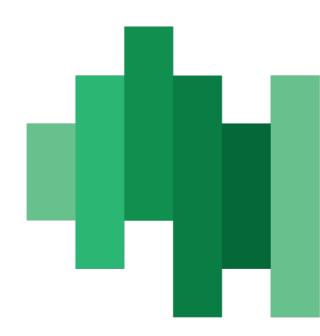


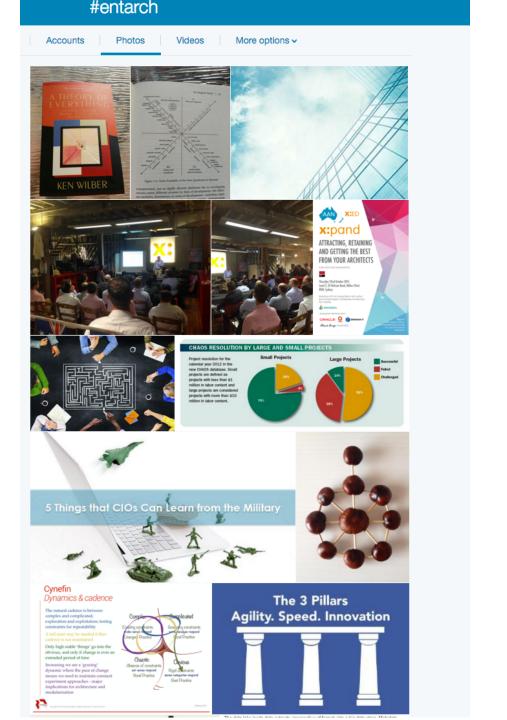
Enterprise Architecture Trends 2015

John Gøtze





#EntArch Today





#EntArch on Twitter a few days ago...



Search

Q

2 hours ago:

API management for a digital world

The rise of the modern API Ever since the dawn of the Internet, people have struggled with how to get one computer to talk to another. Early business systems had no provision for such interactions. They were entirely closed—worlds unto themselves...



Yesterday:

ArchiMate Modeling in Practice – Defining the application landscape

The team is in full swing now, very much aware of the fact that 'the pressure is on'. The reference models are in a "good enough" form at the moment, and some of the grumbling from management seems to be fading away....



2 days ago:

The DevOps Drumbeat - Part 2

Introducing the DevOps Drumbeat The move to DevOps also introduces additional constraints to our burgeoning Iron Polygon, as individual projects

4 hours ago:

IT4IT™ Reference Architecture Version 2.0, an Open Group Standard

By The Open Group 1 Title/Current
Version IT4IT™ Reference Architecture
Version 2.0, an Open Group Standard 2
The Basics The Open Group IT4IT
Reference Architecture standard
comprises a reference architecture and a
value chain-based operating model for
managing the business ... Continue...

Open Group Open

Yesterday:

WHY is EA broken?

By Neil Rerup On Friday, I posted an interesting article from Jason Bloomberg entitled "Is Enterprise Architecture Completely Broken?" that was published in Forbes. I thought it was a really well written article (no pandering here, Jason) and thought it accurately portrayed...



son Bloomberg

2 days ago:

Digital Disruption Drives Innovation
For Dynatrace

to account the above of the state of

Yesterday:

Enterprise Architecture at the Crossroads

Enterprise Architecture is facing sev challenges as a discipline and a prac In this blog post, John Gøtze outline: central challenges, and discusses wi should be done. He suggests that enterprise architecture managemer must focus on enterprise collaborat The Challenges The...



Yesterday:

The Open Group Edinburgh—Th State of Boundaryless Informat Flow™ Today

By The Open Group This year marks 20th anniversary of the first version TOGAF®, an Open Group standard, the publication of "The Boundaryles Organization," a book that defined I companies should think about creat more open, flexible ... Continue...

The DevOps Drumbeat - Part 1

What it means to build quality software

4 days ago:

Enterprise Architecture Management IS Collaboration – Gartner Doesn't Get It

More and more QualiWare users consider a consensus-driven management philosophy and enterprise collaboration to be a key driver for business agility and innovation. This has always been essential for QualiWare when we design our products and services. For several years, we have...



Open Group Open

3 days ago:

EAVoices.com

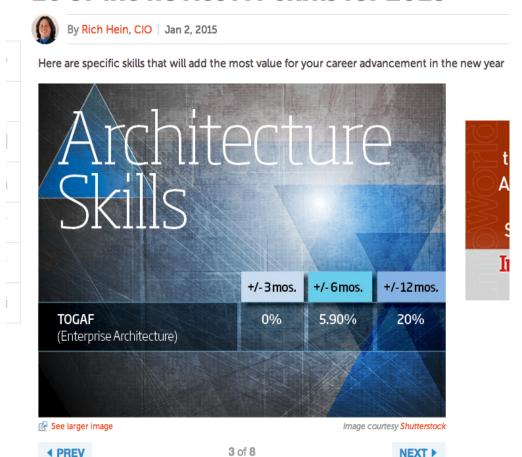
EA is "hot"





Home > IT Careers

16 of the hottest IT skills for 2015



5

but "broken"...





Forbes We How To Make Your First Million Dollars - Yo, Hailo And Others Explain Active on LinkedIn in

Is Enterprise Architecture Completely Broken?

+ Comment Now + Follow Comments

TECH 7/11/2014 @ 7:34AM | 6.807 views

Jason Bloomberg Contributor

FOLLOW

I write and consult on digital transformation in the enterprise.

Opinions expressed by Forbes Contributors are their own.

2002

Remember Milton, the red stapler guy from the movie Office Space? Useless to his company, he had been laid off years before, but due to an unexplained glitch, he was never informed and kept getting paid. So there's Milton, showing up for work day after day, clueless about why he has nothing useful to do.

Makes you wonder: are there any Miltons in your organization?

Sadly, for some large enterprises, you need look no further than the Enterprise Architects. In the years since John Zachman originated the field of Enterprise

Architecture (EA) in his seminal 1987 article for IBM Systems Journal, EA has achieved a surprisingly paltry level of success. Yes, Enterprise Architects have used various frameworks and other tools to document how their organization operates, often with meticulous detail. But to what end? The cost savings and responsiveness benefits that EA has purported to deliver have been few and far between. Stories of stalled or misdirected EA initiatives vastly outnumber bona fide examples of EA efforts leading to measurable business value.

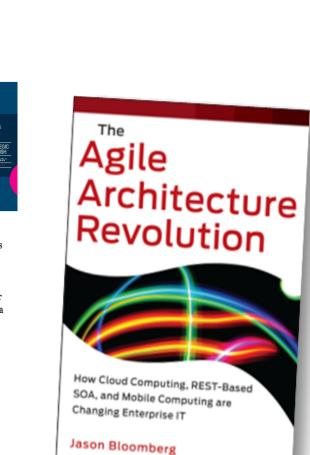


+ Follow Comments

What gives?







Revolution

How Cloud Computing, REST-Based SOA, and Mobile Computing are

Changing Enterprise IT

In fact, just what an Enterprise Architect is actually supposed to do is curiously still up for debate, more than 25 years after EA's invention. Common

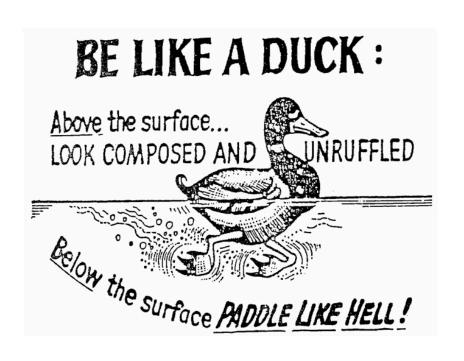


So, Is There a Problem?

Problem? Yes and No ...



Is EA "broken"? Hardly, but ...





Silverbullets and bullshit

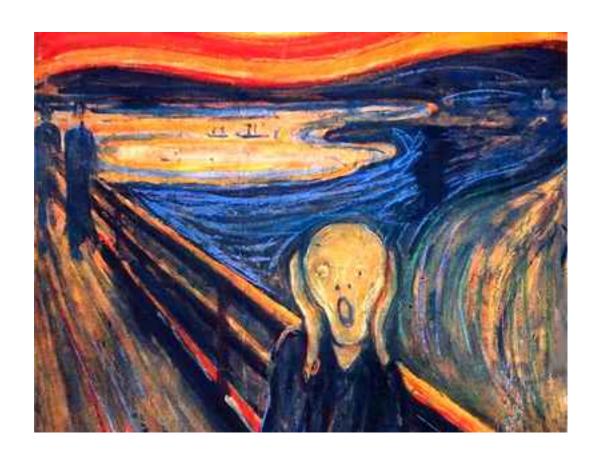






<An EA approach> represents a new breed of Enterprise Standards and is recognized as a paradigm shift by the global business and IT community to empower through its Reference Content a structured way of thinking, working and modelling enabling organizations to innovate, transform and deliver value.

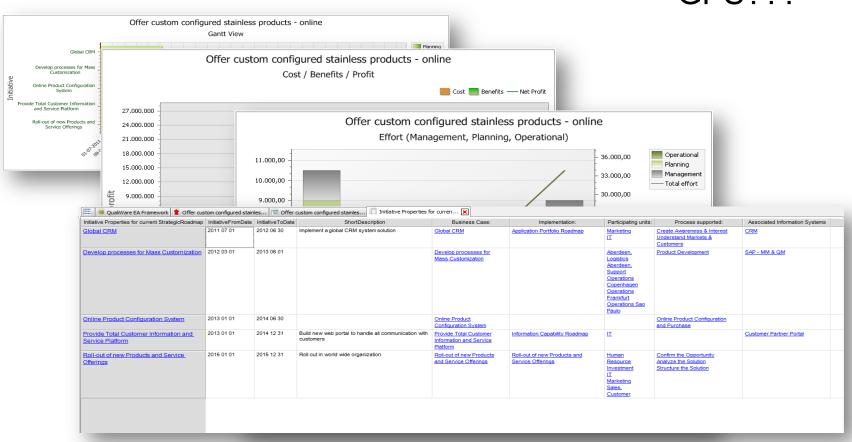




Dashboards, reports, visualisations and analyses



GPS???

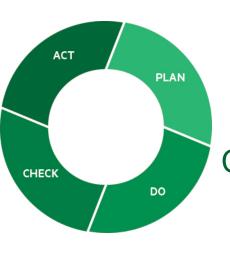


EA's Impact





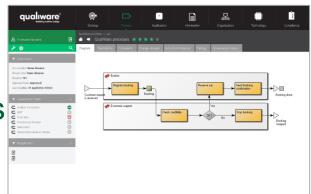
Coherency







Consistency Consensus





The only thing that's changed, is everything

Disruptions



big mobile service data on-demand agile cloud byod always on social business apps!

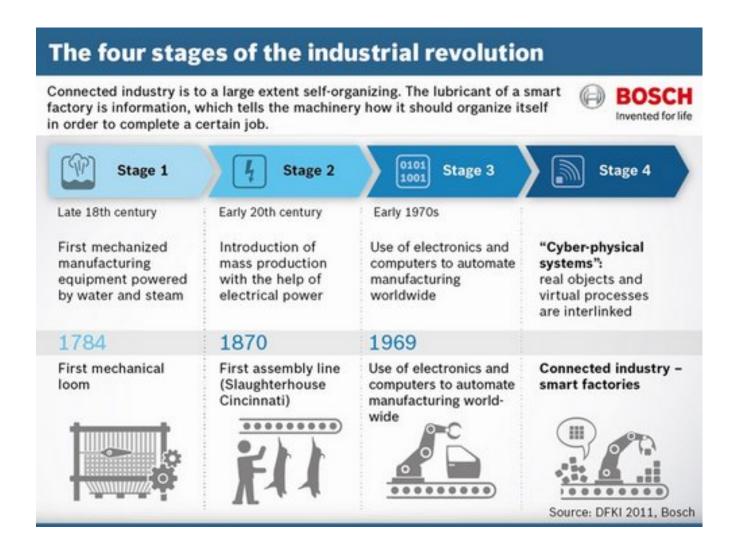




???

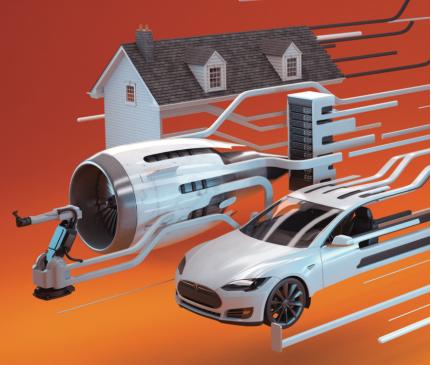
4th Industrial Revolution





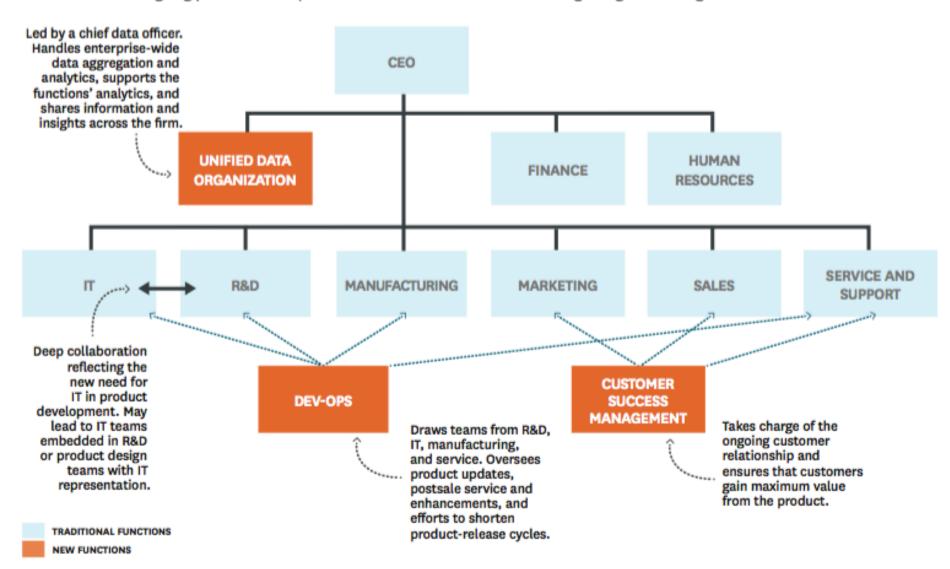






A NEW ORGANIZATIONAL STRUCTURE

Smart, connected products require functions within manufacturing firms to collaborate in new ways. As a result, firms' structures are rapidly evolving. A new functional unit focused on data management is starting to appear. Though rare, units focused on ongoing product development and customer success are also beginning to be recognized.



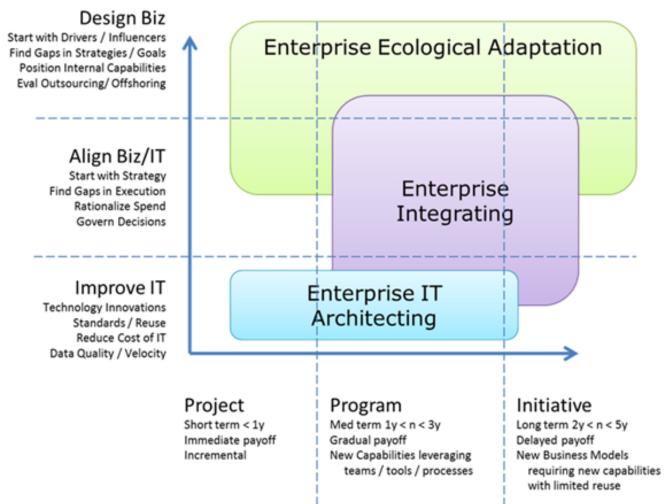


EA Scholary Analysis

Enterprise -> Ecosystem



EA Schools of Thought



James Lapalme, 2011, in IT Professional (Vol14, Issue6)

The EA Scope Shift



S ES 2015
Third International Conference on Enterprise Systems Basel, Switzerland, October 14-15, 2015



How does Enterprise Architecture support innovation? Marco Nardello, James Lapalme, Gustav Toppenberg and John Gøtze

Research methodology



Applying the **Design Science methodology** we developed artifacts in order to solve a specific need.



Completed a systematic literature review of reviews about innovation

Created the new framework of innovation

Designed the artifacts for assessment



Completed data gathering:

two structured interviews one document analysis

Two coders applied thematic analysis

Prepared the heat-map and the quidelines

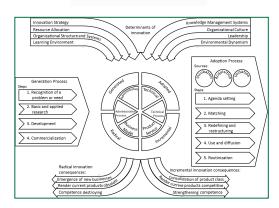


Design Science Evaluation

Presented the framework and the results

Collected of feedback **Evaluated internal reliability**

Framework



Questionnaires

| (1) Have the fra | naire for evaluation | | |
|------------------------------|--|--|--|
| (1) Have the fra (a) How? | B.1. Questionnaire for interviews | | |
| (2) Without thi (a) What | Innovation as an outcome | | |
| (b) Has th (c) How? | Looking for: Definition of innovation (e.g. newness), innovation as an outcome, types of innov | | |
| (3) Do you belie (a) How? | | | |
| (4) Do you belie | Aware Do you categorize innovations? How? Looking for: Type (administrative vs. technical, product vs. process), radicalness (radical v | | |
| mendations | incremental) | | |
| (a) How? (5) What parts | Further questions: Would you explain each category? Where did these categories originate? Contribution Do you help Router distinguishing between different types of innovation? | | |
| (a) Why s (6) What requir | Further questions: How? Which activities do you pursue that help Router categorize differe | | |
| (7) Are there as | types of innovation? | | |
| (a) Which | | | |
| | Innovation as a process | | |
| | Introduction Let's talk about the processes related to innovation. How does a new idea become part of Router? | | |
| | Looking for: Generation and adoption processes, drivers, phases of the processes, sources | | |
| | Aware Are you aware that innovations can be generated and adopted? | | |
| | Innovation as a generation process | | |
| | Introduction Let's talk about the generation process. What does generating innovations mental for you? | | |
| | duare Do you perceive there to be different steps in this process? What are they? Contribution Do you help Router recognise the stages of this process? Which activities do yo pursue that help Router identify the stages of the innovation process? Contribution Do you pursue activities that support Router in each step of the senerati | | |

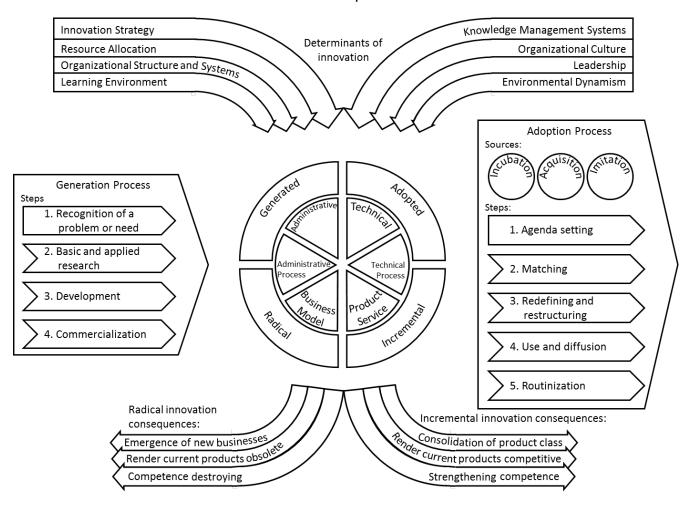
Codebook

| | | | Involvement | | | |
|-------------------------|------------------|------------------------------------|---|--|--|--|
| Label | | Definition | Example | | | |
| Aware | | | | | | |
| | (GSC) cor | umercialization A discour | so fragment that makes explicit reference to the activity of Once to a manufacturing marketing marketing, and distribution of a thinkin | he prototype has been developed we start by about how we are soing to sell it. | | |
| Contributing | (000) | | | g asset and at an going to sent | | |
| | | | A discourse fragment that makes explicit reference to changing (or im- | | | |
| | _ | | proving) organizational processes, or technologies that pertain to the ad- ministrative portions of an organization, hence the portions that are not | | | |
| | | | directly related to creating, producing, and delivering products or ser- | | | |
| | | | | | | |
| | Label | Business Model innovation | A discourse fragment that makes explicit reference to creating or chang- ing (or improving) the accress of recomes, the intended contemps have | Once an engineering team has developed a pro | | |
| Label Administrative | Adoption proc | (BMI) | ing (or improving) the sources of revenue, the intended customer base, products, and details of financing. Expressions such as 'business model,' | uct we have a meeting with them and we a three how are you going to sell it, what is yo | | |
| Administrative | | | 'oricing strategies,' 'markets,' 'restes to market' must be coded with this | route to market? | | |
| | | | fragment. | | | |
| | | Generated innovation (GI) | A discourse fragment that makes explicit reference to new products or | We are documenting the new products that ha | | |
| | Stage agenda- | | services that are created within the organization. In such fragments, in- novation is explicitly or implicitly defined as an outcome of a generation | been designed from the engineering teams match existing and future market needs. | | |
| | | | process. | manufacturing and refer to the second | | |
| | | Adopted innovation (AI) | A discourse fragment that makes explicit reference to products, services, | We have enriched our product offerings by a | | |
| | | | processes, technology, or ideas that have been adopted by the organiza- | quiring new products from other organization | | |
| Technical inne | Stage matchin | Radical innovation (RI) | A discourse fragment that makes explicit reference to innovations that | We are interesting new leadance models that a | | |
| I CALLED STATE | | reason successor (10) | produce fundamental changes in the activities of the organization and | fundamentally different from the ones that o | | |
| | | | represents clear departures from existing practices. | have today. | | |
| | Stage redefinie | | A discourse fragment that makes explicit reference to innovations that discourt the existing technical trainitory and shaper the organization's | | | |
| Product/Service | (ASRR) | | medica and arraign | | | |
| (PSI) | | Incremental innovation (II) | A discourse fragment that makes explicit reference to innovations that result in little departure from existing practices. | Our orginoering teams are also involved in t development of new products that are based o cristing once. | | |
| | | | A discourse fragment that makes explicit reference to innovations that | | | |
| Technical Pro | Stage use | | refine and improve the existing technical trajectory, products and ser- | | | |
| (TPI) | (ASUD) | | VICER. | | | |
| | Stage routinie | languation on a generation process | | | | |
| | | Label | Definition | Enamele | | |
| Administrative | | Generation process (GP) | A discourse fragment that makes explicit reference to a series of activities | Through the application of a specific approac | | |
| vation (API) | Incubative see | , | (a process) for creating new products or services within the organization | the engineering teams of our company devel- | | |
| | | | for internal use or for sale to other organizations. | new products and services that will be later so or used to improve current products | | |
| | Accordance no | Stage recognising a problem or | A discourse fearment that makes explicit reference to the activity of | When we innersate we start by identifying t | | |
| | recopanies so | need (GSRPN) | recognizing a problem or need that stimulates research and development | opportunity or need that we want to address. | | |
| | | | activities designed to create an innovation to solve the problem or need. Expressions similar to 'problem recognition' and 'identification of needs' | | | |
| | Tenitative score | | Expressions similar to 'problem recognition' and 'identification of needs' must be coded with this code | | | |
| | manualive sour | Stage research (CSR) | A discourse fragment that makes explicit reference to an activity of re- | Then we do a little hit of research of what | | |
| | | | search. This activity starts with an investigations of the advancement | there and what might be useful. | | |
| | | | of scientific knowledge. The results of this research are used to pursue | | | |
| | | Stage development (GSD) | acceptific investigations that are intended to solve practical problems. A discourse fragment that makes explicit reference to the activity of | The engineering teams are the ones responsib | | |
| | | Diago dorenyamin (GDD) | developing the new idea by patting it into a form that meets the needs | for designing the solution. | | |
| | | | of the audience of notential adopters. During this process activities such | | | |
| | | | as designing, prototyping, development, and refining of the idea, product, or arrate might be remaind | | | |

Framework



The **new framework is divided into five sections**: innovation as an outcome, generation process, adoption process, determinants of innovation and innovation consequences



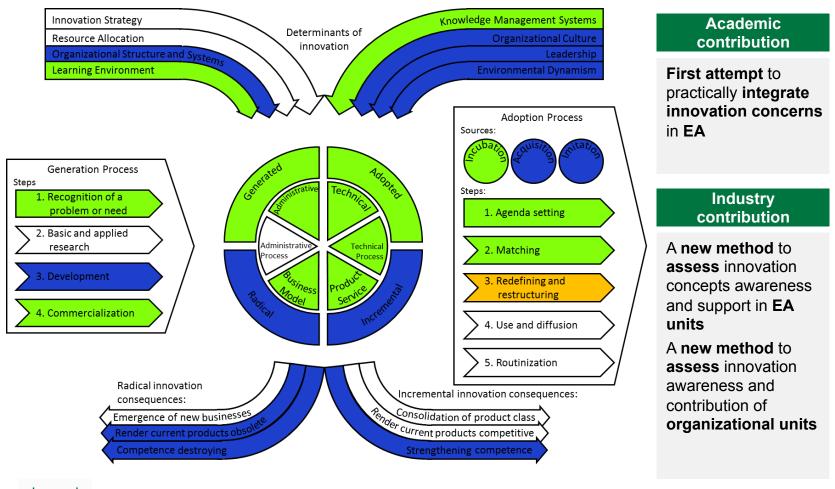
Final results

Not aware and not contributing



Aware and contributing

The final results of the project highlight that the EA team was **aware** of **11 concepts** of innovation and was **aware** and **contributing to 14.** On the right the **academic** and **industry contributions.**



Aware

Contributing

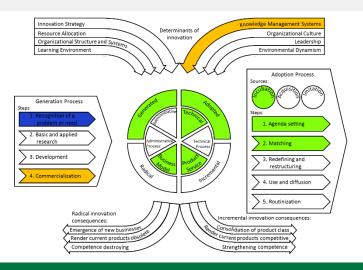
Cross-concept results



The cross-concept results **present the connection between** the **core innovation concepts** and the **determinants** and **consequences** of innovation.

Determinants of innovation

These results present the elements of the framework that were coded in the same fragment in which a determinant was coded

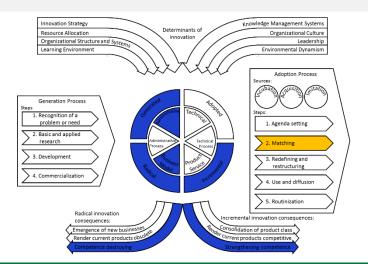


Industry contribution

Identifies the **determinants leveraged** by the organization to **support innovation** as well as which **innovation concepts** are **supported**

Consequences of innovation

The elements of the framework that were coded in the same fragment in which a consequence was coded



Industry contribution

Identifies the **consequences considered** by the organization and for which concepts were considered

Not aware and not contributing









Guidelines



The guidelines proposed aim at expanding innovation knowledge and fully exploit current processes potential as well as design new activities to support innovation.

STUDY INNOVATION

Share innovation knowledge inside the EA team in order to become aware all the aspects of innovation



Perform a step of the innovation processes or support directly one of the types or forms of innovation

- Develop new processes
- Extend and adapt existing processes to other concepts of innovation

HELP MANAGING THE CONSEQUENCES

Identify the consequences of innovation the EA team wants to support innovation

- · Develop new processes
- Improve existing processes

CONTRIBUTE TO THE DETERMINTATS

Identify the determinants the EA team is leveraging to support innovation

- Develop new processes
- Improve existing processes

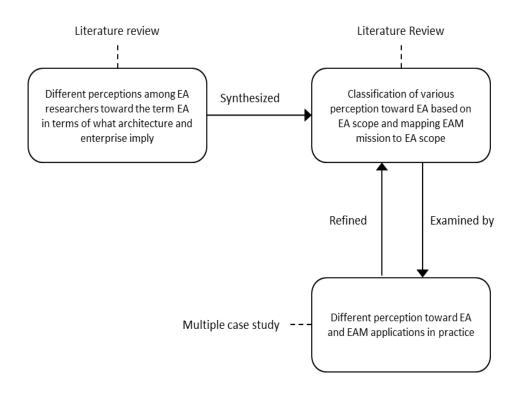


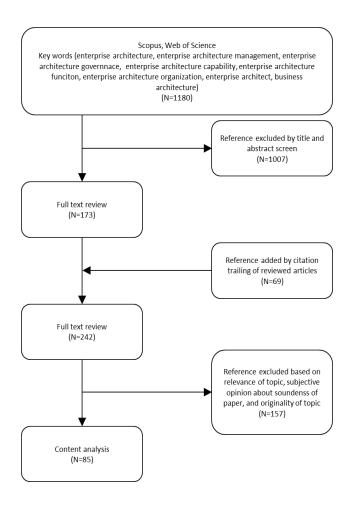
The Evolution of Enterprise Architecture Meaning and Scope

Fatemeh Rahimi, John Gøtze and Charles Møller (submitted)

Systematic Literature Review + Research Interviews



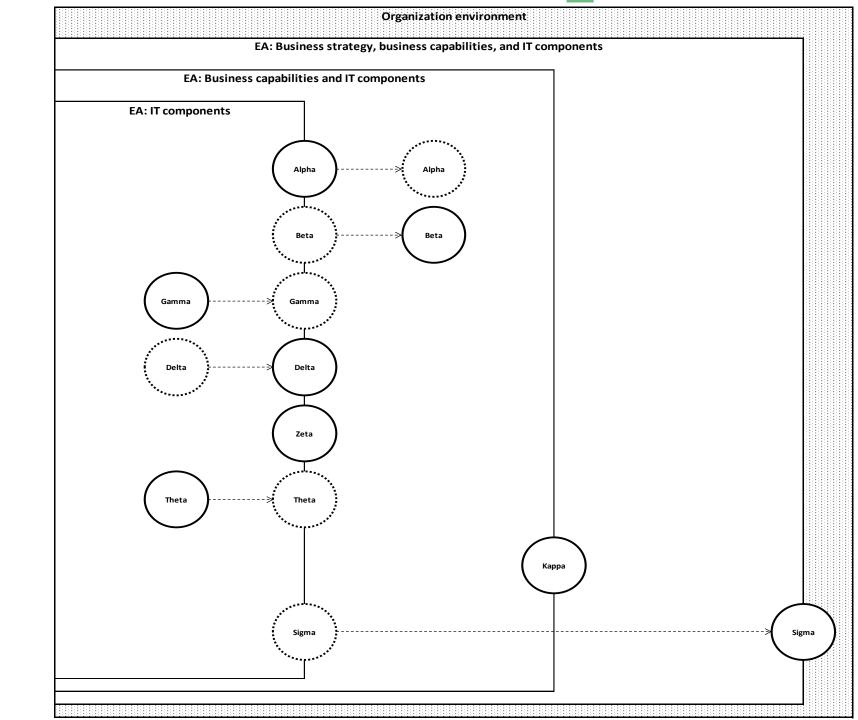




Coding of Cases



| EA function position and makeup | EA mission | EA function and IT architecture design | EA function and business architecture design |
|--|--|---|--|
| - EA function located within IT planning organization - EA function consists of business partners and enterprise architects - Architects have IT | - EA function ensures IT alignment with business strategy and requirements - EA function responsible for developing and securing robust architectural design and roadmap | Strategic Planning - EA function responsible for developing IT strategy for various business domains based on business strategy and requirements - EA function develop target architecture and roadmap for various business domains and also technology roadmap and target architecture for enhancing IT platform | - EA function not involved in business strategy development - EA function support business development by consulting business on IT capabilities support for business capabilities |
| background and business understanding - No formal business architect | | Project Lifecycle - EA function define project idea based on business initiatives, involved in project scoping, and architecture scenario assessment - EA function responsible for architecture compliance reviews prior to and at the end of project execution | Project Lifecycle - EA function supports redesign of business processes and involved in business optimization projects |



Findings



| EA scope | IT components | Business capabilities and IT components | Business strategy, business capabilities, and IT components |
|-------------|---|---|--|
| EAM mission | Support IT landscape optimization and strategic planning in mutual alignment with business strategy and business capabilities | Support strategy execution by guiding integrated business and IT capability design in mutual alignment with business strategy | Support strategy formulation in terms of strategic objectives and business model in mutual alignment with market |

... enterprise architects involvement at the strategic level is not limited to leveraging digital economy opportunities, but having a holistic and comprehensive view of an organization's EA and its environment, enterprise architects support developing business strategy in alignment with a broader range of competitive and market forces.



Gartnertology

By 2018, 50% of enterprise architecture (EA) teams will focus their digital business architectures on innovative business design.

Gartner

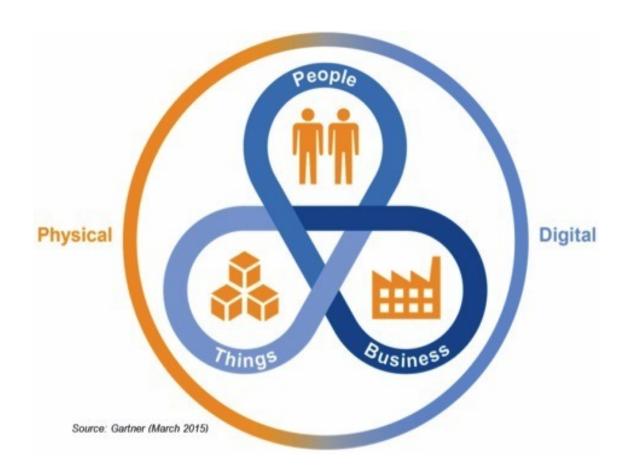
Digital Business evolution



| | Before the Web | Before the Nexus of Forces | | | After the Nexus of Forces | | |
|--------------|--|---|---|---|---|---|--|
| | Analog | Web | E-Business | Digital Marketing | Digital Business | Autonomous | |
| Focus | Build relationships that drive business or lower cost | Extend relationships into new markets or geographies | Transform sales channel into a global medium to drive efficiencies | Exploit the nexus to drive greater efficiency | Extend potential customers from people to things | Smart, semiautonomous things become the primary "customer" | |
| Outcomes | Optimize relationships | Extend relationships | Optimize channels | Optimize interactions | Build new business models | Maximize retention of and relationships with things | |
| Entities | People | People Business | People Business | People Business | People Business Things | People Business Things | |
| Disruptions | Emerging technologies | Internet and digital technologies | Automation of business operations | Deeper customer relationships, analytics | Creation of new value and new nonhuman customers | Smart machines and things as customers | |
| Technologies | ERP, CRM | CRM, Web | EDI, BI, portals | Mobile, big data, social | Sensors, 3D printing, smart machines | Robotics, smarter machines, automation | |
| | ▲ Change of kind | Change of degree | ee | | | 3 | |



"Digital business is the creation of new business designs by blurring the digital and physical worlds."



Digital Business Building Blocks and Stakeholders





Physical touchpoints and palettes?





Gartner's 5 high-level building blocks



Vision and strategy

High-level goals, strategic actions and key performance indicators

Palette

Selection of technologies, processes, information and skills

Touchpoints

Integration, governance, interaction and interoperability protocols

Backbone

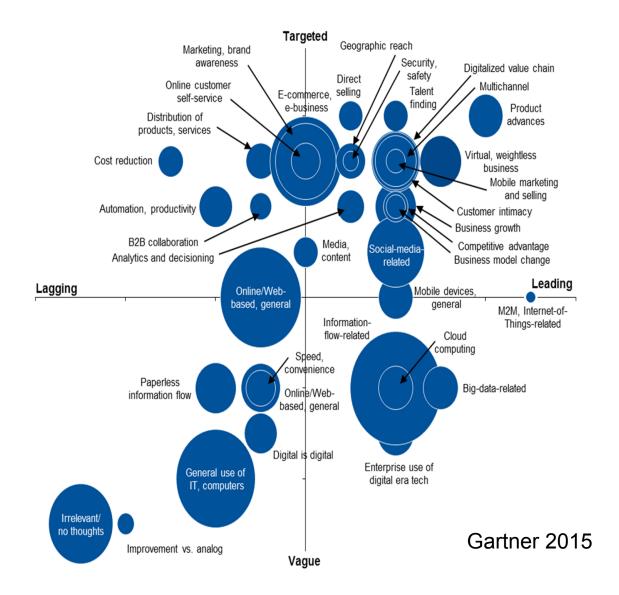
 Infrastructure delivery, reliability, security, availability and recoverability

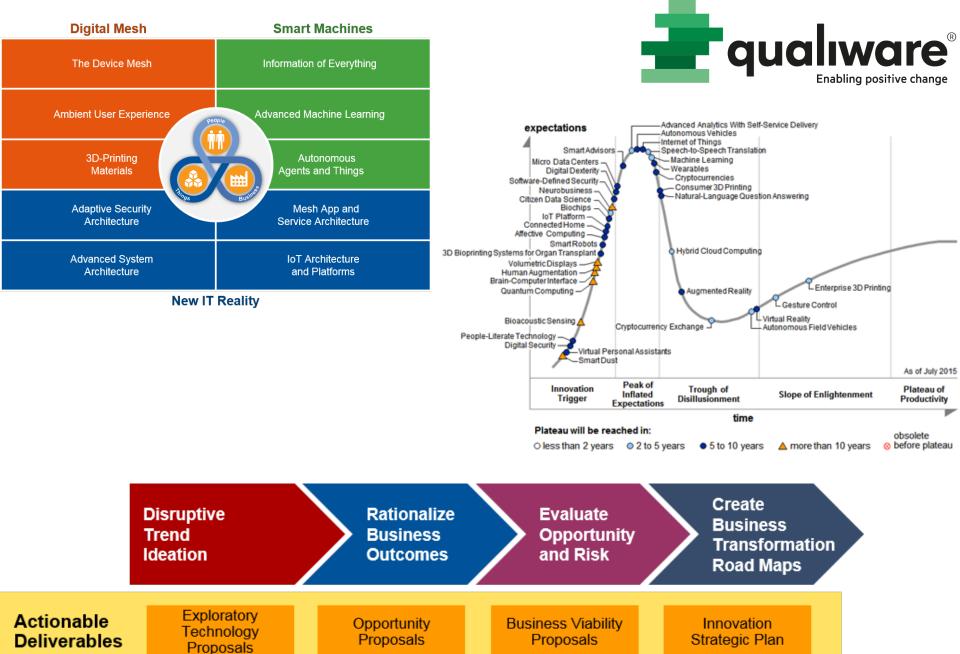
Capabilities

 Business ecosystem, business models, resources, markets and economics

Digital Business?







Source: gartner.com

Gartner 2014: Bimodal IT



Mode 1 is traditional IT, where systems must be reliable, predictable and safe (SoR).

Mode 2 is non-sequential, emphasizing innovation, agility and speed (SoI).

IT must be both:

"Rock-solid and fluid"



Gartner: Bimodal EA





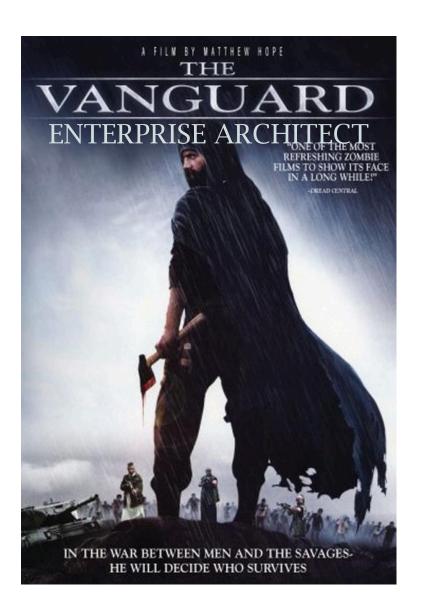
Vanguard enterprise architects, driving innovation with disruptive technologies

Foundation

Foundational enterprise architects, delivering systems of record and maintaining the (primarily technology) estate

Vanguard?





Supporting cast:

- "Technical Debt Collectors"
- "The Pace-Layerer"
- "The Mad Data Scientist"
- "The Ruthless Digitalizer"
- And other superheroes

Bimodal IT & DevOps











BETWEEN DEV AND OPS

I'm all about change

I'm in charge of stability

Development

Conflict

Operations

Traditional Mode

Traditional

Exploratory Mode

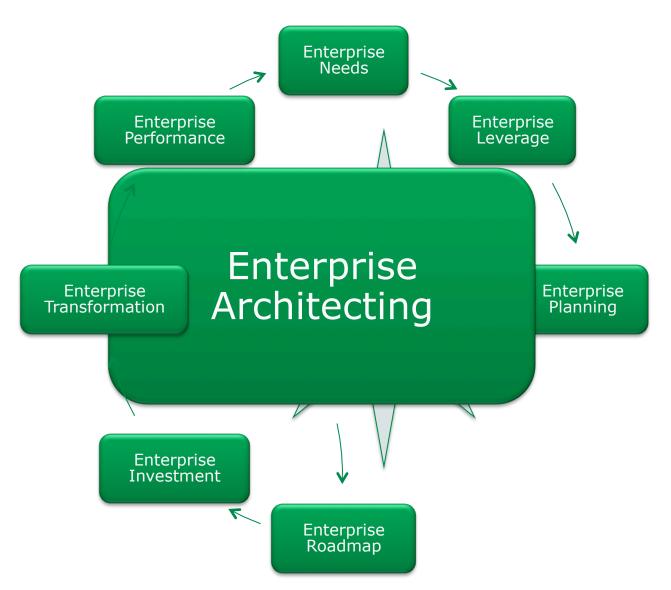
DevOps



We're Not in Kansas Anymore

Enterprise Architecture as a Metadiscipline





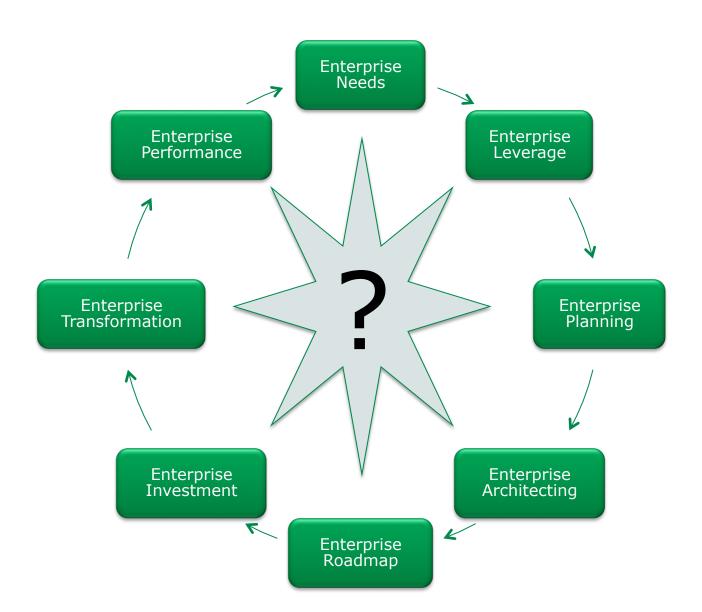
Enterprise Architecture as a Metadiscipline





Enterprise as a Discipline **____qualiware**®



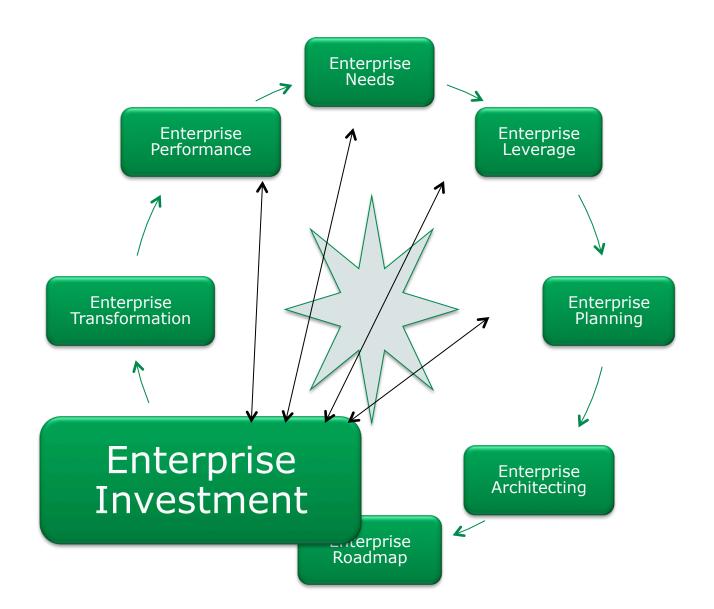




Enterprise Investment

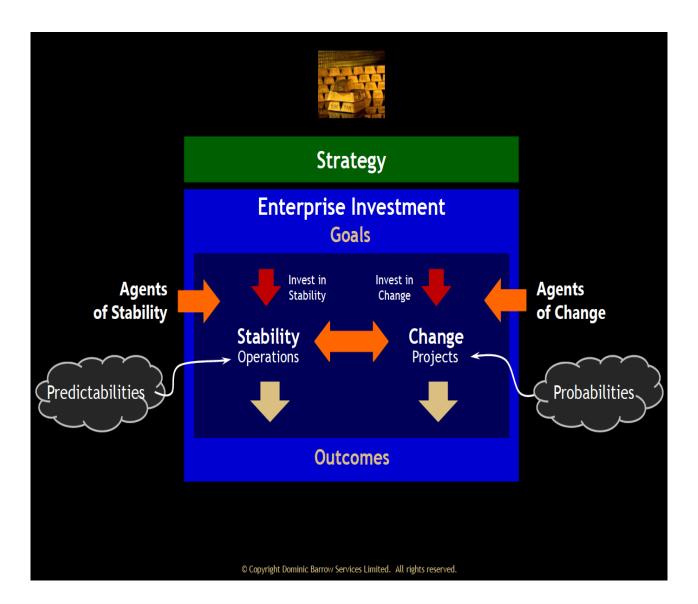
Enterprise Investment





Chris Potts: Enterprise Investment

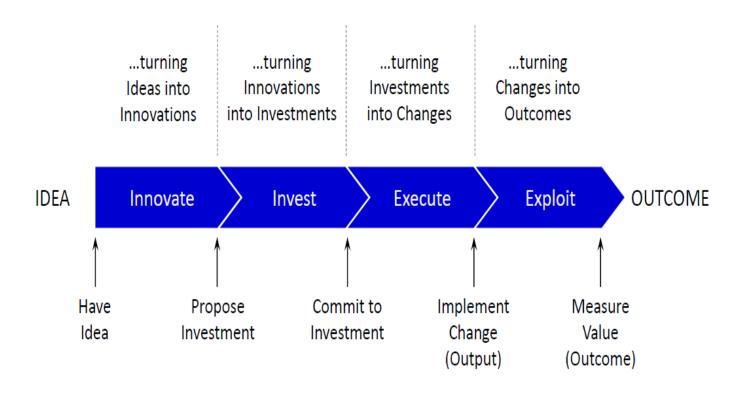




The enterprise investment process



Investment in....



Enterprise Investment

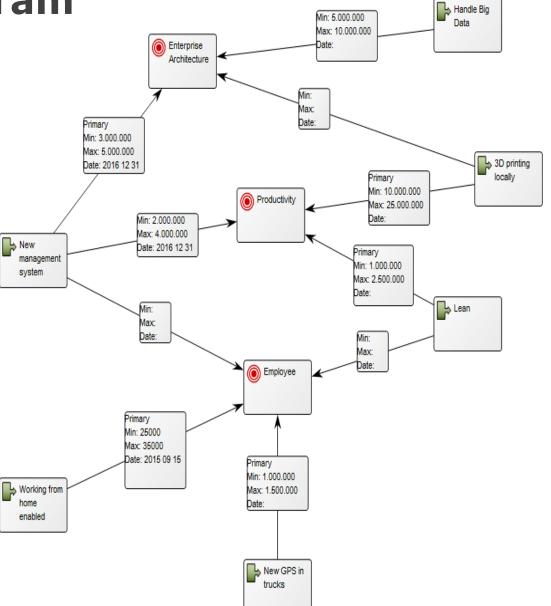


Are we achieving our goals for both value and structure as risk-efficiently as possible?

| Enterprise Architecture | Investment Portfolio |
|---|--|
| Achievement of agreed design characteristics Success of structural investments Influence on people's strategies & plans Impact on portfolio productivity & efficiency Impact on time-to-first benefit in projects | Achievement of agreed investment goals Percentage investment by goal Portfolio costs to Profit &Loss Each project: value milestones achieved Contribution of 'exploitation projects' |

Investment portfolio diagram



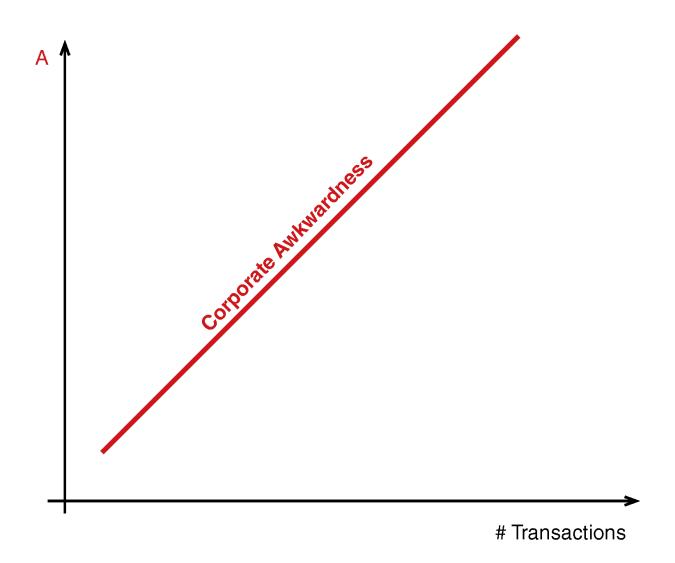




Enterprise Design

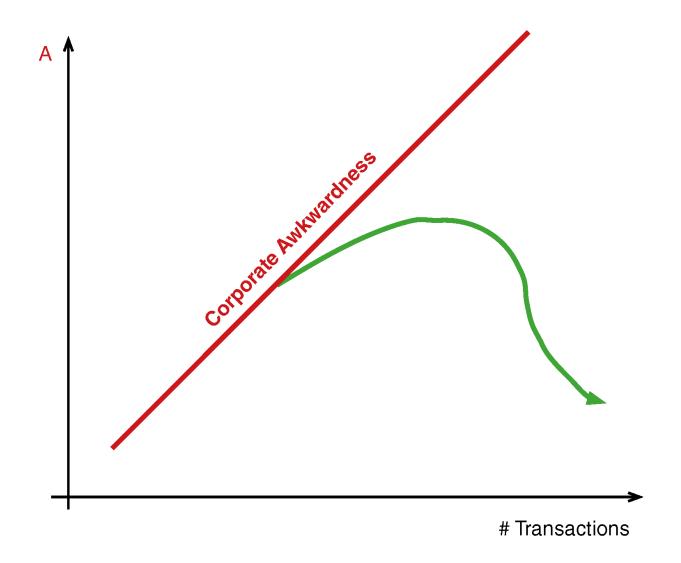
"The Enterprise"





Breaking the Curve





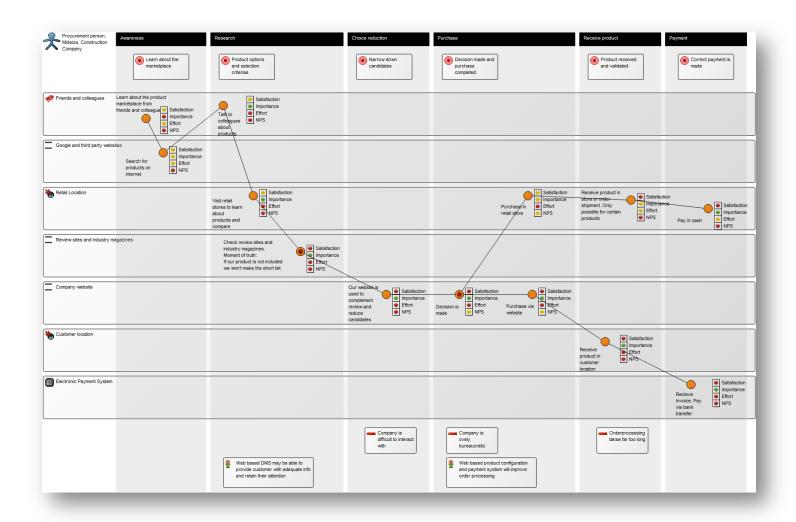
Enterprise Design



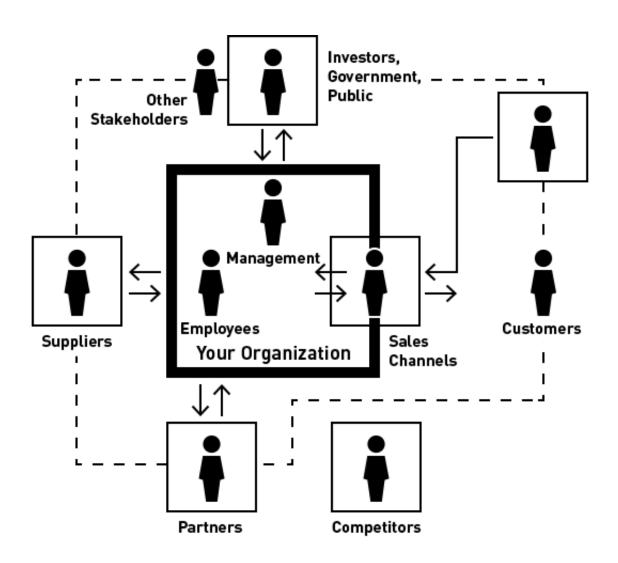
the new enterprise connected + networked contextual + engaging evolutive + emerging adaptive + dynamic dynamic + agile soft + fluid

Customer Journey Map



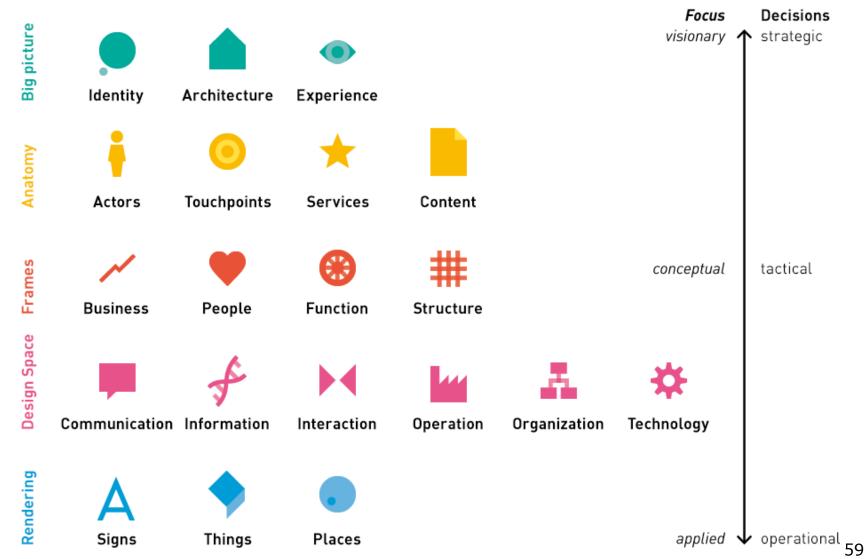






Enterprise Design Framework



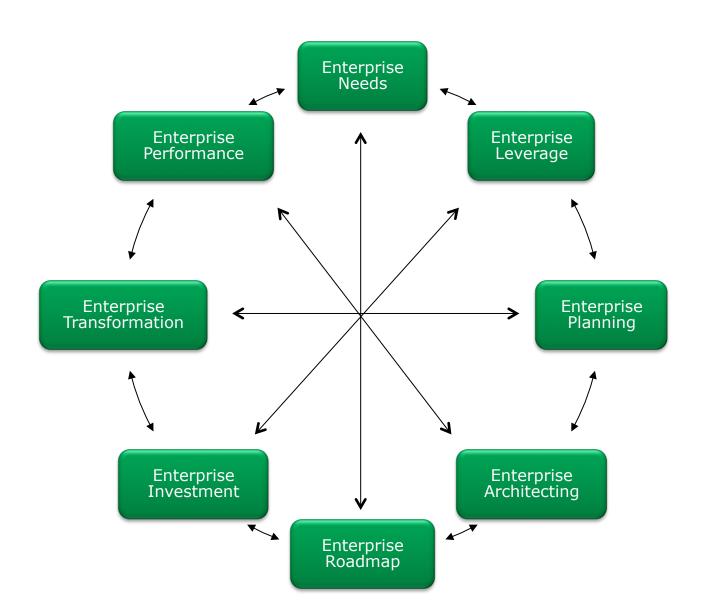




Enterprise Architecture Management Is Collaboration

Enterprise *is* a Discipline



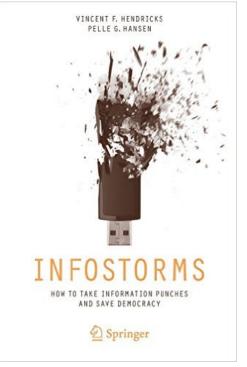


The Viable Enterprise



The Many C's

- Coherency
- Consensus
- Consistency
- Collaboration
- Compliancy
- Complexity
- Cognition
- Communication
- Conversation
- •





The Power of Talk in a Digital Age



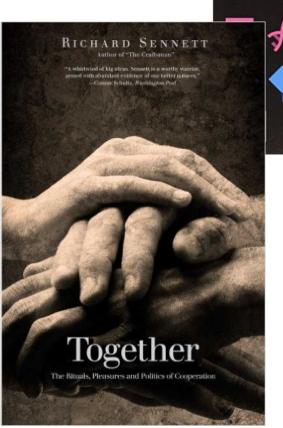
Sherry Turkle

AUTHOR OF ALONE TOGETHER

5 mandatory books



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