The IT Roadmap for Data and Analytics

Excerpt
How do successful organizations use data as an asset to drive market differentiation and growth?

Today, business success and digital initiatives are fueled by data and analytics strategies that scale with business ambitions. “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 this initiative are:

1. Is the scope of the initiative strategic, operational or governance?
2. What are the key stages and activities of a data and analytics initiative?
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 map 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

Set objectives and build the business case

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 changing landscape of business and technology opportunities and risks

Sample of associated Gartner resources include:

• Analyst inquiry: Engage with an analyst on deriving business value of data and analytics

• IT Score for CIOs

• 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

Design and adjust team structure

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

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

Set up the data management and governance 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 if data
- Develop framework for resisting data hoarding, preventing data hijacking and combating privacy shaming

Sample of associated Gartner resources include:

- Analyst inquiry: Collaborate with an analyst to understand how organizations can apply analytic capabilities to improve performance and optimize decision making
- On-site workshop: Workshop on best practices for implementation of a governance program
- Research: Use this research to 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
Use data to drive decisions

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

Sample of associated Gartner resources include:

- Facilitated networking: Meet with a peer member regarding
- Risk to Avoid in Data Governance Implementation
- Consultation by phone: Review the entire engagement and address future state and other critical priorities

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Refine and progress
Increase 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

Sample of associated Gartner resources include:

- Research: Review research to know 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: Use research to rewire organizational culture for an AI-infused future
- Data and Analytics Leaders: Rewire Your Culture for an AI-Augmented Future

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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.

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.

Application 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.

Enterprise architecture leader and team

Consider information and data architecture as part of the overall EA and not as an afterthought.

Information and operations leader and team

Establish, maintain and budget for new type of assets related to data and analytics.

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.
Client Impact Story: Data at the Core and the Power of Analytics to Transform

Most 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
Conclusion

Whatever your initiative, Gartner experts develop unbiased research and toolkits to help CIOs and their teams achieve their mission-critical initiatives.
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