NEWS

The 2014 Enterprise Architecture Awards

At a time when Web and mobile technology development have become top priorities, effective enterprise architecture matters more than ever. Here are this year's six winning initiatives

By Alex Cullen
InfoWorld |
SEP 22, 2014 2:47 PM PDT

Welcome to the fifth annual Enterprise Architecture Awards, presented by InfoWorld, Forrester Research, and the Penn State University Center for Enterprise Architecture. This year, we have six winning EA programs from the following companies: Allstate Insurance, Australia Post, Dell, Dubai Customs House, Molina Healthcare, and State Farm Insurance Companies.

This group shows how far EA has come in terms of overall business impact and, in particular, in its focus on customer-facing systems that drive engagement and increase revenue. Our winners clearly understand that big data and mobile are more than leading-edge technology areas -- they also represent enormous opportunity to increase customer interaction and prove the value of EA done right.

The winners were selected by a six-person panel of leading EA practitioners:

[Keep up on the latest thought leadership, insights, how-to, and analysis on IT through Computerworld's newsletters.]

Gary Vonderhaar, enterprise architecture group executive, and



Vijay Bhuvanagiri, head of business architecture at Mastercard, a 2013 Enterprise **Architecture Awards winner**

Igor Gershfang, senior director of emerging technology solutions at Walgreens

Jason Graf, IT director at Yum Brands, another 2013 winner

RECOMMENDED WHITEPAPERS



How to Grow Past Legacy Limitations with SaaS Commerce + ERP Platforms



5G: Improving the Telehealth Experience for Healthcare Providers and Patients



⚠ Gartner Predicts 2021: Healthcare Providers Must Accelerate Digital Transformation to **Address Disruption**

Eric Meredith, vice president of architecture governance and communications at PNC **Financial**



SponsoredPost Sponsored by Allied Telesis Choose the Right Switch for Video Surveillance David Parrott, chief architecture officer at Thomson Reuters

We're grateful for our panel's efforts in selecting finalists and choosing six winners among many worthy entrants. The results speak for themselves. It's difficult to imagine an array of EA practices that could be more successful in helping their organizations achieve strategic business goals.

Allstate Insurance: Enabling business innovation

Property and casualty insurance in the United States is a relatively low-margin business. To compete in this market, the best strategy is to create differentiated products and services for unique customer segments, each with a customized value proposition. This requires both great service and innovative products.



SponsoredPost Sponsored by HPE 8 steps to achieving the 'cloud everywhere' vision

Allstate Insurance realized that in order to grow its business, it needed to transform IT from a "fix and run" organization to a group focused on ways to "run and grow."

To accomplish this, Allstate named a Chief Innovation Officer to build and lead a team creating, evaluating, and developing new products and services for customers. Working closely with each business unit and an Innovation Execution group within Enterprise Architecture Innovation draws on both data-driven analytics and customer insights to create new offerings, enhance existing ones, and coordinate activity across the enterprise.

Prior to the creation of the Innovation Execution group, innovation chiefly derived from the ad-hoc implementation of ideas. Even when prototypes showed promise, they could not easily be integrated back into production environments. Today the EA practice's Innovation Execution activities target both business and IT, enabling innovation through the following methods:

Building "more real, more quickly," by pipelining business ideas through the systems development lifecycle faster

Uncovering potential roadblocks very early to minimize project risks

Providing development teams with working, proven prototypes for reference

Ensuring migration to production is streamlined without sacrificing quality or engineering rigor

The EA practice has adapted in several ways. Key architects with extensive development expertise are tapped to lead innovation projects, while solution architects now work on projects using both waterfall and agile methodologies. They are always part of a crossfunctional team for innovation projects.



SponsoredPost Sponsored by Salesforce The IT Leader's Guide to a Customer-Centric Digital Strategy

In addition, EA and the Innovation Execution teams proactively engage the IT operations teams early. This devops-style approach cultivates a collaborative commitment to successful implementation and fosters a much better understanding of nonfunctional requirements and operational needs.

The Innovation Execution team builds on the classic EA deliverables -- including application road maps and architecturally scalable designs -- by providing prototypes, market tests, and the assessment of high-risk portions of large complex systems.

The primary technology challenges come from keeping pace with new trends, including:

Mobile development and architectural changes, such as responsive UI design

Telematics and the connected car -- and their impact on such offering as usage-based insurance

Big data analytics capabilities with open source tools

Going forward, the Innovation Execution practice within EA will expand from its three core functions -- proof-of-concept projects, market tests, and fast business enablement -- to create an advanced R&D team. This team will focus on key capabilities and platforms that are two to three years out. They will also develop partnerships with key businesses and with the technology and innovation departments of leading universities.

Stakeholders see a new partner in EA thanks to the Innovation Execution practice, which not only supports their IT development teams, but can also assist in making their strategic goals and plans a reality by providing actionable solutions in significantly less time.

Australia Post: Focusing on customers

Australia Post is a for-profit, government-owned business enterprise with products and services across many industry verticals. Since 2011, digital disruption has accelerated downturns in the company's traditional letters and retail business, while at the same time creating growth opportunities in areas such as parcels, e-commerce, and government services. In response, Australia Post has undergone a fundamental transformation and created new products and services that are relevant and compelling for customers in the digital age.

The technology organization has shifted its focus from back-office, ERP system consolidation to enabling business growth and innovation through technology by investing in customer, product, and channel platforms. At the same time, Australia Post has increased efficiency and agility by adopting new technologies -- such as big data analytics and cloud infrastructure -- and a new customer-centric operating model. The EA practice, in turn, has reorganized itself around the following strategic objectives:

Drive customer centric-thinking across the technology organization and the enterprise as a whole

Enable business growth by guiding projects toward solutions that better address customers' needs and wants

Set strategic technology goals to maximize the value of technology investments

Australia Post's EA practice champions customer-centric tools and methods across the organization, partnering closely with business units. The EA practice developed leading-edge thinking on how to integrate customer experience management principles with business and technology architecture, and it recently rolled out training on these techniques to several hundred of Australia Post's staff.

With strong traceability to both business and customer outcomes, the EA group created architectural blueprints for key domains. Its iterative approach to enterprise architecture recognizes both "intentional" and "emergent" architectures, while considering various future-state scenarios. Long blueprinting cycles are avoided in favor of quick response and practical solutions that enable rapid progress. To ensure customer perspectives were represented, the EA group partnered with the sales organization to engage directly with customers, particularly e-commerce merchants, to better understand their needs -- which directly influenced technology strategy and solutions.

With a deliberate communications plan, the EA group engaged all levels of the business with tailored messages and deliverables. These included an interactive demonstration of technology strategy to the board, top-level summaries of key blueprints and road maps for business executives, and reference architectures/patterns for software engineering teams. Many of these artifacts are regularly referred to today.

Many initiatives have been developed, scoped, and sequenced as a result of the EA group's blueprints and road maps, which have informed the spending of approximately A\$2 billion (\$1.8 billion U.S. equivalent) in capital investments. At the same time, the benefits in terms of technology cost, speed, and sustainability have been substantial:

A projected cost avoidance of A\$40 million over five years (with A\$5 million already realized) through a new data/analytics platform, hosting, and IT network services

A\$1.8 million in projected annual cost savings and simplification through technology decommissioning

A projected 34 days' reduction in project duration through accelerated infrastructure provisioning

A projected annual carbon emission reduction of 6,030 tons

The impact has been even more impressive in terms of business growth. Thanks to a human-centric re-architecting of the digital experience, adoption of customer self-service solutions has increased, as has revenue from digital channels. Digital platforms have been scaled to support a year-over-year increase in mobile and Web visits of 200% and 30%, respectively. Leading-edge in-memory systems have been deployed to handle the massive volumes of data associated with routing and tracking parcels, providing customers with greater convenience and choice.

Today, the value of EA is well recognized. Thanks in part to customer and digital channel blueprints, Australia Post boasts more than 1.4 million registered customers with single sign-on across five products/services. In 12 months, it is estimated that this will rise to 4 million customers across 12 products/services.

Dell: Shifting from hardware to solutions

Over the past several years, Dell has undergone a transformation from transaction-based PC vendor to end-to-end solution provider. Customers asked Dell to become much more than a vendor. The company responded with a commitment to deliver innovative new solutions to customers in four key areas:

The adoption of virtualization, convergence, and cloud technologies

Access to powerful, integrated applications

The ability to turn masses of data into insights

Overcoming evolving security threats and ensuring regulatory compliance

To meet this challenge, Dell formed the Business Architecture Team (BAT), which includes senior business unit and functional leaders, and reports directly to members of the founder's leadership team. BAT is responsible for understanding the strategy, transformation planning, and strategic realization of the entire Dell business. The EA

group partners closely with BAT to recommend architecture strategy and create solutions across the company. EA is represented at the executive table with other crossfunctional business teams, giving it a strong voice in strategic decisions.

Most difficult was the scope of change. Nothing in the Dell value chain was left untouched. Under the new model, Dell may combine software with servers, cloud services, and professional services for installation. Consequently, almost every aspect of Dell's key IT systems needed to change to support the new business strategy.

Faced with this new direction, the EA group adopted a phased approach to strategic planning:

Strategy rationalization: The EA group reviewed Dell's nine functional and four business-unit strategic plans to identify where IT could provide enablement. In addition, the group was charged with identifying strategic contradictions and overlaps, such as two business units proposing different solutions to the same problem.

Enablers and prioritization: Enablers are defined as independently valuable changes to business capabilities. EA and BAT identified the key enablers for each strategy. For example, "solution validation" is an enabler for Dell's strategy to build out its solutions portfolio.

Enabler rationalization: EA identified where multiple strategies required the same enabler. Ultimately, EA created a one-page visualization that presented the rationalized enablers in an easy-to-understand format. The visualization resembles a subway map, where the subway stations are the enablers and the strategies are subway lines -- which often share subway stations.

Architecture and road map planning: Lead architects created an architecture strategy document for each strategy. These describe the architecture transition states for each enabler -- such as the annual changes to the business, application, information, and infrastructure architecture. This approach resulted in a set of funded programs, which amounted to the discretionary portion of Dell's annual IT budget of approximately \$1 billion.

Dell's reuse-oriented strategy has several benefits. First, it results in a simpler enterprise architecture and lower implementation cost; IT savings alone are conservatively estimated at \$152 million. Second, Dell is optimizing for global, end-to-end solutions rather than disconnected or siloed solutions.

Above all, the EA group has brought architectural clarity, earning the respect and confidence of other internal Dell stakeholders in the planning process. By following through on outcomes, EA provides a clear implementation plan to close all gaps associated with each enabler.

Page 1 of 2

• Learn how IT leaders are building cyberdefenses. Attend CSO's Future of Cybersecurity & Trust Summit-7/20-7/22

YOU MAY ALSO LIKE

Recommended by

4 new hidden Chrome features you should really be using

Windows 11: The long migration

A phenomenal Android privacy feature you probably forget to use

NEWS

The 2014 Enterprise Architecture Awards

At a time when Web and mobile technology development have become top priorities, effective enterprise architecture matters more than ever. Here are this year's six winning initiatives

By Alex Cullen
InfoWorld |
SEP 22, 2014 2:47 PM PDT



Page 2 of 2

For example, one of Dell's key enablers is to offer customers a simple, consistent quoting and purchasing experience for complex solutions. Last year, the quoting process for complex solution orders involved creating up to three separate quotes and interacting with up to nine separate systems. The process took as many as 100 clicks and more than nine minutes. By the middle of 2014, the same process required one quote and one system, and it took roughly 3.5 minutes. This is the kind of process efficiency required for Dell to make the transition to an end-to-end solution provider.

Going forward, the EA practice will focus on quantifying benefits, with an emphasis on the impact enablers will have on revenue growth. In addition, the decision-making capability of the EA framework will be enhanced, through modeling customer needs and prioritizing strategically important enablers.

Dubai Customs House: Managing business capabilities

Dubai Customs House has set a goal to transform the organization from a traditional customs house to a world-class customs organization -- in the shortest possible period of time. Attaining such an aggressive goal required a new mechanism to help the organization increase its delivery capability and uncover profitable business opportunities.



That mechanism, business capability management, focuses on four aspects of the business: people, process, technology, and information. The intent is to create a more flexible business by planning capability development in advance, with a key emphasis on stakeholders being able to make better-informed decisions. Ultimately, this initiative has helped Dubai Customs House establish itself as the leading customs administration in the region and a leader across the globe.

The EA practice assists the organization in determining business and architectural strategy, including the development of a road map for business transformation and practice modernization. This road map helps determine the scope, focus, and

incremental steps necessary to meet new business goals.

The main stages of capability assessment include business "visioning," current state analysis, future state development, gap analysis, and implementation planning. The EA team developed the following deliverables to aid in producing value to the business:

Capability management framework: The framework defines the method, processes, and tools to enable the organization to assess its capabilities.

Capability maturity model: This model helps develop the road map needed to improve quality and increase efficiency of the organization, including improvement strategies and higher service quality.

Capability map: The business capability map is a tool for developing enterprise architecture. The objective is to depict the customs business model in a one-page snapshot that clarifies relationships among different elements of the customs business.

Capability profiles: These documents identify and organize capabilities, describing them in detail through a common set of attributes that provide a high-level view of how the capability operates.

Capability assessment questionnaire: Based on the capability maturity model, this document contains questions to validate the quality of services in the organization.

Capability assessment report: This document contains the formalized findings of the assessment process and includes recommendations for the transformation of business capabilities.

Thanks to this fresh approach, Dubai Customs House has improved service-level maturity by 70% and decreased manual activities by 50%. The accuracy of reporting has also been vastly improved. Cross-departmental collaboration has nearly doubled, while system efficiency has increased by 30% and staff effectiveness has risen by 50%. Standards adoption has risen as well.

Identification of process overlap has resulted in substantial cost savings. Dubai Customs merged its inspection function with its declaration management function at its centers, as well as its special tasks function with its intelligence function. The inspection

capability was unified across multiple functional areas.

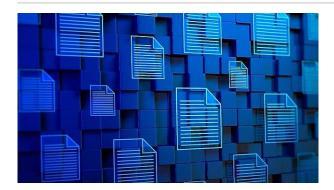
Finally, stakeholders can now access a "single source of truth" for all organizational information through an innovative system dubbed Enterprise Connected View.

Dubai Customs House expects continued, substantial increase in the volume of trade activities. The capability management practice has optimized customs clearance capability, enabling Dubai Customs House to handle the ever-increasing load and sustain itself as a world-class customs administration.

Molina Healthcare: Realigning around business outcomes

Molina Healthcare is a Fortune 500 company that must meet stringent regulatory health care requirements. The EA group at Molina Healthcare is a lean business unit within the office of the CTO. Established in 2011, EA is an eight-member team of enterprise, information, and solution architects that works with senior stakeholders that lead business units and strategic projects across the organization.

Rechartering EA for business outcomes involved sweeping changes. The primary driver was the need to evolve the EA unit from a technology-centric, top-down, "policing" type of operation to one focused on business goals -- and the ability to collaborate with internal partners to ensure strategic goals are realized.



SponsoredPost Sponsored by Dell Technologies and Intel® A Hidden Trap for CIOs: Data-set Bias in Machine Learning

A key requirement was the need to support an overarching governance initiative that stressed the importance of technology reuse, while providing greater assurance that Molina Healthcare would make the best decisions based on sound business information drawn from across the enterprise. EA responded with a strategy that simplified its own

service offering narrowed its focus, and fundamentally redefined how it needed to fit within the organization. This strategy has enabled EA to provide strategic direction and support executive decision in four key areas:

Business planning: Describing the business and how IT aligns with it to reduce project risk

Project portfolio management: Knowing when and how to engage EA in projects to improve quality

Operational management: Reigning in costs by assessing proposed new technologies earlier in the procurement cycle and increasing portfolio/asset reuse

Solution development: Controlling distributed technology to improve service delivery

As a result, EA now enjoys a dramatically different role within Molina Healthcare. By fine-tuning and simplifying its service offering -- and organizing the EA team around deliverables that benefit the organization rather than simply meeting IT objectives -- EA has become a strategic partner that enables better decisions and greater reuse across the enterprise.

Evolving from an operationally focused unit that primarily drove IT projects to a strategic resource was a significant organizational challenge. There was ambiguity around the specific role of enterprise architects versus other architects in the organization. This, along with a tactical focus, contributed to suboptimal utilization of enterprise architects. For example, EA would typically conduct architectural reviews for projects too late in the procurement cycle to provide adequate assessment, leading to costly technology duplication.

To address these challenges, EA opted for a "partnership" approach with the project management office in particular, a key entry point for new technologies. EA also simplified its own business processes to make the EA practice more approachable. For example, instead of administering a daunting 20-question "technology-focused" project review form, EA now asks six simple business-focused questions.

In addition, the EA team trimmed services and became much more specific about what it could do to facilitate better decisions. These capabilities included: business direction through the use of capability maps, architectural direction using road maps, and structured direction using road maps that show an alignment of technologies that support capabilities. The team also promoted the adoption of enterprise-wide standards. An account manager role was introduced for core business capability areas, to ensure an in-depth understanding of each business unit and its needs.

As part of its rechartering efforts, EA also reorganized services around two primary clusters of enterprise architecture offerings: strategic services (focused on future-state planning, road-mapping, governance, and standard-setting) and tactical services (focused on new technology evaluation, solution design, and facilitation).

More important, all of EA's services now directly support a global governance initiative:

Architecture governance: EA evaluates architectural quality against several criteria, including business alignment, compliance, and interoperability.

Data governance: EA ensures new technologies are identified and all handoffs support data governance initiatives.

Project governance: EA participates in project intake sessions, facilitates discussions around strategic projects, and ensures EA involvement in strategic projects at different levels as required.

Standards governance: EA supports routine application portfolio reviews, reviews newly procured software, simplifies IT investment decisions, and accelerates system implementation.

Technology portfolio governance: EA evaluates new technology against several criteria, including cost management, reuse, and standards adherence.

Collectively, these efforts have resulted in a streamlined, collaborative approach that has enabled EA to evaluate projects sooner and determine where EA architects need to step in to identify new technologies. By partnering with stakeholders in each business area, EA now ensures that the company no longer invests in one-off, parochial technology

solutions that favor a particular business unit or project. All initiatives, including ad-hoc IT efforts, have clearly stated objectives, be they new capabilities or new business functions that improve quality or remove barriers to health care services.

State Farm Insurance Companies: Improving customer experience

State Farm is a leader in insurance and an emerging player in banking and financial services in the United States. The company's business strategy is straightforward: To be more customer-centric and drive growth by providing a remarkable customer experience.

Customer needs and preferences have evolved, in many cases fueled by mobile technology and social media. Customers want to interact with State Farm at their convenience, using the method of their choice; providing remarkable customer service was seen as a key way to differentiate the business. In addition, State Farm needed to manage its digital business more effectively, minimizing variation and optimizing costs.

EA's role was to help craft, clarify, plan, architect, and execute on this business strategy and help deliver practical business outcomes. EA is jointly led by business and IT executives and operates in a hub-and-spoke model to engage with stakeholders more effectively. The EA hub team takes primary responsibility for direction-setting activities, such as strategic architecture, blueprints, standards, and tooling. EA spoke teams are directly embedded in business capability areas that blend business and IT personnel.

The business provides leadership for business architecture, along with the relatively new discipline of experience architecture. IT leads application, data/information, and technology architecture practices. EA is charged with improving business and IT clarity, providing input into strategic planning and direction, and offering insight into execution issues.

EA adds value to the enterprise by focusing on strategic planning, with a top-down vision that includes "customer journeys" -- the key interactions customers have with State Farm, such as shopping and filing claims. Techniques to improve the customer experience include journey mapping, experience visualizations, customer segmentation/personas, focusing on "mobile first," and customer scenarios/jobs.

By focusing on the customer-driven experience, State Farm's EA practice has:

Helped the organization execute on business strategies that result in tangible business outcomes

Integrated a systematic and holistic approach for addressing customer needs and preferences

Effectively aligned strategic vision, direction, and execution by fully integrating with strategic business capability planning across channels and products

Integrated architectural blueprints for vision and transitional architectural planning across all customer journeys

Become an important partner in changing the organization's culture to be more customer-centric

Going forward, State Farm will continue to leverage, refine, and innovate within its EA practice to engage with business and IT partners as well as customers. The practice will drive strategic excellence by furthering practical business outcomes focusing on the customer first.

In addition, the EA practice plans to sustain operational excellence by strengthening collaboration, integration, and partnerships among business and IT architecture disciplines. With such user experience approaches as "lean UX," increased business agility and decreased time to market should follow. Also, a common enterprise reference and repository of architecture content will ensure a holistic, integrated set of blueprints is available for current-state analysis, aspirational-state views and decisions, and the creation of transitional state views.

At State Farm, EA is leading the way with an unwavering focus on customer-centric solutions, while adhering to fundamental architectural principles. Add to that a commitment to collecting and acting on feedback from internal stakeholders, and the EA practice should continue to accelerate the delivery of successful solutions.

This story, "The 2014 Enterprise Architecture Awards" was originally published by InfoWorld.