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# ENTERPRISE ARCHITECTURE PROFESSIONAL JOURNAL

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## EDITOR'S WELCOME

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by Darryl Carr, EAPJ Editor

Welcome to the October 2016 Edition of the Enterprise Architecture Professional Journal. We serve practicing and aspiring enterprise architects, as well as those who apply the holistic perspective of enterprise architecture to other disciplines. EAPJ informs their daily work and benefits their careers with content that is focused, concise, authoritative, practical and accessible.

This issue focuses on Design Thinking, with articles from:

- John Roth – A timely article on the use of Design Thinking concepts as part of an Enterprise Architecture function. John is a leading thinker on this topic, and regularly presents material on the topic at conferences.
- David Johnston-Bell – David was a presenter at last year's Australasian Enterprise Architecture Conference in Sydney, Australia. He brings us a well-researched article on the need for EA practices to adopt new approaches to meet an increasing number of challenges focused on Digital Transformation.

That material builds on our feature article from Steve Else, CEO at EA Principals, who posits that EA is at a crossroads, but the opportunities are great if the focus is on the right things, at the right times. Essential Architecture, which is the focus of the article, highlights the need to bring the architect's knowledge and skills together to help organizations through this heightened period of transformation.

This issue also features an interview with Tom Zorde, a principal management consultant specializing in executive advisory for strategic digital transformation. Tom has been the lead architect at several Australian companies helping transform their operating models to achieve the consumer centric and data driven outcomes required to innovate and survive digital disruption. Tom also leads the business architecture effort for the Global IoT reference architecture collaboration project and heads the Perth Internet of Everything community, a forum to share opportunities and challenges of emerging technologies including Internet of Things and Predictive Analytics.

We also have a great article from the always thought-provoking and very future-focused Tom Graves. Tom, based in the UK, has worked across a large number of industries and organizations. He is a regular speaker at conferences, along with being a prolific blogger and author on Enterprise Architecture. Tom's article, entitled "Simplifying Enterprise Architecture", focuses on the need to pare back EA (and some of the incumbent frameworks) and focus on the core concepts that make EA effective in an organization.

A new feature in the Journal is the EA Events section, highlighting some of the activity happening in EA-related events and conferences going on around the world. There is plenty of activity going on, so have a look, and get out there and get involved.

Please contact me at [editor@eapj.org](mailto:editor@eapj.org) with your questions, comments, ideas and submissions. I look forward to hearing from you!

*Darryl Carr*

*Editor, Enterprise Architecture Professional Journal*

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By Steven Else, Ph.D.

### **EA at a Crossroads, But High Interest Points to a Promising Future**

If enterprise architecture had its own anthem, would you stand for it, or sit in protest?

OK, maybe that's an unfair question.

But when it comes to the future of enterprise architecture (EA), regardless of the original intent of EA, people are going to loyally line up on different sides of historically contentious points: the actual meaning of "enterprise," over-reliance on the exclusive use of tools, the components, size, responsibilities, and characteristics of an optimal EA team, and the question of the "academic" dimension of EA ends and its practical application begins.

This healthy discussion, while passionate and colored with skepticism at times about EA overall, proves one indisputable fact: Many people have very strong feelings about EA and are vested in its future, while others dismiss it as too much overhead, too fuzzy, and simply not mature enough as a discipline to add measurable business value in the near to medium term.

There has been confusion about EA since this discipline started gaining traction in the late 1980s, after John Zachman published an article describing a framework for information systems architectures. Eventually, Zachman regretted initially calling his framework "A Framework for Information Systems Architecture," instead of "Enterprise Architecture," because it may have contributed to EA being perceived as only related to Information Systems/Information Technology (IS/IT) and not really something for business transformation. To complicate things further, many considered Zachman's schema or ontology as an EA framework, which it truly is not.

Three decades later, EA is still somewhat hamstrung by the perception that it is overall academic and very much linked to systems and IT and therefore not something in which senior business leadership need necessarily invest. Currently, one of the most popular (and actual) EA frameworks in the world is TOGAF® but many still consider it mainly as something for IT and, in fact, it doesn't clear up the notion of what an enterprise truly is in terms of the establishment of an EA practice. It just rightfully emphasizes that such a practice should be carefully intermeshed with all the other frameworks and methods in place for business- and technology-related decision making. In other words, it emphasizes that every organization must ultimately develop its own EA framework with the understanding that a knowledge of TOGAF can greatly accelerate that progress.

It's important moving forward for business transformation and EA that the perception of EA change to reflect a broader, more holistic transformational change in a business, including regarding business processes, investments, innovation, security, or even overall business strategies and models.

To achieve this, there has to be a better understanding of the terms enterprise and architecture. For example, there have been questions for decades about what an enterprise is: Can it be for a large system/program (not just an organization)? Can it be just a line of business or a focused transformation, such as an EA Wiki for more collaborative planning – maybe initially just for one line of business? Must it really be a whole enterprise to start? Can't it be used in initiatives where multiple organizations are collaborating? How does it differ from "system" of systems architecture? Similarly, confusion about the term architecture is inherent in the term because it is the same one used for the discipline of designing cities, buildings, houses, etc.

Despite the feeling about EA today, people leading business transformation will, I think, in the not too distant future, concede that architecture work, perhaps more tightly linked to strategic and design thinking, is essential for coherent business transformation, especially to evolve with increasing clarity

of the bigger picture—the architectural landscape—and how one significant change in building blocks impacts other ones in the scoped “enterprise” (system of interest).

So, business transformation is actually more likely inclined to accept and invest in Essential Architecture, a new meaning of the EA acronym, and not so much the unending disputes of exactly of what an enterprise is and which enterprise(s) or part of an enterprise is being architected. In short, architecture is, in fact, essential. The proper scoping of it initially and over time will always remain a challenge, but one can more effectively capture design elements of the scoped transformation thinking in terms of Essential Architecture.

One could also appreciate the value of “Ecosystem Architecture” as another complementary way of thinking about EA, but the term ecosystem has many different meanings associated with it, although one should think of one’s ecosystem (relevant industry) and the planet (being eco-conscious) when doing EA...

One thing that is clearly essential to many organizations—and potentially to their detriment—is the overreliance they have on tools to plan and analyze EA-related change. A single tool, even a supercomputer, is not going to be a “silver bullet” to master the architecture landscape. Some kind of EA framework or methodology is more important up front than any tool or set of tools. Therefore, decisions about the knowledge, skills, and maturity (KSM) related to doing EA should precede major tool decisions and associated investments.

Briefly, there needs to be an understanding of what an organization-specific EA framework does for the organization, what an architectural definition does, and a vision of roles, responsibilities, and workflows. Tool rollouts need to be complemented by EA training to achieve the maximum benefit. Also, EA-related tool investments should incorporate the need to have at least 1-2 dedicated experts in the tool within months of the instantiation of the EA tools as part of the planning tools landscape. Many organizations are willing to spend millions on tools and associated, mass training, but not on a couple of dedicated experts.

Linked to the introduction and maturity of EA in organizations is the need for them to have their strategic planning offices collaborate more closely with their architecture, portfolio/program management, business/systems analyst, procurement, and human capital management teams, in order to leverage the knowledge of funding streams and staffing plans with business and technology trends, strategies, and models.

Another area that will play a critical role in the future of EA is the makeup of EA teams. Defining the team—enterprise architects, domain architects, solution architects, platform architects, and subject matter experts—and its size and scalability, along with the enterprise itself is essential. Highly capable, knowledgeable, skilled, and mature teams that can scale in response to business demands must move high-priority initiatives more rapidly in the desired direction. Just as EA teams (core and extended) must be designed to scale up, they must also be designed to scale down when appropriate.

Sometimes, though, the above recommended direction for a much more collaborative and interwoven approach gets muddled through often “traditional” EA initiatives where the EA objectives don’t include the basic: solving the business problem or seizing the business opportunity. Validating this are common criticisms of EA, which largely revolve around the perception that EA is too academic in its philosophy—that it is too academic and that it has an “ivory tower” complex. In light of such criticism, solution architects are often the main focus for change. However, solution architecture without EA usually suffers from silo approaches to problem solving.

It is increasingly the case that EA start-up programs must show value in the first six to nine months, or they will be moved from strategic to largely tactical operations. Even with the requisite, mandatory, top-down support for an EA program, business leadership expects tangible results within a reasonable time period. EA must show relatively soon, even in a focused area, that it is in fact making a difference

in the understanding of and planning for increasingly complex architecture landscapes supporting dynamic business capabilities.

EA has to be seen as crucial to problem solving, while mapping out practical approaches to scoping and solution development, reinforced by the ability to answer key stakeholder questions quickly and in compelling ways. An understanding of the relevant ecosystem, touch points, charter, and the areas that will produce the biggest impact is required. There also must be an ability to quantitatively and qualitatively “dashboard” the role and value of EA throughout the systems development lifecycle of major transformation investments.

In my optimal EA world, the future of an EA capability would include artificial intelligence, big data analytics, automation, and the improved integration of various roles and responsibilities in terms of transparent workflow. In addition, I envision that the EA capability must be able to contribute to the generation of CEO-worthy visuals, leveraging extended graphics talent and smart tools that can create outstanding models and animation for top notch communication of the challenges and options to meet them. The EA team would also increasingly leverage simulations to improve its scoping and road mapping capabilities. Such an EA capability would be linked to very intelligent, extended ecosystems managed by overall lean and agile core EA teams. Organizations want answers about their architectural landscape. EA can not only help organize the thinking but also determine how to solve the right problem.

While evolving to be more compelling in an innovative and visual/artistic way, EA also has to evolve into more of a science. Through modeling and artificial intelligence, EA will be able to better understand the necessary roles, skills, and knowledge to develop and evolve the proper framework for any organization/transformation initiative.

With the disruptive business and technical models being used this decade, many organizations are looking to EA to help with the collection of requirements to satisfy the concerns of key stakeholders. In reality, EA can help people better understand the drivers, goals, and big picture, and leverage best practices to solve certain problems that are the domain of expert solution architects working closely with enterprise architects.

The right dose of EA (perhaps Essential Architecture?)—the correct combination of knowledge about increasingly disruptive business and technology trends—will enable organizations—now and in the future—to more successfully implement intelligently and creatively architected solutions.



**Dr. Steven Else**

Steven is the founder and CEO of EA Principals, Inc., a leading authority in enterprise architecture (EA) certification and professional services, and author of the book *Organization Theory and Transformation of Large, Complex Organizations*.

by John Roth, Professional Enterprise Architectural Practitioner

### Enterprise Architectural Dynamics in Action – Challenge and Response

It is well known that all business corporations are confronting a bewildering variety of new provocations, especially through emerging global trends and emerging technological trends.

The practice of Enterprise Architecture can be understood as an apparatus for recognizing, focusing and activating organizational redirection, in view of a properly desired dimension and a properly determined scale. There can be well structured provisions for establishing a notional vision, for anticipating a range of participation, for respecting the logical and physical technological components, for setting an agenda for realization, and for keeping activities aligned with ultimate intentions. Some new, additional considerations can now be proposed, in realizing how Enterprise Architecture can adapt to demands for Innovation, Transformation, and clarity of Organizational Alignment.

Geoffrey Moore is an author, consultant and entrepreneurial advisor, who can provide an intriguing, high-level overview of institutional pressures and possibilities around the idea of Zone Management. Briefly these can be described as the Performance Zone, the Productivity Zone, the Incubation Zone, and the Transformation Zone. Here performance concerns revenue and sales while productivity concerns effective operations. These are two areas that any corporation will master with some level of success in order to remain in business. Incubation and transformation present special challenges, which are less familiar and more demanding. Still, it is not unusual for any company to have some means of generating new innovations on some level. What is more unusual is for a company to be able to select the most meaningful of many possible new ideas and activate these at proper scale throughout the enterprise. Successful and enduring corporations will need to allocate capital and resources in a manner not unlike venture investment in order to accommodate innovation and transformation. The book, *Zone to Win*, offers convincing insights regarding how this can be done.

Respecting the concept of four zones, additional useful distinctions can be offered for distinguishing and traversing each of the four separate realms of concern. Understanding innovation is helpful in relation to an Incubation Zone. Understanding transformation is helpful in relation to a Transformation Zone. Understanding comprehensive business structure, through a means like the APQC Process Classification Framework, is useful in relation to a Performance Zone and a Productivity Zone.

Yet going further, a generalization based on long standing observations about subtle psychological dimensions of culture and character may further assist in compressing and consolidating critical principles. Too many proprietary languages and too many distinctive claims can seem to generate confusion and distortion. The overriding need – to settle the best proper course of movement, in the appropriate situation – demands better, refined ways of discernment. The practice of Enterprise Architecture can become enhanced through adaptation and appreciation here and going forward.

## Design Thinking and Enterprise Transformation – Process Acceleration

### 1. DESIGN THINKING – Innovation

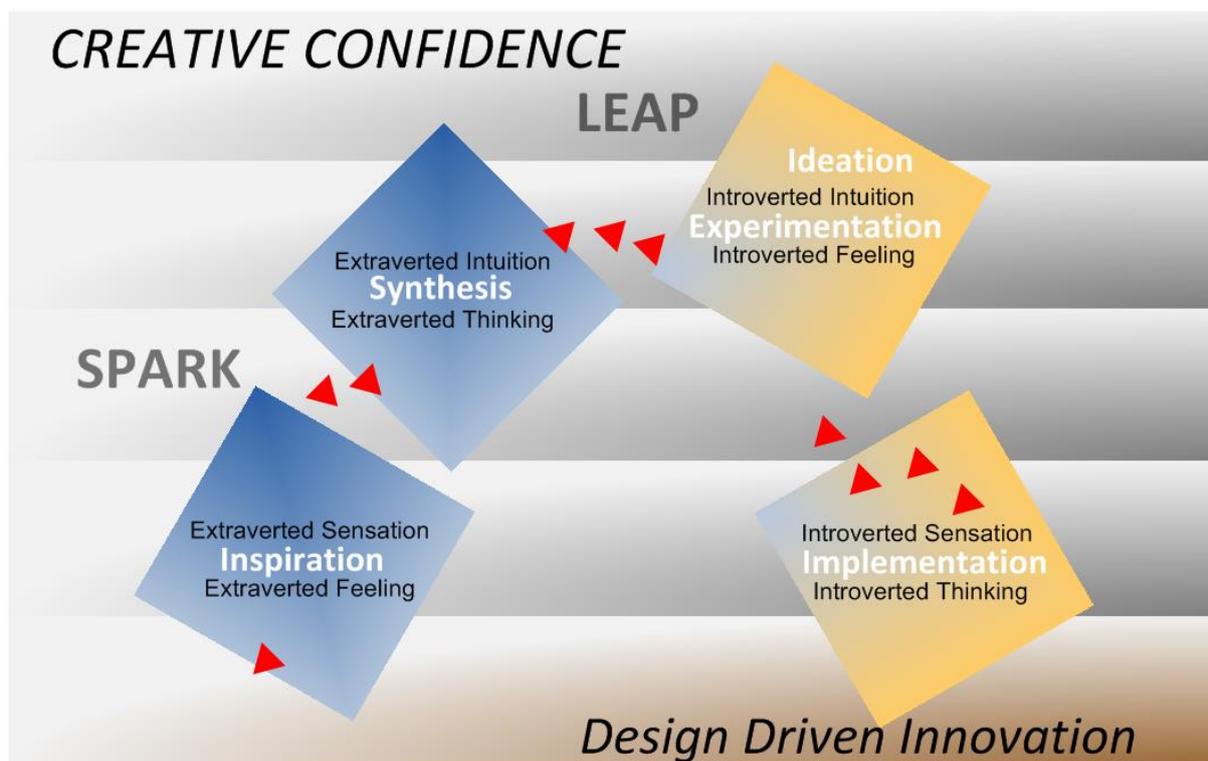
Within the past ten years, Design Thinking has gained considerable visibility as an open technique to encourage collaborative teamwork for creative and productive outcomes. While it was initially applied toward generating original concepts for manufactured products, Design Thinking is now being more widely adopted for governmental programs, institutional programs, social programs, and educational programs. The IDEO design consulting firm and the Stanford University d.school, in Silicon Valley, have become especially energetic about promoting activities around Design Thinking.

Recently, the September 2015 issue of *Harvard Business Review* featured the theme, “Design Thinking Comes of Age.” More and more business enterprises are acknowledging the importance of greater awareness about disruptive influence and positive innovation. An imperative for accommodating dynamic change has also become increasingly apparent.

Although the IDEO brand name is often expressly identified with Design Thinking, the basic approach should really be seen as being completely open and available for anyone and everyone. With respect to the wider professional community concerned with creative design, a great deal of attention has been devoted to better understanding of creative process as a skill and as a discipline, going back over a period covering many decades. Other indirectly related efforts have been making an impact for at least fifty years or more, such as the Observe-Orient-Decide-Act (OODA Loop) for strategic planning, which is being used by the United States military forces.

While there are a number of variations around Design Thinking, David and Tom Kelley published an especially articulate description in the book, *Creative Confidence*. The two brothers are associated with IDEO, and their intention is to relate their own personal discoveries with Design Thinking simply and directly for a popular audience. The book even achieved best-selling status for a while when it first appeared in 2013. *Creative Confidence* emphasizes a view that finding better ways of making things and better ways of doing things actually represents a natural ability within everyone’s experience. Not surprisingly, results will improve with dedicated practice.

According to *Creative Confidence*, the collaboration and innovation process follows a few consistent phases. These are identified as Inspiration, Synthesis, Ideation with Experimentation, and Implementation. Careful examination shows how many persons prefer to handle the same situation differently. So, Inspiration concerns an exploration to see how various individuals will want to encounter familiar tasks and events, each in a unique fashion. Synthesis concerns consolidating and prioritizing the raw, random discoveries of the Inspiration phase. Ideation with Experimentation concerns an outward expression of the most promising prototypes, in the simplest possible manner, so that other people can respond and offer additional feedback and suggestions. Finally, Implementation concerns the practical details for actually producing results that will be fully workable in real world conditions and circumstances.



Repetition and Iteration at all stages is always encouraged.

Design Thinking ideally represents a completely open and available way to encourage teamwork and collaboration, directed toward change and innovation. Looking out historically, over several decades of emergence and evolution, many shared realizations could be found to contribute toward a significant collective backstory. Any recommended exercises and techniques can be understood apart from the theoretical structures and scaffolds supporting the process of Design Thinking.

A more profound appreciation for the momentum enforcing Design Thinking may be achieved by noticing significant developments separately gaining awareness in other fields of endeavor.

By now, most people in the business and management professional communities have been exposed to the Myers-Briggs Type Indicator survey (MBTI), regarding individual cognitive tendencies and capabilities. It can be stressed that the MBTI test should be seen as offering only an approximation of personal, preferential characteristics. Still, the underlying principles have been studied and refined for almost one hundred years. So a certain acceptance will arise through a widespread, long-standing accumulation of observation. Notions like the Gross Domestic Product (GDP) or the Unemployment Index in economics are known to carry cautions and limitations and misapprehensions. But those concerns will not necessarily invalidate the legitimacy that comes with careful appreciation for what these techniques can truly offer.

The distinction between Extraversion and Introversion has become commonplace in casual conversation. Accomplished professional therapists will realize how Extraverted and Introverted attitudes are variously discerned along with functional aspects of Sensation, Thinking, Feeling, and Intuition. There are particular, characteristic ways that these values appear with regard to individual behavior or with regard to shared group behavior.

Returning back to the four stages of Design Thinking from *Creative Confidence*, it can be recognized that the initial positioning for the whole cycle represents several different aspects of Extraversion. Then, the later positioning represents different aspects of Introversion. More specifically, Inspiration draws on a special awareness about Extraverted Sensation combined with Extraverted Feeling. Synthesis draws on awareness about Extraverted Intuition combined with Extraverted Thinking. These first two phases are suggested as Spark activities, using the special language of David and Tom Kelley in *Creative Confidence*. Then, Ideation with Experimentation draws on the capabilities

conveyed by Introverted Intuition combined with Introverted Feeling. Finally, the Implementation stage draws upon the pragmatic impulses conveyed by Introverted Sensation and Introverted Thinking. These two later phases are suggested as Leap activities in accordance with *Creative Confidence*.

Clearly, a full exposition of how all of this works could become quite elaborate. Basically, the same stance that enforces one part of the process will be different from what is needed during another part. For now, it should be sufficient to realize that what is being presented is a well-defined formulation for navigating a full cycle of contribution toward some specifically directed vision or purpose. In actual practice, the Design Thinking approach usually depends on a series of specific exercises and techniques, rather than any reliance on abstraction or intellectual conceptualization.

It may be surprising for the public consumer to know that any number of famous brand-name products came about through the involvement of the IDEO group, applying a Design Thinking approach. Oral-B toothbrushes, Tempur-Pedic mattresses, and IKEA kitchens would probably all be familiar to almost everyone in any metropolitan area of the United States. If Design Thinking has become widely influential behind-the-scenes, a more in-depth appreciation would probably be reserved for those committed to following comparable directions, as a professional specialization over many years.

Visiting the Internet web site for IDEO, the variety of achievements includes an ATM interface for Wells Fargo Bank, a financial portfolio allocation model for PNC, a service design for First Source Bank, a branch office experience for GE Money Bank. The “Keep the Change” debit card program for Bank of America would be another example. There are many more, involving State Farm Insurance, Mass Mutual, and Swiss Life.

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## 2. Change Management and Change Leadership – Transformation

The same kinds of impressions can also be directed otherwise, toward an enhanced understanding of a business organization, for building greater cohesion and cooperation at an enterprise level.

Scott Keller and Colin Price have both enjoyed substantial professional careers as management consultants with McKinsey and Company. In reconsidering motivations for comprehensive, large-scale organizational transformation, following many years of investigation, they published their convictions in 2011 in the book, *Beyond Performance*. Briefly, the team of Keller and Price has proposed an ambitious program for managing comprehensive transformation in any context and anywhere in the world.

Two essential tendencies may be explained as Performance and Health, where Performance is focused on what may be most immediately apparent, and Health is focused more upon other, longer-term, sustainable benefits.

In addition, there are five distinctive areas of consideration, which are indicated through five code-words, all happening to begin with the letter “A”. The five areas are to be understood through intentions to *Aspire*, to *Assess*, to *Architect*, to *Act*, and to *Advance*. For McKinsey and Company, a great deal of documentation, discussion, and calculation was undertaken, in arriving at the Five-A model.

With respect to the theme of emerging trends and directions influencing business enterprises, it can be stated that much of the underlying logic supporting organizational transformation appears to be well-aligned with an underlying logic, separately supporting innovation and collaboration.



The principles of Performance and Health can be seen to be sympathetic with the psychological attitudes of Extraversion and Introversion. Extraversion usually concerns how an outward observation comes to be taken internally for appreciation or action. Conversely, Introversion typically involves how an inward condition or conviction comes to be expressed outwardly. In a business context, Performance is directly related to immediate profits and expectations in the financial marketplace. And for the purpose of this analysis, Health involves subtle, longer-term, sustainable considerations, which may often run counter against anything resembling instant or external gratification.

Both Performance and Health can be associated with each of the five separate areas of examination: Aspiring, Assessing, Architecting, Acting, and Advancing. Furthermore, these five can be again correlated with the psychological functions of Intuition, Feeling, Thinking, and Sensation. Aspiration equates with Intuition. Assessing equates with Feeling. Architecting equates with Thinking. Action equates with Sensation. Then additionally, Advancing conveys the way that all four of the other aspects can become well-centered with regard to the whole system of endeavor.

Further elaboration about how all of this is to be integrated for business purposes can be found by looking more closely at *Beyond Performance* or at other resource materials that are available from McKinsey and Company. What is most essential for this discussion is the assertion that proper respect for holistic integration has become more important than concentration on singular, contributory components taken in isolation.

In the final chapter of *Beyond Performance*, McKinsey makes the claim that these understandings were applied inside of Wells Fargo Bank, beginning about the year 2005 and preceding the dramatic financial crisis that occurred about 2008. The dedicated effort to attain cohesion and coherence can be seen to have contributed to a superior marketplace position, largely avoiding the worst problems that affected most other comparable financial institutions. Subsequently, Wells Fargo Bank has now become the most highly valued banking corporation in the world, in terms of market capitalization, even though other companies may be larger in terms of asset size.

### 3. Revenue and Production – Enterprise Enablement

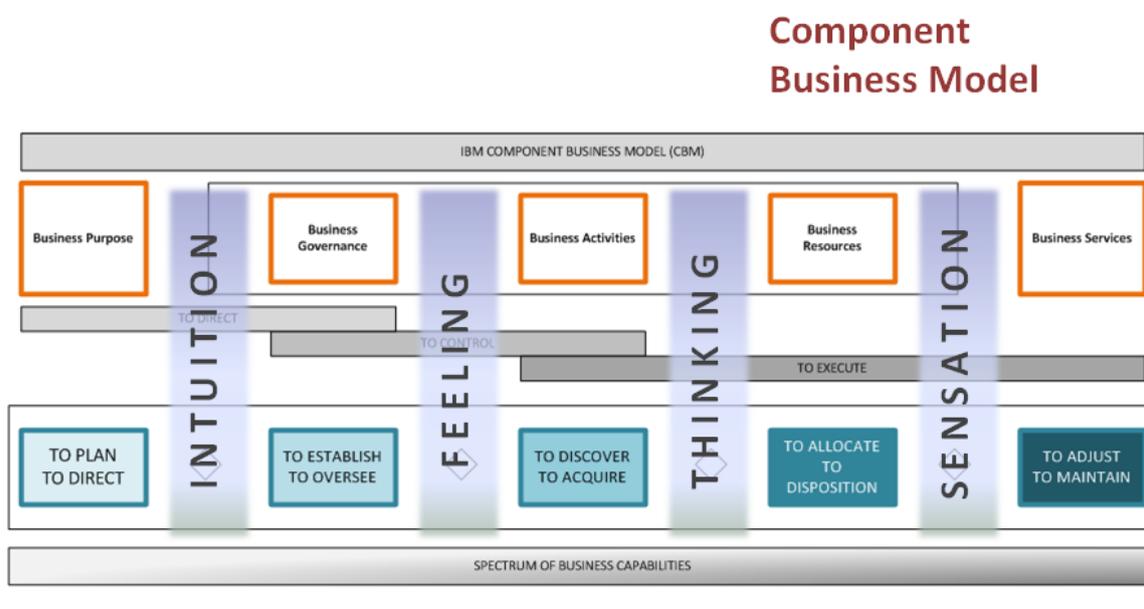
Apart from extraordinarily heroic ambitions, it should be acceptable also to try to relay these kinds of insights in view of routine, typical processes and concerns. All of this is not just exclusively about intensive creative effort or massive organizational redirection. Other possibilities exist as well.

The APQC is an independent association dedicated to furthering a disciplined approach for standardizing process documentation and for measuring process improvement. One primary commitment has been the establishment of the uniform Process Classification Framework (PCF), with variations respecting several different industry groups.

Having a recognized, formalized methodology offers the potential to focus on the behavior of functional areas in a consistent way. The standard process classifications can be augmented or adjusted with additional refinements, in view of the localized business circumstances. One particular benefit of using the PCF would be a better ability to cross-reference functions with technical tools and systems. Also, the succession of levels within the framework provides a means to move up or down for high-level summary purposes or for detailed examination.

The original APQC models were developed in close cooperation with IBM, and IBM has continued to participate in helping to keep the initiative fresh and adaptive. Although the full schematic can seem dense and imposing on first encounter, it is possible to assert an intermediary interpretation, to make the extent of the undertaking more immediately accessible. About the same time that the initial PCF initiative was beginning, IBM also happened to be involved with a separate program regarding a Component Business Model (CBM). Not surprisingly, both of these initiatives may share a related common logic.

At the highest level, the Component Business Model attempts to isolate items of Purpose, Governance, Activities, Resources, and Services.

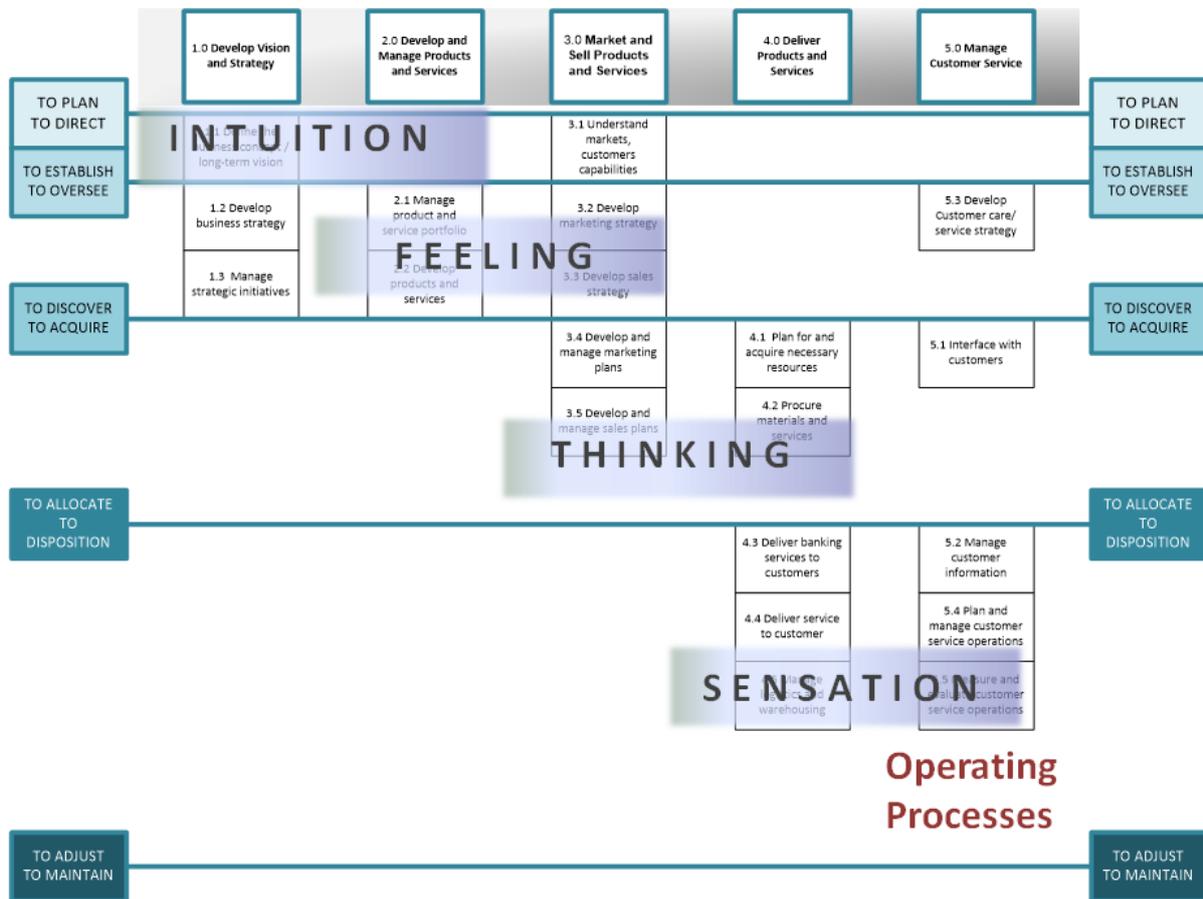


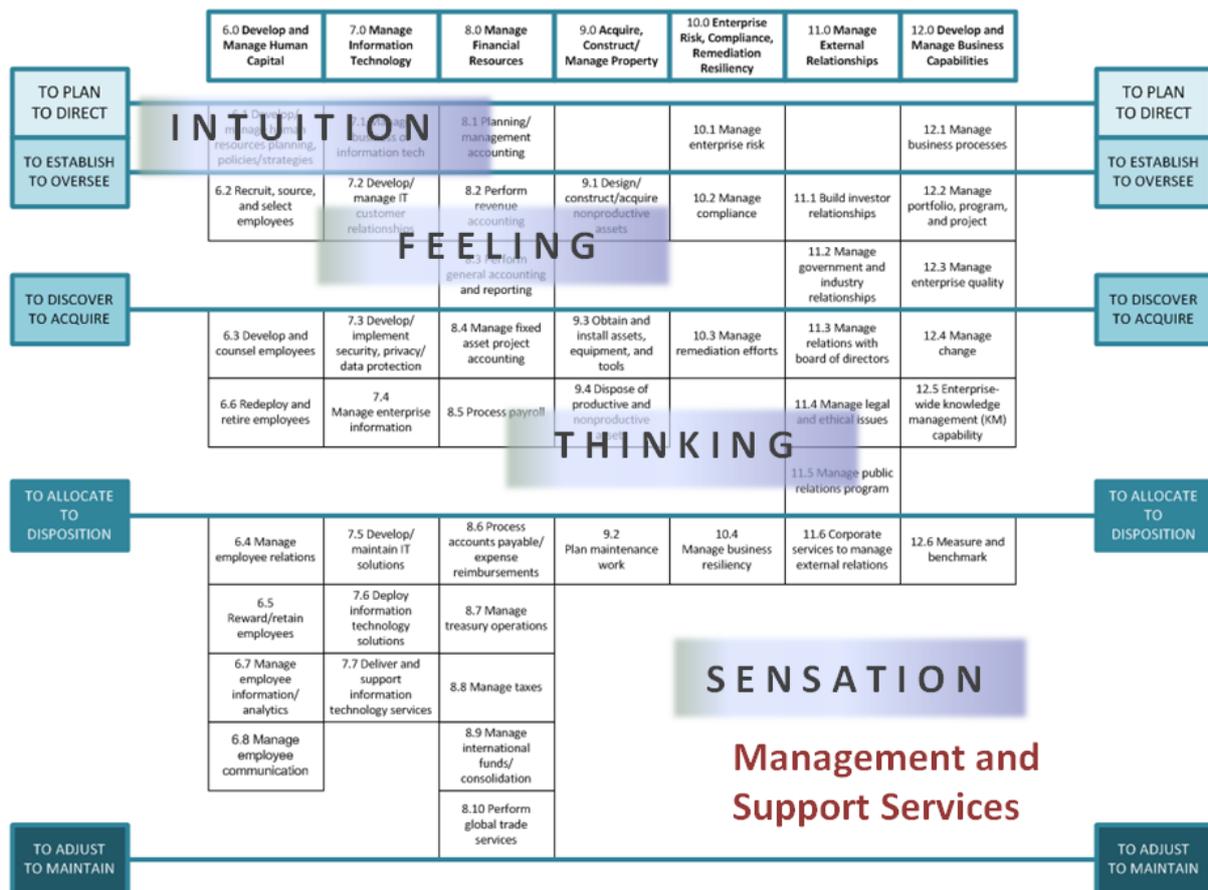
This range of concerns can be interpreted to describe an extended spectrum of capabilities.

*Purpose* would inform intentions to *Plan* and to *Direct* an effort or enterprise. *Governance* would inform intentions to *Establish* or to *Oversee* behaviors – for an effort or enterprise. *Activities* would inform intentions to *Discover* or to *Acquire* ways for realizing what *Purpose* and *Governance* hope to accomplish. *Resources* would inform a means to *Allocate* or to *Disposition* what is necessary for

supporting the required *Activities*. Finally, *Services* would inform ongoing considerations to *Adjust* and to *Maintain* momentum for the effort or enterprise.

Without getting into minutely fine-tuned definition of meanings and terminologies, staying at a high-level of overview, it is still useful to correlate this spectrum of distinctions in comparison with the same dynamics used by McKinsey or by IDEO in addressing transformation or innovation.





On one side, *Purpose* may be best accomplished in view of what an orientation of Intuition could contribute. On the further side, *Services* may be best accomplished in view of what an orientation of Sensation could contribute. In between, *Activities* and *Resources* may be best managed in view of what orientations of Thinking and Feeling could contribute. Also *Governance* may be similarly managed in view of what Thinking and Feeling could contribute, with somewhat different prioritization.

In mapping a full, high-level overview of the Process Classification Framework in this manner, it can be seen that different considerations can be addressed effectively, in keeping with an open acknowledgement of fundamental skills and capabilities. The APQC model presents a group of five Operating Processes, which are directed toward the strategic positioning of an organization. Decisions on this level must reflect the full scope of effort required for establishing and maintaining a viable business.

Implications regarding vision or principle may be best regarded through means of Intuition. Concerns about immediate practical necessities may be best regarded through means of Sensation.

Separately, the model presents a group of seven Management and Support Services. Each of these auxiliary areas should be well aligned with the determinations from the Operating Processes level.

Since there are many subordinate specializations within Management and Support Services, certain strengths and capabilities may be most influential with respect to whatever expectations are most necessary, wherever needed.

#### 4. Distilled Observations and Principles – Decision Management Maturity

This examination of Design Thinking has concentrated on an enhanced understanding of many, distinctly differentiated personal contributions, which may be well orchestrated together in view of overall intentions.

The psychological attitudes of Extraversion and Introversion – along with the personal cognitive functions of Sensation, Thinking, Feeling, and Intuition – can be seen to offer a useful means of classifying and modulating and enforcing appropriate interactions, throughout the entire endeavor.

A comprehensive range of concerns must reflect integration and coherence. There, a discerning and differentiating, acquired consciousness may be most valuable – in comparison against more limited, isolated or ingrained kinds of dependencies. This is how disciplined and informed insight may be best appreciated.

A central premise of these investigations has been based on seeing the way in which certain principles borrowed from the field of analytical psychology can be applied toward superior management and business improvement.

### **5. Distilled Observations and Observations – Cognitive Differentiation**

An awareness of authentic differentiations – regarding authentic, personal perceptions and preferences – can be intelligently used to inform many kinds of decisions and directions.

This conviction carries implications going well beyond how individual psychologies may be typically understood, or superficially misunderstood.

It is not really about illness or lack of adjustment, in a personal way. It is not really about emotional problems or therapeutic interventions. Those kinds of preconceptions should be set aside, in this context.

This material is meant to emphasize an optimal composure for openly acknowledging strengths and capabilities, in view of an orchestrated series of actions, aimed at accomplishing meaningful, intended consequences.

#### **Conclusion:**

Possibilities for innovation and collaboration become empowered when there are positive and active, shared understandings.

Well-focused organizational purpose can be carefully conveyed across many normally divergent areas of contribution.

Proper respect for individual cognitive differentiation may be as important and as meaningful as other more commonly acknowledged forms of diversity.

Appreciation for well-harmonized agreement represents a discipline and a talent and a skill, in and of itself, separate from any particular facility for working or behaving in one certain way.

These kinds of realizations represent solid components of an emerging social and cultural awareness, extending well beyond how purposeful motivation has been conventionally regarded in the not-too distant past.

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John Roth

Los Angeles

December 31, 2015      Revision: April 17, 2016

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## John Roth



PHOTO CREDIT: ZOE LOGAN

Following an advanced degree in design and an MBA from a prominent business program, John Roth had initially performed as an independent consultant, contributing effort toward a number of significant corporate change-related projects in several large American urban centers.

Now currently employed for an extended period of time with a large financial enterprise in Los Angeles, the working focus has often involved advocacy of new technologies for business: mobility devices, electronic documents (paperless office), remote cloud-based service potentials, and advanced security assurances. Enterprise Architecture will ideally intersect also with initiatives particularly respecting long-term strategy and comprehensive integrated planning

Separately, there has always been robust appreciation of cognitive diversity and teamwork empowerment. Design Thinking, Business Transformation and Innovation are areas of particular concern and commitment

by Tom Graves, Principal at Tetradian

It lands on my desk with a bone-rattling thud. Weighing in at way more than my laptop, and nigh on a thousand pages now of turgid technical prose, this well-known enterprise-architecture standard is not exactly a lightweight read in any sense of the term. And it's just one amongst dozens, maybe hundreds, of likewise tomes that we supposedly 'must' know before we can do anything in the trade – or explain it to anyone else, for that matter.

Which is a problem – because unless we *can* explain what it is that we do, this discipline of ours is goin' nowhere...

In practice, that 1000-page monster is too big to be much use. What we need at most is the 100-page practical guide; preferably the 10-page overview; and even more the 1-page executive summary and the 1-*paragraph* elevator-pitch.

In short, we need to apply our architecture to itself: simplify, simplify, simplify, and keep simplifying again until it *does* make practical sense. And only then go down into the depth of contextual detail that we do need, to make it all work well in the real world.

So how do we do that?

My suggestion would be to start from a single word: **effectiveness**.

Or, in an enterprise context, **enterprise-effectiveness**.

That's important to everyone in the enterprise, in every level and domain – which means that if we focus our architectures on effectiveness, straight away we'll be talking about something that's important to everyone else too.

In which case, what's 'effectiveness'? It's not just a synonym for 'efficiency': we can be very efficient at "doing the wrong things righter", as Deming once put it. Instead, to do the right things right, we need to maintain a balance between at least five distinct themes:

*Efficient* – makes the best use of the available resources, with the minimum of wastage

*Reliable* – can be relied upon to deliver the required outcomes in the respective usage-scenarios

*Elegant* – accommodates all relevant human factors, such as simplicity and ease of use

*Appropriate* – is 'on track' to overall purpose, within and beyond the organization itself

*Integrated* – everything links with and supports everything else

(There would usually be further themes that we'd need for full enterprise-effectiveness: security, for example, or health-and-safety, environment or ethics. But those five themes above work well enough as a minimum default.)

All of which we could simplify down to one sentence, as the 'why' for all architecture: that **things work better when they work together, on purpose**.

Which in turn leads us to a phrase we could use as a possible elevator-pitch:

Things work better when they work together, on purpose – and our role as architects is to make sure that that happens, to enhance effectiveness everywhere in the enterprise.

If we want, we could specify a domain: IT-architecture, process-architecture, brand-architecture, whatever. But in essence it's usable for any and every form of architecture in the enterprise – and beyond, for that matter.

But *how* do we do that? What do we *do*? What **architecture-methods** do we use? Those are the questions that come up straight away after any elevator-pitch.

If we show someone any of the usual frameworks, they'll soon drown in all that detail. Hence not much use for explaining anything to anyone outside of the trade. Instead, a simpler option is to go back to the old Tuckman project-lifecycle that everyone knows: Forming, Storming, Norming, Performing, Adjourning. We can then reframe that into a form that fits better to how architecture works in practice:

*Purpose* (Forming) – the business-purpose, scope and expected duration for this cycle

*People* (Storming) – engaging stakeholders and resolving conflicts

*Preparation* (Norming) – planning out the activities to satisfy the need and purpose

*Process* (Performing) – enacting the activities required to satisfy the need and purpose

*Performance* (Adjourning) – identify benefits-realization, lessons-learning and pointers to further actions needed

All of which we could summaries visually as follows:

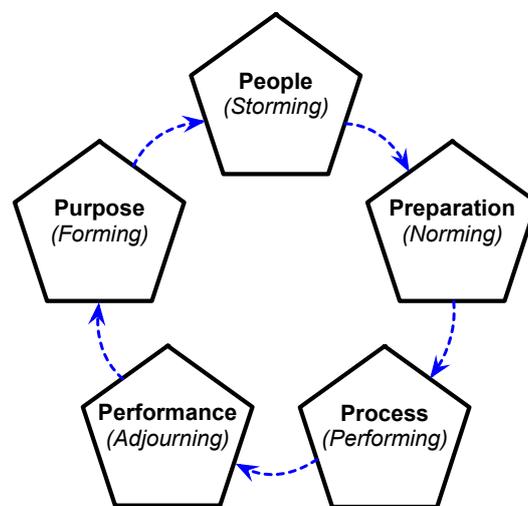


Figure 1: Five-Element / Tuckman recursive architecture-process

The big difference, compared to most architecture methods, is that the method is essentially the same for any purpose, any scope, any duration. It doesn't matter whether it's for classic IT-architecture, process-architecture, brand-architecture or whole-of-enterprise architecture – the core of the method is always the same. It doesn't matter if the duration is a TOGAF-style two-year transformation, a two-week Scrum-type sprint or a two-hour quick-assessment – the core of the method is always the same. And it's recursive, or fractal – we can start another cycle at any point within any other cycle, we can nest cycles within cycles to our heart's content, and each one of those cycles still uses the same core method. Which makes things a heck of a lot simpler – as long as we keep track of where we are in the recursion, of course.

That last point is important, though, because things can go badly wrong if we skip any of the steps in an iteration, or try to do them in a different order. For example, if we try to skip over that always-challenging Storming phase, we'll find ourselves going straight back there anyway, whether we like it not. And if we forget that final Adjourning phase, we'll not only miss out on key lessons-learned, but also fail to identify benefits-realized – hence people may fail to see any value in what we've done. Not A Good Idea... – there are good reasons why the steps are in the sequence they are, and why we do need to do every step!

This recursive five-step cycle gives us the sequence we need when we're doing architecture, and the focus or emphasis that we need at each stage in that sequence. Yet what do we actually *do*? What are the *tasks* that we need to carry out, in order to make things work better, together, on-purpose?

The same simplicity-lens helps us a lot with understanding **architecture-tasks** too, because it turns out that the simplest way to summaries the tasks not only links up with the Tuckman sequence, but with the effectiveness-themes as well. We can describe the typical grouping of tasks in the form of a maturity-model, that we could summaries visually as follows:

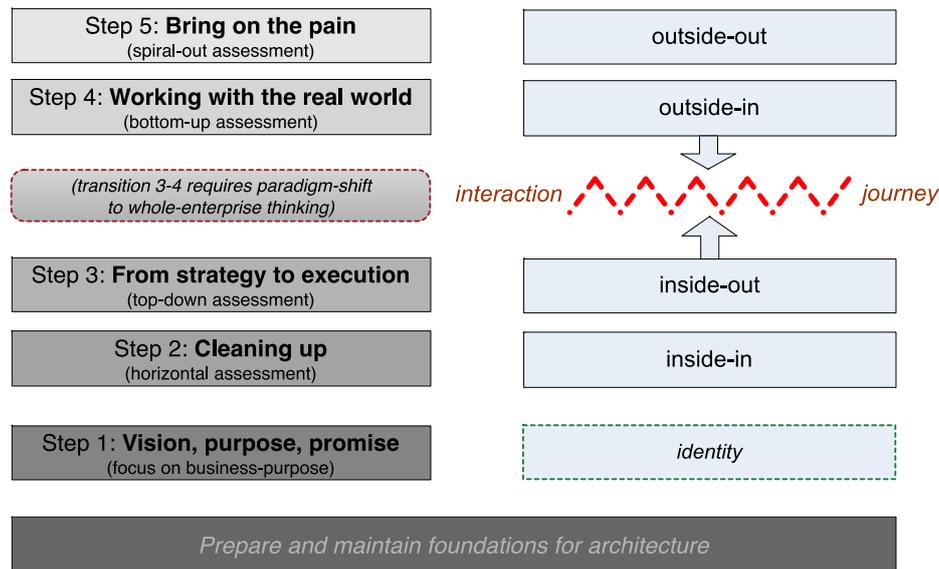


Figure 2: Maturity-model and architecture-perspectives

The same principles apply to every type of architecture: the steps, the types of tasks, the people-relations needed, and the overall processes, are all essentially the same in each case – only the scope and details change. We could summaries the steps as follows:

-- Step 0: Setting up to do architecture

This is similar to TOGAF’s Preliminary Phase: the aim here is to set up an initial architecture capability, by using the architecture method on itself. Given that aim (the Purpose for this cycle), we then need to get support from relevant stakeholders (People); get clear on how to do the work and everything we need to support us in doing it (Preparation); do the work to set up the architecture capability (Process); and verify and test that we’ve done it right (Performance) and are ready to tackle real-world business-challenges.

-- Step 1: Vision, purpose, promise

What is the business of this organization? What does it do, and why? What are the core capabilities, assets, information, people-relationships, rules, regulations and suchlike that make it all possible, and make it all happen? The emphasis of tasks here is on overall Purpose, and on the effectiveness-theme of Appropriate.

-- Step 2: Cleaning up

In anything other than a startup, the architecture-estate will always be in somewhat of a mess – it’s an inevitable outcome of everyday entropy. We need to get used to cleaning up, side-to-side and end-to-end, as we go along, and before starting anything new. On the surface this rationalization and de-duplication and the like might seem mostly to be about efficiency or reliability – but because architects themselves are unlikely to do the detail-level work, the real tasks here are about getting People to work together on this, and on human-oriented Elegant effectiveness-concerns such as simplicity and maintainability.

-- Step 3: From strategy to execution

The tasks to learn here are about how to take a top-down strategy, and identify and define everything needed to make it happen, and work well, in the real-world. (This is classic EA territory, of course –

but note that these are not the only skills that architects need to learn!) The emphasis here is on Preparation, and on making things as Efficient as possible.

-- **Step 4: Working with the real-world**

The focus in this step shifts towards bottom-up and outside-in, and the more challenging tasks of dealing with the inherent uncertainties of whatever arises from the real-world and in real-time. The emphasis here is on run-time Process, and keeping things Reliable.

-- Step 5: Bring on the pain

From that previous practice on core-foundations, clean-up, top-down and bottom-up, we should now be ready to take on whatever the world throws at us – the ‘pain-points’ for the business and beyond. The emphasis here is on real-world Performance – ‘doing the right things right’, at speed – and on keeping everything Integrated, working together well, in the midst of dynamic change.

Wherever feasible, it’s best to do architecture-development in that sequence – particularly the development of skills and maturity. It’s not mandatory as such, but each time we do something out of step, we risk creating problems for ourselves further down the line. For example, if we try to do a top-down strategy (Step 3) before we’ve done a clean-up (Step 2), we’d be building a new architecture on top of unstable foundations. Not always avoidable, of course, but Not A Good Idea if we don’t know that we’re doing it!

Beyond Step 5? – well, there’s always something new to learn, some new challenge to face. Particularly from Step 4 onwards, much of this is about the ‘planning’ that we need for working with things that we can’t plan for – new technologies, new processes, new ideas, new challenges – whilst still holding to the enterprise’s core aims and purpose. And yes, that’s a challenge just in itself...

The key point, perhaps, is that architecture isn’t something that we can learn from books alone. Instead, the most valuable lessons, yet also the hardest-won, are those that accumulate quietly over years of real-world practice.

And above all, we need to keep it simple. (Simple, but not simplistic – they’re not the same, and the difference is important!) Not just for us as architects, but for everyone else too. As we’ll each no doubt discover, making things simple is one of the hardest tasks of all – but it’s often the one that matters most. Those monster manuals are of little use unless we already know enough EA to know how to use them: so simplify, simplify, simplify, and keep simplifying again until what we do in enterprise-architecture *does* make practical sense.



**Tom Graves**

Tom is known as a highly innovative thought leader on the futures of business. With a keen eye for systems and structure, he has nearly 40 years of experience in knowledge management, skills research, software development and the human side of complex systems. Quietly compassionate, he balances conceptual rigor and pragmatic realism with a deep awareness of human issues and human needs in the business environment. Tom is credited as one of the pioneer inventors of desktop publishing, and as an entrepreneur and manager is conversant with the practical issues in implementing new approaches and new business models into existing industries.

He is a prolific author, and experienced presenter on radio and television, at conferences and in workshops and seminars. Passionate about the process of empowerment and the role of intuition in organizations, he brings to Tetradian an unusual skill in overview and synthesis, and in creating links across a widely diverse range of disciplines and professional domains.

Tom has a Master of Arts degree from London's Royal College of Art, Bachelor of Arts (DipAD) Degree in Graphic Design from Middlesex Polytechnic, London, and Graduate Certificate in Strategic Foresight from Swinburne University, Melbourne, and has received and presented extensive training in personal development, neuro-linguistic programming and other psychology-oriented modalities.

by Darryl Carr, EAPJ Editor

For this edition of the Enterprise Architecture Professional Journal, we are speaking to experienced practitioner and thought-leader Tom Zorde. We discuss the commonly heard terms of Digital Disruption, and Digital Transformation, and hear Tom's views on why this is important and how to prepare your organization.

**EAPJ:** Digital Disruption and Digital Transformation are regularly used terms in most, if not all, industries today. How do you define those terms?

**Tom:** I define Digital Disruption as the business, economic and social opportunities brought to existence on the back of new knowledge. Knowledge which prior to cloud computing was simply unattainable.

The low cost, pay-per-use accessibility and scalability of cloud computing has enabled the digital disruptor companies to experiment and innovate. As a result, companies with new business models that embrace "information as an asset" are able to rapidly launch with very little capital, and although many fail, those that survive can quickly attract large portions of the customer market. The digital business differentiator is that information is a managed and protected asset just like other businesses assets like your workforce, inventory and equipment.

In my mind, Digital Transformation is the journey an organization must undergo to embrace information as an asset. This is generally a large undertaking as it impacts the core fabric of the organization including its operating model, accountability culture, innovation and risk management.

Many companies undergo digital transformation simply because they've started listening to their customers. Customers are attracted to competition that allows them to do business when, where and how they want, and are making the experience positive. Unfortunately, having a more advanced e-commerce capability and an app is not enough. Unless you can gather the right data, gain insight and use it to adapt fast and create new value for your customer, then there is little protecting you from digital disruption.

**EAPJ:** What role do you think Enterprise Architecture has in the conversation on Digital Transformation and who should they be talking to?

**Tom:** Enterprise Architects are in a unique position to help uncover and communicate the impact of digital disruption across the organization. An EA view to identify opportunities and challenges in areas such as the supply chain or customer journey are critical inputs in shaping a digital transformation roadmap.

As Digital Transformation is about using information to deliver value, it is critical to talk to managers involved in the business value chains. This includes, Marketing, Sales, Operations, and M&A. I also believe HR have a largely underestimated role to play to help shape the people and culture required to compete in the digital era. EA should also work with IT and governance, risk and compliance, who play critical business partner roles to help enable a successful transformation, and need to be one step ahead of the internal business units they service.

**EAPJ:** We hear a lot about the rise of IoT, the ever-present references to Big-Data, and new terms like Cognitive Computing and Machine Learning. What is your take on how these trends will impact businesses?

**Tom:** These trends are the tools of Digital Disruption. Without a company awareness of what and why certain information is an asset, these terms have little relevance. Internet of Things (IOT) enables greater and more timely data collection from sensors to grow the information asset. However, an aspect often overlooked is that IoT includes actuators for remote controlling the 'things'. The same way autocorrect changes your spelling as you type, services built on the IoT ability to identify and

opportunistically intervene will deliver compelling customer experiences and resource savings. For example, imagine a fuel saving service for autonomous vehicles that positions them in another vehicle's slipstream when possible.

Big Data enables fast processing of large and varied data sets through cheap scalable computing and is therefore a great enabler for data-driven or digital organizations. The information asset is unlocked through the development and on-going refinement of the right algorithms. This is why data scientists and cognitive computing are so important. The same way data and algorithms underpins weather forecasting, the method of predicting the future, can now be used to prescribe the actions of things. It's an exciting time to be creating businesses.

**EAPJ:** What other trends do you see as having a significant impact on the future of business?

**Tom:** I think the social enterprise paradigm using crowd sourced innovation and open architectures is a game changer. Companies that are aware of the opportunities in their ecosystem including community, customers, partners and competitors are better prepared for digital disruption. A good understating of your digital assets, your risk mitigations and how these interplay with the broader ecosystem to generate value is the key here. Trust is a foundational enabler for this to work and this is why technologies such as block-chain is starting to get commercial attention.

**EAPJ:** For companies that have not yet begun the Digital Transformation journey, what is your advice?

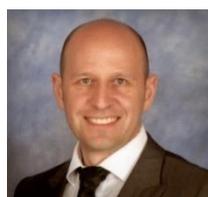
**Tom:** I find executives have way too many priorities. They do not have visibility of the interdependencies required to sequence these appropriately to achieve their company's goals. Digital transformation is not a technology project, and big decisions will need to be made. For many, it will be the largest metamorphosis their organization has ever under-taken, so given it is less of a renovation and more of a rebuild, I recommend they establish a strategy and change capability with a mandate to:

- Identify the market opportunity and value proposition
- Understand the required operating model and
- Re-prioritize what is important.

They will likely rediscover the importance of understanding and managing company culture, knowledge, innovation and change as important fundamentals. Most organizations have matured to be operationally excellent, but do not have the capabilities required for transformation and change.

**EAPJ:** As practicing Enterprise Architects, where do you believe we should be focusing our efforts to ensure we have the skills and knowledge to help organizations deal with an ever-increasing rate of change?

**Tom:** I believe organizations look to us as EA's for guidance on what to focus on. We must therefore know what the industry will demand in the medium to long term, and have the communication skills to articulate the plan and guide rapid progress. We are thinkers, dreamers, influencers and change agents, and must therefore master a diverse set of skills to be effective. Remember though that skills and knowledge are only effective if shared, so coaching others and breaking down communication barriers are the secret sauce of an effective EA.



**Tom Zorde** is a principal management consultant specializing in executive advisory for strategic digital transformation. Tom has been the lead architect at several Australian companies helping transform their operating models to achieve the consumer centric and data driven outcomes required to innovate and survive digital disruption.

Tom currently leads the business architecture for the Global IoT reference architecture collaboration project and heads the Perth Internet of Everything community, a forum to share opportunities and challenges of emerging technologies including Internet of Things and Predictive Analytics.

# WHAT EA PRACTICES NEED TO CHANGE TO MEET THE CHALLENGES OF DIGITAL DISRUPTION

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## Executive Summary

The traditional practice of EA is no longer sufficient in the SMACIT (Social, Mobile, Analytics, Cloud, and Internet of Things) world EA now inhabits. With customers expecting a greater range of self-service touch points, having greater ability to broadcast fast feedback regarding the performance of an organization to a very large audience, and expecting organizations to react and accommodate that feedback, the nature of business is becoming more collaboration-centric versus process-centric, and therefore much more about customer outcomes. EA practices and approaches need to adapt to this new world. This paper looks at some new domain areas of EA that are required to meet the challenges, in particular focusing on customer experience by implementing a customer experience domain, and providing guidance on how it can be implemented in large organizations.

## Introduction

It is well reported that the digital disruption is hitting organizations and forcing them to become more agile and customer focused (Potter, 2015) (Foresheew, 2015) (Webster, 2015). Webster reports statistics from the Australian Bureau of Statistics that show a correlation between the internal and external linkage of IT systems and an increase in the organization's productivity, and therefore organizations that increase the linkage of their IT systems are more likely to have introduced new products, operational changes, management changes or marketing changes from the previous year. Potter reports the amount of data being generated by external interactions with organizations (aka "big data") is driving the investment of new digital tools to better understand and use this data to stay ahead of the competition. Foresheew reports that Australian organizations are being impacted more by digital disruption than their overseas equivalents, and that around 56% of CIOs report that their organizations are being affected by digital disruption, which is influencing customer experience and operational efficiency.

IT departments are also being disrupted by digital. Gartner made a prediction in 2012 that by 2017, the CMO will have a bigger IT budget than the CIO (McLellan, 2012), and the 2014 survey by Avanade indicated that IT now only controls about 2/3 of the IT budget (Avanade, 2014). A lot of this change is being driven by cloud computing, but the extent of how much is not apparent to IT departments. According to the RightScale 2016 survey (Weins, 2016), 95% of respondents state their organizations are using cloud services, yet 2015 Cisco survey shows the disconnect between the amount of services IT departments think are cloud based versus the reality (Earle, 2015). The survey suggests that IT departments believe that, on average, 51 cloud services are being used by an organization; in reality, on average, it is 730. These changes lead to the conclusion that the traditional IT department, unless it radically changes its approach, is doomed to irrelevance as more services become cloud based and internal IT departments are left to wither.

Just as IT departments are in danger of becoming irrelevant unless they change, the practice of Enterprise Architecture (EA) is also doomed to irrelevance unless EA continues to adapt and change.

The practice of EA has evolved over the years, from originally being focused on technology architecture, then to being focused on enterprise-wide IT architecture, and then incorporating business strategy via business architecture (Bredemeyer & Malan, 2004). As EA has moved up this "value curve", EA has brought positive results to organizations, especially when focused at the

executive and strategy level of an organization (Ross, et al., 2006), or becoming involved with the organization's strategy, markets, products and capabilities and using this information to drive organizational change (Al-Amoody, 2013).

This disruption provides enterprise architects with another opportunity, and a reason, to continue to move up the "value curve" into the realm of business design and to provide leadership for continuous business transformation (Bloomberg, 2014). To achieve this though, the skillsets of enterprise architects and the capabilities of EA will need to expand to include new practices and understanding, those being: Customer Centric Design; Design Thinking; organizational eco-system understanding; and Systems of Engagement (Cullen & DeGennaro, 2014).

### **Expanded EA skillsets**

#### *Customer Centric Design*

Customer experience is an area that is fast gaining the attention of organizations (Rawson, et al., 2013) (Reiss, 2013) (Kirsner, 2015) as a way of ensuring that companies meet the needs and expectations of customers and stay ahead of the competition. Customer experience focuses on the overall interactions a customer has with an organization, along with focusing on any particular individual transaction, to ensure that customer satisfaction remains high throughout the "customer journey", the end-to-end set of touchpoints a customer has with an organization. (Rawson, et al., 2013) (Merholz, 2009). The customer experience ultimately is based on the customer's emotions during the journey (Shaw, 2013). A key aspect to understanding the customer experience is to understand the motivations of the customer along the customer journey (Richardson, 2010). It may sound obvious, but (Christensen, et al., 2006) points out that actually asking customers why they did something, rather than just assuming, provides a great insight into the motivations of their customers.

Given this organizational focus, this is an area that enterprise architects need to be involved with, at some level. Customer experience and EA teams have complementary synergies that can be leveraged when organizations decide to improve their customer experience (Miers, 2013) (Cullen, et al., 2015). And given that Forrester Research reported that only 15% of customer experience initiatives were successful, then this is an opportunity for enterprise architects to leverage EA frameworks and methods to provide greater success to customer experience transformations (Barnett, 2015).

#### *Design Thinking*

Design Thinking is a methodology for creating innovative and desirable solutions to a problem (Naiman, nd) (Fast Company, 2006). Whereas analytical thinking requires understanding of the parameters of a problem, from which a solution can be developed, Design Thinking focuses on the goal to be achieved, then works backwards to a set of solutions to meet that goal, some of which may be "left field" in terms of the context of the problem, but actually provides an elegant solution. A key aspect of Design Thinking is that it is "human-centric", i.e. it is intended to look at the problem and the solution from the customer's point of view, not the organization's point of view.

While different organizations have different steps in their various Design Thinking methodologies, they essentially consist of the four following steps: define the problem; brainstorm various options; select one of the promising options and refine it, e.g. by developing a prototype; then based on the learnings of the prototype, execute a "production" version (Plattner, nd) (Naiman, nd) (Fast Company, 2006).

Given that EA is fundamentally about relating an organization's structure and operations to its strategy (Ross, et al., 2006), then using Design Thinking will allow Enterprise Architects to come up with innovative approaches to meeting the organization's strategy; hence it is a method that all Enterprise Architects should have in their toolkit.

### *Systems of Engagement understanding*

Systems of Engagement understanding is the unification of people, process, information and technology, and away from being focused on Systems of Record, which tend to focus on efficiency and reliability. Systems of Engagement encourage peer interactions, whereas Systems of Record are passive holders of information (Moore, 2011).

### *Organizational Ecosystem Design*

Organizational Ecosystem Design is about understanding the ecosystem that an organization inhabits; rather than stopping at the organization's boundaries. Ecosystem design looks outside the boundary to include the organization's suppliers, customers, partners, competitors and regulators and how these stakeholders can influence an organization's success (Cullen & DeGennaro, 2014).

### **A different way of EA thinking**

EA needs to expand its domains to accommodate these different ways of thinking. Let us take as an example a business strategy to "create a delightful experience for our customers"; Immediate questions arise as to what constitute "delightful"; how can "delight" be measured; how can "delight" be defined. After all, what we are talking about here is subjective and varies by emotions and therefore fashion trends. Furthermore, what may be delightful in one customer engagement point may be completely irrelevant in another.

The more comprehensive EA models in the Business Architecture Domain, based on the Business Model Canvas (Osterwalder, 2008), provide the necessary inter-relationships and linkages between the more discrete and measureable components. Using these models, we are able to design products and services according to business value propositions for our stakeholders, and the necessary support in logistics and capabilities for a successful business. However, these are all based on discrete components that we can clearly define and measure. Inserting emotional or subjective drivers into such models can easily result in misunderstanding, misrepresentations and dissent, thereby breaking one of the golden remits of EA – to gain consensus.

It is clear then that if EAs are to continue playing a role in influencing and guiding the boardroom, something needs to be added to our more traditional toolkit: something that is able to translate emotions and subjectivity into concrete business concepts. What if we were to introduce the concept of an "Experiential Layer" that governs the behavior of Business Services? We are then able to start documenting and relating emotional strategic intent to Business Service design. If it were only that simple; the definition of "delight" would change depending on the Business Service being consumed. For example, someone going through an online purchase service will define "delight" as being able to find the right product quickly and in an informed manner, whilst the same customer reporting a product issue will define "delight" as being able to resolve problems quickly and having an empathetic ear.

We therefore need to, in our thinking of the Experiential Layer, be able to decompose "delight" into its different flavors for the Business Services along the Business Value Chain. Furthermore, we can also start considering what other stakeholders may consider as "delightful" in their interactions with us.

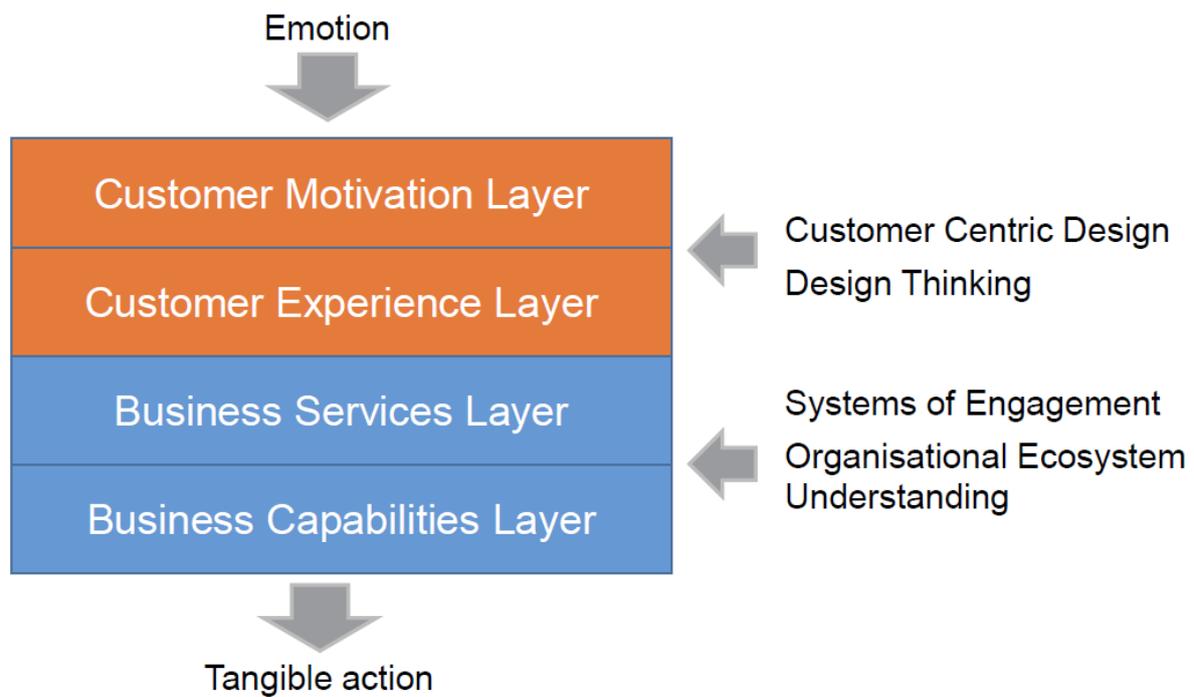


Figure 1 – a different way of EA thinking

Figure 1 provides a model of how we can translate emotion to tangible action using the expanded skillsets of Customer Centric Design, Design Thinking, Systems of Engagement understanding and Organizational Ecosystem Design. Customer Centric Design and Design Thinking will enable us to understand our customers and what solutions we can provide to meet their needs. Once these have been understood, we can then decide what services and hence capabilities are required to support those solutions. By relating the Experience Layer to the Business Services Layer, what we have achieved is to articulate the organization’s Systems of Engagement. As we start to relate all our customers’ desired experiences across all the customer touchpoints against the business services, we are now undertaking Organizational Ecosystem Design to achieve this outcome.

### Conclusion

Organizations are faced with an unprecedented scope and scale of change, where the power of the customer / supplier relationship has moved to the customer. Enterprise Architects have a range of skills and knowledge that they can use to help organizations manage change. This disruption provides Enterprise Architects an opportunity not only to move the practice of EA away from being seen as an “IT concern” and help organizations realize their strategies, but also allow Enterprise Architects to influence that strategy based on what we see happening to other organizations from the “digital disruption”. But this will require Enterprise Architects to move beyond the traditional EA domains and focus on the new skills of Customer Centric Design, Design Thinking, Systems of Engagement understanding and Organizational Ecosystem Design to ensure that their organizations meet the challenges from digital disruption.

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**David Johnston-Bell**

David has over 15 years in Enterprise Information Architecture, across a range of commercial (telco, retail), government (health, defence) and education sectors (university). David has been at the "pointy end" of many enterprise-wide programs, driving organisational change along with technology change, which has given him a high degree of commercial acumen and technical expertise. David's experience with EA includes all aspects of large program implementations, including ideation, prioritisation, business case development, high-level designs and overseeing architectural governance of programs. David has a Masters in Engineering an MBA and is currently the Enterprise Information Architect for Deakin University, one of Australia's leading universities.

## EA EVENTS

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### AWARDS

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iCMGWorld 2016 Architecture Excellence Awards

Hot on the heels of their win at last year's Australasian Enterprise Architecture Conference ([as featured on EAPJ](#)), Australian-based Fragile to Agile picked up awards in the Global and ANZ sections, for their amazing work in transforming ME Bank.

Also part of the event was:

- The induction of Oliver Sims into the iCMG Hall of Fame.
- Awards across multiple industry verticals from a global community of practitioners, including:
  - Credit Suisse
  - King Khalid University
  - Wipro
  - Kenyan Ministry of Health
  - Air Canada
  - The World Bank
  - UBS
  - Vicus
  - Turk Telecom

Congratulations to all of the winners. You can see more information on the awards here:

<http://live.icmgworld.com/architectureawards/2016/#>

### INFOWORLD / FORESTER RESEARCH 2016 ENTERPRISE ARCHITECTURE AWARDS

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Focusing on a theme of speed and responsiveness, this year's awards recognized winners across a number of domains, including:

- Humana (Health Care / Health Insurance)
- MassMutual (Financial Services)
- South State Bank (Financial Services)
- Aetna (Health Care)
- Cummins (Engineering)

A worthy set of winners and some great examples of the transformative capabilities of Enterprise Architecture. You can find details of the winners here:

<http://www.infoworld.com/article/3121107/enterprise-architecture/the-2016-enterprise-architecture-awards.html>

### WEBINARS AND CONFERENCES

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Here's a quick run-down of some of the EA-focused activity coming up around the globe:

#### ASSOCIATION OF ENTERPRISE ARCHITECTS

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[IRM UK 3 Day Seminar | Business Architecture: The Foundation for Enterprise Transformation](#)  
October 17-19 - London, England

[AEA Webinar Series with Jason Uppal | Assess Performance and Culture of Innovation, Session 6](#)

October 19 - Webinar

[IRM UK 2-Day Seminar | Strategic Enterprise Design](#)

November 22-23 - London, England

[IRM UK Seminar and Workshop | Management Strategies for Enterprise Architecture](#)

November 24-25 - London, England

IASA GLOBAL

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[ITARC Sofia](#)

October 25-26 Sofia, Bulgaria

[ITARC India](#)

November 1-2 - Bangaluru, India

[ITARC London](#)

November 24-25 - London, England

THE OPEN GROUP

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[IT4IT™ Applied: Case Studies for Agile IT4IT \(Part One\)](#)

October 19 - Webinar

[The Open Group Paris, France 2016 | Making Standards Work®, e-Government](#)

October 24-27 Paris, France

[The Open Group Mexico City, Mexico | Making Standards Work for Business Transformation](#)

November 7-8 – Mexico City, Mexico

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If you have an event you want to let people know about, contact us at [editor@eapj.org](mailto:editor@eapj.org).

## CALL FOR SUBMISSIONS

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**by Darryl Carr, EAPJ Editor**

The Enterprise Architecture Professional Journal welcomes contributions in its fields of interest, which are enterprise, business, application, information, integration, technology and security architecture, as well as the strategic management of business and technology transformation. EAPJ publishes peer-reviewed material that advances its fields of interest and supports the careers of its readers.

EAPJ combines the strengths of peer-reviewed technical journals and professional newsmagazines. EAPJ invites submission of academic, feature, opinion, and interview articles. The editorial staff also considers other submissions, such as images, interactive graphics, video, and animations. Successful submissions contain actionable information that enhances the capabilities of professionals working within the EAPJ fields of interest.

Each issue consists of one or more main articles and one or more features, all centered on a theme introduced by the Editor's Welcome. Main articles are generally no more than 5,000 words in length, with body text interspersed with numerous callouts, graphics or tables.

EAPJ encourages submissions, readership and community participation from qualified individuals representing the widest possible variety of geographical regions, cultures, backgrounds and beliefs. Authors must properly attribute all referenced content and ensure that their submissions do not infringe upon any copyrights or intellectual property laws if published in the EAPJ. EAPJ encourages potential authors to contact the editor early on to receive guidance on developing material with the greatest likelihood of publication.

EAPJ also seeks expert reviewers to work with the editor and authors on developing and selecting main articles for the journal.

Please send expressions of interest, submissions, questions, ideas or comments to [editor@eapj.org](mailto:editor@eapj.org). Potential authors and reviewers should introduce themselves by describing their background briefly, supplying a resume or CV, or referencing an online profile.

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