

Enterprise Architecture

On Being Effective in
2018

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Presentation Focus

- Ice Breaker
- Portrait of an Enterprise Architect
- Leadership....How Do You Show Up
- An Architecture Effectiveness Model
- Architecture Decisions
- Pulling It All Together With OKR's

Ice Breaker

- Let's do something fun and interesting
- A quick 3 minutes

Portrait Of An Enterprise Architect



Before



After

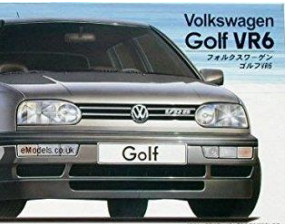
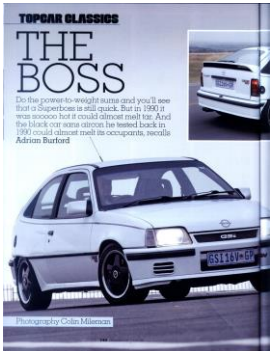
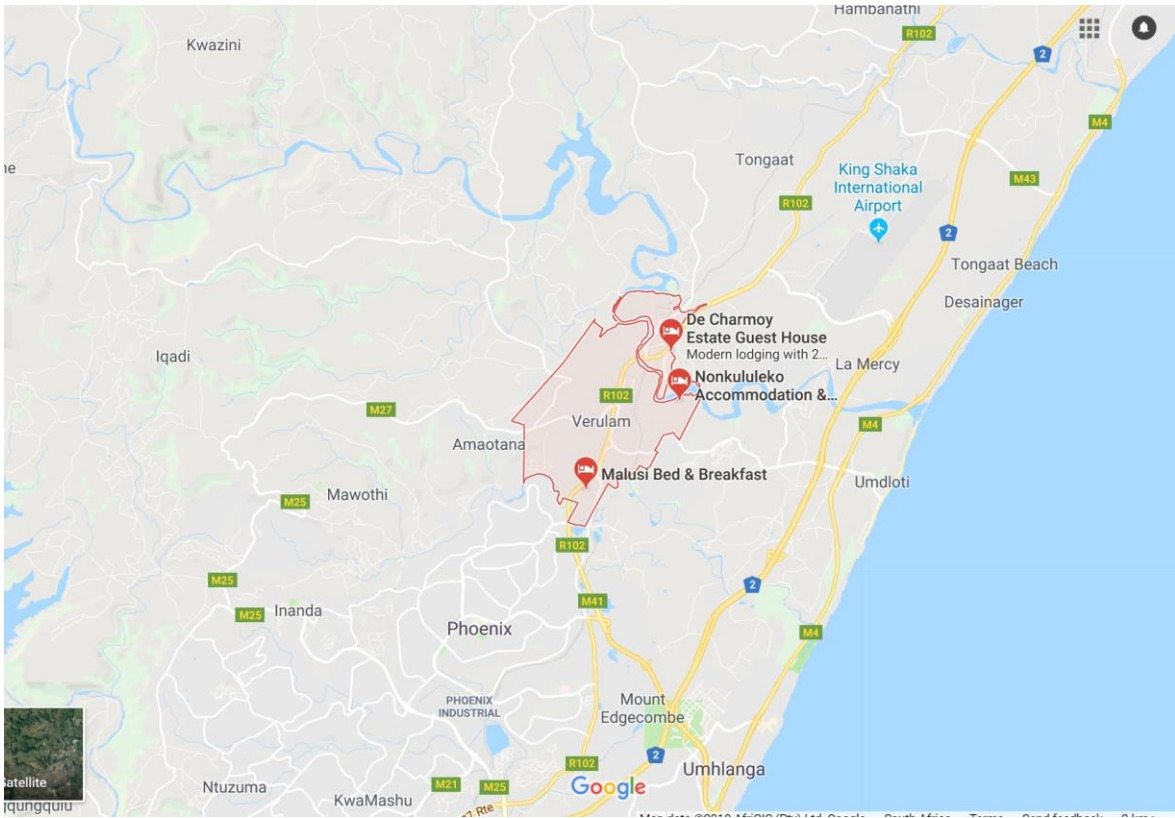


Full-time

UNISA

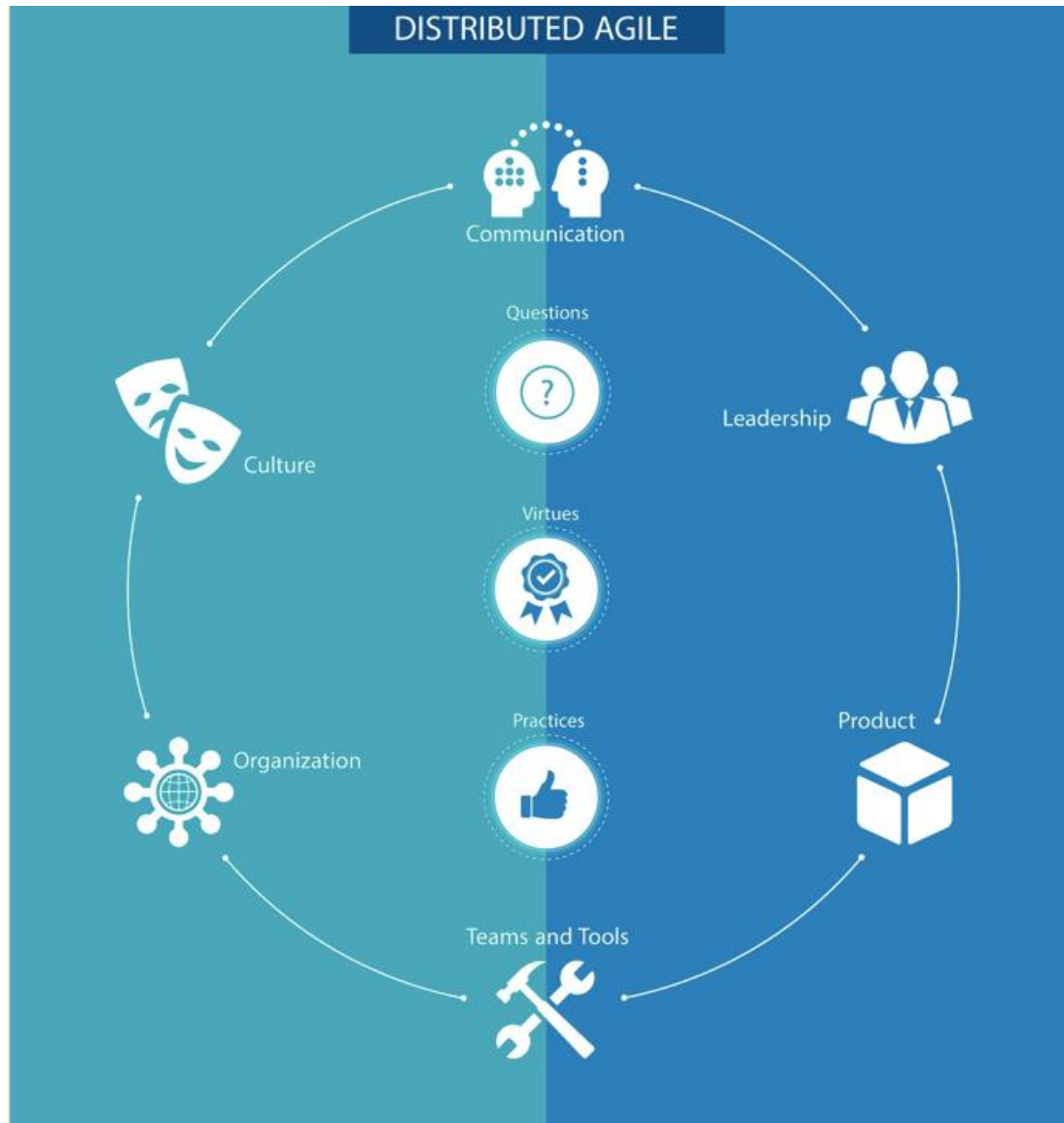


3x Part-time



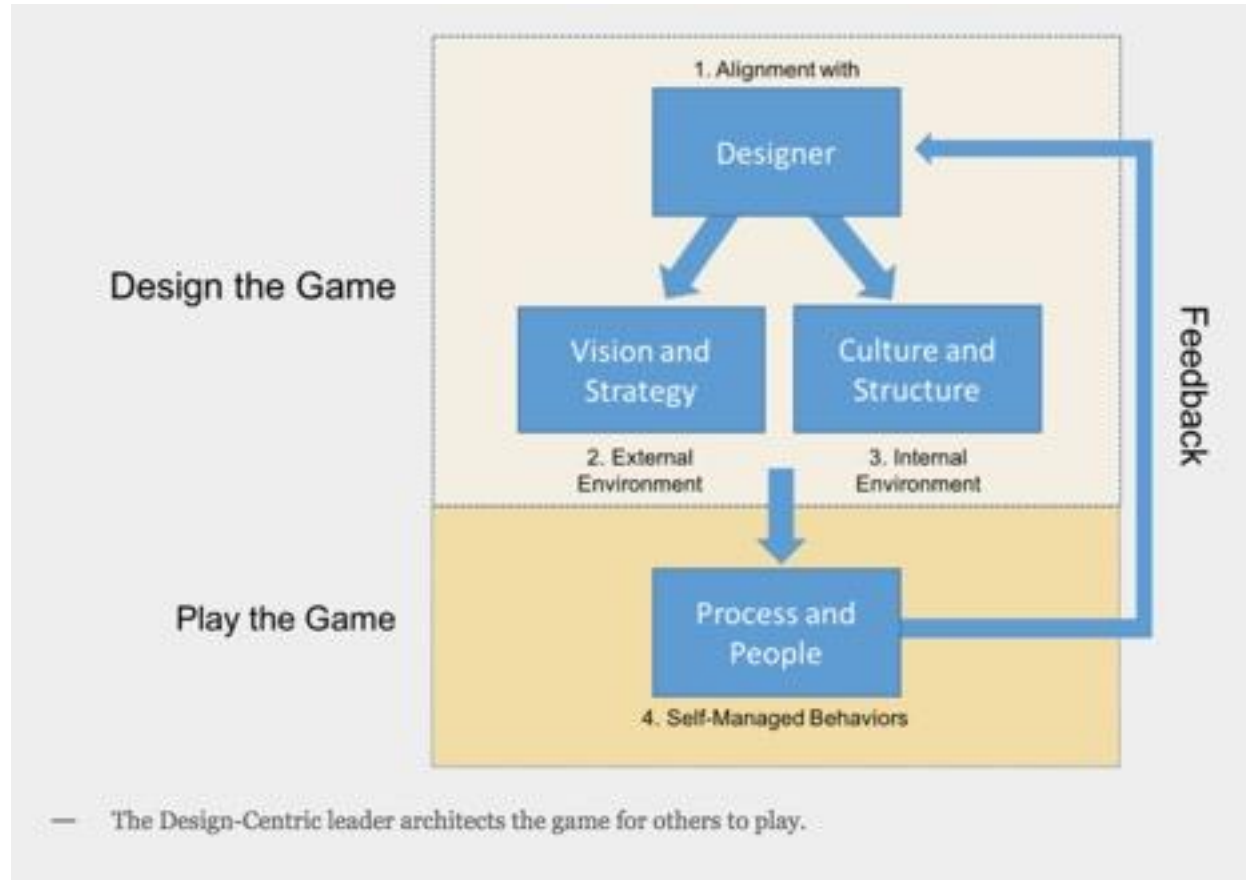
Leadership....

The Agile World



- Leadership is key
- There is a shift to “Teal management”
 - Empowered teams
- Of course, the others are just as important !!

Leadership Always Happens



- Leadership Architecture !!
- Where the leader designs a system within the organization
 - allows teams to self-organize and to be empowered to deliver the organization's objectives.
- If this is done well, there is little need for the leader to intervene in the organization or system because the people and teams are able to effectively lead and guide the organization themselves.

Play The Game: Human Communication

Evolutionary Breakthroughs In Human Collaboration¹

Color & Description	Guiding Metaphor	Key Breakthroughs	Current Examples
RED			
Constant exercise of power by chief to keep foot soldiers in line. Highly reactive, short-term focus. Thrives in chaotic environments.	Wolf pack	-Division of labour -Command authority	-Organized crime -Street gangs -Tribal militias
AMBER			
Highly formal roles within a hierarchical pyramid. Top-down command and control. Future is repetition of the past.	Army	-Formal roles (stable and scalable hierarchies) -Stable, replicable processes (long-term perspectives)	-Catholic Church -Military -Most government organizations (schools, police)
ORANGE			
Goal is to beat competition; achieve profit and growth. Management by objectives (command and control over what, but freedom over how).	Machine	-Innovation -Accountability -Meritocracy	-Multinational companies -Investment banks -Charter schools
GREEN			
Focus on culture and empowerment to boost employee motivation. Stakeholders replace shareholders as primary purpose.	Family	-Engagement -Egalitarian management -Stakeholder model	-Businesses known for idealistic practices (Ben & Jerry's; Southwest Airlines; Starbucks)
TEAL			
Self-Management replaces hierarchical pyramid. Organizations are seen as living entities, oriented toward realizing their potential.	Living organism	-Self-management -Wholeness -Evolutionary purpose	-A few pioneering organizations

Are you engaged or just satisfied ?



What I do must have some **significance to me**; it must **mean something to me personally**, and on **more than just a surface level**. To me, **my work is something of value—something of worth**. If I'm only focused on a paycheck, I am willing to put in as much work as is commensurate with the paycheck. However, **when my work has meaning to me, what I do has greater purpose**

Do I have the **freedom and empowerment** to perform my job in a way that I do best? **Autonomy** involves a degree of **self-governance**. It allows me, as an **individual**, to **create or shape my role and environment** in a way that is **best for me** and for the **organization**.

There was a time **years ago** when one could **maintain a base set of skills or level of development**, and that base could carry that **individual throughout his or her career**. However, our **internal speed of change and growth** must **match** (or exceed) the **external rate of change**. Particularly with rising generations, the **ability to develop, grow, and progress in a job** provides **challenge and excitement** that **benefit** not only the **individual** but also the **company**.

When an **employee puts in his or her all**, yet has **little impact** on the **organization's or team's success**, engagement is **difficult to cultivate**. On the other hand, if what **I am doing is making an impact**, I am **often willing** to go through **tough times** if I have **hope of making an impact**. This is also where **recognition and feedback fit in**. I **need to understand** what kind of **impact** I am having; **feedback** from a **customer, peer, boss, etc.**, will **help me understand that level of impact**.

This factor is **clear** throughout many of our **employee engagement surveys**. Quite often, one of the **highest-scoring questions** on the engagement **survey** is **related** to a version of the following question: **"I like the people I work with."** Employees need to **feel a connectedness** to those **around them**. Similarly, my **connection** to the **organization**-will often **dictate** my **level of commitment**.

Architecture Effectiveness Model

Introduction

“Things work better, together, on purpose”

- Architecture is everyone’s responsibility What’s is it and why should I care ?
- Architects work at varying levels of: **Scope, Scale, Complexity**
- Quality of architecture is a function of technical correctness, inclusiveness and diversity of the solution
 - $F(T_c, I, D) = Q$, where $Q \geq 0$
- We architect in “**run-time**” vs “**design-time**”

Technical correctness
Inclusiveness
Diversity

“Weighting things in the favour of the SAFe teams and the organization”

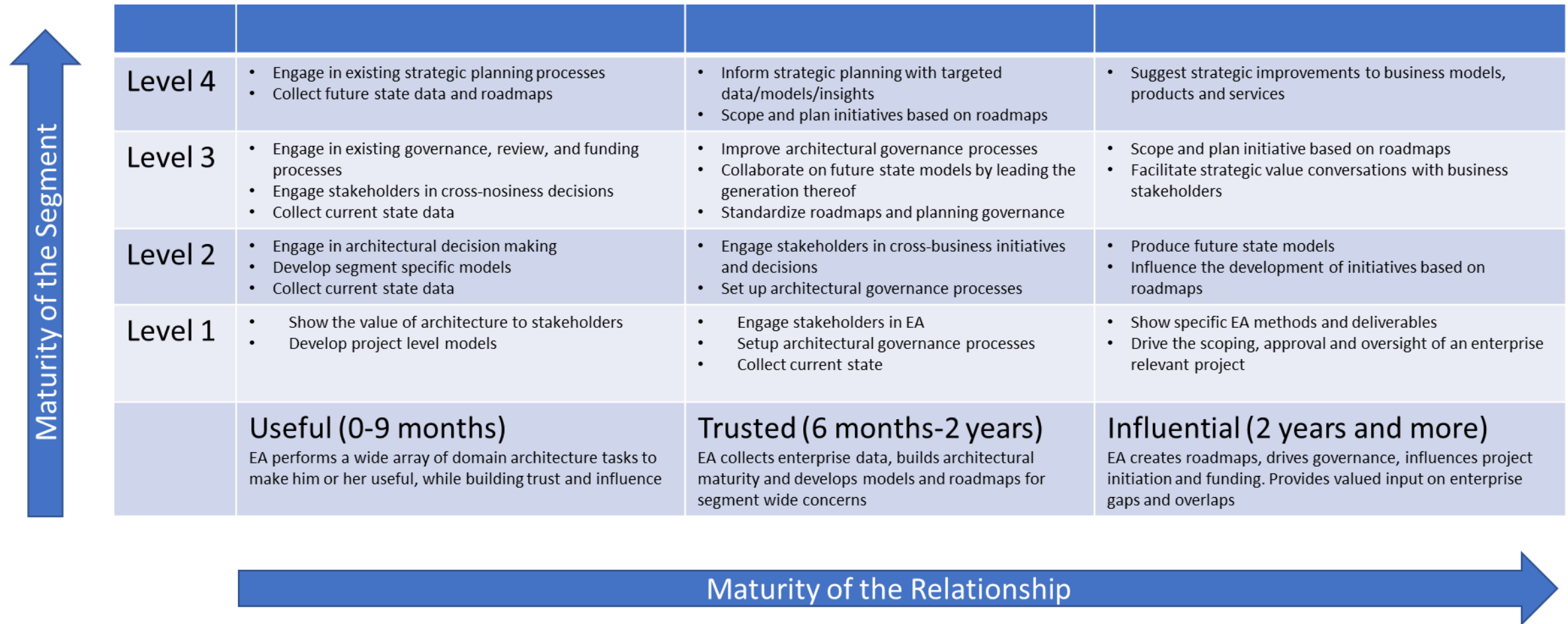
Enterprise Architecture Effectiveness Model

- Function of maturity of the relationship (EA <-> Partners)

AND

- Maturity of the segment
 - **Level 1:** Architecture is not a trusted and well understood role
 - **Level 2:** Architecture is used and their processes are defined, however inconsistent and not very well
 - **Level 3:** Architecture is performed consistently and is part of governance as well as some portfolio planning activities. The business stakeholder does not take ownership of driving the funding and execution of EA roadmaps
 - **Level 4:** Architecture is performed consistently and is involved in planning and governance. The business stakeholders involved in funding and overseeing the business changes themselves are engaged with enterprise architecture. They have been key in developing the roadmaps and follow through with regular updates to the future state models and roadmaps. In addition, they decide on which initiatives to use based on the content of the roadmaps.

Enterprise Architecture Effectiveness Model

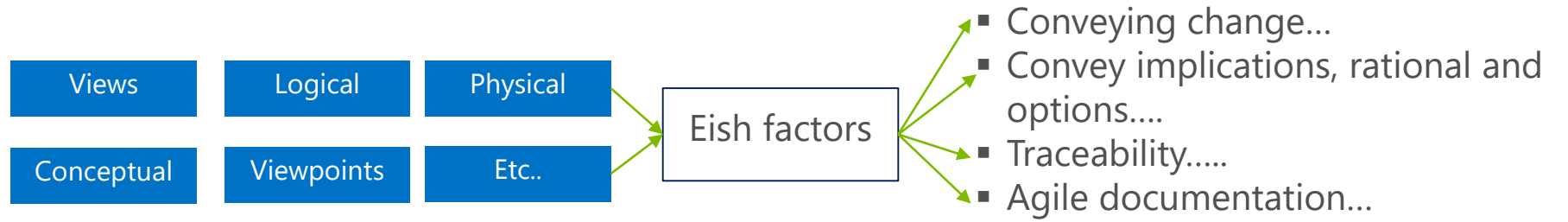


- Self rating exercise And why did you rate yourself that way ?
- Also, teleport into a startup...any startup....one paragraph on why you should continue being paid

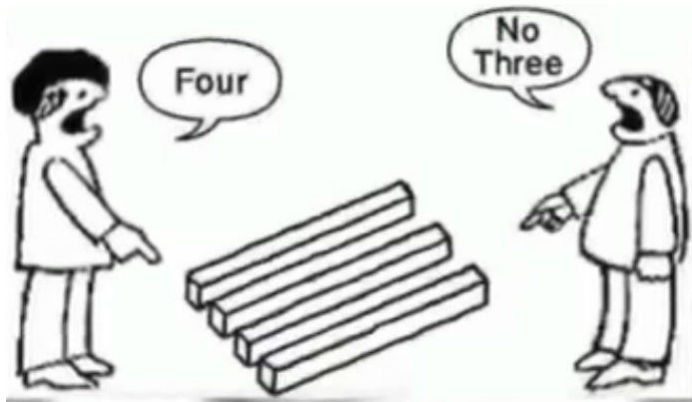
Architecture Decisions

Introduction

How we mostly execute



What we really see

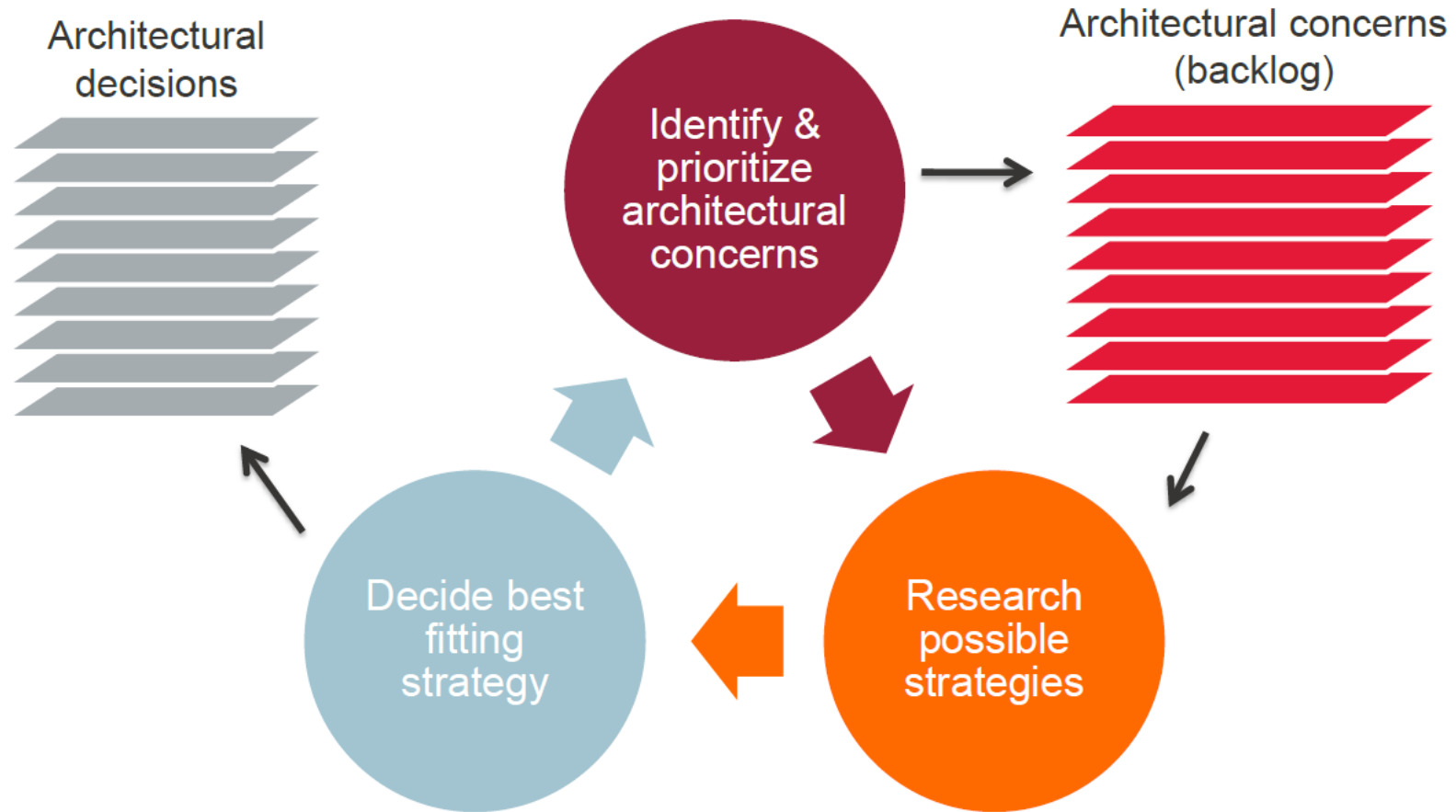


Architecture Decisions are...

- **Balance** between **guidance** and **constraints**
- References the systems **key structural elements, external visible properties** and their **relationships**
- **Test**: Does this decision affect one or more system qualities such as : performance, availability, security, etc... ?
- **Test (refactored)**:
 - Does this decision leave "**breadcrumbs**" in the area that I am working in ?
 - The more, the better
 - Filter out GAGC type decisions...
 - Will **my decision(s) prevent the following** from happening in the future:
 - What were these people thinking ?
 - Have they not heard of sound design principles ?
 - Did they know that the system will live longer then one month ?

Some really complex
architecture

Architecture Decision Workflow

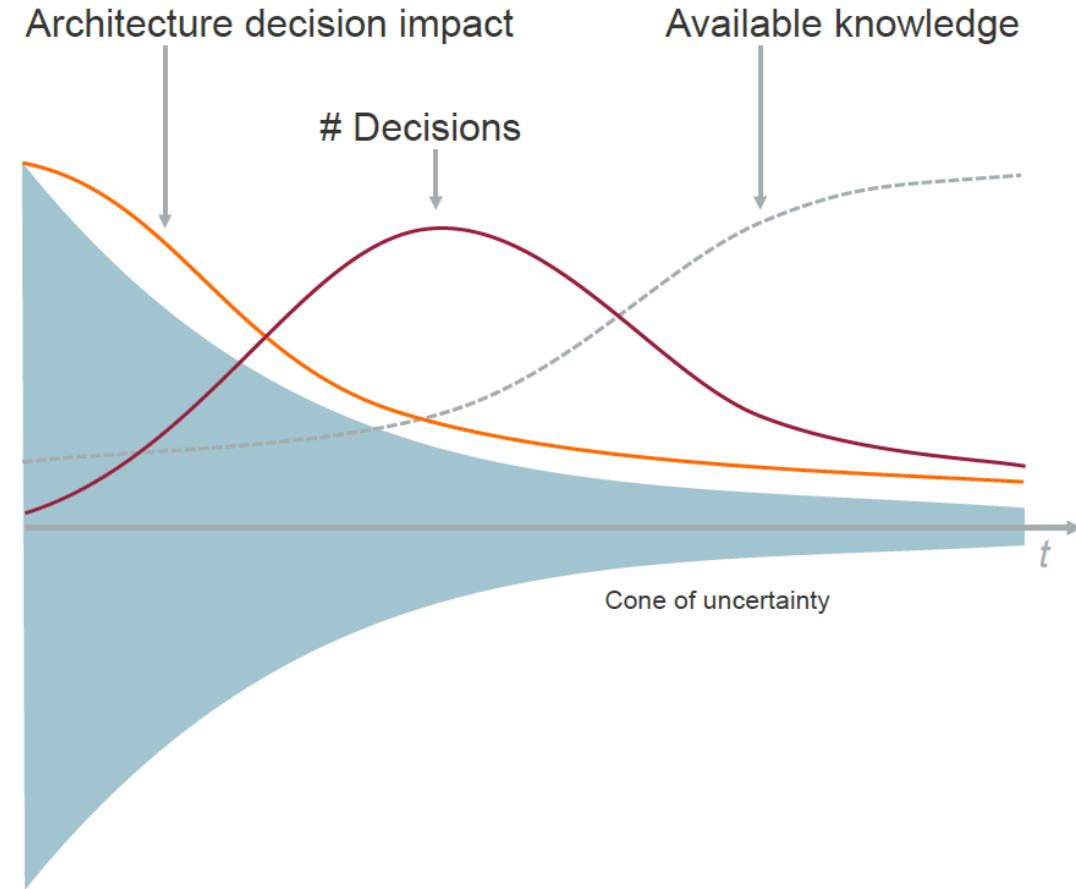


Architecture Decision and the Cone of Uncertainty

All architecture decisions are based on incomplete information.....

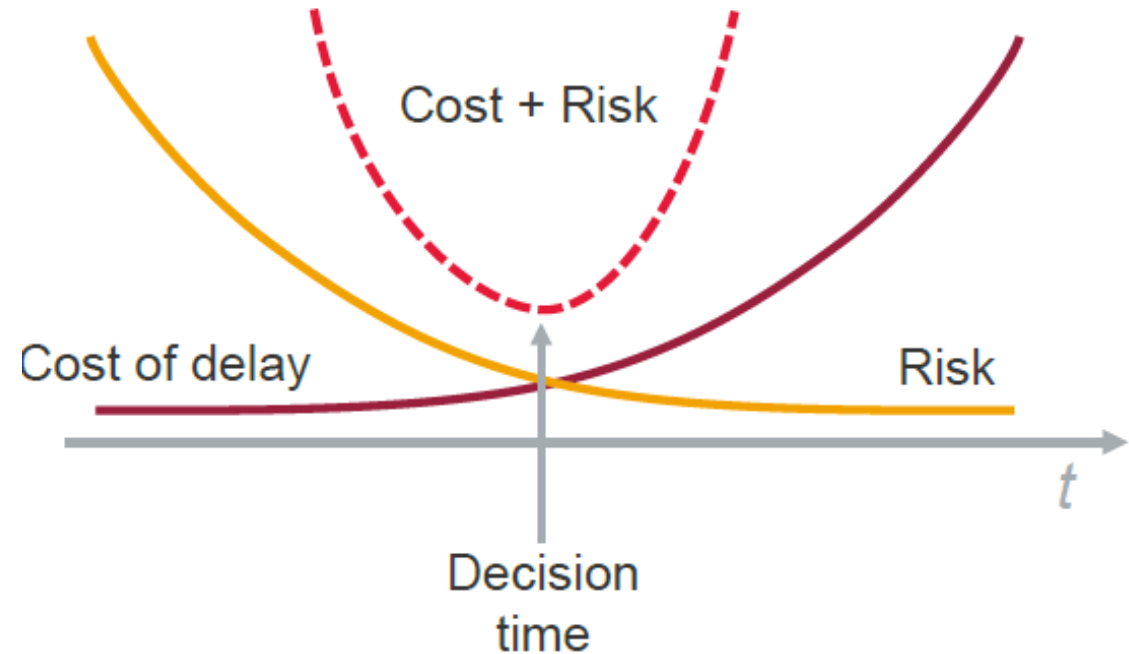
and

the highest impact decisions are taken while the least factual knowledge is available.



Architecture Decision and the Cone of Uncertainty


- Certainty of correct architectural decision depends on knowledge of:
 - Relative cost of the alternate solutions
 - Value and impact to the organization
 - Delivery times
- Timing architectural decisions are based on balancing **risk**, **cost** and **delivery time**
 - Too little information -> risk of not meeting key requirements
 - Waiting too long -> delays, wasted resources



Your Key Skills:

- Timing of architecture decisions
- Making decisions based on incomplete information
- Dealing with the resulting risks

Reflection Point



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Helping people raise their voice and those who serve them to listen and respond better

Ushahidi, which translates to “testimony” in Swahili, was developed to map reports of violence in Kenya after the post-election violence in 2008. Since then, thousands have used our crowdsourcing tools to raise their voice. We’re a technology leader in Africa, headquartered in Nairobi, with a global team. We are a social enterprise that provides software and services to numerous sectors and civil society to help improve the bottom up flow of information.

We believe that if marginalized people are able to easily communicate to those who aim to serve them...

...then those organizations and governments can more effectively respond to their communities' immediate needs...

...while simultaneously bringing global attention to their problems through the aggregation of their voices.



"I am guided each day by these three questions:

‘What are you fixing?’ ‘What are you making?’ and ‘Who are you helping?’”

Juliana Rotich [Co-founder Ushahidi.com]



Pulling it All together with OKR's

"Objectives & Key Results"

Enabling Functions Architecture OKRs

Make our customers and employees lives better by evolving the Groups IT Architecture

- Produce 6 **segment architecture** packs for the Enabling Functions business units, reflecting the IT landscape of each unit at the end of Q2.
- Collectively identify and build **10 IT-led business cases** that will evolve the IT architecture of Corporate Functions, thus driving the **architecture strategy** and displaying **innovation**
- Get funding for 5 IT-led business cases and execute on all 5 business cases
- Define the **Simplification** approach for 2018 and decommission 15 **significant systems**

Broaden and deepen the understanding of the Group's IT Architecture

- Create and maintain 150 **architecture views** via **consensus seeking** within feature teams annually as a team
- Log 500 **decisions** and **socialize** with all related stakeholders annually as a team
- Table 10 **decisions** per month at each **CIO MANCO**
- Identify and realize **savings** of R 100 M via **architecture led activities** for 2018 as a team

Enabling Functions Architecture OKRs

Improve the practices to create, evolve and maintain the IT Architecture

- Identify and execute on **100 personal development** hours per annum per architect
- Identify and propose **5 process improvements** per architect
- Conduct 10 **technology demonstrations/tutorials** per architect in each business unit
- Identify 5 **security initiatives** per business unit to improve the overall security posture of Enabling Functions

Build a more inclusive and diverse workforce including a sustainable architecture pipeline

- Design, agree and implement a process by which employees can be **actively progress to architecture** roles in order to have a sustainable people pipeline for the Architecture BU.
- **Identify 5 individuals** in Enabling functions to **take through the pipeline**

Enabling Functions Architecture OKRs

Improve the culture and resilience of the Enabling functions architecture team

- Spending 50 hours on **inter-personal development** per architect per annum that is **demonstrable**
- Spending 20 hours on **leadership development** per architect per annum that is **demonstrable**
- Having 5 **team alignment** sessions for the year
- Having 5 **social meets** for the team for the year

OKR (Objectives and key results)

OKRs are not the only things that we do they are the things that we must do

3-5 high-level objectives

- Qualitative and inspirational
- Time-bound
- Actionable by the team independently
- OKRs are stretch goals. We should have a 50/50 chance of making them.

Under each objective, 3-5 key measurable results

OKRs are not synonymous with performance evaluation i.e., there are many other facets to performance measurement

<https://rework.withgoogle.com/guides/set-goals-with-okrs/steps/set-objectives-and-develop-key-results/>

Acknowledgements

A Big Shout Out To

- John Okoro, Distributed Agile Leadership, accessed at www.infoq.com
- Eltjo Poort, The Life And Times Of An Architect, accessed at <https://saturn2017.sched.com>

I should have covered all other references in the presentation , if I didn't , please let me know