Adopting Bimodal or Other Modes of Operation Primer for 2017

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To meet the demands of digital business, CIOs and other IT leaders need to prepare their business to innovate and transform the business at speed. A bimodal approach delivers the required combination of innovation and agility, as well as predictable, reliable delivery of core business capabilities.

Scope

The bimodal initiative covers the enabling capabilities, critical success factors and transformation needed to combine reliable delivery with rapid iterative exploration required for digital business.

This initiative includes:

- Leading a bimodal enterprise
- Initiating, scaling and synthesizing a bimodal capability in the enterprise
- Changing the organization’s culture and its approach to metrics; teaming; collaboration; stable business processes such as planning, budgeting and procurement; and the impact on the organization’s reporting lines
- Adapting governance and risk management mechanisms to reflect a differentiated, bimodal approach, including the PMO, investment management and oversight, benefits realization
- Adopting iterative approaches to solution development and delivery to better manage uncertainty, innovation and increase the delivery cadence
- Developing an adaptive approach to sourcing to facilitate flexibility by working with a wide range of vendors and service providers — from small to big, from innovation-led to transactional
- Catalyzing technology-enabled innovation, and developing and sustaining a formalized approach to innovation management
- Renovating the IT core to prepare it for the digital transformation, which would include opening up the legacy environment with an SOA and APIs, rationalizing and modernization of the application portfolio, and implementing a postmodern ERP strategy
Bimodal is the practice of managing two separate but coherent styles of work: one focused on predictability; the other on exploration. Mode 1 is optimized for areas that are more predictable and well-understood. It focuses on exploiting what is known, while renovating the legacy environment into a state that is fit for a digital world. Mode 2 is exploratory, experimenting to solve new problems, optimized for areas of uncertainty. These initiatives often begin with a hypothesis that is tested and adapted during a process involving short iterations, potentially minimum viable product. Both modes are essential, create substantial value and drive significant organizational change, and neither is static. Marrying the Mode 1 predictable evolution of products and technologies with the Mode 2 exploration at speed of the new and unknown is the essence of an enterprise bimodal capability.

Becoming a bimodal enterprise is challenging in that it requires instilling a very different culture. Successful organizations tend to go through two evolutionary stages. Stage 1, initiating bimodal, focuses on forging a Mode 2 identity with what might be off-the-books projects. This often leads to inconsistent change and to collaboration struggles with the traditional (Mode 1) IT group while things become aligned. The focus shifts to establishing repeatable, scalable value creation in Stage 2, scale. Significant changes are made in Mode 2 to normalize and scale its output, and in the Mode 1 process, technology and mindset to ensure it can absorb the rate of change and value being produced in Mode 2. We also posit a final stage — Stage 3, synthesis — in which the two modes working smoothly together become business as usual.

Digital business activities require bimodal business. Bimodal is thus relevant to many leadership roles, from the CIO, COO, CFO, to those involved in leading infrastructure and operations.

Top Challenges and How Gartner Can Help

Digital business is a sharp poke in the ribs for all organizations. Emerging new business models, rapid technology evolution and turbulent markets creating a changing landscape of winners and
losers demand strategic and transformational enterprise responses. These rapid changes create chaos and uncertainty for all those responsible for designing and operating the business including product/service management, supply chain, manufacturing and customer service, while simultaneously striving to balance business stability with incorporating digital innovations into their operations.

To help the enterprise remain viable and competitive in the age of digital business, CIOs and other enterprise leaders will have to address the challenges of transforming to bimodal. Our research shows that the top key challenges include creating a bimodal culture and enabling behaviors; scaling an initial bimodal capability to meet demand and complexity needs; establishing innovation and innovation management; and renovating the IT core.

How can enterprise leaders create the optimal culture and behaviors to enable bimodal?

Analysis of the responses to the 2016 Gartner CIO Survey highlights a number of the key challenges, most notably adapting the enterprise’s culture (see “The Most Common Barriers to Adopting Bimodal, and How to Overcome Them”). For 21% of the responding enterprises, the bimodal and the existing business cultures were the primary limitation to implementing bimodal. This parallels our observations from client discussions that culture is the key limiting factor in extending — and ultimately scaling — a bimodal capability.

Becoming bimodal means explicitly embracing areas that are uncertain, with unknown outcomes making it hard for conventional enterprises to institutionalize. Further, the development of a Mode 2 style of work requires management to relinquish explicit control, which is always difficult. Although this represents a significant shift for most organizations, organizations that successfully transform to bimodal develop a culture that prizes iterative, exploratory, collective and innovative approaches as part of their Stage 1 and Stage 2 efforts. These organizations make the shift from command-and-control structures and behaviors to a more autonomous, collaborative approach with multidisciplinary, self-directed teams that have significant decision-making rights delegated to them. This, in turn, changes the organization’s approach to trust, and flattens the organizational structure, delegating more decisions to more people.

Bimodal is very experiential. People need to touch it, feel it and start to live it to build understanding. As such, the key to success is starting small, building buy-in and support, and gathering momentum within both the Mode 1 and Mode 2 teams.

Planned Research

- New Bimodal Cultural Norms and Normalizing Them Within the Enterprise
- Appropriate Governance and Risk Practices and Enterprise Change Implementation
- Culture Hacks That Can Spark Change on the Ground
- Performance Management Changes in a Bimodal Organization
- Metrics Needed for an Agile World
How can the bimodal capability scale to meet increasing demand and take on larger, more complex programs?

Most organizations start their bimodal journey with the development of a Mode 2 capability that is typically focused on relatively simple "island" projects involving little or very simple interdependencies with Mode 1 and the existing application portfolio. As organizations build understanding, confidence trust, and develop somewhat mature selective capabilities, they begin to take on larger and/or more complex programs. As they invest in a larger Mode 2 capacity, they begin to look at scaling the Mode 2 capability.

Scaling bimodal requires that the enterprise tackle issues such as:

- Developing a business and digital strategy and governance framework to foster greater agility
- Renovating the IT core
- Developing staff by investing in skills, methods and management training
- Obtaining funding for projects with a different risk and uncertainty profile from those of traditional IT projects
- Establishing leadership, shared goals, outcome-oriented metrics, and reward and recognition approaches to promote collaborative behaviors among the differing teams
- Evolving processes by which Mode 2 projects are developed and successful ones are transitioned to the Mode 1 team to easily scale and industrialize the solutions

Planned Research

- Scaling Bimodal From a Leadership, Governance and Management Perspective
- How Bimodal and Pace Layers Fit Together
- Security in a More Agile, Bimodal IT World
- The Impact of Bimodal IT on Security Governance
- Application Governance in a Cloud World
- Application Organizational Design Change in a Bimodal World
What role does innovation management play, and how do you get an organization to innovate effectively?

During the last recession, companies focused on achieving operational excellence. As business leaders sought to optimize and drive out unnecessary costs, a culture of risk aversion emerged. Fast-forward to today, and CIOs see a diminishing return on their operational contributions; they need to bump up their game on innovation and business transformation.

CIOs need to inspire innovation. They need to develop a culture that encourages people to bring new ideas to the table, and a continuing process to evolve those ideas through prototype and implementation or to learn why they did not continue.

To build a sustainable innovation process and culture, CIOs face the following challenges:

- Articulating innovation goals and designing programs that will deliver on those goals
- Enabling a culture of innovation
- Turning innovation into a discipline through repeatable processes and practices

**Planned Research**

- Establishing an Innovation Center
- Centralized Versus Decentralized Approaches to Innovation
- Using Corporate Venture Capital Models to Drive Innovation
- Partnering and Open Innovation

What does renovating the IT core mean, and how does it get done?

When organizations initially create a Mode 2 capability, they can create great new things quickly. But the legacy Mode 1 environment soon begins to constrain what the Mode 2 team initiatives can accomplish in the enterprise. Some hard decisions need to be made to renovate the legacy environment and enable bimodal to continue delivering value to the enterprise. And as bimodal capabilities approach the need to scale, one of the main limiting factors will be the speed at which the enterprise can pursue, fund and prioritize that renovation.

Renovating the IT core comprises a number of parallel work streams, which can include:

- Modernizing application architecture and infrastructure to support modern agility, velocity and scalability requirements, as well as reducing application complexity
- Modernizing integration strategies and infrastructure to build a pervasive, agile integration capacity that empowers digital business outcomes
- Application rationalization to modernize the application portfolio and associated management practices
Building infrastructure agility to address the demands of Mode 2 project integration and execution

Implementing a postmodern ERP strategy to balance the benefits of vendor-delivered integration against business flexibility and agility

Adopting new methodologies to software development, infrastructure and service management

**Planned Research**

- 2016-2017 Application Strategy Roadmap
- Application Modernization Defined
- Continuous Experience: The Architecture of Cross-Channel User Engagement
- Best Practices in Adopting Microservices
- Strategic Architectural Principles for Digital Business and the IoT
- Selecting the Best HTAP Style to Address Your Business Requirements
- Architecture and Platform Patterns for Bimodal
- Best Practices for Bimodal and APIs
- The Rise of the API Economy
- The Use of Cloud and Hosting for Bimodal IT
- I&O Must Combine ITIL and DevOps to Deliver Business Value for Bimodal IT
Related Priorities

Table 1. Related Priorities

<table>
<thead>
<tr>
<th>Priority</th>
<th>Focus</th>
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<tbody>
<tr>
<td>Building a Sustainable Innovation Process and Culture</td>
<td>The building a sustainable innovation process and culture initiative helps CIOs play a leadership role in driving innovation within their teams and across the broader enterprise.</td>
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<tr>
<td>Modernizing Application Architecture and Infrastructure</td>
<td>Application architecture and infrastructure provide the foundation for application systems. They impact your applications’ agility, usability, scalability and robustness.</td>
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<td>Infrastructure Agility</td>
<td>The infrastructure agility initiative focuses on Mode 2 of bimodal IT — which tends to be exploratory, and possibly transformative — as the foundational IT platform for digital businesses.</td>
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<td>Application Strategy and Governance</td>
<td>The application strategy and governance initiative comprises key disciplines that application leaders, CIOs and enterprise architects must embrace as they evolve their organizations.</td>
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<td>Risk Management Program</td>
<td>Risk management is the strategic discipline of assessing, prioritizing, monitoring and controlling the impact of uncertainty on objectives.</td>
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Source: Gartner

Suggested First Steps

- Understand how to get started with bimodal by reading "Kick-Start Bimodal IT by Launching Mode 2."
- Read "Three-Step Roadmap to Bimodal Adaptive Sourcing: Leverage Digital Urgency to Be an IT Broker."
- Read "Seven Steps to Start Your DevOps Initiative."
- Read "The End of the Waterfall as We Know It."
- Review the two special reports on bimodal, and deepen your understanding of what it is and is not. See "How to Achieve Enterprise Agility With a Bimodal Capability" and "Deliver on the Promise of Bimodal."
- Read "If You Want to Innovate More, Start With Management Innovation."
- Read "Applications Have Changed; Why Does That Matter?"

Essential Reading

- "How to Achieve Enterprise Agility With a Bimodal Capability"
- "Deliver on the Promise of Bimodal"
- "Infrastructure and Operations Leaders Key Initiative Overview"
- "Transforming ERP to Postmodern ERP Primer for 2016"
- "Shift On-Premises Offerings to Cloud-Based SaaS Primer for 2016"
- "Modernizing Application Development"
- "Data Center Modernization Primer for 2016"
- "Executing on Business Transformation While Building a Highly Adaptive Enterprise Primer for 2016"
- "Modernizing Integration Strategies and Infrastructure Primer for 2016"
- "How to Make APIs a CEO and Board Priority"
- "The 12 Principles of Application Architecture for Digital Business and IoT"
- "How to Determine a Preferred Converged or Hyperconverged Integration Style"
- "Rethinking Storage in the Era of Bimodal IT"
- "Strengthen the Three Pillars of Innovation in Your Organization: Purpose, People and Process"
- "A Maturity Model for Innovation Management"
- "Overcoming Innovation’s Measurement Problem"
- "Use Six Principles of Resilience to Address Digital Business Risk and Security"
- "Digital Business Forever Changes How Risk and Security Deliver Value"
- "Market Trends: Prepare Now to Smooth the Inevitable Transition to a Subscription-Based Business Model"
- "How Can Security Leaders Develop an Effective Information Security and Risk Management Organization?"
- "Should Your Enterprise Deploy a Software-Defined Data Center?"
- "When IT Leaders Should Select Private Over Public Cloud Services"
- "Virtual Machines and Containers Solve Different Problems"
- "Focus on Application Agility to Deliver Change With Velocity"

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