Enterprise Architecture Primer for 2022

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Initiatives: Enterprise Architecture

Digital demands have accelerated, prompting a marked increase in technology investments beyond corporate IT and also creating new disruption risks. In 2022, enterprise architecture leaders need to enable distributed delivery across the enterprise, while ensuring organizational resilience.

Scope

This initiative covers enterprise architecture (EA) practices that support targeted business outcomes and critical business priorities, such as digital acceleration and organizational resilience.

In addition to EA and technology innovation (TI) leaders, including CTOs and business leaders, other IT roles involved in this initiative are:

- Chief information officers (CIOs)
- Applications and software engineering leaders
- Data and analytics leaders

Topics in this initiative include:

- Digital Business Design and Strategy: Work with business leaders to design business and operating model components that can adapt quickly to new customer expectations, disruptive trends, and emerging threats and opportunities.
- Distributed Decisions and Digital Enablement: Empower business technologists, product and fusion teams across the enterprise to make smarter digital investment and delivery decisions on their own.

Innovative Digital Foundations: Orchestrate resources and partner with IT teams to build shared digital platforms that are composable, enable autonomy and are embedded with architecture guardrails to ensure resilience and adaptability.

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Analysis

Figure 1: Enterprise Architecture Overview

Enterprise Architecture



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The world is poised to emerge from the pandemic, transformed. Many industry verticals have seen seismic shifts in how, where and by whom work gets done; how producers build products; how consumers find and consume them; and how corporate and government entities collaborate with each other. These shifts are enabled by, and further fuel, an accelerated rate of digitalization. The 2021 Gartner CIO Survey shows that 83% of enterprises are seeing consumer demand for digital products and services increase. ¹ Meanwhile, the 2021 Gartner CEO and Senior Business Executive Survey also shows growth as the top strategic priority for the next two years. ²

This surge in demand creates new urgency for CIOs and their teams to deliver more, better, faster. However, corporate IT functions cannot possibly grow fast enough to deliver against these heightened expectations on their own. This is why we see the rise of business-led IT investments (see Quick Answer: The Difference Between Shadow and Business-Led IT, and Why It Matters) across the enterprise.

Gartner's 2020 Digital Friction Survey shows that 41% of employees outside IT are now business technologists who produce technology solutions themselves, whereas IT teams make up only 10% of all employees. ³ Furthermore, organizations that successfully enable their business technologists are 2.6 times more likely to achieve their digital business goals. The 2022 Gartner View from the Boards of Directors Survey also shows that 40% of boards have moved more funds into business functions for digital investment. ⁴ Digital investment and delivery is thus increasingly distributed (moving away from the center) and more democratized (business technologists have autonomy to make digital decisions).

However, today's business reality continues to be defined by disruption, rapid change and uncertainty. Business leaders cannot afford to deprioritize resilience, especially since distributed enterprises can be more prone to volatility. We refer to this combination of imperatives — driving business growth through digitalization, while ensuring organizational resilience — as resilient growth.

In any given year, EA helps clarify targeted business outcomes, formulate and translate business strategy, and enable its effective execution. In 2022, as enterprises strive for resilient growth, EA leaders must focus on supporting democratized and distributed delivery, while architecting the business for resilience to both internal and external disruption.

Topics

In 2022, EA leaders must help strategize and design business and operating models that empower democratized and distributed teams in their pursuit of resilient growth. This requires them to evolve their remit and activities in three ways:

- Build emerging skills in areas of digital business design to support new business value creation
- Adapt governance models and scale back EA's tactical involvement to create delivery autonomy
- Drive foundational digital investments toward more composable architectures (see Client Question Video: What Does It Mean To Be 'Composable'?)

Our research in this area addresses the following topics:

Digital Business Design and Strategy

EA must help design business and operating model components to be technology-enabled, data-driven and more modular — i.e., more composable to meet both enterprise and distributed product-level needs. Use business architecture to shape the future-state business vision, strategy and roadmaps that achieve targeted growth goals. Furthermore, EA practitioners need emerging skills, such as value-stream mapping and ecosystem modeling, to help business partners pursue innovation and growth opportunities.

Questions Your Peers Are Asking

- How do enterprise architects inform, support and validate the formulation of business strategy to help achieve business outcomes?
- How can EA facilitate the design of, or changes to, business and operating models to achieve composability and drive business transformation outcomes?
- How can EA help the enterprise adapt and respond to emerging threats and opportunities, and withstand disruption in their business ecosystems?
- What business architecture practices can be leveraged to shape strategic decisions, build investment plans and roadmaps for successful strategy execution?

Recommended Content

• Some recommended content may not be available as part of your current Gartner subscription.

- Predicts 2021: Enterprise Architecture Designs the Composable Organization
- Better Digital Business by Design With the Business Architecture Landscape
- How Executive Leaders Can Prompt Innovative Business Model Creation
- 3 EA Tactics for Responding to Digital Opportunities and Threats
- Model Your Ecosystem to Identify the Partners Needed for Digital Business

Planned Research

- Predictions for EA for 2022 and beyond
- EA as an internal management consultancy for a composable business
- Building ecosystem partnerships with business architecture
- Four steps to build better roadmaps
- How can EA enable OKRs in a distributed organization

Distributed Decisions and Digital Enablement

EA must extend its internal management consulting beyond senior executives to business technologists, product and fusion teams. These folks need tailored data and architectural guidance to make decisions that fulfill both local (growth) and enterprise (resilience) interests. Reposition EA as a set of services to coordinate across product-oriented operating models, enable self-service through adaptive governance, coach the use of iterative and experimental work practices, and guide scaled agile and continuous delivery.

Questions Your Peers Are Asking

- How can EA enable product lines and fusion teams distributed across the enterprise to make sound digital investment decisions?
- How can EA establish and continually evolve architectural guardrails that are easy to follow, create more autonomy and advance the enterprise toward target-state architecture?
- What techniques and practices can architects use while facilitating product or solution design to drive successful innovation (e.g., design thinking and lean startup)?
- What best practices can architects use to guide scaled agile and continuous delivery of digital initiatives across the enterprise?

Recommended Content

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- Adaptive EA Governance: 4 Styles That Enable Digital Delivery
- Quick Answer: How Must EA Governance and Assurance Change to Support Product Management?
- Case Study: Prioritizing EA Support for Business-Led Architecture (Maersk)
- Case Study: New Architecture Domains for Scaled Agile (Citizens)
- Case Study: Business User-Centric Approach to Information Architecture (Globo)

Planned Research

- Four archetypes of distributed and democratized operating models
- Architecture design advisory models for a democratized IT landscape
- Rethinking federated architecture models for distributed organizations
- Evolving role of architecture in scaled agile frameworks
- Hype Cycle for Enterprise Architecture, 2022

Innovative Digital Foundations

Modern digital foundations — such as continuous integration/continuous deployment (CI/CD) toolchains, low-code platforms and APIs — are needed to power digital work (both production and consumption) across the enterprise. Architect these foundations to be composable (see Becoming Composable: A Gartner Trend Insight Report) — that is, business entities (e.g., capabilities, products, services and systems) partitioned into modular building blocks that are easily configured into combinations to serve different business contexts. These foundations enable teams to rapidly innovate and adapt to disruptions, while ensuring resilience.

Questions Your Peers Are Asking

- How does EA steward investments to build composable digital foundations that drive resilient growth for the enterprise?
- How can EA help co-create resources that comprise the digital foundations of an enterprise, such as modern technology platforms and composable reference architectures?
- How can EA assess and select tools that best help envision, model and plan for the future of the enterprise, and incorporate them into the digital foundations?

Recommended Content

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- Architect for Adaptability to Build a Resilient Enterprise
- Magic Quadrant for Enterprise Architecture Tools
- Critical Capabilities for Enterprise Architecture Tools
- Ignition Guide to Building Reference Architectures for a Composable Business
- Design and Build the New Digital Foundations

Planned Research

- Making reference architectures consumable by nonarchitects
- Designing a minimum viable architecture for distributed enterprises
- Supporting composability with modern integration architecture
- Magic Quadrant and Critical Capabilities for EA tools
- Beyond EA tools: The ecosystem of tools for enterprise architects

Suggested First Steps

- Avoid the 13 Worst EA Practices and Ensure Your Success in the Digital Business Era
- IT Score for Enterprise Architecture and Technology Innovation
- Stage Planning a Business-Outcome-Driven Enterprise Architecture
- The Enterprise Architect's First 100 Days
- Presentation: The New EA Operating Model for Digital

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Essential Reading

- Leadership Vision for 2022: Enterprise Architecture
- Hype Cycle for Enterprise Architecture, 2021
- The Future Direction and Evolution of Business-Outcome-Driven Enterprise Architecture
- 8 Best Practices for Creating High-Impact Business Capability Models
- Case Study: Interconnected Business Capability Mapping (Medtronic)
- EA's Role in Product Line Management
- Use Value Streams to Drive Customer Centricity, Design Services and Operating Models, and Technology Platforms
- EA's Role in Building a Data-Driven Organization
- Enterprise Architects Combine Design Thinking, Lean Startup and Agile to Drive
 Digital Innovation
- Enterprise Architecture Activity Guidebook

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Tools and Toolkits

- Toolkit: Enterprise Architecture in a Box 2.0
- Toolkit: Determining the Scope, Focus and Work Allocation Mix for Your EA Program
- Tool: Business Architecture Activities and Deliverables Close the Strategy-to-Execution Gap
- Toolkit: Workshop for Constructing an Initial Business Capability Model
- Toolkit: How to Create Business Scenarios That Drive Digital Disruption Innovation
- Toolkit: Enterprise Architecture Value and the I&T Operating Model Optimizing Patterns
- Ignition Guide to Rebooting the Enterprise Architecture Practice
- Ignition Guide to Designing and Managing EA Activities as Products
- Ignition Guide to Building Architecture Communities of Practice
- Ignition Guide to Building an Architectural-Thinking Training Program for Non-Architects

Evidence

¹ Where Next? Technology Leadership in a World Disrupted: Key Insights From the 2021 Gartner IT Symposium/Xpo Keynote

³ Democratize and Distribute Technology Work Across the Entire Enterprise to Accelerate Digital Business

Document Revision History

Enterprise Architecture Primer for 2021 - 7 January 2021

Enterprise Architecture Primer for 2020 - 24 January 2020

Enterprise Architecture Primer for 2019 - 5 February 2019

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² 2021 Gartner CEO Survey: The Year of Rebuilding

⁴ Roadmap to Renewal: The 2022 Board of Directors Survey

Enterprise Architecture Primer for 2019 - 5 February 2019

Build a World-Class EA Discipline Primer for 2018 - 19 April 2018

Build a World-Class EA Capability Primer for 2017 - 23 January 2017

Build a World-Class EA Capability Primer for 2016 - 20 January 2016

Related Priorities

Initiative Name	Description
EA and Technology Innovation Leaders	This initiative helps CTOs, EA and technology innovation leaders to build effective teams to drive innovation and architect the composable business to achieve adaptability and resilient growth.
Technology Innovation	Technology innovation teams must continuously monitor emerging technologies and trends, while applying combinatorial innovation to discover, assess and prioritize them, to achieve resilient growth.
CIO: Strategy, Governance and Operating Models	This initiative focuses on adaptive strategy and governance to drive continual evolution of operating models to deliver business outcomes while fostering enterprise resilience and operational agility.

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