Predicts 2023: Enterprise Architecture Charts New Path for Postdigital Era

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Initiatives: Enterprise Architecture

A postdigital executive will set new expectations of enterprise architecture, beyond management of the internal IT department and IT estate. Enterprise architecture and technology innovation leaders must determine how to change the EA practice to meet these expectations.

Overview

Key Findings

- Volatility, uncertainty, complexity and ambiguity (VUCA) concerns are set to continue. Business architecture is vital to bridge the gap between understanding VUCA's impact on the organization, and developing and executing business and information and technology strategy in response to it.
- Organizations are under pressure to implement environmental, social and governance (ESG) practices to allay the concerns of investors, employees, governments and communities. Done well, ESG is not simply another initiative — it's a wholesale change to the organization's culture, business and operating model.
- Responsibility for digital delivery has been shifting from the IT organization into the business, driven by the business desire for more control and ownership. This risks organizations becoming fragmented and inefficient.
- Enterprise architecture (EA) governance and assurance have evolved to accommodate the democratized organization, and the shift from project to product, by influencing and co-creating architectural guardrails.
- The focus of EA upon solution delivery and design support alone hampers the greater value that the discipline of EA can provide.

Recommendations

Enterprise architecture and technology innovation leaders required to support digital business design and strategy must:

- Demonstrate the value of EA in preparing organizations for change by developing a value proposition for business architecture (BA) to support VUCA planning. Do so by working with the enterprise strategy and planning functions or groups.
- Support your organization's ESG strategy by developing dedicated EA "service" to support it, along with a value proposition. Socialize and offer these services to executives involved with ESG and your own leadership team.
- Make EA an essential part of democratization by becoming involved early in strategic as well as operational improvement initiatives. Exploit this early involvement by learning and refining your EA services.
- Identify how EA can add value in relation to IT democratization and platform engineering by examining your organization's strategy for them. Build a strategy to guide platforms toward a minimum viable architecture, and create guardrails.
- Define the value that EA services must deliver to whom, and by whom, using EA tools as leverage to communicating desired change and understanding actual change.

Strategic Planning Assumptions

By 2027, 50% of extra-large organizations will use business architecture to advance strategic planning in the face of volatility, uncertainty, complexity and ambiguity.

By 2026, business-outcome-focused EA teams supporting ESG initiatives will outnumber those focused on technology management alone.

By 2026, EA teams inside IT departments will be displaced by democratized business teams outside of IT departments.

By 2026, EA support for platform engineering that enables democratized technology delivery will deliver 50% greater adoption of architectural guidelines than those not supporting platform engineering.

By 2026, 20% of chief enterprise architects will move delivery-focused architects within the delivery-focused organizational structure in IT.

Analysis

What You Need to Know

The practice of the EA discipline by whom, and for whom, is complicated by three primary factors:

1. **Postdigital World.** The digital business era is maturing. Gartner is already observing industry-leading enterprises seeking the next technology-enabled business growth S-curve. [1] Gartner contends that this "post-digital period" will be known as "autonomous business." [2]

2. **Business Leaders' Perception of Use of I&T.** [3] Complicating this transition are differing views on the use of I&T in different parts of an organization. Leaders have differing perceptions of the need for change today or tomorrow. Further differences come from business leaders' expectations of the IT department. One may view the department as a factory producing upon demand, another may view it as a service provider, and yet others may see both the department and I&T as integrated within the fabric of what makes up the business itself.

3. **Continued Misunderstanding of EA Value.** Gartner recognizes frustration on the part of EA practitioners with the value proposition that EA might provide given persistent perceptions of EA that reduce additional uses. [4] Many still view EA team members as highly sought after IT gurus who work only on the most important IT efforts in a fiscal year. This perception limits the value proposition the discipline can provide outside of delivery of IT solutions alone.

Pressure to find qualified staff to fulfill the EA role persists. Beyond delivery support, EA practitioners are expanding their focus to include:

- **Cost Management Support.** Enterprise architects can help their organization manage cost pressures by using EA to identify savings opportunities in systems and processes in production.
- **Innovation Management.** Leadership teams can discover more innovation opportunities in the face of competitive and social pressures with EA support and advice than without it.

- **Business Model Change.** EA must help when the IT executive is changing to a new business model or transforming the existing business model. EA helps identify information, technology, people and processes in new combinations for the benefit of the organization, not just the IT department.

Our strategic planning assumptions (SPAs) show the breadth of change EA and technology innovation leaders face in response to the use of I&T as a factory, a service provider and the business itself. The cumulative impact is a marked departure from EA that faces internally back into the IT department alone.

For some, this will not come as a surprise, but as a validation of how they already operate. For the rest, it is a call for a different path forward. EA and technology innovation leaders must ensure this new path has a well-defined scope, clear focus on outcomes, and clearly articulated value added to the IT executive and the organization. For those leaders impacted by SPAs like VUCA and ESG, we expect that they are already considering further changes to their organization beyond the digital era. Figure 1 shows the relationship of each SPA, in order of analysis, to way in which I&T is perceived by the leadership of the organization and the corresponding focus of the CIO in response to that perception. The blue column then highlights the most likely use of EA to support and the last column indicates the related SPA of greater concern given the content in the perception, focus, and use columns.

For those engaging in all aspects of EA, these SPAs may be of equal importance. For others, a specific focus by the IT executive may make specific SPAs more important for immediate consideration. In all cases, failing to make this connection will put enterprise architecture and technology innovation leaders out of sync with their leadership. Ultimately, this will result in failed EA programs.

> **The time to change is now. The discipline of enterprise architecture will fail if it does not directly support expectations business leaders have of the IT executive.**

For each of our SPAs, answer the following questions to determine the applicability of the SPA to your organization and your professional development:

- Is this a personal aspiration or a professional expectation likely to impact the role and the practice of EA within your organization?
- Is this an important consideration to deal with in the coming year?
- If this has not yet impacted the practice of EA in the organization, why not?
- Is this SPA pointing in a direction you see the discipline of EA heading?
- What would have to change in your organization for this SPA to be more likely to occur?

Figure 1: Strategic Planning Predictions Mapping to EA Discipline Usage

Strategic Planning Predictions Mapping to EA Discipline Usage

Perception of I&T	IT Executive Focus	Most Likely Use of EA	Most Relevant SPAs Given Perception, Focus and Use
Technology Producer	Pre-Digital	1. Delivery Support 2. Platform Management	• By 2026, EA teams inside IT departments will be displaced by democratized business teams outside of IT departments. • By 2026, EA support for platform engineering that enables democratized technology delivery will deliver 50% greater adoption of architectural guidelines than those not supporting platform engineering.
Service Provider	Digital	3. Investment Management 4. Cost Management	• By 2026, 20% of chief enterprise architects will move delivery-focused architects within the delivery-focused organizational structure in IT.
Integral Partner	Digital Plus, moving to Autonomous Business	5. Innovation Management 6. Business Model Transformation	• By 2027, 50% of extra-large organizations will use business architecture to advance strategic planning in the face of volatility, uncertainty, complexity and ambiguity. • By 2026, business-outcome-focused EA teams supporting ESG initiatives will outnumber those focused on technology management alone.

Source: Gartner
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Strategic Planning Assumptions

Strategic Planning Assumption: By 2027, 50% of extra-large organizations will use business architecture to advance strategic planning in the face of volatility, uncertainty, complexity and ambiguity.

Analysis by: Saul Brand and Philip Allega

Key Findings:

We live in volatile, uncertain, complex and ambiguous (VUCA) times. Pandemics, invasions, cyberattacks and political change all are familiar examples of what has been called permacrisis. [5] For leaders of complex organizations, resilience and adaptiveness are hallmarks of continued success. Gartner contends that VUCA fuels business model transformation and innovation investments in operating models.

Business executives and transformative CIOs will increasingly turn to business architecture (see Note 1) to support VUCA planning. They must ensure continued organizational success in a world where increased VUCA is probable. BA is essential to bridge the gap between understanding the impact of VUCA on the organization, and developing and executing business and I&T strategy in response to it. Organizations will use BA to:

- Identify the threats and risks VUCA poses [6]
- Determine business direction, strategy and capabilities in response to VUCA
- Make smarter I&T investment decisions that exploit VUCA opportunities or mitigate VUCA risks

BA will be more attractive to organizations that are transitioning to new business and operating models or changing large parts of existing models in the face of adversity. Every organization will face VUCA situations, but not all will take a proactive approach to engage with VUCA issues, opportunities, threats and risks.

We contend that extra-large, plus, organizations (i.e., those with revenue of greater than $3 billion per year) will enjoy the luxury of the division of labor to meaningfully consider and respond to such concerns. [7] This does not mean that those with lower annual revenue won't be buffeted by VUCA forces or will not attempt to respond. Indeed, we anticipate that we will see others use business architecture to advance strategic planning in addition to the extra-large organizations. However, we contend that the greater preponderance will be for extra-large organizations.

Near-Term Flag:

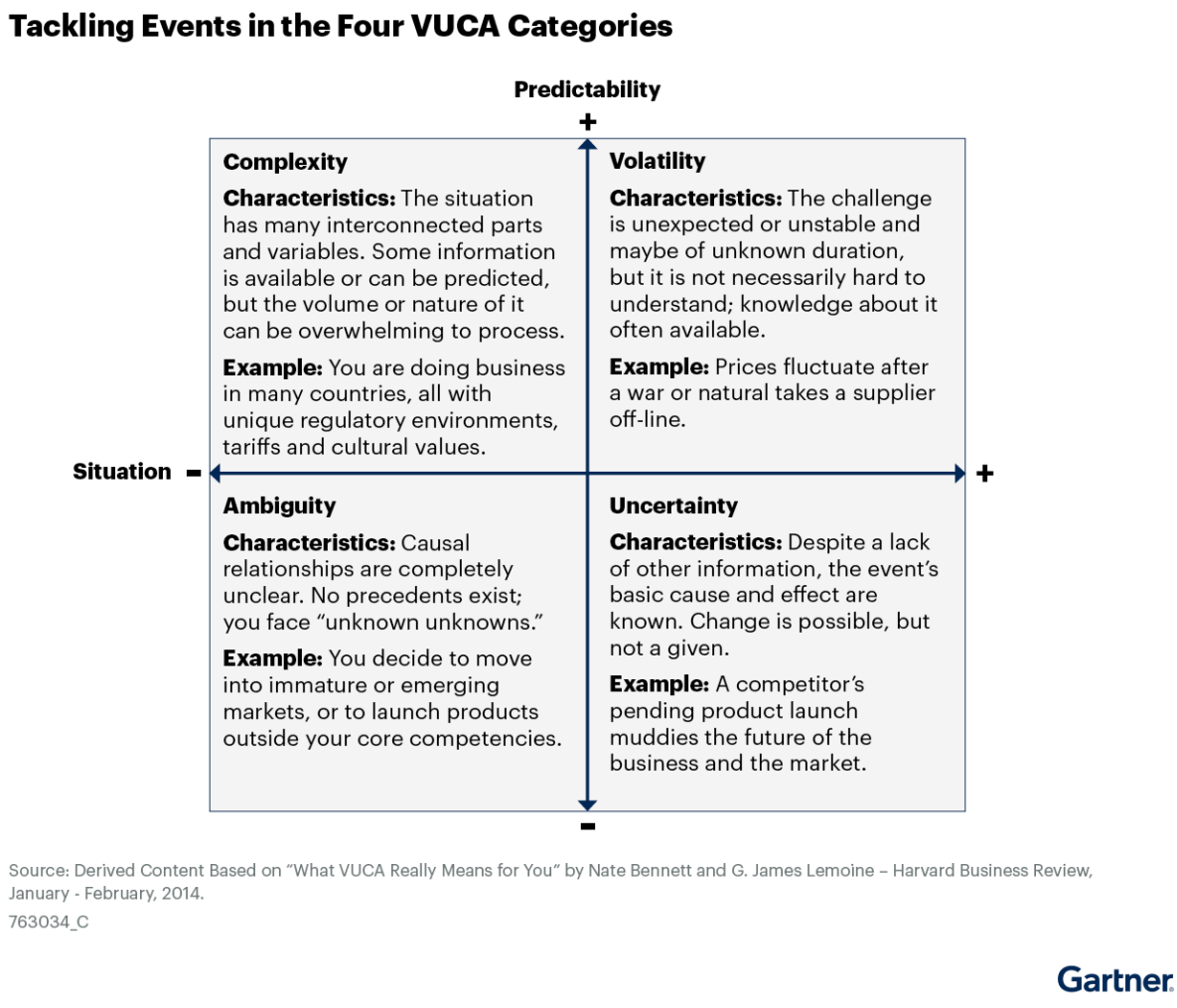
The 2023 Gartner Board of Directors Survey on Business Strategy in an Uncertain World shows that recession, long-term economic uncertainty and inflationary pressures are among the top 3 external threats and constraints to growth anticipated through 2024. [8] Up to 2019, the world was built on global finance and supply chains with the U.S. and its allies overseeing the peace and ability of nations to trade freely. The global context must be watched closely to determine whether business architecture increased in relevance.

Over the next four years, and possibly beyond, the current world order will be under considerable pressure. Within the next two years, we expect to see more CxOs using business architecture to support VUCA planning and more chief enterprise architects (CEAs) paying closer attention to the beliefs and needs of their CxOs, who will likely want to use business architecture to support VUCA planning. VUCA extends beyond traditional organizational boundaries. Organizations can no longer operate in a vacuum, see themselves as largely independent and focus only on their own priorities. [10]

Market Implications:

VUCA is a vital component of strategic planning. VUCA planning helps organizations identify, understand and build context around their current and future state. It conflates four distinct types of challenges that demand four distinct types of responses (see Figure 2). VUCA planning enables organizations to manage risks associated with rapidly changing external forces and market conditions. However, on its own, VUCA as a strategic planning discipline is merely an academic exercise of limited value. To be of value to boards, C-Suites, executive business leaders and transformative CIOs, VUCA as a strategic planning discipline needs BA to be translatable and executable.

Figure 2: Tackling Events in the Four VUCA Categories



Source: Derived Content Based on "What VUCA Really Means for You" by Nate Bennett and G. James Lemoine – Harvard Business Review, January - February, 2014.

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BA identifies targeted business outcomes, explores implications, impacts and risks, and addresses stakeholder questions and concerns. BA provides critical guidance and support to close the strategy-to-execution gap. BA clarifies VUCA outputs. In turn, VUCA outputs become BA inputs. BA activities must support VUCA planning by constructing the necessary diagnostic and actionable deliverables to support:

- The development and execution of business strategy
- Business and operating model design
- The I&T investments necessary to respond to VUCA and realize targeted business outcomes

Unless BA supports VUCA planning, organizations can't design and build an adaptive, resilient and composable IT estate that responds quickly to ever-changing business needs.

To get the most out of VUCA as a strategic planning discipline, CxOs and supporting EA and technology innovation leaders must do one of the following:

- Separate and move the BA practice or discipline into the enterprise strategy and planning function
- Ensure a highly collaborative partnership between the BA practice and enterprise strategy and planning function

The first option seems highly probable. Many organizations will soon recognize and want to realize the benefits and value of combining VUCA planning with BA.

Recommendations:

- Pay attention to the near-term markers to determine when, or if, BA is needed to support VUCA planning.
- Develop in advance, with the enterprise strategy and planning functions or groups, a value proposition for BA to support VUCA planning. Demonstrate how BA makes VUCA planning translatable and executable. Mount a roadshow to assess the appetite of others for BA to support VUCA planning, seek buy-in and determine what conditions create a mandate to move forward.
- Anticipate the use of VUCA planning by assessing the VUCA planning competencies of the organization's business architects. Develop a plan to enhance VUCA planning skill sets where necessary to close gaps.
- Work with the enterprise strategy and planning functions to grow and extend BA collaboration on VUCA planning.
- Assess the organizational impact on the BA practice of a possible move to enterprise strategy and planning functions.
- Use VUCA planning outputs as inputs to drive key BA activities and deliverables, if VUCA planning is relevant to organizational leadership.

Related Research:

Brave New Worlds: Tapestry of Trends 2022 by Gartner Futures Lab

2023 Leadership Vision for Enterprise Architecture

Hype Cycle for Enterprise Architecture, 2022

Tool: Business Architecture Activities and Deliverables Close the Strategy-to-Execution Gap

Presentation: Business Architecture 2.0: Revamped for Digital

How Enterprise Architects Use OKRs to Deliver Business Outcomes

Strategic Planning Assumption: By 2026, business-outcome-focused EA teams supporting ESG initiatives will outnumber those focused on technology management alone.

Analysis by: Marcus Blosch and Andrei Razvan Sachelarescu

Key Findings:

Environmental, social and governance (ESG) (see Note 3) has become a key concern of organizations. Twenty percent of CEOs and senior business executives mention environmental sustainability in their top five strategic business priorities. [9] Environmental sustainability has seen a whopping 292% rise in percentage of executives naming it in their top three priorities from 2021. [11] Organizations are under pressure to implement ESG practices to allay the concerns of investors and employees, and those of the governments and communities in which they operate. Sustainability by design, supporting desired ESG outcomes, will become the standard mode of working and will impact everything from products and services for clients to supporting management and business processes.

Done well, ESG is not simply another initiative. It's a wholesale change to the organization's culture, business and operating model. Organizations must:

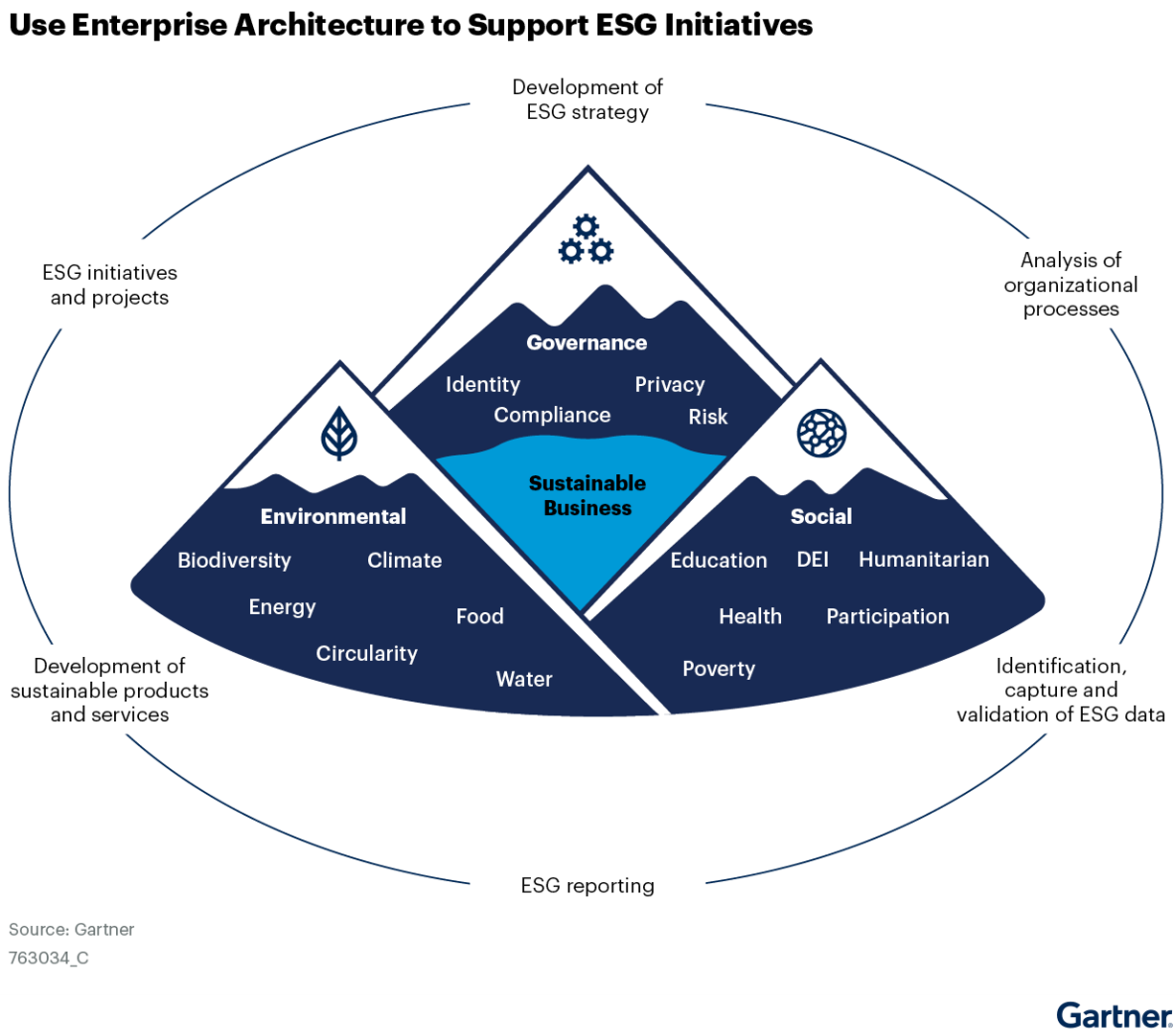
- Set up internal measurement, monitoring and reporting systems.
- Collect and analyze data from the entire organization — and often across the entire supply chain.
- Redesign products and services.

- Change the way they engage with investors, employees and other key stakeholders.

The extent of this will depend on the ambition of the organization's ESG strategy. This is increasingly being dictated by outside sources such as investors and regulators.

EA is at the heart of any business transformation, and has a great deal to contribute to an ESG initiative. For example, EA has models and methodologies needed to support ESG. These include tools for designing and executing the information architecture to support measurement, monitoring and reporting systems, to those for product design and business process change. ESG represents an opportunity for EA teams to reposition EA as internal management consulting that can offer support and play a key role in executing ESG (see Figure 3).

Figure 3: Use Enterprise Architecture to Support ESG Initiatives



Source: Gartner
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Market Implications:

As the coming years will continue to be characterized by volatility and uncertainty (see Note 5), the focus on ESG reinforced the demand for EA to be or become an internal management consultancy. [12] The multiple elements of ESG will need different models and methods, supporting diverse teams, and delivered with a consulting methodology from EA focused on delivering value early and often. ESG will reinforce this shift to EA as an internal management consultancy.

Business architecture is becoming increasingly important. ESG requires an in-depth knowledge of the organization's operating model — its business capabilities, how it's organized, its business processes, and the management processes, culture and governance model. The business architecture must also provide the bridge into the underlying technology platform. These elements and more fall within the frame of business architecture. [1] [3]

Information or data architecture and analytics are central to ESG's need to measure, monitor and report. EA, through its information architecture practice, will facilitate the design of architectures that support traceability of all company activities. This will enable the organization to avoid "greenwashing" and to demonstrate to all stakeholders the actual sustainability of its activities. Simply promising sustainability will no longer satisfy customers or investors. Data architecture will also be essential to track sustainability efforts by providing different KPIs on investments, operations, new solutions designed and everyday activities.

Innovative technology and services are central to many organizations' ESG ambitions. Artificial intelligence, digitalization and data analytics are considered the most important ones for supporting sustainability. Cloud computing and automation are also considered important in supporting sustainability efforts.

EA will be important in all technology choices related to existing technologies and technological trends. EA will inform, through trendspotting activities, on which to focus. The focus will change from supporting profitable growth to finding sources of sustainable profitable growth. For example, responsible automation will replace more traditional automation practices focused only on profitable growth. However, making any technology initiative sustainable will require the analytical and structured approaches that EA provides.

Taken together, we contend that this makes the broader use of EA applicable to ESG more so than the technology portion of EA alone.

Recommendations:

- Analyze ESG and how organizations can apply it. (Gartner research provides a great resource, as do our experienced analysts who can guide you.)
- Examine your organization's ESG strategy and contact the executives involved. Understand your ESG stakeholders, the outcomes they're driving and their needs.
- Develop an EA "service" to support your organization's ESG strategy, along with a value proposition. Socialize this service with executives involved with ESG and your own leadership team.
- Infuse traditional EA activities (such as data architecture, governance, solution design and metrics) with sustainability. Determine how you can build ESG into your architecture practice.
- Upskill in sustainability as an EA function. Help business and IT leaders develop sustainable thinking and design.
- Use business ecosystem practices as an EA function to provide end-to-end knowledge of current sustainability levels and insights into how the organization can increase sustainability in the short and long term.

Related Research:

2022 CEO Survey — The Year Perspectives Changed

2022 CEO Survey: Sustainability and ESG Become Enduring Change

Leadership Vision for 2023: Enterprise Architecture

Enterprise Architecture Must Evolve Into an Internal Management Consultancy

Presentation: How to Advance an ESG Program

The Role of the CIO and Technology in the Enterprise Sustainability and ESG Endeavor

Strategic Planning Assumption: By 2026, EA teams inside IT departments will be displaced by democratized business teams outside of IT departments.

Analysis by: Marcus Blosch and Saul Brand

Key Findings:

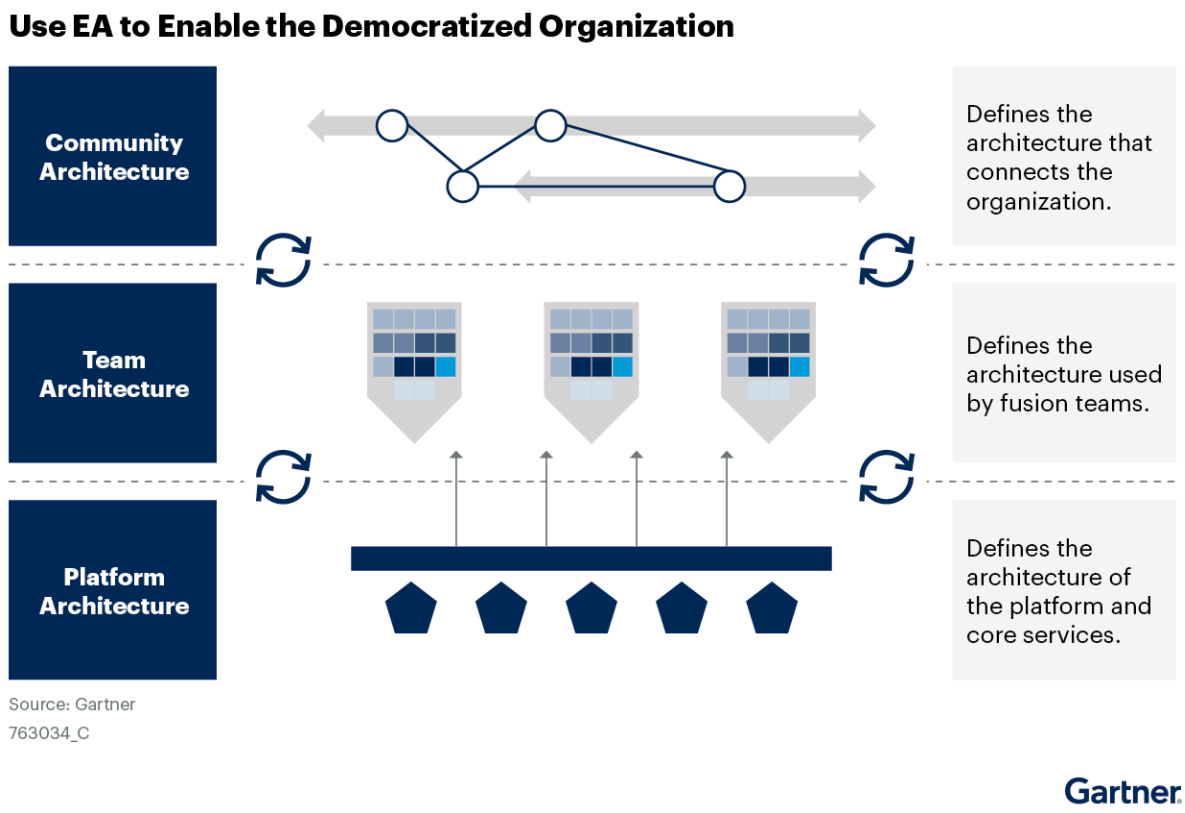
Responsibility for digital delivery has been shifting from the IT organization to the business. This trend has been accelerating since 2020, driven by the business desire for more control and ownership. The business teams responsible for digital delivery often have little or no link to the IT organization. A Gartner survey found that 41% of individuals responsible for technology delivery ("business technologists") report outside of IT. [1 4]

The shift of digital delivery into the business started small, but is gathering pace, driven by several factors:

- Business demand for autonomy — Business managers, frustrated with the quality and timeliness of IT organizational delivery, have demanded more autonomy for their own initiatives.
- Greater technical skill in the business — As more "digital natives" (see Note 3) enter the workforce, the level of technical skill and competence in business teams increases.
- Technical change to simplify development and integration — The rise of as-a-service delivery, cloud infrastructure, and low-code/no-code environments has made designing and delivering new services and solutions less expensive and easier.

This is a positive trend, but there's a risk that organizations will become fragmented and highly inefficient. To be successful, democratized organizations must be thoughtfully architected over three levels (see Figure 4). The platform architecture defines the technical platform and core services consumed by the teams. The team architecture defines the architecture that supports and enables the teams, and the community architecture defines the architecture needed to connect all these elements and ensure a healthy community.

Figure 4: Use EA to Enable the Democratized Organization



Let's look at each layer in more detail:

- **Platform architecture.** The platform provides the core services common to all the teams that sit on it. For example, it can contain key business applications such as ERP and CRM, along with other essential services such as security, infrastructure and data management. The platform is architected, with reusability as a core tenet, using a modular, API and service-oriented (MASA) style. [15]
- Team architecture. To work effectively, fusion teams use a minimally viable architecture (MVA) that is common to them all. This contains a simplified framework, design patterns, principles and policies that will be helpful in fulfilling local needs. Localization should be a tenet here, creating agility and flexibility for individual teams to meet their local needs.
- Community architecture. This sets the shared direction and guardrails for the democratized organization. It defines the strategy, goals and objectives, governance model and strategic roadmap. This ensures that those involved understand the direction and objectives, and can make their local decisions within that context. The shared and communal nature of this architecture is a key tenet.

EA teams face two key challenges:

1. Many of the consumers of EA have no connection to the IT organization, and little or no knowledge of architecture. This refocuses the challenge of crafting a meaningful value proposition and set of EA services that these individuals and teams consider useful.

2. The EA services, approach and governance model needed is different at each level. These different levels must be kept in synchronization, requiring a highly flexible response from the EA practice.

Market Implications:

Democratization is a profound shift in organizational design (see Note 6). The dominant model has been a "specialized" model, where work is organized into specialist groups (for example, sales, finance, customer service and IT). The company "org chart" is a common representation of that way of organizing. The problem with this approach is that many complex business problems — such as designing a new product or experience for a customer, or lowering a carbon footprint — require highly collaborative approaches from a range of perspectives. Put simply, the specialized model is not well-suited to complex, real-world problems that require a rapid response.

The democratized (or distributed) model puts all the resources needed to solve a business problem as close to the problem as possible. It uses iterative, experimental approaches, such as product management, to solve these problems. It has the autonomy to set its own direction and make its own decision.

Organizations will be looking for guidance and resources to help them move from the specialized to the democratized way of organizing (and to help them manage a hybrid model along the way). These new organizations will need to balance independence and adaptive ways of working with collaboration across the organization. EA will be key to this ambition, giving people the models and methods to achieve this, and providing guidance in the style of an internal management consultancy.

A new form of EA will be needed, tailored to suit each of the three layers of the model and able to work collaboratively with a wide range of stakeholders. EA must also take another step forward, away from the static models of architecture. In these distributed models, simulation, analytics and digital twins have the potential to bring architecture to life and lead to more insightful designs.

None of this will be possible without the right talent. EA teams must develop, acquiring new competencies from simulation to data science and product development. The search for talent will be a great challenge for almost every organization. Even here, creativity and new approaches will be needed to plug this talent gap.

Recommendations:

- **Do your homework.** Analyze your organization's ambitions to move to a more democratized organization, probably by adopting product-management-based approaches.
- **Define your EA services.** Perform a stakeholder analysis of your organization's model and identify the key stakeholders, their business outcomes and needs, and where they sit in the model. Use the three layers to guide your analysis.
- **Do your design.** Identify the EA services necessary to support this new way of working. Collaborate with your team to define the services and create a delivery model that you can make work.
- **Get involved early.** Become involved in democratization early so you can make EA an essential ingredient and you can learn and refine your services and how you deliver EA.
- **Don't stand still.** Democratized models emerge over time through a series of iterations. Adopt a continuous improvement methodology, and always look for new ways to improve your services and delivery model.

Related Research:

Tool: Architecting the Democratized Organization

EA's Role in Supporting Fusion Teams

EA's Role in Product Line Management

2023 Leadership Vision for Enterprise Architecture

Strategic Planning Assumption: By 2026, EA support for platform engineering that enables democratized technology delivery will deliver 50% greater adoption of architectural guidelines than those not supporting platform engineering.

Analysis by: Bill Blosen, Saul Brand and Andreas Frangou

Key Findings:

Business-led collaborative, cross-functional teams (e.g., fusion teams) are being empowered to make decisions outside centralized IT, and IT teams are being empowered by the agile product model. Together, these represent key attributes of product-driven and democratized organizations. Product-driven and democratized organizations adopting modern software development methodologies, tools and techniques are more likely to be successful than those who do not. [16]

EA governance and assurance is evolving to accommodate the democratized organization and the shift from project to product by influencing and co-creating architectural guardrails. But EA teams involved in these shifts have yet to address the problems of cognitive load (i.e., the expanding complexity of architectural, tooling, deployment and monitoring choices). Organizations focused on digital business or deploying digital assets must and will turn to platform engineering to reduce cognitive load.

Two further points of clarification will aid EA teams involved in this effort:

1. **Platform architecture.** This focuses on the "style" of architecture that supports business strategy and sets EA guardrails for smarter investment decision making (for example, cloud-based and enabled by MASA).

2. **Platform engineering.** This is the choice and combination of technologies, within the style of EA and EA guardrails, to meet ever-changing business needs. [1] [7]

Platform engineering is a transformational innovation. [18] It is a catalyst, reducing cognitive load by increasing developer experience and accelerating value delivery. Platform engineering provides IT and fusion teams with a consistent set of tools that software engineering leaders and product teams can rely on to provide security and adoption of EA guardrails. It provides "paved roads" that IT and fusion teams can follow as compelling and easier paths to faster value delivery. Platform engineering will enable value delivery through platforms hosted on self-service internal developer portals that include EA guardrails (e.g., principles, policies, standards, governance, assurance and compliance).

Near-Term Flag:

Within the next two years, we expect to see three things:

- EA governance and assurance models evolving to support the design and delivery of platform-engineered software delivery platforms.
- Platforms running as an agile product, [19] with a platform owner (the product owner of the platform team) gauging success through engineer adoption and demand.
- Simple, compelling and composable platform architectures realized through platform engineering, reducing cognitive load, which will result in improved speed to value and developer experience.

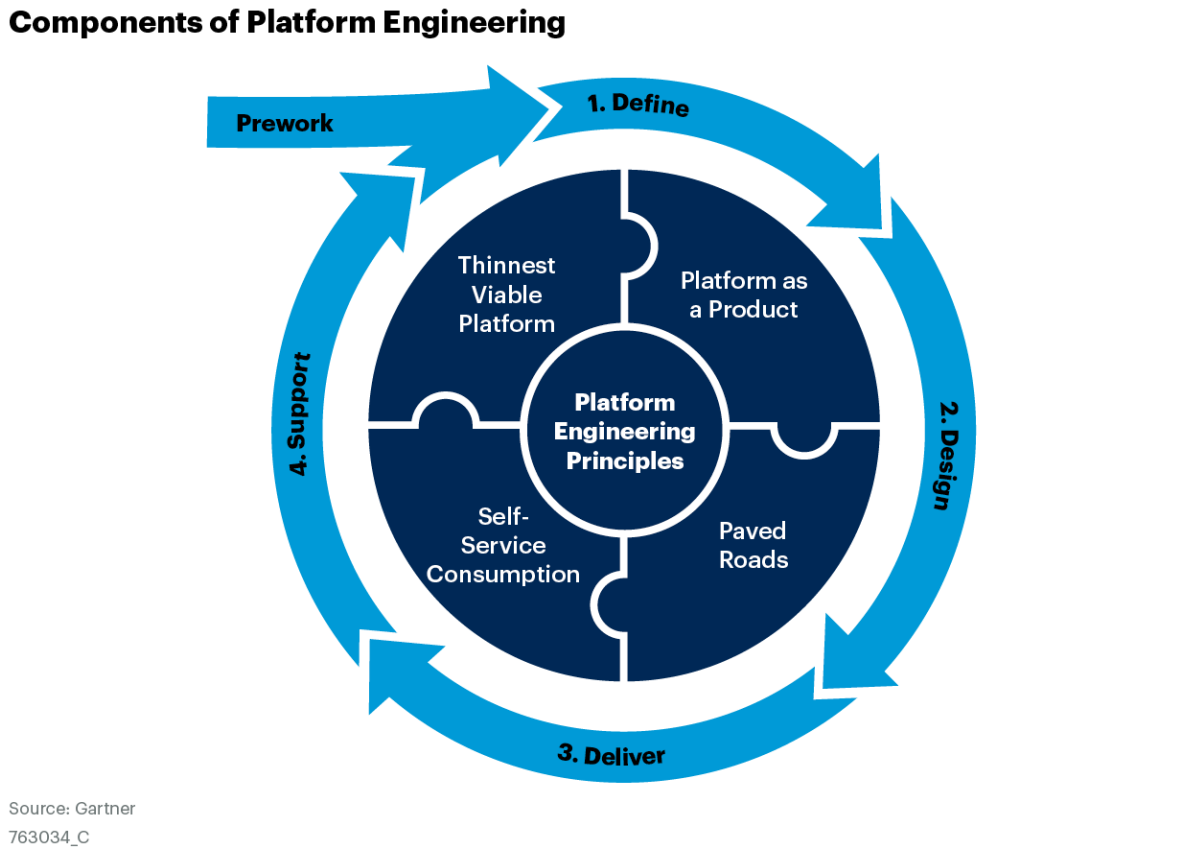
Market Implications:

EA governance and assurance must continually evolve to support new trends, methodologies and technologies. These include the increased democratization of IT and adoption of platform architecture and platform engineering. EA governance and assurance guardrails must orchestrate collaboration across multiple stakeholders to successfully design and deliver platforms.

The inclusion of platform engineering in EA governance will bridge the gap between EA and product architecture and software engineering. Adaptive EA governance enables enterprise agility through distributed authority to make value-based decisions. Distributed organizations use adaptive EA governance, which is based on communities of practice (CoPs) using minimum viable architectures. New MVAs will include platform architecture and platform engineering to reduce friction and cognitive load. New MVAs will influence platform engineering to shorten time to value and time to market.

Platform engineering will be trending as IT and non-IT teams alike suffer under a chaotic cognitive load. Teams will gravitate to the paved roads provided by platform engineering teams. This cognitive load also affects the developer experience. IT leaders are concerned about this and are adopting platform engineering, among other techniques, to improve the developer experience and reduce attrition. Figure 5 shows the main aspects of platform engineering.

Figure 5. Components of Platform Engineering



EA can expand its influence with this trend and shape smarter enterprise decisions and outcomes. By working with platform owners, EA can influence and co-create platform solutions that promote EA governance and assurance. This also gives enterprise architects access to direct developer feedback to understand the demand for tools and adoption of EA guardrails to support the effort.

By supporting the efforts of the platform engineering team and influencing the architecture of internal developer platforms, EA can help platform engineering teams deliver the most effective developer platforms by supporting their efforts to:

- Balance risk with agility
- Decrease time to value
- Reduce cognitive load
- Improve developer experience

- Guide the organization to a successful future

Recommendations:

- Learn about IT democratization, platform architecture and platform engineering. Examine how organizations are applying them. (Gartner research provides a great resource, and our experienced analysts can guide you.)
- Study your organization's strategy for IT democratization and platform engineering. Build a strategy to guide platforms along the architectural design and guardrails toward an MVA.
- Combine EA-supported communities of practice with the platform owners and the developer to derive platform solutions consistent with the MVA.
- Assess EA compliance by measuring platform adoption and demand and reduction in developer cognitive load.

Related Research:

Hype Cycle for Emerging Technologies, 2022

Case Study: Infrastructure Platform Teams for Self-Service Delivery

Case Study: Self-Service Infrastructure Platforms to Accelerate Delivery (ABN AMRO)

Quick Answer: How Can Enterprise Architecture Support Product Management?

Quick Answer: How Must EA Governance and Assurance Change to Support Product Management?

Tool: Architecting the Democratized Organization

Strategic Planning Assumption: By 2026, 20% of chief enterprise architects will move delivery-focused architects within the delivery-focused organizational structure inside IT departments.

Analysis by: Philip Allega

Key Findings:

Chief enterprise architects who realize that their value comes from using the discipline of EA to do more than support delivery efforts funded during a specific fiscal budget cycle will rethink the composition of their direct reports. When today's in-flight delivery distracts from greater value sought by IT executives, the chief enterprise architect will recognize that:

- The sole focus upon delivery support is an obstacle to expanding the value provided by the EA discipline in considerations about the future state and the current state.
- IT project culture can lock some EA efforts into, at best, solution design for in-flight efforts only.
- Orchestrating in-flight, in-production, and future needs and desires requires transparency but does not require control of all decisions by "architects" for in-flight products or projects alone.

Market Implications:

For the marketplace of available staff, redefining the work people must execute to deliver EA value will change hiring criteria for named roles associated with the discipline of EA. The immediate impact is upon staffing job descriptions for the core EA team, the selection and career management of the chief enterprise architect, and the role descriptions of near-neighbor roles. This will impact pricing the role and matching it to those available in the employment marketplace.

The second impact is upon the organizational structure of the EA team itself. Gartner contends that as the role shifts its focus to providing more value than support of solution design and delivery, the need for direct control over delivery-focused resources will lessen.

The derivative impact will be upon the structure of governance, compliance and assurance upon roles associated with the discipline of EA.

In turn, this will be a forcing factor for the chief enterprise architect to reconsider how tools can offer leverage in providing advice, measuring its consumption and predicting the impact of choice. Reducing direct oversight and control is an opportunity for further leverage through automation of tasks few people can execute but tools can support. We anticipate that this will give EA tool technology providers a prominent use case to support fewer resources to have a wider view of the state of delivery change, what's in production and what's desired for the future.

Recommendations:

- Determine the value that EA services must deliver to whom, and by whom — regardless of organizational structure today.
- Work with human resources leadership and the IT executive to:
  - Determine the level of individual gravitas necessary to advise, support and execute the EA services.
  - Assess organizational roles, management structures and succession planning.
  - Determine when dotted-line relationships can work and the interfaces between such roles.
- Rethink governance — from orchestration of advice creation to impact upon roadmaps for investment choice.
- Engage EA tool technology providers in use cases to support higher leverage of resources to monitor the state of delivery choices as the core EA team changes its primary focus beyond delivery alone.

Related Research:

3 Steps to Creating Enterprise Architecture Services

EA Value Stories: Articulating EA's Performance to Stakeholders

Customize EA Metrics to Capture and Communicate the Value of EA

Quick Answer: How Can We Position the Architecture Review Board for Success?

Critical Capabilities for Enterprise Architecture Tools

Magic Quadrant for Enterprise Architecture Tools

A Look Back

In response to your requests, we are taking a look back at some key predictions from previous years. We have intentionally selected predictions from opposite ends of the scale — one where we were wholly or largely on target, as well as one we missed.

By 2022, 80% of digital businesses will take a collaborative approach to EA, involving participants across business and IT, and potentially beyond. This prediction was previously published in Predicts 2019: Enterprise Architecture Evolves Into an Internal Management Consultancy.

Although directionally correct, meaning that such collaboration does occur, the result today is this approach is still a leading practice and not a frequently used common practice, which 80% would suggest. If one agrees that our contention is that EA is successful when it supports the IT executive, the results of the 2022 Gartner Overcoming the Barriers to Digital Execution Survey [20] underscore a positive direction but not one that supports the prediction. Indeed, the survey reports that the highest response to "How often does your IT organization do the following?" was that 27% always "...worked with other CxOs to move technology decision making to areas beyond IT."

By 2022, 50% of EA programs will be supported by AI-enabled software for planning, governance, assurance and IT asset management purposes. This prediction was previously published in Predicts 2019: Enterprise Architecture Evolves Into an Internal Management Consultancy.

We missed this prediction completely. Solutions that toolchain planning, governance, assurance and IT management processes together from other tools are visible in the EA tool marketplace, but the use of AI has had limited impact on EA tools for these purposes by 2022. Some EA tools do provide AI/ML features for suggesting gaps in repository, or suggesting relationships or adjacent components while modeling, but this does not speak to this prediction.

We do see more AI/ML features planned on the 2023 roadmaps for EA tool providers. Gartner believes that these.features are still in early stages, even if the trajectory is promising. Potential buyers of such tools who are interested in this functionality should speak to prospective, or current, vendors about their future plans.

Evidence

2023 Gartner Board Of Directors Survey on Business Strategy in an Uncertain World. The 2023 Gartner Board of Directors Survey on Business Strategy in an Uncertain World was conducted to understand the new approaches adopted by nonexecutive boards of directors (BoDs) to drive growth in a rapidly changing business environment. The survey also sought to understand the BoDs' focus on investments in digital acceleration; sustainability; and diversity, equity and inclusion.The survey was conducted online from June through July 2022 among 281 respondents from North America, Latin America, Europe and Asia/Pacific. Respondents came from all industries, except governments, nonprofits, charities and NGOs, and from organizations with $50 million or more in annual revenue. Respondents were required to be a board director or a member of a corporate board of directors. If respondents served on multiple boards, they answered for the largest company, defined by its annual revenue, for which they are a board member. Disclaimer: The results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

2022 Gartner CEO and Senior Business Executive Survey: This survey was conducted to examine CEO and senior business executive views on current business issues, as well as some areas of technology agenda impact. The survey was conducted from July 2021 through December 2021, with questions about the period from 2021 through 2023. One-quarter of the survey sample was collected in July and August 2021, and three-quarters was collected in October and December 2021. In total, 410 actively employed CEOs and other senior executive business leaders qualified and participated. The research was collected via 382 online surveys and 28 telephone interviews. The sample mix by role was CEOs (n = 253); CFOs (n = 88); COOs or other C-level executives (n = 19); and chairs, presidents or board directors (n = 50). The sample mix by location was North America (n = 176), Europe (n = 97), Asia/Pacific (n = 86), Latin America (n = 40), the Middle East (n = 4) and South Africa (n = 7). The sample mix by size was $50 million to less than $250 million (n = 58), $250 million to less than $1 billion (n = 81), $1 billion to less than $10 billion (n = 212) and $10 billion or more (n = 59).

Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

[1] The S-curve refers to a mathematical model known as the sigmoid curve, which plots similar to the letter "s." As the curve begins to flatten, business leaders seek the next inflection point that will increase growth in the curve upward.

[2] See "Autonomous Business Is the Next Tech-Enabled Strategic Growth Curve for Pioneer Enterprises."

[3] Throughout Gartner research, we note that I&T refers to "information and technology" as items and IT as the functional department.

[4] In "Business Architecture: The Art and Practice of Business Transformation" (2010), William Ulrich and Neal McWhorter make this comment, which feels as fresh today as it was when originally written: "...historically, the term enterprise architecture has a tendency to turn off business professionals because they immediately assume that the concept is an IT-focused creation."

[5] "Permacrisis" is the 2022 Collins Dictionary "word of the year," meaning an extended period of instability and insecurity.

[6] In a simple example, if a competitor launches a new product that draws your clients away from your organization to another for reasons not clearly obvious (i.e., cost) then the way forward to respond may be unclear. The new product may attract a particular demographic due to a combination of economic concerns on the part of the buyer, regulatory changes in your market, social considerations, and more. More could include further competitive turbulence in a hypercompetitive market, rapid changes in political or social concerns, supply chain disruption, or further flux in other nontechnological concerns that make the use of information and technology more (or less) attractive as a leadership response to VUCA.

[7] Gartner defines company sizes according to annual revenue, in U.S. dollars, as follows: Micro (<$50 million), Small, ($50 million to $250 million), Midsize($250 million to $1 billion), Large ($1 billion to $3 billion) and Extra-Large (more than $3 billion)

[8] 2023 Gartner Board of Directors Survey on Business Strategy in an Uncertain World: This survey was conducted to understand the new approaches adopted by nonexecutive boards of directors to drive growth in a rapidly changing business environment. The survey also sought to understand boards' focus on investments in digital acceleration, sustainability, and diversity, equity and inclusion. The survey was conducted online from June through July 2022 among 281 respondents from North America, Latin America, Europe and Asia/Pacific. Respondents came from all industries, except governments, nonprofits, charities and NGOs, and from organizations with $50 million or more in annual revenue. Respondents were required to be a board director or a member of a corporate board of directors. If respondents served on multiple boards, they answered for the largest company, defined by its annual revenue, for which they were a board member.

Disclaimer: The results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

[9] See Zeihan, P. (2022) "The End of the World Is Just the Beginning: Mapping the Collapse of Globalization," HarperCollins; and Mack, O., Khare, A., Krämer, A., and Burgartz, T. (2015). "Managing in a VUCA World," Springer.

[10] See 2022 CEO Survey — The Year Perspectives Changed.

[11] See 2022 CEO Survey: Sustainability and ESG Become Enduring Change and 2022 CEO Survey: Sustainability and ESG Become Enduring Change.

[12] See Evolve Enterprise Architecture Into an Internal Management Consultancy.

[13] See Design a Better Digital Business With the Business Architecture Landscape.

[14] The 2020 Gartner Digital Friction Survey was conducted via an online survey platform from January through March 2020, with a total of approximately 4,500 employees who used technology in their daily work. The 2021 Gartner Reimagining Technology Work Survey and the 2021 Gartner Technology Skills Outside of IT Survey also reinforce this point.

The 2021 Gartner Reimagining Technology Work Survey was conducted online in March 2021 among over 6,000 employees across functions, levels, industries and geographies. The survey examined the extent to which employees outside of IT were involved in customizing and building analytics or technology solutions, the types of activities they performed, the teams and structures they worked in, and the types of support they received.

The 2021 Gartner Technology Skills Outside of IT Survey was conducted online from November through December 2021 among over 3,000 employees across functions, levels, industries and geographies. The survey was designed to understand the role that CIOs should play to support employees who produced analytics or technology capabilities and reported to a business area outside of IT.

[15] See MASA: Create Agile Application Architecture With Apps, APIs and Services and Design and Build the New Digital Foundations.

[16] See Quick Answer: How Can Enterprise Architecture Support Product Management? and Quick Answer: How Must EA Governance and Assurance Change to Support Product Management?

[17] See Hype Cycle for Emerging Technologies, 2022.

[18] See Leadership Vision for 2023: Enterprise Architecture and Top Strategic Technology Trends for 2023: Platform Engineering.

[19] This concept is discussed further in How to Govern and Fund Platforms in a Product World.

[20] The 2022 Gartner Overcoming the Barriers to Digital Execution Survey. This survey was conducted online from 1 March through 14 March 2022 to understand how to overcome barriers to digital execution. In total, 96 CIOs and IT and business leaders who were members of Gartner's Research Circle, a Gartner-managed panel, participated. Members from North America (n = 43), EMEA (n = 35), Asia/Pacific (n = 11) and Latin America (n = 7) responded to the survey.

Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

Note 1: Business Architecture

Business architecture (BA) refers to the activities of creating diagnostic and actionable deliverables to support the development and execution of business strategy, business and operating model design, and the investments necessary to respond to disruptive forces and realize targeted business outcomes.

Note 2: Definition of Environmental, Social and Governance

Environmental, social and governance (ESG) refers to a collection of corporate performance evaluation criteria that assess the robustness of a company's governance mechanisms and its ability to effectively manage its environmental and social impacts. Examples of ESG data include the quantification of a company's carbon emissions, water consumption or customer privacy breaches. Institutional investors, stock exchanges and boards increasingly use sustainability and social responsibility disclosure information to explore the relationship between a company's management of ESG risk factors and its business performance.

Note 3: Digital Natives

A digital native is an individual who has grown up with digital technologies all around and is comfortable with their use. A digital native has no problem with technology.

Note 4: Further Considerations for ESG

The next two years will be characterized by volatility and uncertainty. For ESG, two key themes stand out:

- First, investors are looking to ESG to help organizations grow and be profitable; organizations with strong ESG capability are also seen as better long-term investments. [17] For government organizations, investor pressure is mirrored by public concern and political pressure to implement ESG.
- A second theme is energy security, which conflict in the Ukraine and Europe's over-reliance on Russian gas has underscored.

Taken together, ESG initiatives are highly likely to remain a priority for many organizations. While uncertainty will drive the mix and focus of an organization's strategy, undoubtedly ESG will play a minor, if not leading, part. The opportunity is there for EA leaders to reach out to those executives in charge of ESG in their organization and begin building a relationship and setting the stage for future engagements. To do that, EA leaders need to have a good understanding of ESG, and their organization's strategy and ambition, and be clear about what contribution they can make, ideally crafting an EA service specifically designed to support ESG.

ESG, more than any other initiative, requires collective action. As EA leaders begin the conversation around ESG and shaping a dedicated EA service, this is also an opportunity to reach out to other domain leaders, such as supply chain, data and analytics, and infrastructure and applications teams, that will likely also play a role in delivering ESG. The aims will be to open the conversation on ESG, build relationships and set the stage for future collaboration.

Note 5: Further Considerations for Democratized Organizations

The trend toward the democratized organization has been strongly correlated with the move to product management approaches, along with the use of fusion teams and the rise of the business technologist. Supporting this from a technology perspective is the use of platform-based architectures (digital foundations), modular, service-oriented, API-based architectures (MASA), and the move into the cloud. We could also argue that broader trends such as 'digital natives' in the workplace, the rise of the smartphone, the Internet of Everything (i.e., a time when every object in the real world will have its own IP address) and more also help this move along. These trends are the first step along the democratized path.

How far along that path an organization will go will vary. However, we predict that over the next four years the democratized model will become increasingly common and the dominant form of organizational model. The challenge for organizations is to enable this model, and get the benefit of agility and adaptability, without making a huge mess. We see that organizations will need to adopt new ways of working and new governance models, and use architecture to make it happen.

Recommended by the Authors

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Enterprise Architecture Primer for 2022

Leadership Vision for 2023: Enterprise Architecture

Infographic: Benchmark Data From the IT Score for Enterprise Architecture

IT Score for Enterprise Architecture and Technology Innovation

Autonomous Business Is the Next Tech-Enabled Strategic Growth Curve for Pioneer Enterprises

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