Six Reasons You Need Holistic Enterprise Architecture

John Gøtze June 15th, 2022

### Arribatec.

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Seks grunner til at du trenger holistisk virksomhetsarkitektur .

### Arribatec.



### Enterprise Architects are Dead. Long Lives Enterprise Architecture Management!

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Wolfgang Goebl • 1st Co-Author "Enterprise Design Patterns" bei Architectural Thinking Association 5mo • Edited • 🕲

Ok, let's face the truth - Enterprise Architecture is a very unsuccessful discipline in most companies - living in a small IT-centered group of people only. But how can we design enterprises to be more useful for people, and more successful in creating a positive impact?

Enterprise Design requires going beyond the typical scope of design for better products or IT architectures, and instead focusing on the enterprise itself as both the environment to reshape and our material to design with. Instead of isolated specialised disciplines like Enterprise Architects, Service Designers, Strategy, Organisation Design, we need an approach for connecting customer-centered product and service development with the architectural changes required to deliver. Combining ingredients of Architectural and Design Thinking with applied Systems Design, Intersection Group provides a holistic and systemic approach to help you deal with the challenges of innovation and transformation at an enterprise scale.

More clarification here: https://lnkd.in/d4-TquNm

#enterprisedesign #intersection #enterprisearchitecture

CCO Bülent Duagi, CFP 🛷 and 122 others

158 comments • 6 shares



By Wolfgang Goebl



# 6 reasons you need holistic enterprise architecture

It is essential in today's VUCA world to understand and co -design:

- · how the elements that make up your enterprise are related, architecturally
- your enterprise's organization design
- your enterprise's risk appetite and security challenges,
- your enterprise's business market/ecosystem and your value proposition,
- your enterprise's products and services, and
- your enterprise's culture and its stakeholders.

### We Live in a VUCA World



### *202x -*Living in a VUCA World

Sammehæng

### Coherency

The state of sticking together when we need and want to

Levedygtighed

### Viability

The ability of the enterprise to go beyond merely doing what it does, and. doing it well and efficiently

*Tilpasningsevne/ Omstillingsparathed* 

### Adaptability

The ability to be flexible and adjust to changing factors, conditions or environments Allestedsnærværelse

### Ubiquity

The fact of appearing everywhere or of being very common

# Architecture





# ISO/IEC/IEEE 42020:2019

### architecture

 fundamental concepts or properties of an entity in its environment and governing principles for the realization and evolution of this entity and its related life cycle

### processes

• Note: The entity to be architected can be of several kinds, as illustrated in the following examples: enterprise, organization, solution, system, subsystem, business, data (as a data element or data structure), application, information technology (as a collection), mission, product, service, software item, hardware item, product line, family of systems, system of systems, etc.



# ISO/IEC/IEEE 42020:2019

### architecting

- conceiving, defining, expressing, documenting, communicating, certifying proper implementation of, maintaining and improving an architecture throughout the life cycle for an architecture entity
- Note 1 to entry: The entity to be architected can be of several kinds, as illustrated in the following examples: system, enterprise, solution, business, data, application, information technology, mission, product, service, software, etc.

## Architecture, Architecting Architecturing

- A noun and a verb
- Something we have and something we do/create/co-design



# ISO/IEC/IEEE 42020:2019

### enterprise

- bold or complex endeavor
- Note 1 to entry: One or more organizations can participate in an enterprise. In case of multi -organization enterprises, each of the organizations brings various resources forward for use in the enterprise and they participate to the extent that they benefit from their involvement. The purpose of the enterprise is to address some challenges that these participating organizations cannot readily address on their own . Within a single organization, an enterprise may refer to a subset of the organization which is typically addressing particularly challenging or complex issues, often over a defined duration, and may undertake this with certain relaxations, tightening or otherwise authorized modifications of standard corporate processes and practices.

### What kind of enterprise do you want to be?



Inefficient

## The EA3 Cube











![](_page_16_Figure_0.jpeg)

![](_page_16_Figure_1.jpeg)

![](_page_16_Figure_2.jpeg)

![](_page_16_Figure_3.jpeg)

![](_page_16_Figure_4.jpeg)

![](_page_16_Figure_5.jpeg)

![](_page_16_Picture_6.jpeg)

![](_page_16_Picture_7.jpeg)

#### Organizational Structure .

Depicts the major business units (BUs) that make up the organization.

Reporting relationships between governance bodies and the BUs are usually depicted through an organization chart and a role/responsibility matrix.

Types of BUs include subsidiary whole companies, internal divisions, departments, stand -alone and integrated lines of business, program and staff offices, cross -functional teams, contractors, and independent workers. External groups may also be depicted if there is a persistent relationship. Oversight of BUs is achieved by centralized or decentralized (federated) governance methods.

![](_page_17_Figure_4.jpeg)

Products Output Induction

Andread & Modificed Sandra Catalogo & Sandrado

Business Unit I

Business Unit 2

![](_page_17_Figure_5.jpeg)

Face

![](_page_18_Figure_0.jpeg)

Source: H. Kniberg and A. Ivarsson, Scaling Agile @ Spotify, October 2012

#### **Functional Domains**.

Depicts the major performance capability areas of an organization, presented hierarchically in sub -architecture domains.

The relationship of these domains is that strategic goals drive business activities/information exchanges, which are enabled by technology systems that are hosted on networks and in facilities. There are industry best practices at each domain level that help with effectiveness and efficiency, but which need to be selected and used with the whole organization in mind. There may also be government regulations and resource constraints that must be factored into plans and projects.

![](_page_19_Figure_3.jpeg)

![](_page_19_Figure_4.jpeg)

# Technology

Strategy

# **Business**

![](_page_21_Picture_0.jpeg)

#### Risk Management.

Depicts key areas of risk in each functional domain and in the BUs. Organizations want to eliminate or limit disruptions that effect mission success or profitability.

Risk derives from uncertainty in predicting or dealing with disruption. Mitigation centers on the avoidance or response actions. Tolerance reflects the acceptable level of exposure to a certain type of disruption and the negative effects that would result. A trigger is something that causes a disruption event.

A holistic approach to managing risk begins at the enterprise level and completes with more detailed procedures at the BU and program levels.

![](_page_22_Figure_4.jpeg)

# Risk ManagementCybersecurity

• NIST Cybersecurity Framework

![](_page_23_Figure_2.jpeg)

#### Markets & Valuation.

Depicts the public and private sector markets and/or mission areas that the organization is active in.

For private sector organizations this is the market's valuation (stock price) versus the aggregate sale value if broken -up. It is also the anticipated value increase or decrease from mergers, acquisitions, start - ups, and spin - offs, as well as a comprehensive balance sheet of monetized assets and liabilities in each business unit.

For public sector organizations it is the liquidation value of all tangible and intangible assets.

![](_page_24_Figure_4.jpeg)

BU-A

![](_page_25_Figure_0.jpeg)

![](_page_25_Figure_1.jpeg)

# Enterprise Ecosystem

#### **EA Schools of Thought**

![](_page_26_Figure_2.jpeg)

![](_page_26_Figure_3.jpeg)

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

#### Human Capital.

Depicts the knowledge, skills, and abilities (KSAs) needed in each functional domain of the organization. The KSAs are different for executives, managers, and staff in each area.

There is a "cultural core" in each organization that is comprised of the values, norms, beliefs, facts, history, traditions, and methods in each BU and program area.

Cultural norms create informal power centers, communication channels, and processes.

People are often thought of as the most important and valuable resource of any organization, so full -lifecyle (hire-to-retire) talent management is very important.

![](_page_27_Figure_5.jpeg)

![](_page_27_Figure_6.jpeg)

![](_page_28_Picture_0.jpeg)

#### **Bureaucracy versus Humanocracy**

![](_page_28_Figure_2.jpeg)

We need to put human beings, not structures, processes, or methods, at the center of our organizations. Instead of a management model that seeks to maximize control for the sake of organizational efficiency, we need one that seeks to maximize contribution for the sake of impact.

#### Products & Services.

Depicts the tangible or virtual products and services that the organization provides to internal and external customers.

Mission success and profitability are maximized through a holistic approach to delivery with a focus on vertical/horizontal process integration within/between BUs.

Key areas of focus include customer relationships, end -to-end supply chain management, onsite/online store efficiency, and marketing/communications effectiveness. Architecture methods can help to identify gaps and overlaps, process improvement and reengineering projects, managing change, and handling disruption.

![](_page_29_Figure_4.jpeg)

![](_page_30_Figure_0.jpeg)

![](_page_30_Figure_1.jpeg)

![](_page_31_Picture_0.jpeg)

### CUBE FACT: Only 3 faces can be seen in one viewpoint

#### Mapping of possible views

Structure	Function	Risk	Value	People	Product	Value	Structure
						Value	People
						Value	Product
						Value	Function
						People	Structure
						People	Value
						People	Risk
						People	Product
						Structure	Value
						Structure	People
						Structure	Function
						Structure	Risk
						Product	Function
						Product	People
						Product	Risk
						Product	Value
						Function	Product
						Function	Value
						Function	Structure
						Function	Risk
						Risk	Product
						Risk	Function
						Risk	Structure
						Risk	People

#### Viewpoints

People Product Function Structure Risk Structure

Product Value Function Value Risk

People Value Risk Function People Risk Value Structure People Product Function Structure

![](_page_31_Figure_5.jpeg)

![](_page_32_Figure_0.jpeg)

8 Viewpoints (intersections)

## Patterns ...

Value	People	Product	Value proposition
Structure	Value	Function	Shared services; segment architecture
Structure	People	Value	Benefit realization ; reaping/ sowing
Structure	Function	Risk	Integrated Management system
Structure	Risk	People	GDPR
Function	Product	Risk	Lifecycle challenges
Function	Value	Product	Architectural runways
Risk	Product	People	Privacy by Design

# The Dark Side of the Cube

![](_page_34_Figure_1.jpeg)

Value	Structure	People	Product	Risk
Value	People	Product	Risk	Structure
Value	Product	Function	Risk	People
Value	Function	Structure	Risk	Product
People	Structure	Risk	Function	Value
People	Value	Structure	Product	Risk
People	Risk	Product	Structure	Value
People	Product	Value	Risk	Structure
Structure	Value	Function	People	Risk
Structure	People	Value	Risk	Function
Structure	Function	Risk	Value	People
Structure	Risk	People	Function	Value
Product	Function	Value	Risk	People
Product	People	Risk	Value	Function
Product	Risk	Function	People	Value
Product	Value	People	Function	Risk
Function	Product	Risk	Value	Structure
Function	Value	Product	Structure	Risk
Function	Structure	Value	Risk	Product
Function	Risk	Structure	Product	Value
Risk	Product	People	Function	Structure
Risk	Function	Product	Structure	People
Risk	Structure	Function	People	Product
Risk	People	Structure	Product	Function

Function

Function

Structure

People

Product

Function

Function

Function Product

Product

Product

Product

Structure

Structure

Structure

Structure

People

People

People

People Value

Value

Value

Value

![](_page_35_Figure_0.jpeg)

• (opposing faces must add up to 7)

37

![](_page_36_Picture_1.jpeg)

Any organization that designs a system will produce a design whose structure is a copy of the organization's communication structure.

Conway's Law

![](_page_36_Figure_4.jpeg)

Opposite Faces: 1 and 6

#### Architect or Bee?

![](_page_37_Figure_2.jpeg)

Opposite Faces

#### **Enterprise Investment**

![](_page_38_Figure_1.jpeg)

Opposite Faces

## **Dark Patterns**

![](_page_39_Picture_1.jpeg)

# **Richard H. Thaler**

### 2017 Nobel Memorial Prize in Economic Sciences for *behavioral economics*.

A choice architect has the responsibility for organizing the context in which people make decisions.

Choice architecture - a means to improve consumer decision-making by minimizing biases and errors that arise as the result of bounded rationality. Richard H. Thaler and Cass R. Sunstein ...with a new afterword

"One of the few books I've read recently that fundamentally changes the way. I think about the world," -Steven Levitt, coanthor of Dealorannia

https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2536504

# **BÅLFORBUD!**

6

Hvem kan få dispensasjon?	INGEN
Ja, men	INGEN
Vi skal bare	INGEN

#### FORBUDET GJELDER OGSÅ NÅR:

- 💥 du er forsiktig
- du kjenner flere eksperter, eller er ekspert selv
   du skulle bare... eller har tent bål i hele ditt liv
- 眯 du er på ferie
- du har gledet deg til pølser
   dere er en skole-/barnegruppe
- du er på campingtur
  du føler at grillingen eller du er superviktig

Svaret er NEI!

![](_page_41_Picture_12.jpeg)

CARRY IN P

https://brannmidt.no/balbrenning/

v Lillestrøm kommune

![](_page_41_Picture_15.jpeg)

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# ThankYou

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