

How to dig for the new gold with an AI Buddy

Principles from 1953++ adapted for nowadays needs – achievable only with architecture (using EA of course)



Peter Lieber

- CEO, Sparx Systems C. Europe
 - Focus on EA, ProCloud Server and Prolaborate
- CEO, Sparx Services C. Europe
 - Focus on EAM (www.sparxservices.eu) with Sparx Eco System
 - New: Focus on MBSE, too
- President, Austrian Entrepreneurs' Association (www.gewerbeverein.at)
- Vice-President, Association of Austrian Software Innovations (www.voesi.or.at)
 - Head of Special Interest Group, Enterprise Architecture Management (EAM)



Peter Lieber

„Innovation needs models“

Agenda

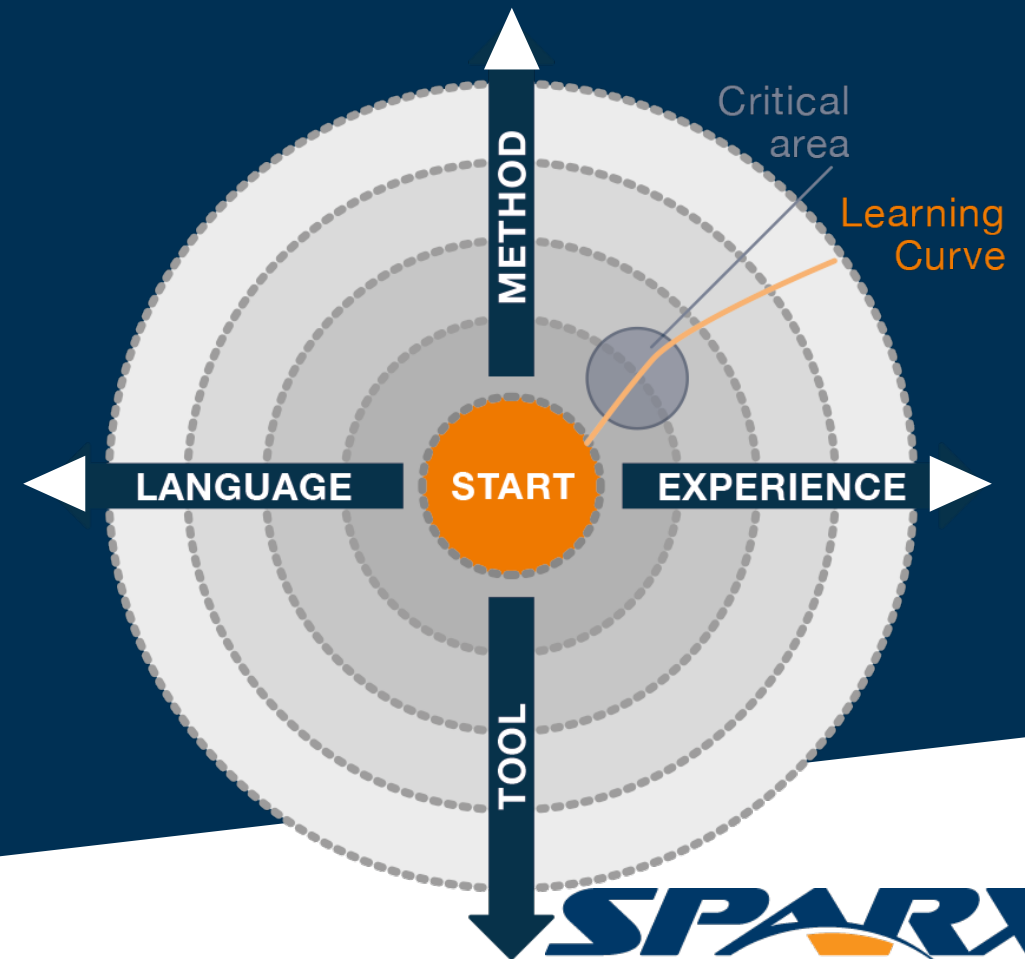
- Challenges
- How to become successful
- Dig for the new gold
- You need 5A
- Short reminder: The Model Maturity Model Integration
- LIVE: How to get model inspiration from your AI Buddy (chatgpt)
- Q&A

Challenges with modeling are many

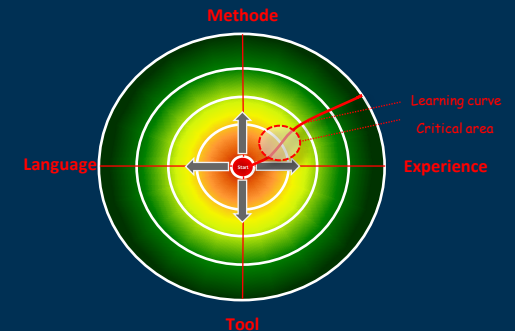
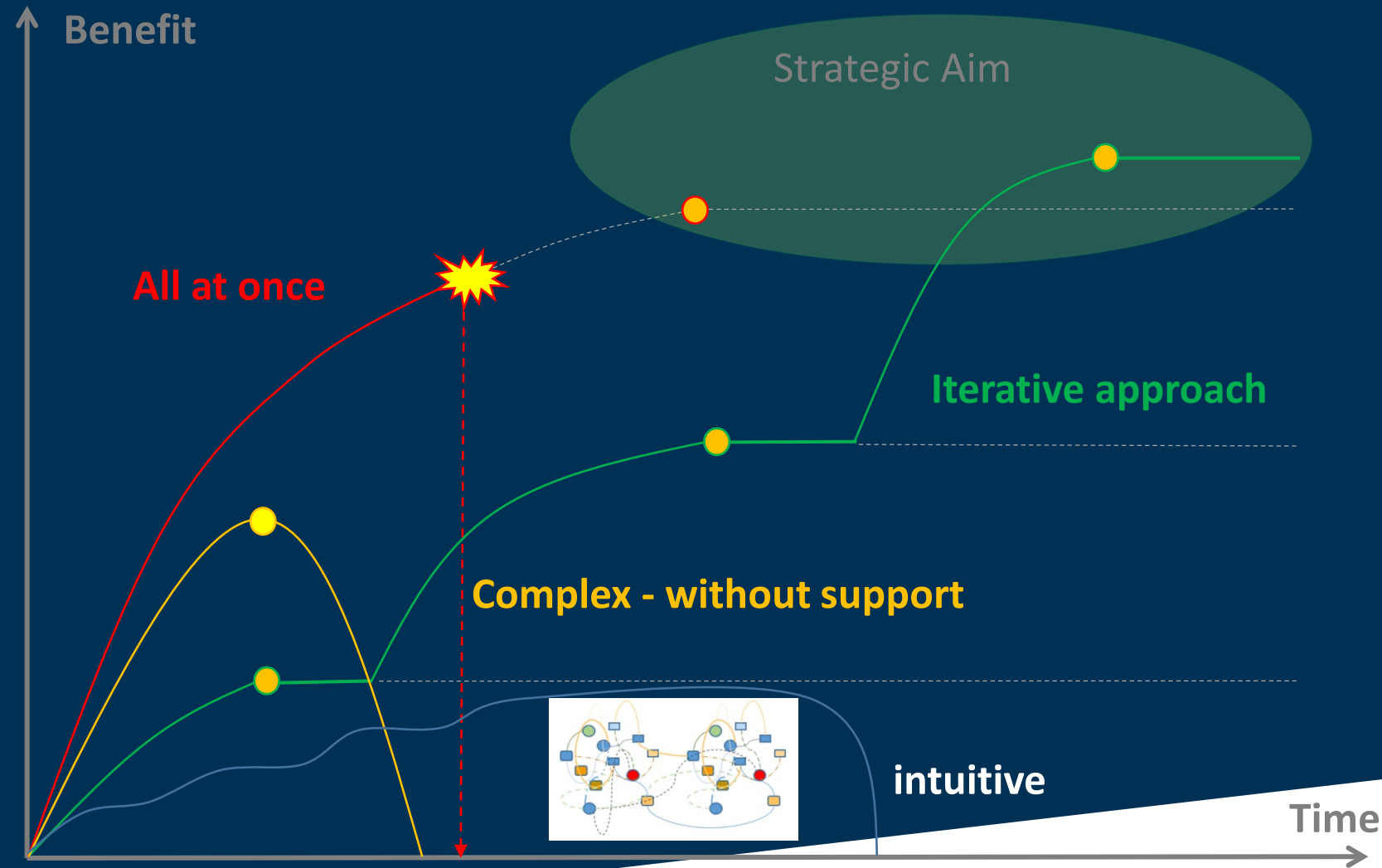
REQUIREMENTS
EAM IMPLEMENTATION

“A fool with a tool is **just a fool.**”

“A genius without a tool is not
productive”



How can we fail in our Modelling Approach?

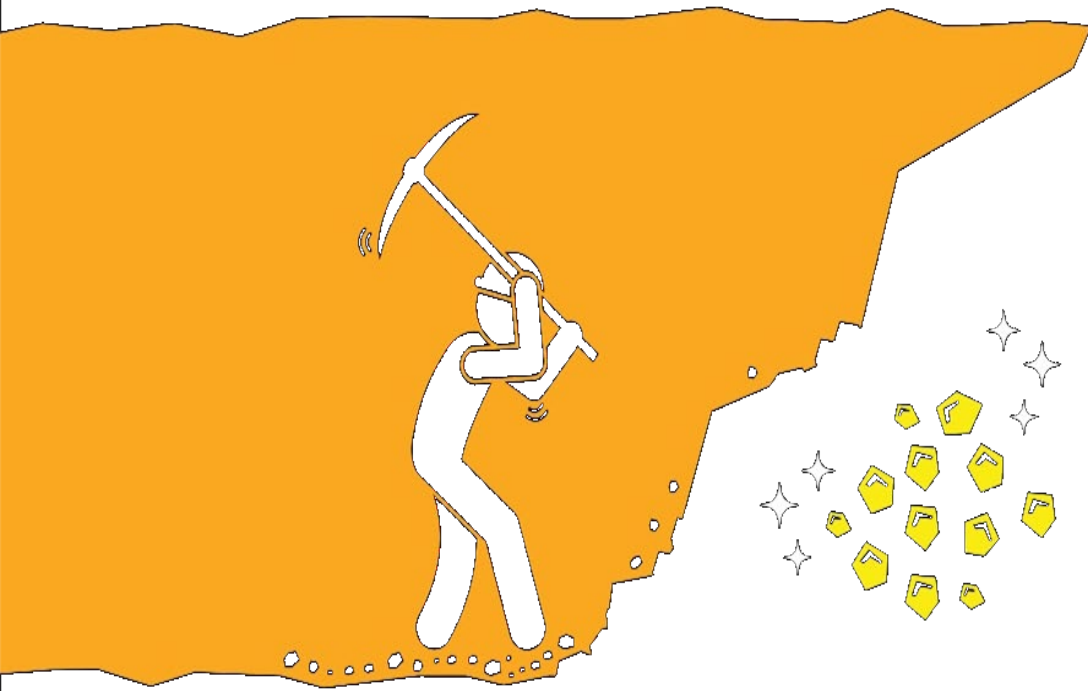


An abstract composition of several teardrop-shaped objects in various shades of yellow and orange, arranged in a cluster. The objects have a smooth, glossy finish and are set against a light gray background. The text "Model as a base for the new gold" is overlaid in the center in a white, sans-serif font.

Model as a base for the new gold

Data is the new Gold.

Why we need a holistic view.



Data

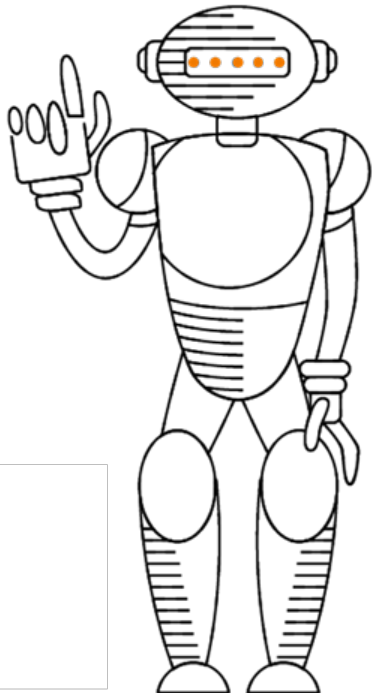
- Increases performance and **compliance**
- Flows through the new, entire value chain, the **ecosystem**
- Allows insights along the **Customer Journey**
- Enables **innovative, data driven business models** (Digitization)

Data, the new Gold Vital Basis for your AI Buddy

“

*Artificial
Intelligence is
neither good
nor bad.*

iHuman, Documentary



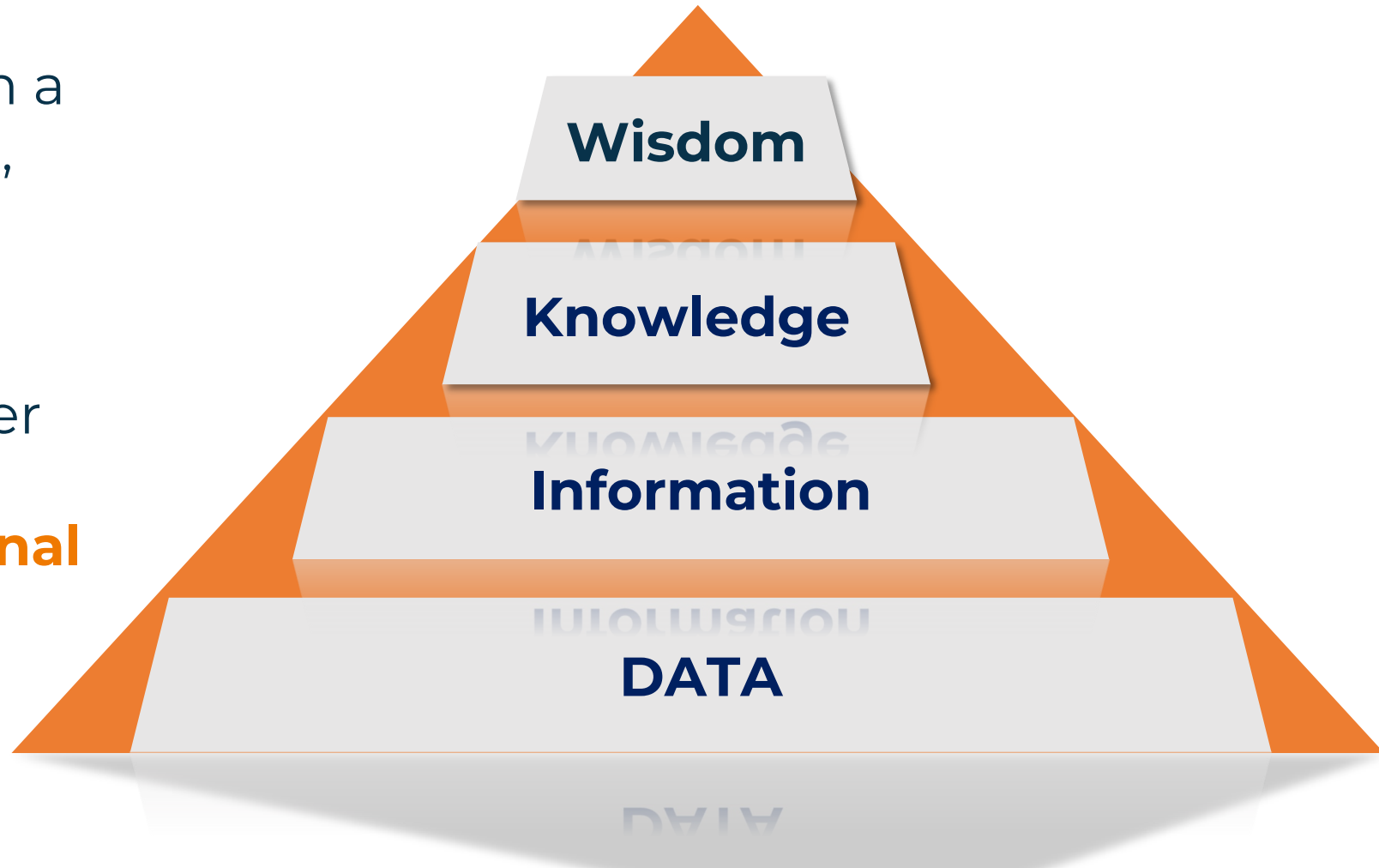
- We **train AI with data** we feed.
- We must understand data and build its **Architectural Landscape**.

Show your  become a proper Trainer for your AI Buddy.

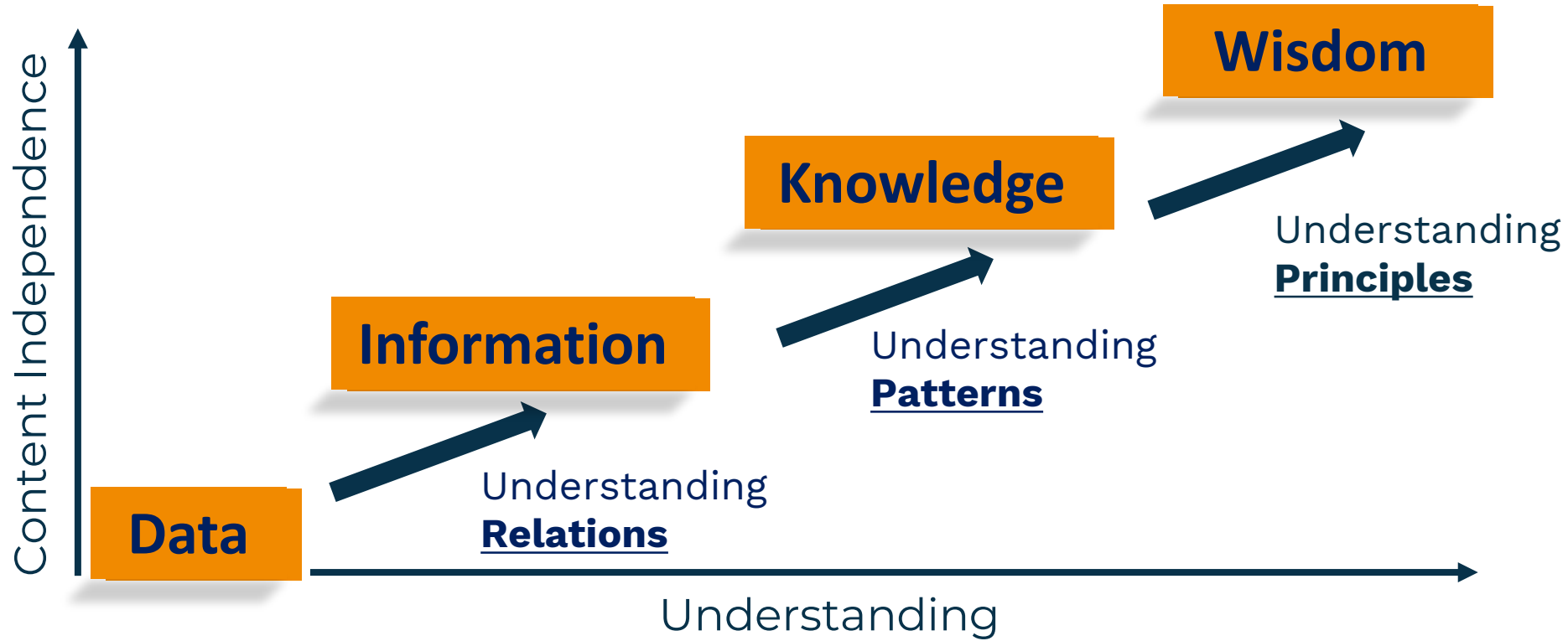
Understand Data with the DIWK Model

From the 80ies... based on a concept from the 50ies (!), used for **knowledge management**

- Relevant more than ever to understand DATA
- Describing **the functional and structural relationship** between:

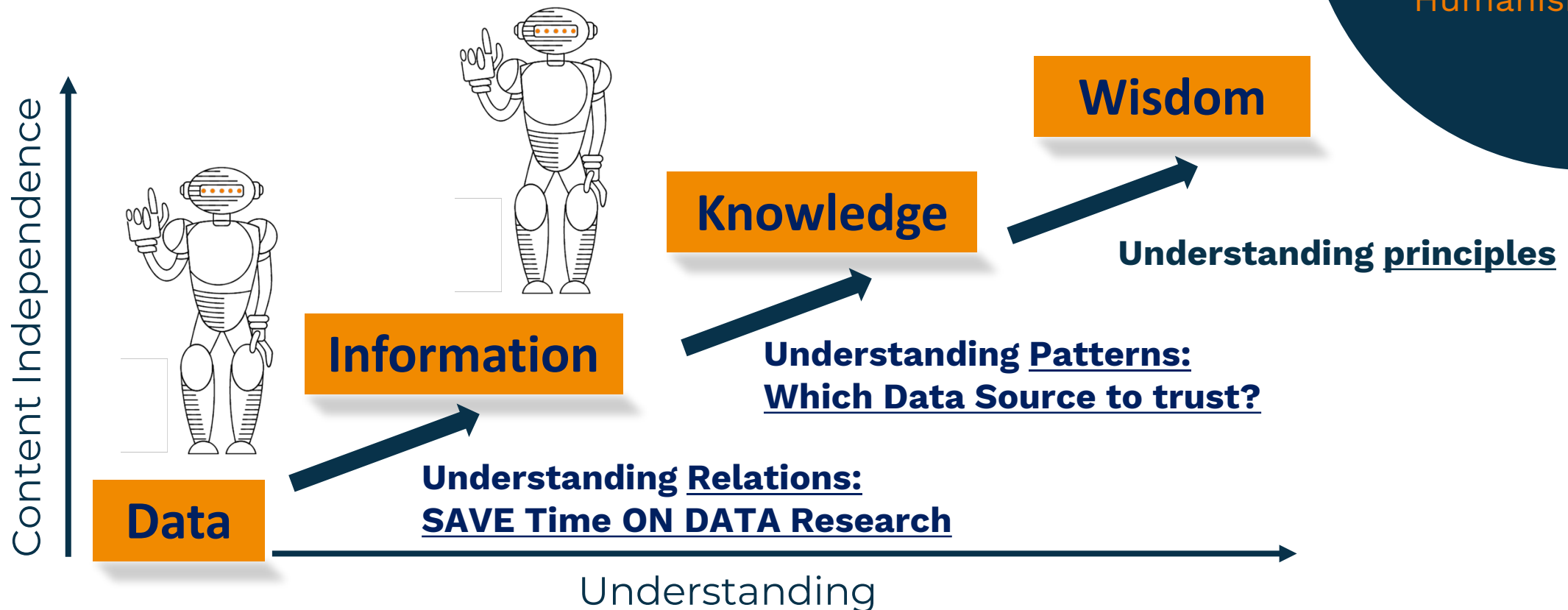


The DIWK Model, from DATA to WISDOM



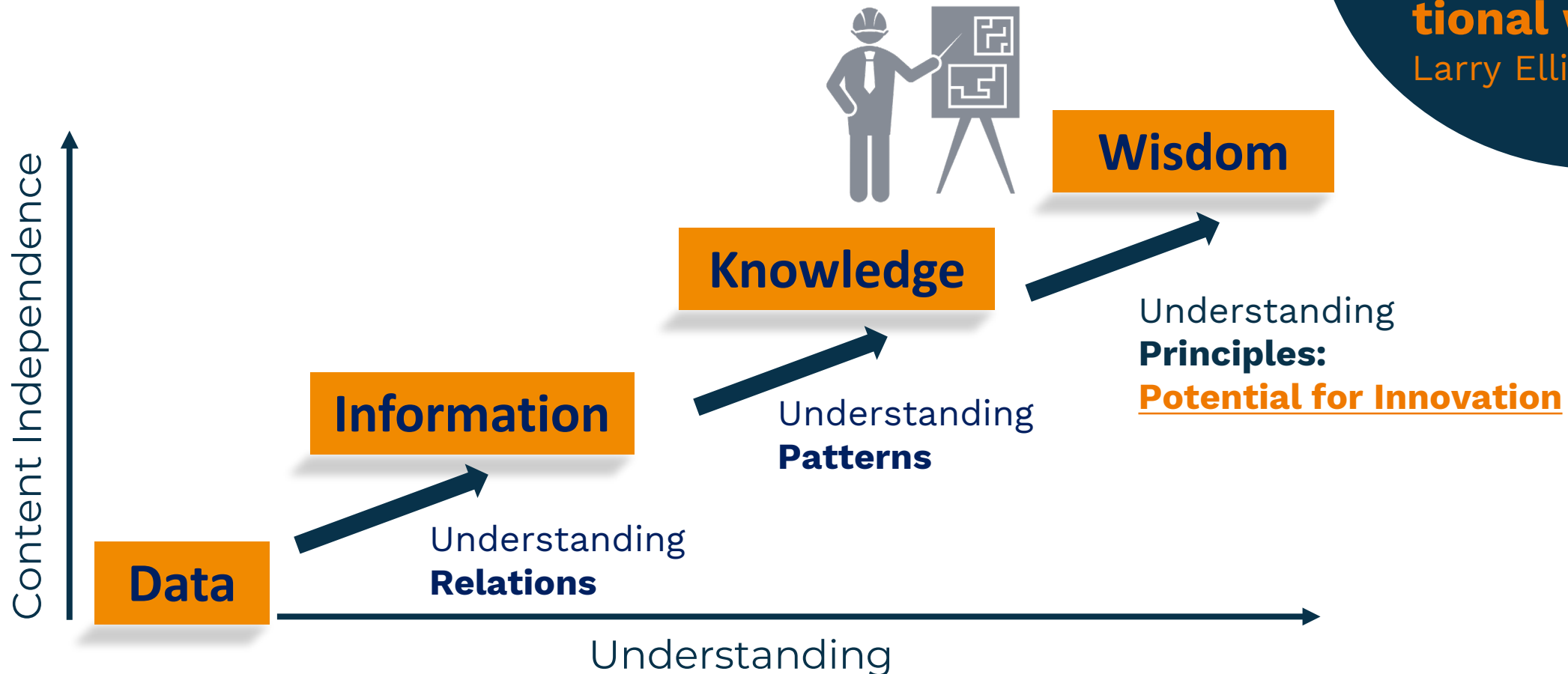
The Role of the AI Buddy in Data Architecture

“
AI does not understand Human Principles.
Manifesto digital Humanism

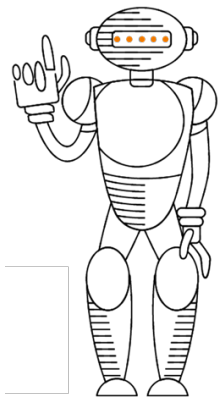


Our Role in Data Architecture: Wisdom through Principles

“
The only way to
go ahead is
to find errors
in the conven-
tional wisdom.
Larry Ellison



Take the upside down view for the proper AI Training



Measurement

Facts

Data

Information

Knowledge

Wisdom

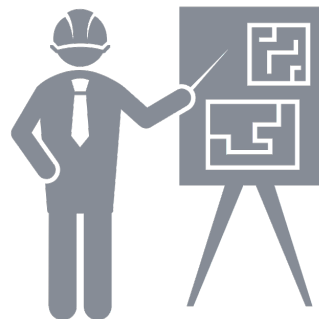
Focus

Observe

Sample

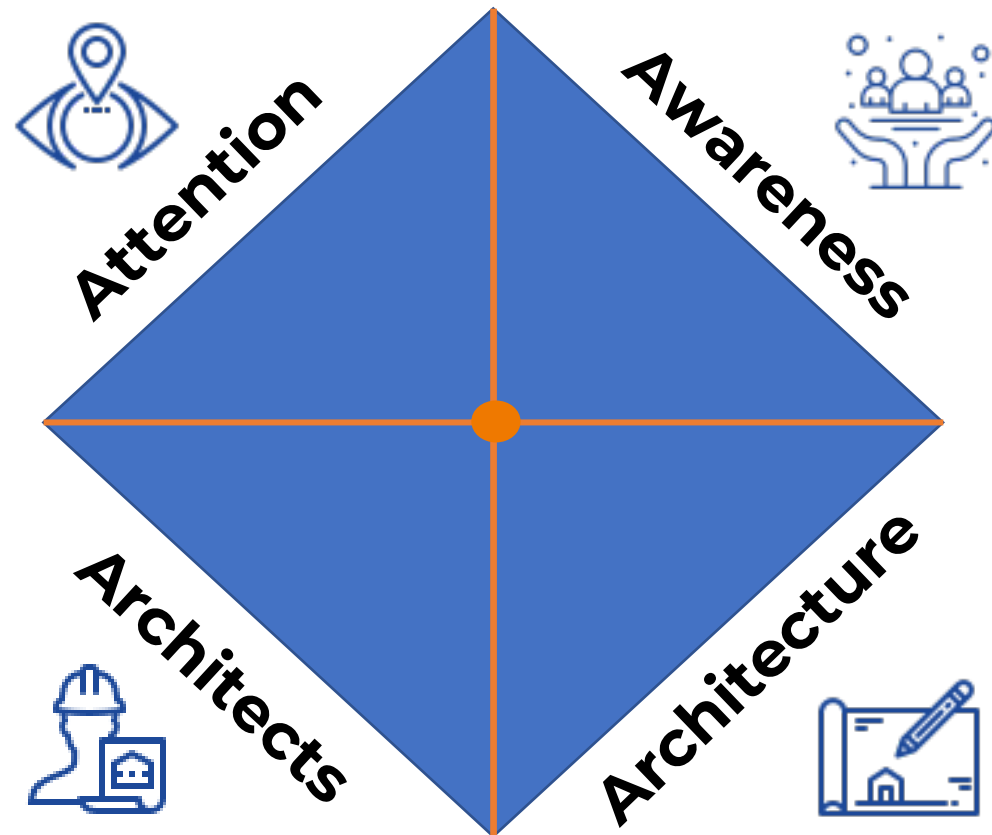
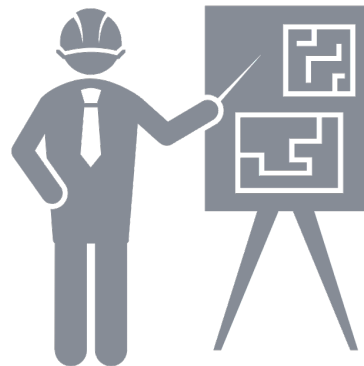
Compare

Adjust



Take the holistic view from the top of the Pyramid: 5A's to implement

Architecture Management



You need 5A



AWARENESS FROM
MANAGEMENT



ATTENTION



ARCHITECTS

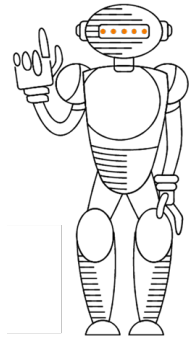


ARCHITECTURE



ARCHITECTURE
MANAGEMENT

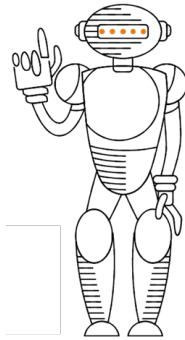
The 5 Maturity Levels



Level 1

Initial

Process unpredictable, poorly controlled, **Reactive**

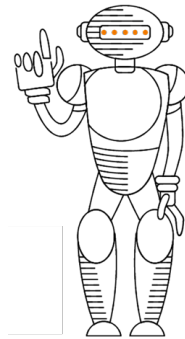


Level 2

Managed

Processes characterized for projects

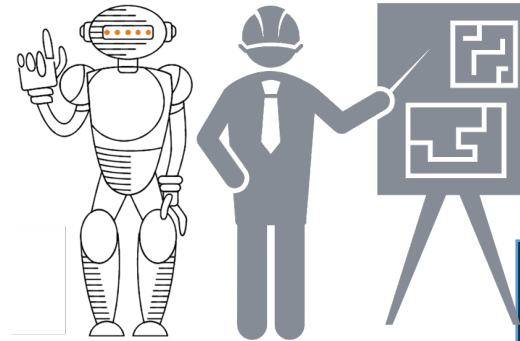
Often Reactive



Level 3

Defined

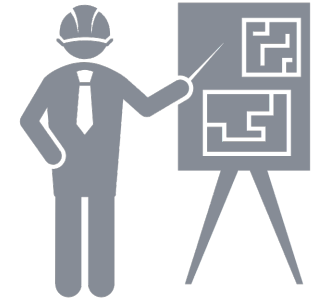
Processes characterized
Proactive



Level 4

Quantitatively managed

Processes measured & controlled



Level 5

Optimizing + Innovate

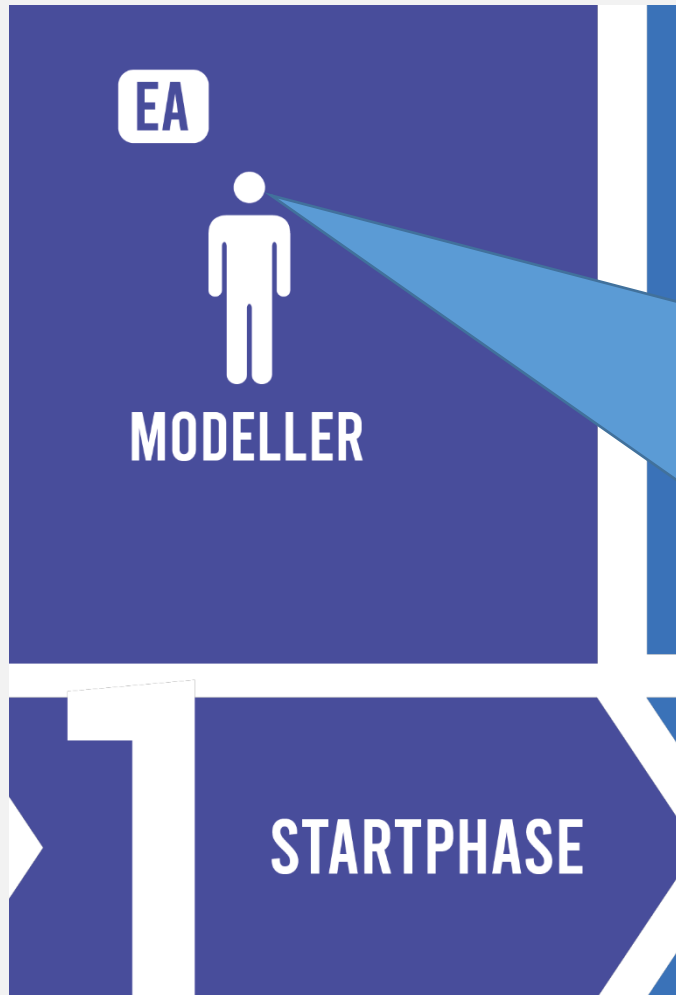
Process improvement
Start new Initiatives



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MMMI Levels

- Level 1 – Initial/Start
- Level 2 – Managed - Collaboration
- Level 3 – Defined - Publishing/Deployment
- Level 4 – Qualitativly Managed - Regulation/Certification
- Level 5 – Optimizing + Innovate



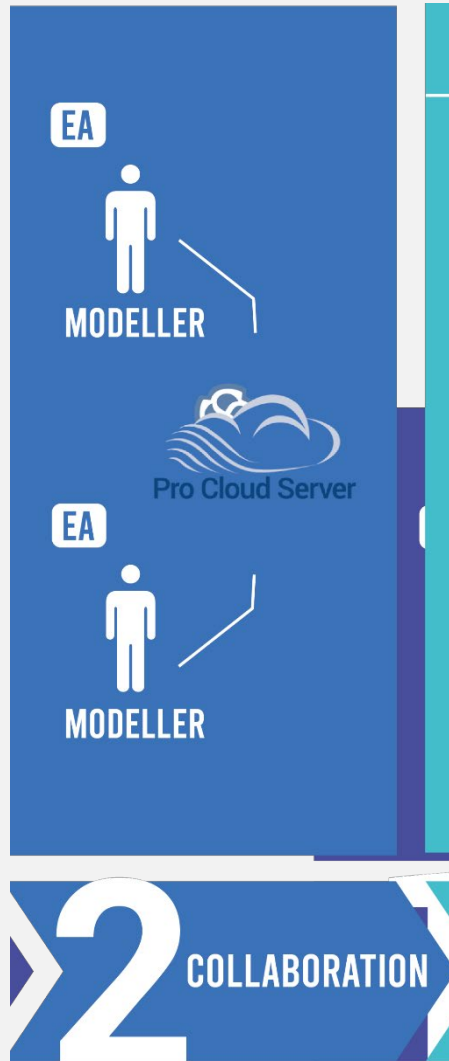
MMMI Level 1 | Startphase

Ideas: Easy to get, easy to install, easy to run

I use EA this way daily for any ideas, notes, thoughts but also for private stuff as wedding planning, funeral planning, household organization, ...

- Purchase a license of EA
- Install EA, Run EA
- Collaboration: Me, Myself and I
- Structure as you wish
- Use what you need and what
- Share your thoughts using documents, HTML generation, model sharing, ...

If your modelling work is helpful for your organization – maybe your colleagues are also interested in starting with modelling (with EA of course) and then...



MIMI Level 2 | Collaboration

Ideas

- Central Database repository
- Use ProCloud Server
- Share Licenses using EA Floating
- Define a common structure (packages, diagrams, elements, ...)
- Identify possible collaboration challenges
 - Lock-Mechanism
 - Visibility Levels
- Activate EA security
- You can already start thinking about
 - Use Prolaborate with Live Access



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But...

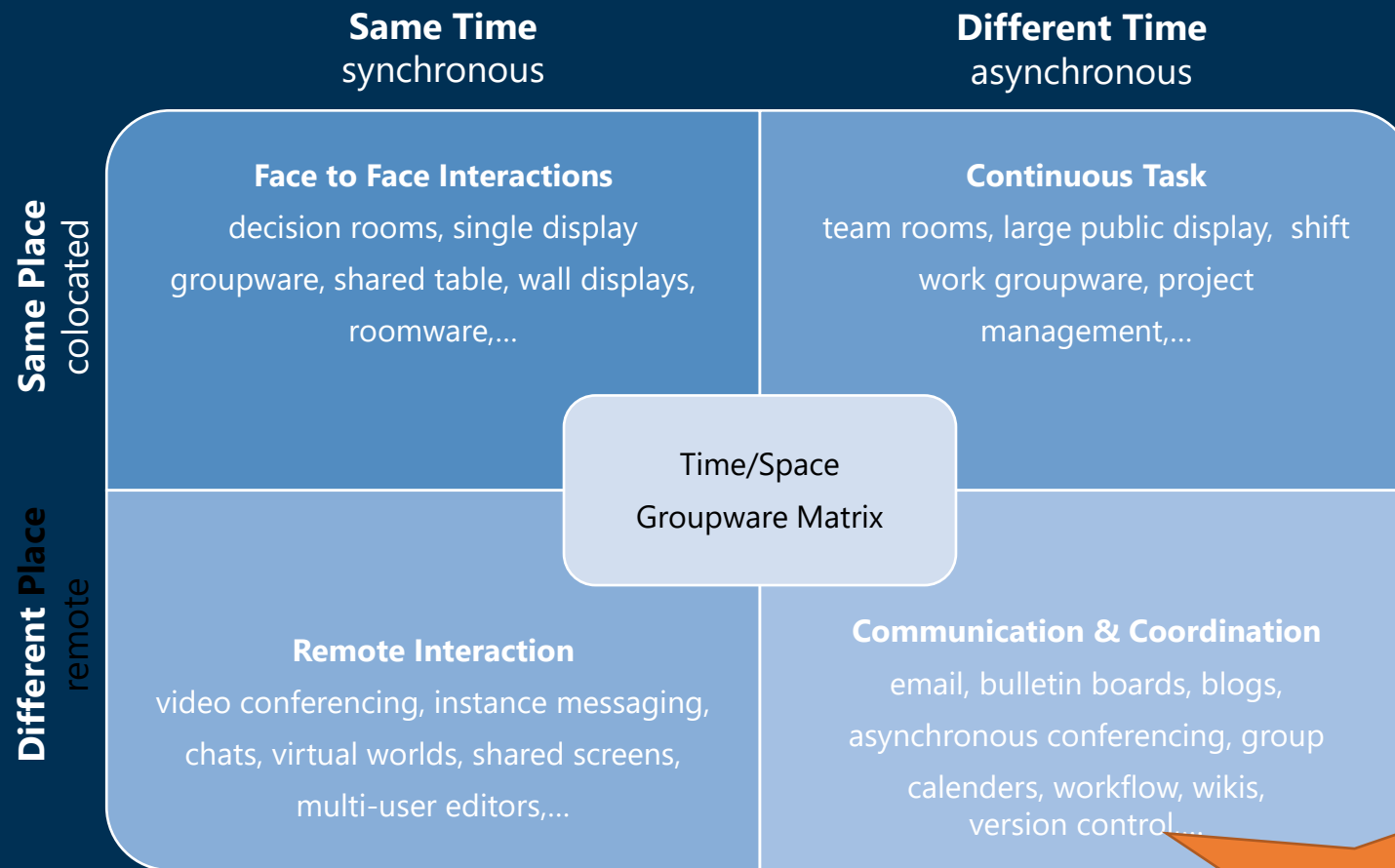
Enterprise Architect Challenge



Configuration
Management

Team
Collaboration

Collaboration in General



VCS –
Version Control Systems

Configuration Management, Change Management and Collaborative Modeling

Working collaboratively
on a model is hard

Versioning for EA
Models is hard and
error-prone

Tracking Changes in
Models is very complex

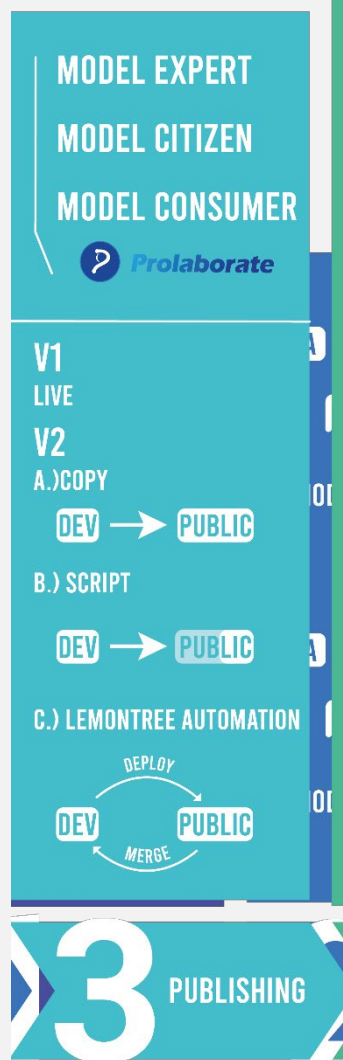
RESULT → Modeling with EA is often used
without Configuration Management



And whats next?



If your modelling team is growing and you want to share also with people not aware of modelling but needs access, results, analysis or provide input - then...



MIMI Level 3 | Publishing

Ideas

- More database repositories
 - DEV, TEST, PROD
 - Per Project, Per Solution, Per EAM, ...
 - Local, DBMS
- Deal with versions, variants
- Identify your own methodology (MDG, Validation rules, scripts, scriptlets, assistants, ...)
- Implement a publishing process (Copy, Script, Automation, ...)
- Identify different Model roles (Expert, Citizen, Consumer)
- Use Prolaborate
 - To share and integrate the published model
 - To collaborate for model under development
- Use Automation to improve productivity and raise the value of your model work
- Reusable Asset Services or LemonTree Components



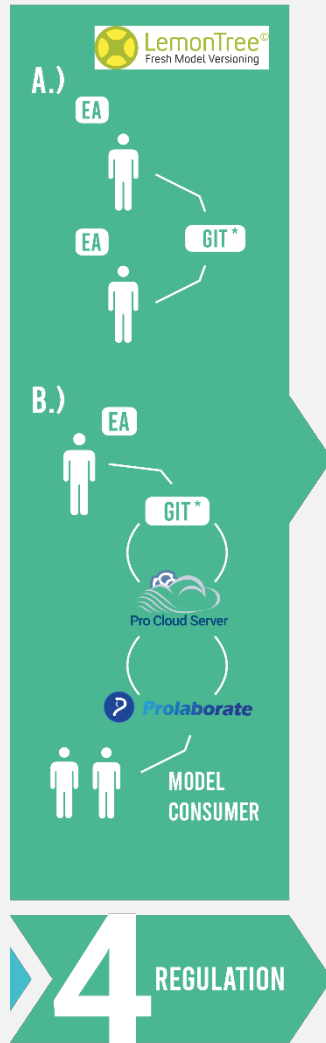
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More to come?

If your model work has regulator,
certification impact e.g. ISO26262
for automotive, DO178C for
aviation, ... or
IRFS17, Slovincy II, ...
then...

*OTHER VERSION CONTROL SYSTEMS (VCS) SUPPORTED



MMMI Level 4 | Regulation

Ideas

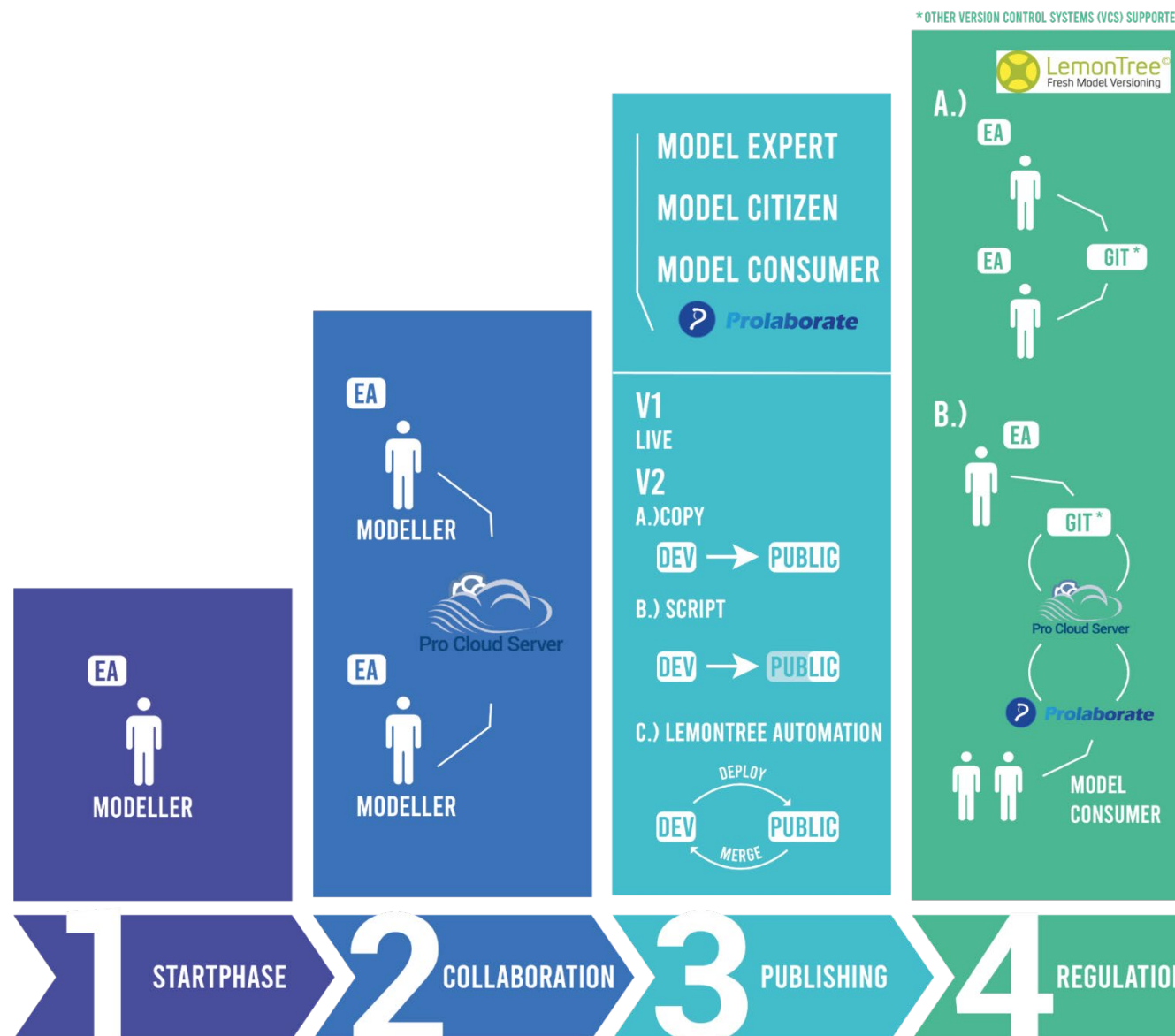
- You need to have a version controlled backend (e.g. very popular GIT)
- You need to have structured change management for the model itself
- You have to keep historic stages (versions) from your model for evidence (e.g. for a court process if a person was injured by the autonomous AI driven vehicle)



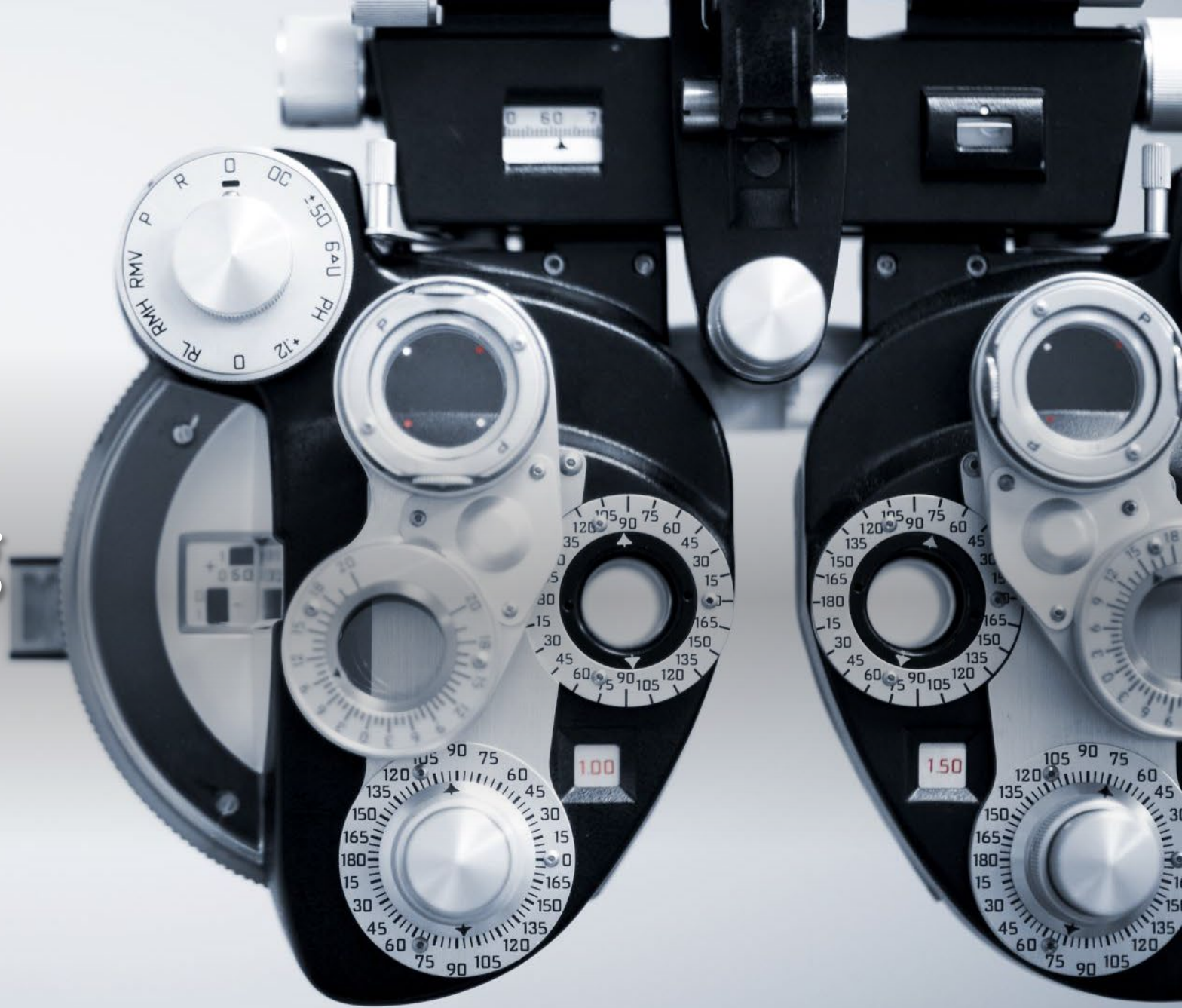


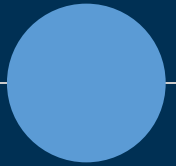
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MMMI Level 5 | Optimizing



Optimizing





Q&A

peter.lieber@sparxsystems.eu