadmap for Data and Analytics**

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**Gartner roadmaps are designed to help CIOs and IT leaders successfully execute new initiatives and reduce time and costs. Our suite of roadmaps provides extensive coverage of IT leaders' top priorities, such as:**

- Data and Analytics
- Digital Transformation
- Security
- Data Strategy
- Cloud Strategy
- Maturing Information Security
- Cloud Migration
- IT Organizational Design
- Customer Experience
- ERP Transformation

**Explore additional resources to learn more about data and analytics**

→ [100 Data and Analytics Predictions Through 2024](#)

→ [Data and Analytics for Digital Transformation](#)

→ [Data and Analytics Leaders: Rewire Your Culture for an AI-Augmented Future](#)