

The Evolution of Enterprise Architecture: Enabling IT to "Speak Business" to Drive Innovation

A new blueprint for effectively architecting
and implementing ideas that produce the
right business outcomes

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► The Role of the Enterprise Architect

Enterprise architect is a common job title within IT organisations at large companies, but the term lacks any standard definition.

Ask someone on the business side what their organisation's enterprise architects do, and you'll likely get a response like, "They work with IT," which is true, but also pretty vague.

Each business organises its enterprise architects in a way that best serves the organisation and helps achieve its goals. That's one of the reasons the enterprise architect role has no standard definition. Most teams consist of members with broad IT experience, but each member will often have some role-specific knowledge. One team member might specialise in security, for example, and another in applications.

Like the tech industry in general, the only constant in enterprise architecture is change. Roles and titles will continue to evolve, and as the business and IT sides of the organisation continue to come together in the face of digital transformation, how these teams are organised, where they report, and the types of projects they focus on are sure to change over time.

Regardless of the specific title, enterprise architects need the ability to work with both their business and IT colleagues to help improve business outcomes. As enterprise architecture roles move closer to the business, those with business knowledge are becoming valuable assets. This is especially true for industry-specific business knowledge.

"By 2021, 40 percent of organisations will use enterprise architects to help ideate new business innovations made possible by emerging technologies."

Marcus Blosch, Vice President Analyst, Gartner

While enterprise architects are crucial to delivering innovation, all too often, enterprise architecture has been executed by IT groups for IT groups and has involved the idea that everything in the current state has to be drawn and modeled before you can start to derive value. This approach has wasted effort, taken too long to show results, and provided insufficient added value to the organisation.

Organisations need to reposition EA closer to the center of the business, and not leave it to stagnate on the fringes. Working closely with CIOs, enterprise architects can produce roadmaps and other reports that can steer the business through digital transformation, through innovative and forward-thinking approaches.

Enterprise architects themselves have to ensure they're not solely focused on the standard EA framework. This approach might be useful to EAs, but to senior management and the wider business, the value isn't clear. A business outcome approach to EA can help ensure EA is always focused on how it can improve the business, and help it respond readily to disruption so new avenues can be capitalised on.



► How to Do Enterprise Architecture

Large global enterprises deploy erwin Evolve tools to support massive user counts in highly regulated industries with complex data and processes (e.g., financial services, healthcare and utilities).

erwin transforms the role of enterprise architects, allowing them to “speak business” and re-architect innovation and value streams in vital areas such as risk management and regulatory compliance. With a trusted enterprise data hub, every user operates from a ‘single source of truth.’ erwin automatically ingests metadata from operational processes, applications and models to make the hub a living, relevant and role-based resource for better decision-making. With erwin’s EA capabilities, organizations can:

Have flexibility in choosing a deployment path that best suits their needs.

erwin provides two EA products to help customers see where their organizations stand today and where they need to transform to produce the desired outcomes tomorrow. **erwin Evolve** provides a complete set of on-premise or cloud-hosted EA tools. This product is highly customizable for integration into the customer environment. **erwin Evolve** is a full-featured, cloud-based EA toolset with out-of-the-box support for industry frameworks with no hardware to implement and manage.

Centralize enterprise architecture modeling and management. With erwin Evolve, enterprise architects have everything they need in one place to plan, manage and respond to business and IT change while driving innovation and digital transformation. Everything in erwin Evolve is presented through a web experience and ties together via a central, shared repository. An integrated set of views and information on strategy, business capabilities, applications, information assets, technologies, etc., provides a thorough understanding of the enterprise.

Support IT-business alignment by developing and capturing multiple artifacts.

To gain critical insights and deliver on strategic outcomes—such as reducing redundant applications to improve operating efficiency, appropriately processing sensitive data or seamlessly implementing new cloud systems as part of digital transformation efforts, develop and capture multiple artifacts to serve as documentation. These include heatmap-style IT landscape views and business capability maps, application architecture views, technology dependency views, roadmaps, dashboards and charts.

Increase enterprise collaboration. Give non-EA stakeholders critical insights into aspects of the business they wouldn’t have otherwise in time to make key decisions. This means seamlessly bringing together subject-matter experts and information consumers to share their knowledge and collaborate. erwin’s user-friendly web experience provides self-discovery navigation and analysis of enterprise assets, with cross-functional collaboration encouraged through discussion threads, surveys and other social features. There’s a single source of truth, but different stakeholders have different views based on their roles and information needs.

Model value streams. Enterprise architects become actively engaged with the business to understand how it works, what its processes are, what a value stream looks like today (as is) and how it can be enhanced (to be).

► How to Do Enterprise Architecture

continued

Support industry-standard frameworks and notations.

Numerous industry-standard and industry-defined frameworks have shaped the implementation of enterprise architecture, such as ArchiMate, TOGAF, Zachman International, DoDAF and FEAF. In addition to supporting these frameworks, erwin Evolve should serve is easily and fully configurable to meet enterprise of stakeholder needs. It also is “right-sized” to efficiently and effectively build the enterprise architecture information portal that delivers the greatest value.

Perform quick and easy impact analysis. Explore model elements, links and dependencies to manage change in an efficient and cost-effective way while mitigating inherent risks. Powerful visual analysis is made possible through heatmaps, reports, charts and graphs.

Enable business and IT infrastructure interoperability.

erwin Evolve integrates with such third-party tools as CAST, Cloud Health, RSA Archer and ServiceNow. We also help customers integrate with other erwin products, including erwin Data Intelligence to ensure metadata from data sources, operational processes, business applications and data models is automatically harvested, transformed and fed into a central data catalog and then made accessible and understandable in role-based views.

THE VALUE OF ENTERPRISE ARCHITECTURE TOOLS



Manage complexity: A tool enables business and IT leaders to capture, understand and articulate the opportunities, challenges and risks as businesses shift to digital organizations.



Support the creation of actionable, signature-ready EA deliverables: EA tools enable business and IT leaders to make investment decisions that balance and prioritize current operational demands, disruptions and opportunities with the longer-term strategic vision of the organization.



Speed time to value: EA tools accelerate analysis and decision support for alternative investment, rationalization, and optimization opportunities and plans and for assessing risk, change and the impact on the organization.

Source: Magic Quadrant for Enterprise Architecture Tools, Gartner, May 2017



► erwin Evolve in Action

Increasing regulatory pressure, competitive differentiation, operational excellence – everything in today’s business world depends on quick response, but those actions also have to be based on accurate information.

erwin Evolve provides the right information to the right people at the right time for smarter decision-making. Following are some examples of how our global EA customers are seeing value with the tools.



MANAGING GDPR COMPLIANCE AND RISK ANALYSIS

Risk management and regulatory compliance are primary use cases for erwin Evolve, with many customers using the tool to identify sensitive data points, such as those associated with PII, GDPR, HIPAA and SOX. With this information mapped out in erwin Evolve, users can run risk analyses for compliance audits as well as determine where data breach vulnerabilities exist so they can enhance governance and security measures.

For example, a Japanese pharmaceutical company with clinical development operations in Europe and the United States has an EA initiative managed from the United Kingdom with a focus on application interactivity, architecture landscapes, impact analyses and risk management, including GDPR compliance.

Following several internal delays due to the project’s complexity, erwin Evolve was implemented to support a fully automated enterprise architecture ecosystem with visualizations and dynamic, role-based dashboards to improve global collaboration in real time. Within two weeks, the erwin Evolve design and configuration team, working closely with the Astellas EA and GDPR risk management team, developed a central EA portal, importing more than 260 MB of data. Now the company has objective control and management of its applications for GDPR profiling and risk analysis.



CREATING AND COMMUNICATING BUSINESS NEEDS AND PROCESSES

Southern California Edison (SCE), the largest subsidiary of Edison International, is the primary electricity supply company for much of Southern California. Utilities are complex organizations, with no function operating in isolation. Interconnected, multi-step processes are supported by multiple applications and software solutions so a problem in one area will almost certainly have a downstream effect. After evaluating various enterprise architecture solutions, erwin was chosen to help create a more comprehensive picture of SCE’s business process requirements and communicate business needs to the IT department.

The initial implementation focused on documenting, analyzing and simulating processes in a central repository for a clear view of who and what will be impacted by changes. SCE used erwin to identify employee training requirements and to pinpoint potential trouble spots and bottlenecks in proposed changes. For a major SAP integration, erwin helped reduce the three-to-six-month stabilization period to three weeks. The company realized additional savings with erwin by reducing the time spent writing lengthy technical procedures, savings they estimate paid for the solution within a year.

Analysis and simulation helps SCE make fully informed decisions, train the right people and give them access to the correct information they need. It is “one of the most important change management resources” they have and “a key enabler” in support of major change initiatives. The company also uses erwin to power an employee portal for submitting ideas about operational improvements, helping them keep “a fresh perspective.”

▶ erwin Evolve in Action

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ENABLING POST M&A COST SAVINGS AND BUSINESS TRANSFORMATION EFFORTS

A property data solutions, service and technology provider for realtors, financial institutions, insurance carriers, government agencies and other housing market participants had grown through numerous acquisitions. Thus, it lacked visibility and governance over all its business units and product lines.

The company decided to implement erwin Evolve to support the documentation of its enterprise architecture for a complete picture of the technology landscape to reduce IT costs and use those savings to fund business transformation activities, including next-generation products. After one year, it saved \$42 million and went on to achieve its three-year savings goal of \$250 million with a more holistic EA that encompasses business strategy, application dependency, disaster recovery, server inventory and cloud migration.

With the savings, the firm has been able to migrate all of its data warehouses, which support 52 product lines, to a managed service and integrate all of its ETL processes into a global service to better manage data integrations and the associated standards. These also are examples of how the company has been able to reduce risk.



IMPROVING COMMUNICATION, COLLABORATION AND GOVERNANCE

A governmental agency in Europe started a data governance and digital transformation journey to improve services and security while containing costs. The CIO and his team had to address multiple innovation initiatives, such as data center consolidation, IT service management, ISO certifications and IT strategy and design, and then use cost savings from one project to pay for the next. Project coordination and delivery was challenging because different teams were supported by different vendors, and communication based on standard terminology was lacking.

erwin Evolve was implemented to manage a portfolio of 580 applications, as well as to model the complex current-state architecture across applications, processes, organizations and services. A central repository for EA artifacts was created to provide integrated and approved, role-based views of this information to better manage complexity and risk; standardize and/or re-engineer processes and understand the impact of changes; and establish the infrastructure to deliver services to external clients for other public administration agencies. This latter objective includes maintaining and publishing a catalog of more than 360 services with end-to-end process maps depicting components, customers, service-level agreements, service owners and delivery managers.

Communication, collaboration and governance have improved thanks to clear and accurate dashboards and a current services catalog fed by metadata from various underlying systems (e.g., ServiceNow, RSA Archer, CA Clarity, IBM Data Architect) that is constantly updated and aligned, creating synergy between systems, processes and work groups. Live indicators monitor the progress, assess completeness and balance the responsibility load for different actors involved in EA maintenance (services, processes and application map), with more than 100 workflows established to calculate metrics related to solution completeness and accuracy.

erwin Evolve in Action

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DELIVERING AUTOMATIC VISUALIZATIONS AND INSTANT IMPACT ANALYSES FOR MASSIVE APPLICATION TRANSITION

A communications infrastructure and media services provider in the United Kingdom uses advanced networks to support the exponential growth of connected devices and the ever-increasing demand for data from smartphones to tablets, connected TVs, smart meters, cars and medical devices.

The company chose to work with erwin to help it transition from using 243 applications across data, enterprise and business architectures down to six. Because this project would have enormous impacts, it needed to be managed in an agile fashion with automatic visualizations and impact analyses with information accessible and manageable at the appropriate levels but also cross-referenceable.

Thanks to erwin Evolve, all three disciplines now use the same system and taxonomy to communicate and collaborate, making it the largest IT project they've undertaken within a decade a success. Process owners and SMEs now provide instant feedback to enterprise architects and application managers about what processes support which applications, while any changes planned by enterprise architects are instantly analyzed by process owners so they can plan changes on their end. Data architects can see how data moves not just at the application level but also at the process level with data relationships, dependencies and lineage mapped.



erwin Evolve in Action

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BUILDING AN EA PRACTICE WITH FAST ROI

Daktronics, based in Brookings, South Dakota, designs, manufactures, sells and services video displays, scoreboards, digital billboards, dynamic message signs, sound systems and related products. The company was building out its EA practice and needed a better way to capture the current state of its business, applications, infrastructure and data architecture. After determining that ArchiMate was the best way to describe, analyze and visualize its architecture within and across business domains in an unambiguous way, it needed to find an EA tool it could use to “win fast or fail fast.”

erwin Evolve Agile was selected because it is compatible with ArchiMate, cloud-hosted for fast implementation with lower cost, and has a configurable metamodel for easy modifications. In addition, erwin Evolve Agile enables the retrieval of information from other systems for reporting via APIs. With erwin Evolve, you can also easily create and retrieve diagrams, including the associated relationships for future use.

By incorporating erwin documentation into Daktronics’ development process, the platform has provided beneficial insights into component dependencies throughout its pillar systems and services, along with a valuable reference for analysts, architects and developers to quickly gain procedural and architectural understanding of the technical ecosystem. The company considers erwin Evolve Agile a fast win—it was up and running within the same day, and they realized success within the first week.

As the focus of EA expands from IT capabilities to business outcomes, working with a collaborative enterprise architecture platform is essential to engage stakeholders across the organization, ensuring alignment between IT and the business.



Do you see the value of taking EA beyond a limited IT support role to a strategic business function enabled by purpose-built tools?

erwin Evolve will help your organization realize a new world of alignment, innovation and governance.



**START
A TRIAL
OF erwin
EVOLVE**

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About erwin, Inc

As the data governance company, erwin provides enterprise modeling, data cataloging and data literacy software to help customers discover, understand, govern and socialize their data to mitigate risks and realize results. The erwin EDGE platform facilitates IT and business collaboration in driving actionable insights, agile innovation, risk management and business transformation. We help government agencies, financial institutions, healthcare companies and other enterprises around the world unlock their potential by maximizing the security, quality and value of their data assets.

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