

CHIEF ENTERPRISE ARCHITECT PRACTITIONER'S GUIDE

A Comprehensive Reference for Enterprise Architecture
Leadership

Digital Enterprise Architecture Advisors LLC

Enterprise Architecture Leadership

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Abstract

The ***Chief Enterprise Architect Practitioner's Guide*** provides a comprehensive, practice-oriented reference for the modern Chief Enterprise Architect (CEA) operating in complex, multi-domain enterprises. As organizations scale, digitize, and transform, the CEA plays a critical leadership role in ensuring that technology, data, platforms, and change initiatives remain aligned with business strategy and capability-driven planning.

This guide defines the CEA as an executive discipline responsible for enterprise-wide coherence: establishing architectural principles, governing technology decisions, shaping long-term roadmaps, and directing transformation programs through structured operating models and decision rights. It integrates TOGAF ADM with practical execution patterns and presents the full catalog of enterprise architecture deliverables used to guide investment, reduce fragmentation, and enable intentional design.

Through clear models, governance structures, engagement patterns, and leadership behaviors, the guide equips CEAs and senior architects with the frameworks and tools required to operate effectively at scale. It serves as both a foundational reference and an ongoing companion for enterprise architecture leaders responsible for shaping the digital future of the enterprise.

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Chapter 1: The Role of the Chief Enterprise Architect

1.1 Definition and Strategic Purpose

The Chief Enterprise Architect (CEA) is a senior executive — typically at the C-1 or C-2 level — responsible for defining, governing, and continuously evolving the organization's enterprise architecture. The CEA ensures that technology strategy, data strategy, and digital transformation initiatives are fully aligned with business goals, operating models, and regulatory obligations.

Unlike a Chief Technology Officer (CTO), who is often primarily concerned with the technology product or engineering capability, or a Chief Information Officer (CIO), who focuses on IT service delivery, the CEA occupies the unique intersection of business strategy and technology execution. The CEA translates complex business intent into coherent, actionable architectural direction that spans people, process, data, and technology.

1.2 Core Responsibilities

1.2.1 Strategic Alignment

The CEA ensures that every major technology investment and architectural decision is traceable to a business strategy or capability need. This requires deep engagement with the C-suite — particularly the CEO, CFO, COO, CDO, and CIO — to understand business priorities and translate them into architectural imperatives.

- Participates in business strategy and planning cycles
- Develops and maintains the Architecture Vision aligned to corporate strategy
- Identifies technology implications of strategic business decisions (M&A, market entry, digitization)
- Advises the board and executive committee on technology risk and architecture debt

1.2.2 Architecture Governance

Governance is the mechanism through which the CEA ensures that architecture standards, principles, and decisions are applied consistently across the enterprise. Without governance, even the best-designed architecture degrades into fragmented, inconsistent implementations.

- Chairs or sponsors the Architecture Review Board (ARB)
- Establishes and enforces architecture principles and standards
- Issues architecture mandates and manages waivers and exceptions

- Tracks compliance of projects and programs with architecture standards

1.2.3 Technology Roadmap and Portfolio Management

The CEA owns the long-horizon view of how the organization's technology landscape should evolve. This includes rationalizing the application portfolio, managing technology lifecycle, and sequencing investments to maximize value while minimizing risk.

- Produces and maintains the multi-year enterprise architecture roadmap
- Drives application portfolio rationalization (retire, replace, retain, re-platform decisions)
- Manages technology standards lifecycle (adopt, trial, assess, hold, retire)
- Aligns architecture roadmap with capital and operating budget cycles

1.2.4 Enterprise Transformation Leadership

CEAs in modern organizations play a central role in major transformation programs — cloud migrations, ERP implementations, digital platform programs, and post-merger integration. They provide the architectural guardrails that prevent transformation programs from creating new technical debt.

1.2.5 Architecture Practice Development

Beyond the technical content of architecture, the CEA is responsible for building and maturing the EA practice itself — the people, processes, tools, and culture that enable architecture to function at enterprise scale.

1.3 The CEA in the Executive Landscape

The CEA's position in the executive hierarchy varies across organizations. Common reporting relationships include:

Reporting Line	Context	Advantage	Risk
Reports to CIO	IT-led organizations	Close to IT delivery	Perceived as IT-only function
Reports to CTO	Technology-product companies	Strong tech alignment	May lack business reach

Reporting Line	Context	Advantage	Risk
Reports to CEO/COO	Digital-native or transformation-led orgs	Maximum strategic influence	Requires strong IT collaboration
Peer to CIO/CTO	Mature EA organizations	Balanced influence	Requires strong peer relationships

1.4 Key Competencies of an Effective CEA

The CEA role demands a rare combination of technical depth, business acumen, and leadership capability. The IASA Global IT Architecture Competency Framework identifies five core competency pillars:

- Business Technology Strategy — understanding competitive dynamics, business models, and how technology creates value
- IT Environment — deep knowledge of the technology landscape, platforms, and engineering practices
- Design — the ability to synthesize requirements into coherent architectural solutions
- Human Dynamics — stakeholder management, communication, and organizational influence
- Quality Attributes — non-functional requirements such as security, resilience, performance, and compliance

Reference

IASA Global IT Architecture Competency Framework (ITACF). Available at: iasaglobal.org. Provides a structured competency model for architects at all levels, including the Chief Architect role.

Chapter 2: TOGAF and the Architecture Development Method (ADM)

2.1 What is TOGAF?

TOGAF (The Open Group Architecture Framework) is the world's most widely adopted enterprise architecture framework. Published and maintained by The Open Group, TOGAF provides a comprehensive approach to designing, planning, implementing, and governing enterprise information architecture. According to The Open Group, over 80% of Global 50 companies and more than 80,000 certified practitioners worldwide use TOGAF.

TOGAF is not a rigid methodology to be followed step-by-step. It is a framework — a toolkit of methods, templates, and best practices — that organizations tailor to their specific context. The CEA's job is to select, adapt, and apply TOGAF components in a way that is pragmatic and relevant to the organization.

Key Insight

TOGAF explicitly states that it should be tailored. No organization implements TOGAF in its entirety. The CEA's judgment in selecting which components to apply, in what sequence, and at what level of rigor is itself a core architectural skill.

2.2 The TOGAF Architecture Development Method (ADM)

The ADM is the heart of TOGAF — a cyclical, iterative process for developing and managing enterprise architecture. It consists of a Preliminary Phase and eight numbered phases (A through H), with Requirements Management at the center.

2.2.1 Preliminary Phase — Establishing the Architecture Capability

Before any architecture work can begin, the organization must establish the capability to do architecture. The Preliminary Phase is about setting up the conditions for success. The CEA leads this phase personally, as its outputs define the operating model for everything that follows.

Key activities and outputs:

- Define the organizational context — identify the enterprise, its drivers, and the constraints under which architecture must operate

- Identify and document architecture principles — the foundational rules that govern all future architecture decisions
- Define the Architecture Capability — the team structure, governance model, tools, and processes
- Select and tailor the architecture framework — decide which TOGAF components to adopt, adapt, or replace
- Define the Architecture Repository structure — where artifacts will be stored and how they will be organized
- Establish the Architecture Governance framework — the ARB, review processes, compliance mechanisms

Outputs: Architecture Principles document, Tailored Architecture Framework, Architecture Governance Framework, Architecture Repository structure.

2.2.2 Phase A — Architecture Vision

Phase A initiates an architecture development cycle. It defines the scope of the work, identifies stakeholders, and produces a high-level vision of the target architecture that satisfies the business objectives driving the engagement.

Key activities and outputs:

- Establish the architecture project — define scope, constraints, and expectations
- Identify stakeholders and their concerns — who needs to be engaged and what matters to them
- Confirm business goals, drivers, and constraints
- Develop the Architecture Vision — a high-level description of the target state
- Produce the Statement of Architecture Work — the formal charter for the architecture engagement
- Assess the business transformation readiness of the organization

Key outputs: Statement of Architecture Work, Architecture Vision document, Stakeholder Map, Approved Statement of Work.

2.2.3 Phase B — Business Architecture

Phase B develops the Business Architecture, defining the organization's business strategy, governance, organization, and key business processes. It is the foundation upon which all subsequent architecture domains (data, application, technology) are built.

Key activities:

- Develop the baseline Business Architecture (As-Is) — document existing business capabilities, value streams, organizational structures, and processes
- Develop the target Business Architecture (To-Be) — describe the future-state business model and capabilities
- Perform a gap analysis between As-Is and To-Be business architecture
- Define the roadmap components for business architecture changes

Key artifacts: Business Capability Model, Value Stream Map, Organization Map, Business Interaction Matrix, Business Footprint Diagram.

2.2.4 Phase C — Information Systems Architecture

Phase C develops the Information Systems Architecture, covering both Data Architecture and Application Architecture. These two sub-phases can be developed in parallel or sequentially depending on organizational priorities.

Data Architecture

- Defines the structure of the organization's logical and physical data assets and data management resources
- Produces a Data Entity/Component Catalog, Data Lifecycle Diagram, Data Security Diagram, and Data Migration Diagram
- Establishes data governance principles, master data management approach, and data quality standards

Application Architecture

- Defines the individual applications to be deployed, their interactions, and their relationships to core business processes
- Produces an Application Portfolio Catalog, Application Communication Diagram, Application and User Location Diagram
- Identifies application rationalization opportunities — consolidation, retirement, replacement, and modernization

2.2.5 Phase D — Technology Architecture

Phase D maps the software and hardware capabilities required to support the deployment of business, data, and application services. It translates the logical architecture into a physical technology landscape.

- Defines the technology standards and platforms that underpin application and data services
- Covers infrastructure, cloud platforms, networking, security platforms, and operations tooling
- Produces a Technology Standards Catalog, Technology Portfolio Catalog, Environments and Locations Diagram, and Platform Decomposition Diagram
- Addresses cloud strategy decisions: public, private, hybrid, multi-cloud

2.2.6 Phase E — Opportunities and Solutions

Phase E is the first phase that moves from architecture definition toward implementation planning. It synthesizes the gap analyses from Phases B, C, and D into a consolidated view of what needs to change, and groups changes into work packages and transition architectures.

- Conducts a comprehensive gap analysis across all architecture domains
- Identifies Solution Building Blocks (SBBs) that will realize the target architecture
- Groups work packages into projects, programs, and transition architectures
- Produces an initial Architecture Roadmap showing the sequence of change
- Evaluates build vs. buy vs. partner decisions for key capability gaps

2.2.7 Phase F — Migration Planning

Phase F develops the detailed Implementation and Migration Plan, translating the Architecture Roadmap into a prioritized, actionable delivery plan that is aligned with the organization's project portfolio and investment cycle.

- Prioritizes projects by business value, technical dependency, risk, and resource requirements
- Develops detailed transition architectures for each major migration wave
- Aligns the migration plan with the enterprise project portfolio management process
- Produces the Implementation and Migration Plan, the finalized Architecture Roadmap, and updated Architecture Definition Document

2.2.8 Phase G — Implementation Governance

Phase G is arguably the most critical phase for ensuring architecture value is realized. It is where the CEA's team transitions from planning to oversight, ensuring that implementation projects deliver outcomes consistent with the approved architecture.

- Establishes Architecture Contracts with implementation projects — formal agreements defining architecture requirements and compliance criteria
- Conducts architecture compliance reviews at defined project milestones
- Manages architecture deviations — assessing requests for waivers and determining appropriate responses
- Provides architecture oversight and guidance to project teams throughout delivery
- Updates the Architecture Repository as implementations progress

2.2.9 Phase H — Architecture Change Management

Phase H ensures that the architecture remains relevant and aligned as the business, technology, and regulatory environment evolves. It monitors for changes that may require architectural response and manages the transition to new ADM cycles.

- Monitors the technology and business landscape for change drivers (new regulations, competitive disruption, technology evolution)
- Assesses the impact of changes on the current architecture
- Decides whether changes can be accommodated within the current architecture cycle or require a new ADM cycle
- Manages the Architecture Repository to reflect the evolving architecture landscape

2.2.10 Requirements Management

Requirements Management sits at the center of the ADM wheel, feeding into and receiving from all phases. It is a continuous process — not a one-time activity — that ensures architecture requirements are identified, documented, and traceable throughout the architecture lifecycle.

2.3 The TOGAF Architecture Content Framework

The Architecture Content Framework provides a structured model for the types of architectural work products that an architect produces. It distinguishes between three types of outputs:

Output Type	Description	Examples
Deliverable	Formally reviewed and approved contractual output	Architecture Vision, Architecture Definition Document, Architecture Roadmap

Output Type	Description	Examples
Artifact	Granular work product that populates a deliverable	Capability Map, Gap Analysis, ADR, Application Catalog
Building Block	Reusable component of business, IT, or architectural capability	Cloud platform component, API gateway service, Identity service

2.4 The Enterprise Continuum and Architecture Repository

The Enterprise Continuum provides a classification scheme for assets in the Architecture Repository, ranging from generic foundation architectures to organization-specific architectures. It enables the CEA to leverage industry reference models and proven patterns rather than reinventing every architecture from scratch.

The Architecture Repository is the CEA's primary knowledge management system. TOGAF defines six classes of architectural information stored in the repository:

- Architecture Metamodel — the framework and grammar that defines how artifacts relate
- Architecture Capability — the organization's EA practice description
- Architecture Landscape — the actual As-Is and To-Be architecture views
- Standards Information Base (SIB) — approved technology standards and patterns
- Reference Library — external reference architectures, frameworks, and industry models
- Governance Log — records of all architecture decisions, waivers, and compliance assessments

2.5 Architecture Governance Using TOGAF

TOGAF provides a comprehensive governance framework that the CEA uses to maintain architectural integrity across the enterprise. Key governance mechanisms include:

2.5.1 Architecture Board (ARB)

The Architecture Review Board is the primary governance body for enterprise architecture. Chaired by the CEA or a senior delegate, it reviews proposed architectures, approves deviations, grants waivers, and ensures compliance with architecture principles and standards.

In large multinationals, a tiered ARB structure is common:

- Enterprise ARB — reviews cross-domain, high-impact architectural decisions. Chaired by the CEA.
- Domain ARBs — reviews domain-specific decisions within established enterprise standards. Chaired by domain architecture leads.
- Project Architecture Reviews — lightweight reviews of solution architectures at project level. Facilitated by senior solution architects.

2.5.2 Architecture Contracts

Architecture Contracts are formal agreements between the CEA's team and project delivery teams. They define the architecture deliverables, quality criteria, and compliance checkpoints that a project must satisfy. They are the primary mechanism through which Phase G governance is exercised.

2.5.3 Compliance Assessments

TOGAF defines a structured compliance classification used by the CEA to assess how well implementations conform to the approved architecture:

Compliance Level	Description
Irrelevant	The standard does not apply to this implementation
Consistent	The implementation is broadly consistent but has not been formally assessed
Compliant	The implementation adheres to all mandatory architecture requirements
Conformant	The implementation meets all requirements and has been formally verified
Fully Conformant	Complete conformance — all standards met and formally certified
Non-Conformant	The implementation does not meet architecture requirements — remediation required

Chapter 3: CEA Deliverables — A Comprehensive Catalog

3.1 Enterprise-Level Deliverables

3.1.1 Architecture Vision and Strategy

The Architecture Vision is the foundational narrative document that articulates where the enterprise architecture is headed and why. It is the CEA's primary strategic communication tool — the document that aligns the C-suite, business leaders, and technology teams around a common direction.

A well-constructed Architecture Vision includes:

- The business context and key strategic drivers
- Architecture goals and success metrics
- The high-level target architecture across business, data, application, and technology domains
- Key architectural principles that will guide decision-making
- A summary architecture roadmap showing the sequence of change
- Major risks and mitigation strategies
- Governance approach and stakeholder engagement model

3.1.2 Architecture Principles

Architecture Principles are a small set of fundamental guidelines — typically 10 to 20 — that govern how architecture decisions are made across the enterprise. They are not policies or standards; they are the values and beliefs that underpin the entire architecture practice.

A well-formed architecture principle has five components:

Component	Description	Example
Name	A memorable short title	Cloud First
Statement	The principle itself in one clear sentence	All new workloads will be deployed to the cloud unless a justified exception is approved
Rationale	Why this principle exists — the business value it creates	Reduces capital expenditure, increases scalability, and accelerates time-to-market
Implications	What this principle means for how we work — what changes	Legacy hosting contracts will not be renewed; procurement must evaluate cloud-native options first

Component	Description	Example
Metrics	How we know the principle is being followed	% of new workloads deployed to cloud; number of approved exceptions per quarter

3.1.3 Business Capability Model

The Business Capability Model (BCM) is arguably the most important artifact in the EA toolkit. It provides a stable, business-aligned view of what the organization does — independent of how it is structured, who does it, or what technology supports it.

Capabilities are organized in a hierarchical heat map, typically three levels deep:

- Level 1 — Major capability domains (e.g., Customer Management, Product Development, Supply Chain)
- Level 2 — Capability groups within each domain (e.g., Customer Acquisition, Customer Retention, Customer Service)
- Level 3 — Individual capabilities (e.g., Lead Generation, Campaign Management, Customer Onboarding)

The BCM is used to:

- Identify which capabilities are strategically differentiating vs. commodity
- Assess the maturity and performance of each capability
- Anchor application portfolio analysis — mapping applications to capabilities they support
- Prioritize architecture investment — focusing on capabilities with highest strategic value and lowest maturity

3.1.4 Application Portfolio

The Application Portfolio is a comprehensive inventory of all applications in the enterprise, assessed against dimensions of business value and technical health. It is the CEA's primary tool for rationalizing the application landscape and driving portfolio investment decisions.

Each application is assessed against:

- Business Value — strategic alignment, business criticality, user satisfaction, regulatory importance
- Technical Health — architectural fit, supportability, technical debt level, integration complexity, vendor support status

Portfolio visualization models commonly used by CEAs:

- TIME Model — Tolerate, Invest, Migrate, Eliminate (Gartner)

- PACE Layering — Systems of Record, Differentiation, and Innovation (Gartner)
- Application Heat Map — plotted on a 2x2 matrix of Business Value vs. Technical Health

3.1.5 Technology Radar and Standards Register

The Technology Radar — popularized by ThoughtWorks — provides a visual representation of the organization's technology standards landscape. Technologies are placed in one of four rings:

Ring	Meaning	Action
Adopt	Proven, strategic technologies approved for broad use	Use for all new workloads in applicable domains
Trial	Technologies being evaluated with real workloads	Use in pilot projects; share learnings with the community
Assess	Technologies worth monitoring but not yet proven in our context	Monitor; do not use in production without approval
Hold	Technologies to be phased out or avoided	No new investment; plan migration from existing usage

3.1.6 Architecture Roadmap

The Architecture Roadmap is the sequenced plan that bridges the current-state architecture to the target-state architecture. It is one of the CEA's most important deliverables — the artifact that translates architecture strategy into a tangible, investable plan.

A well-constructed roadmap includes:

- Work packages — discrete units of architecture change, each with a clear outcome
- Transition architectures — intermediate states of the architecture at defined points in time
- Dependencies — explicit sequencing constraints between work packages
- Business value — the capability or outcome enabled by each work package
- Investment estimates — rough order-of-magnitude cost and resource requirements
- Risk assessment — architecture and delivery risks associated with each element

3.1.7 Architecture Decision Records (ADRs)

Architecture Decision Records capture the context, decision, and consequences of significant architecture choices. They are the institutional memory of the architecture — ensuring that future architects understand not just what was decided, but why.

A standard ADR structure includes:

- Title — a short descriptive name for the decision
- Status — Proposed / Accepted / Deprecated / Superseded
- Context — the forces and constraints that made a decision necessary
- Decision — the choice that was made
- Alternatives Considered — other options that were evaluated and why they were rejected
- Consequences — the positive and negative results of the decision, including implications for future decisions
- Compliance Notes — how conformance with this decision will be measured

3.2 Domain-Level Deliverables

Domain-level deliverables are produced by domain architects under the governance of the central EA team. They provide architectural depth within specific business or technology domains while remaining consistent with enterprise standards.

- Domain Capability Maps — detailed capability models for specific business domains (Finance, HR, Supply Chain, Customer)
- Domain Application Landscapes — application inventories and interaction diagrams for specific domains
- Domain Data Models — logical and conceptual data models for key business domains
- Domain Integration Architectures — API and integration patterns specific to a business domain
- Regional Architecture Variations — adaptations of the enterprise architecture to meet local regulatory, language, or operational requirements
- Domain Roadmaps — domain-specific transformation plans aligned to the enterprise roadmap

3.3 Project-Level Deliverables

Project-level deliverables are produced by solution architects working on specific delivery programs. They operate within the guardrails established by the enterprise and domain architectures.

- Solution Architecture Document (SAD) — the primary architecture deliverable for a delivery project, covering solution design, component interactions, NFRs, and deployment model
- Architecture Compliance Assessment — formal assessment of the solution's conformance with enterprise architecture standards
- High-Level Design (HLD) — the system-level design showing major components and their interactions
- Low-Level Design (LLD) — detailed technical design for individual components
- Non-Functional Requirements (NFR) Specification — performance, scalability, security, resilience, and compliance requirements
- Integration Design Document — detailed specification of interfaces, APIs, and data exchange

Chapter 4: The EA Operating Model — Organizing for Scale

4.1 Why the CEA Cannot Work Alone

In a large, multinational, multi-domain organization, the scope of enterprise architecture spans hundreds or thousands of applications, dozens of business domains, multiple geographies, complex regulatory environments, and hundreds of ongoing delivery projects. No single architect — however skilled — can comprehend, model, and govern this landscape alone.

The CEA's primary job is therefore not to produce architecture, but to build and lead an architecture capability that can produce architecture at the scale the organization requires. This requires a deliberate, well-designed EA Operating Model.

4.2 EA Operating Model Design

The EA Operating Model defines how architecture work is organized, executed, governed, and continuously improved across the enterprise. Its key components are:

Component	Description
Organization Design	How architects are structured — centralized, federated, or hub-and-spoke
Roles & Responsibilities	What each type of architect does, at what level, with what authority
Governance Mechanisms	ARB structure, review processes, standards management, compliance tracking
Architecture Repository	Tools and processes for storing, managing, and sharing architecture assets
Community of Practice	How the broader architecture community is engaged and developed
Performance Management	How the EA function measures and demonstrates its value

4.3 Organization Design Models

4.3.1 Centralized Model

In the centralized model, all architects report to the CEA. This model provides maximum consistency and control but can become a bottleneck and tends to be perceived as disconnected from business unit realities.

Best suited for: smaller organizations, early-stage EA practices, or organizations with a strong mandate for architecture standardization.

4.3.2 Federated Model

In the federated model, architects are embedded in business units or technology domains, reporting to business unit CIOs or technology leaders. The CEA provides standards and guidance but has no direct authority over domain architects.

Best suited for: highly decentralized multinationals, organizations where business unit autonomy is paramount.

Risk: without strong governance mechanisms, the federated model can produce inconsistent architecture and standards drift.

4.3.3 Hub and Spoke Model (Recommended for Large Multinationals)

The hub-and-spoke model combines a small, senior central EA team (the hub) with a network of domain and regional architects (the spokes). The central team sets strategy, standards, and governance; domain architects apply them within their domains and feed local intelligence back to the center.

This model is the most common in large multinationals because it balances consistency with scalability. The CEA has direct authority over the central team and governance authority (through standards and the ARB) over domain architects, who may report organizationally to business unit leaders.

4.4 Roles Within the Architecture Organization

4.4.1 The Central EA Team

Role	Primary Responsibilities	Reports To
Chief Enterprise Architect	Architecture vision, executive engagement, governance framework, EA practice leadership	CIO / CTO / CEO
Deputy / Lead Enterprise Architect	Day-to-day EA operations, cross-domain coordination, ARB facilitation	CEA

Role	Primary Responsibilities	Reports To
Business Architecture Lead	Business capability models, value streams, operating model design, business case support	CEA
Data & Analytics Architecture Lead	Data strategy, master data management, analytics platform architecture, data governance	CEA
Application Architecture Lead	Application portfolio management, integration standards, API governance, rationalization	CEA
Infrastructure & Cloud Architecture Lead	Cloud strategy, platform standards, infrastructure architecture, FinOps	CEA
Security Architecture Lead	Security architecture standards, SABSA alignment, risk architecture, compliance	CEA
EA Practice Manager	ARB process management, repository governance, EA tooling, metrics and reporting	CEA

4.4.2 Domain Architects

Domain architects operate at the intersection of the enterprise EA practice and specific business or technology domains. They are the primary producers of domain-level architecture artifacts and the primary enforcers of enterprise standards within their domains.

Domain Architect Type	Domain	Key Deliverables
Business Domain Architect	Finance, HR, Supply Chain, Customer, etc.	Domain capability maps, domain application landscapes, domain roadmaps
Regional Architect	EMEA, APAC, Americas, etc.	Regional architecture variations, local compliance adaptations, regional roadmap input
Platform Architect	SAP, Salesforce, Azure, AWS, etc.	Platform architecture standards, platform roadmaps, integration patterns

Domain Architect Type	Domain	Key Deliverables
Solution Architect	Individual projects and programs	SADs, ADRs, HLDs, architecture compliance assessments

4.5 Governance Mechanisms

4.5.1 Architecture Review Board (ARB)

The ARB is the primary governance forum for enterprise architecture. Its purpose is to ensure that architectural decisions — particularly those that are cross-cutting, high-impact, or standards-setting — are made with appropriate rigor, visibility, and alignment.

Effective ARB design principles:

- Keep it lean — 6 to 10 members maximum for decision-making effectiveness
- Include business voices — at least one or two senior business stakeholders
- Establish clear decision rights — what requires ARB approval vs. what can be delegated
- Publish decisions — make ARB decisions visible to the broader architecture community
- Measure outcomes — track what happens to projects that went through ARB vs. those that bypassed it

4.5.2 Architecture Community of Practice (CoP)

The Architecture CoP is the CEA's primary mechanism for building architecture culture, sharing knowledge, and scaling architecture capability across the enterprise. Unlike the ARB (which governs decisions), the CoP is a collaborative learning community.

Effective CoP activities include:

- Monthly all-hands architecture community meetings — sharing decisions, new standards, lessons learned
- Working groups on specific topics — API standards, cloud patterns, data architecture, security
- Architecture guilds aligned to technology domains — communities within the community
- Architecture showcase events — project teams presenting their architectures for peer feedback
- External speaker series — bringing in industry experts and TOGAF practitioners

4.5.3 Architecture Metrics and Value Demonstration

One of the CEA's most important and often neglected responsibilities is demonstrating the value of the EA function. Without clear metrics, the EA practice is vulnerable to being perceived as bureaucratic overhead rather than a strategic enabler.

Effective architecture metrics fall into three categories:

Category	Example Metrics
Portfolio Health	% of applications on strategic platforms, number of applications retired per year, application duplication rate, integration point complexity score
Architecture Compliance	% of projects reviewed by ARB, compliance assessment pass rate, number of waivers granted, waiver remediation rate
Business Value	Architecture-enabled revenue (new digital capabilities), cost avoidance from rationalization, time-to-market improvement from platform standardization

Chapter 5: Integrating TOGAF with Complementary Frameworks

5.1 Why TOGAF Alone is Insufficient

TOGAF is comprehensive but deliberately framework-agnostic in many areas. It acknowledges that organizations operate within broader management and governance ecosystems, and explicitly encourages integration with complementary frameworks. The CEA must be fluent in these integrations.

5.2 ArchiMate — The Architecture Modeling Language

ArchiMate, also published by The Open Group, is the modeling language that provides the visual notation TOGAF deliberately lacks. While TOGAF defines what artifacts to produce, ArchiMate defines how to model them consistently.

ArchiMate organizes architecture content into three layers:

- Business Layer — business processes, functions, roles, capabilities, and value streams
- Application Layer — application components, services, interfaces, and data objects
- Technology Layer — infrastructure nodes, system software, networks, and technology services

The CEA uses ArchiMate to:

- Create consistent, navigable architecture views across all domains
- Trace relationships between business capabilities, applications, and technology
- Model the impact of change across the architecture stack

Reference

The Open Group. ArchiMate 3.2 Specification. Available at: opengroup.org/archimate3. The definitive reference for ArchiMate notation and usage. Free to download for registered users.

5.3 ITIL — Connecting Architecture to Service Management

ITIL (Information Technology Infrastructure Library) provides the service management framework that governs how IT services are designed, delivered, and improved. The CEA

integrates TOGAF with ITIL to ensure that architectures are operationally viable — not just technically sound.

Key integration points:

- ITIL Service Design aligns with TOGAF Phase D (Technology Architecture) — ensuring that architectures consider operational requirements such as monitoring, incident management, and capacity planning
- ITIL Change Management integrates with TOGAF Phase H (Architecture Change Management) — providing the operational process for managing changes to the deployed architecture
- ITIL Configuration Management Database (CMDB) feeds the Architecture Repository with accurate as-built information about the deployed technology landscape

5.4 SAFe and Agile — Architecture in a Product-Led Organization

Many large organizations have adopted Scaled Agile Framework (SAFe) or other agile-at-scale approaches for technology delivery. The CEA must integrate the EA practice with agile delivery rhythms rather than operating as a waterfall-era governance gate.

Key integration points:

- Architecture Runway — TOGAF's Architecture Roadmap maps to SAFe's concept of the Architectural Runway, providing just-enough architecture ahead of delivery to enable agile teams to deliver without making inadvertent architectural decisions
- Agile Release Trains (ARTs) — each ART has a System Architect role in SAFe; the CEA ensures these System Architects are aligned to enterprise standards and connected to the architecture community
- Program Increment (PI) Planning — the CEA or domain architects participate in PI Planning to ensure architecture concerns are visible and addressed in sprint planning
- Lightweight ADRs — in agile organizations, ADRs replace heavyweight architecture documents as the primary mechanism for capturing and communicating architectural decisions

Key Insight

The most common failure mode in agile organizations is that architecture becomes invisible — technical decisions are made at team level without reference to enterprise standards, accumulating architectural debt rapidly. The CEA's role is to make architecture visible and valuable within agile delivery, not to slow it down.

5.5 COBIT — Governance and Risk Alignment

COBIT (Control Objectives for Information and Related Technologies), published by ISACA, provides a governance framework for enterprise IT. The CEA uses COBIT to align the EA function with broader IT governance and risk management processes.

Key integration points:

- COBIT's APO (Align, Plan, Organize) domain aligns with TOGAF's Preliminary Phase and Phase A — ensuring that architecture strategy is governed within the organization's broader IT governance structure
- COBIT's risk management objectives inform architecture risk assessment processes
- COBIT's value delivery objectives provide the governance language for demonstrating EA ROI to audit and risk committees

5.6 SABSA — Security Architecture

SABSA (Sherwood Applied Business Security Architecture) is the leading framework for enterprise security architecture. In organizations with a dedicated Security Architecture Lead, the CEA ensures SABSA is integrated with the TOGAF ADM.

Key integration points:

- SABSA's contextual, conceptual, logical, physical, component, and operational layers map directly to TOGAF's architecture domains
- Security architecture views are produced for every major ADM phase, treating security as a first-class architectural concern rather than an afterthought
- The SABSA Business Attributes Profile feeds into the Architecture Principles and non-functional requirements

5.7 The Zachman Framework — Architecture Completeness

The Zachman Framework, developed by John Zachman, provides a two-dimensional classification scheme for enterprise architecture artifacts. The rows represent architectural perspectives (Executive, Business Management, Architect, Engineer, Technician, User) and the columns represent interrogatives (What, How, Where, Who, When, Why).

The CEA uses Zachman not as a process framework (as TOGAF is), but as a completeness check — ensuring that the architecture artifact set addresses all relevant perspectives and interrogatives for high-stakes domains.

Chapter 6: Building and Leading the Architecture Practice

6.1 Establishing the Architecture Capability

Building an EA practice from scratch — or transforming an immature one — is one of the CEA's most challenging and consequential responsibilities. The architecture capability does not emerge organically; it requires deliberate design, sustained investment, and strong executive sponsorship.

6.2 The Architecture Capability Maturity Model

Several maturity models help the CEA assess the current state of the EA practice and define a target state. Gartner's EA Maturity Model and the TOGAF Architecture Capability Framework both describe maturity levels:

Level	Name	Characteristics
1	Initial	Ad hoc architecture activity; no formal practice; architecture standards informal or absent
2	Developing	Architecture team established; basic standards defined; ARB in place but inconsistently applied
3	Defined	Formal EA operating model; comprehensive standards; governance consistently applied; Architecture Repository in use
4	Managed	Architecture metrics tracked; EA demonstrably influencing investment decisions; business capability mapping in use
5	Optimizing	Architecture continuously improved based on metrics; EA is a strategic business partner; predictive capability in technology planning

6.3 Building the Architecture Team

6.3.1 Assessing the Starting Position

Most CEAs inherit an existing architecture landscape rather than building from scratch. A typical starting assessment involves:

- Inventory of existing architects — roles, skills, seniority, domain coverage
- Assessment of architecture artifacts — what exists, what quality they are, what is missing

- Governance audit — what governance processes exist, how consistently they are applied
- Stakeholder perception survey — how business leaders and delivery teams perceive the current EA function

6.3.2 Hiring Strategy

The CEA looks for architects who combine T-shaped skills — deep expertise in at least one domain, broad awareness across domains — with strong communication, stakeholder management, and systems thinking capabilities. Technical depth alone is insufficient; architects who cannot communicate with business stakeholders or navigate organizational politics will be ineffective in a large multinational.

Critical hiring criteria for enterprise architects:

- Demonstrated ability to communicate complex technical concepts to non-technical senior stakeholders
- Experience operating across business and technology boundaries
- Evidence of systemic, long-horizon thinking — not just problem-solving in the immediate context
- TOGAF certification (Foundation + Practitioner) as a baseline for senior architects
- Domain expertise relevant to the organization's business (finance, manufacturing, healthcare, etc.)

6.3.3 Team Size Guidelines

Organization Scale	Central EA Team	Domain Architects	Solution Architects
National organization (5–10k employees)	3–6	5–10	10–20
Large multinational (20–50k employees)	6–12	15–30	30–80
Global enterprise (50–100k+ employees)	12–20	30–60	80–150+

6.4 Architecture Tools and Tooling Strategy

The CEA must make considered decisions about the tools that support the architecture practice. Key tool categories include:

6.4.1 Enterprise Architecture Repository Tools

These tools provide the platform for storing, managing, and visualizing the architecture landscape:

- LeanIX — cloud-native EA tool; strong in application portfolio management and capability mapping; excellent integration with ServiceNow, Jira, and cloud platforms
- Ardoq — highly flexible data-driven EA tool; strong for complex relationship modeling and impact analysis
- Alfabet (Software AG) — comprehensive EA tool with strong roadmap and portfolio management capabilities; popular in large European enterprises
- Bizzdesign Horizon — strong TOGAF and ArchiMate alignment; popular in public sector and regulated industries
- Sparx Enterprise Architect — powerful modeling tool; strong ArchiMate and UML support; cost-effective for smaller teams

6.4.2 Diagramming and Visualization Tools

- draw.io / diagrams.net — free, widely used, strong EA shape libraries including ArchiMate and C4
- Lucidchart — cloud-based; strong template library; good for collaborative diagramming
- Miro — excellent for collaborative workshops; capability mapping, roadmap planning, and whiteboarding
- Microsoft Visio — widely used in Microsoft-centric organizations; good shape libraries

6.4.3 ADR Management Tools

- Confluence — widely used for ADR documentation in Atlassian environments
- GitHub / GitLab — ADRs as code; versioned, linked to code repositories, accessible to engineering teams
- ADR-tools (CLI) — open-source command-line tool for managing ADRs in code repositories

6.5 Architecture Practice Rituals

Consistent rituals are the engine of a healthy architecture practice. The CEA should establish and protect the following:

Ritual	Frequency	Purpose	Participants
Architecture Review Board	Bi-weekly	Review and approve significant architecture decisions	CEA, domain leads, senior business stakeholders
EA Leadership Team	Weekly	CEA team coordination, issue resolution, strategic alignment	Central EA team
Architecture Community of Practice	Monthly	Knowledge sharing, standards development, culture building	All architects, interested engineers
Domain Architecture Reviews	Monthly	Deep dive into specific domain architectures	CEA, domain architect, domain business and IT leaders
Architecture Metrics Review	Quarterly	Review EA KPIs; demonstrate value; adjust priorities	CEA, CIO/CTO, EA leadership team
Technology Radar Update	Bi-annually	Review and update technology standards	CEA, domain leads, senior engineers
Architecture Roadmap Review	Quarterly	Align roadmap with business priorities and budget cycle	CEA, C-suite representatives, EA leadership team

Chapter 7: CEA in Practice — Patterns, Anti-Patterns, and Advice

7.1 Common CEA Success Patterns

7.1.1 Start with Business Capabilities, Not Technology

The most effective CEAs anchor their architecture work in business capabilities before touching technology. A Business Capability Map built collaboratively with business leaders creates immediate credibility, provides a stable foundation for all subsequent architecture work, and frames technology decisions in business terms that executive stakeholders understand.

7.1.2 Make Architecture Visible

Architecture that lives in documents nobody reads has no value. Effective CEAs invest in making architecture visible — publishing living architecture maps on internal portals, presenting at all-hands meetings, creating visual dashboards that show portfolio health and roadmap progress. Visibility drives engagement.

7.1.3 Embed in Transformation Programs

Architecture is most valuable and most visible during major transformation programs. CEAs who position their teams as active participants in — not reviewers of — digital transformation, cloud migration, and M&A integration programs build lasting credibility and ensure architecture has real impact on outcomes.

7.1.4 Govern with a Light Touch

The most effective architecture governance is the minimum necessary to prevent harmful decisions while enabling autonomy for teams making low-risk choices. CEAs who govern everything equally create bureaucratic friction that drives teams to bypass architecture altogether. A risk-based governance approach — investing governance effort proportional to the risk and strategic significance of decisions — is more effective and more sustainable.

7.1.5 Build Relationships Before You Need Them

Architecture authority is mostly informal — it derives from trust, credibility, and relationships rather than hierarchy. CEAs who invest early in building genuine relationships with business leaders, delivery teams, and

peer executives are able to exercise architectural influence far more effectively than those who rely on governance authority alone.

7.2 Common CEA Anti-Patterns

7.2.1 The Ivory Tower Architect

The most damaging anti-pattern in enterprise architecture is the EA team that produces beautifully crafted architecture documents that nobody reads and that have no discernible impact on what actually gets built. This happens when the EA practice operates in isolation from delivery — producing outputs for its own internal purposes rather than solving real problems for real stakeholders.

Remedy: Mandate that every EA team member spends meaningful time embedded in delivery programs. Architecture should be co-created with delivery teams, not handed down to them.

7.2.2 The Governance Bottleneck

When every decision requires ARB approval, the ARB becomes a bottleneck that delivery teams work around rather than through. The result is shadow architecture — important decisions made without architectural oversight precisely because the governance process is too burdensome.

Remedy: Define clear decision rights. Establish which decisions genuinely require ARB review and which can be delegated to domain architects or solution architects. Create a fast-track review process for lower-risk decisions.

7.2.3 Technology-Led Architecture

CEAs who lead with technology rather than business capability create architecture that optimizes for technical elegance rather than business value. The classic manifestation is an architecture roadmap full of technology platform initiatives with no clear connection to business outcomes.

Remedy: Every architecture initiative should have a named business capability owner and a clear statement of the business problem it solves. The Business Capability Map should be the anchor for all technology investment decisions.

7.2.4 The Framework Fundamentalist

Attempting to implement TOGAF in its entirety, in sequence, without tailoring produces enormous overhead with limited value. Organizations that treat TOGAF as a compliance exercise rather than a pragmatic toolkit spend more time managing the process than doing architecture.

Remedy: Be explicit about what TOGAF components you are adopting and why. Tailor ruthlessly. Measure the value of each process you implement and eliminate those that don't earn their keep.

7.3 The CEA as Organizational Leader

Beyond the technical and methodological dimensions of the role, the CEA is fundamentally an organizational leader. In a large multinational, the CEA must be capable of:

- Navigating complex organizational politics — understanding where power resides, who the key influencers are, and how to build coalitions around architecture priorities
- Managing upward — communicating architecture value to the board, CEO, and C-suite in business terms
- Managing across — building productive peer relationships with the CIO, CTO, CDO, CISO, and CFO
- Managing downward — developing, motivating, and retaining a high-performing architecture team
- Representing the organization externally — engaging with industry bodies, technology vendors, and the broader architecture community

References and Further Reading

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