

# Driving Collaboration across Enterprise and Solution Architecture

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**Enterprise Architecture  
Specialist Group**

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#BCS  
#BCSEASG  
#EASGAC2022

# Who are we?

James is a Technical Director within the Atkins C-Suite Advisory team.

He has setup and managed enterprise, solution and data architecture teams, tools and working practices across many industries.



**ATKINS**

Member of the SNC-Lavalin Group

Will is an Enterprise Architect at Edifit, a consultancy that helps organisations develop a model based approach to architecture.

He has experiences performing both enterprise and solution architecture roles across public and private sector organisations.



 **edifit**  
joining the dots

# Why are we here?

For most organisations, decision making, design and architecture are typically distributed across multiple teams, with differing goals, budgets and line management. In our work, we have explored ways in which we can drive collaboration and will identify some of the pitfalls you may encounter.

In this presentation, we'll focus on a recent example of our work in aligning enterprise and solution architecture.

# Topics



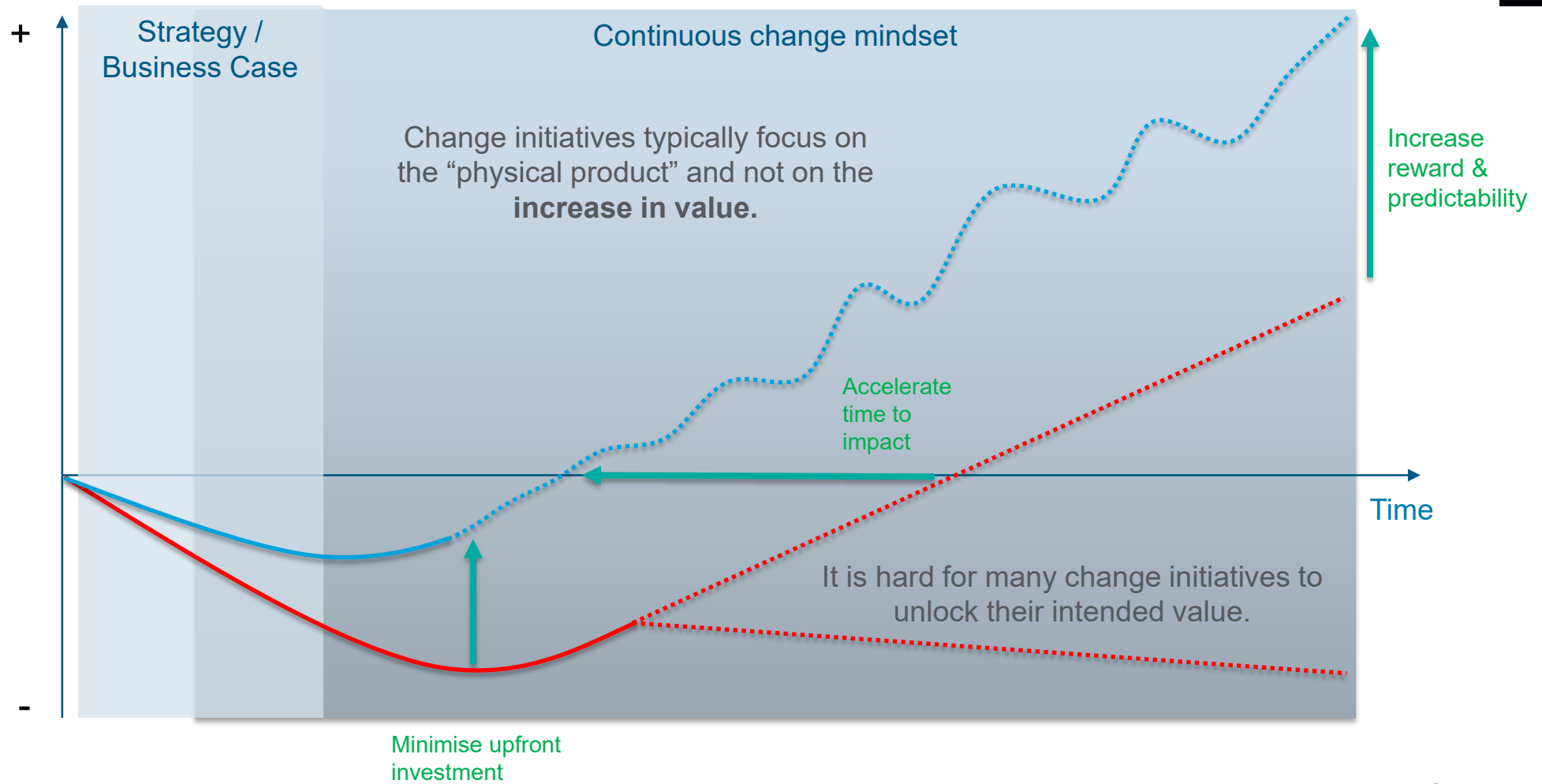
- **Value Delivery.** How do you deliver value?
- **Context.** How do we collaborate across Architecture, Design and Delivery?
- **Challenge.** What collaboration challenges do we face?
- **Collaboration Value.** How does collaboration improve value delivery?
- **Approach.** How do drive collaboration?



- **Real world example.** Enterprise & Solution Architecture in Defence.

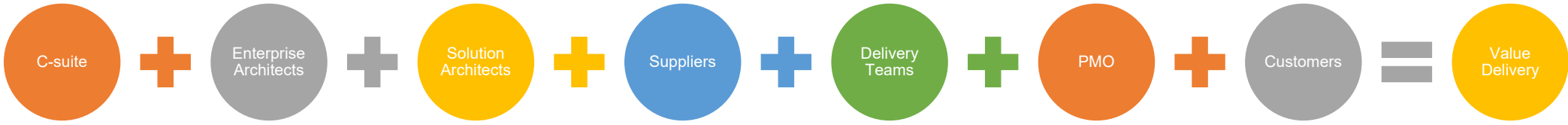
**Key Ingredients to success.  
Q&A.**

# Value Delivery

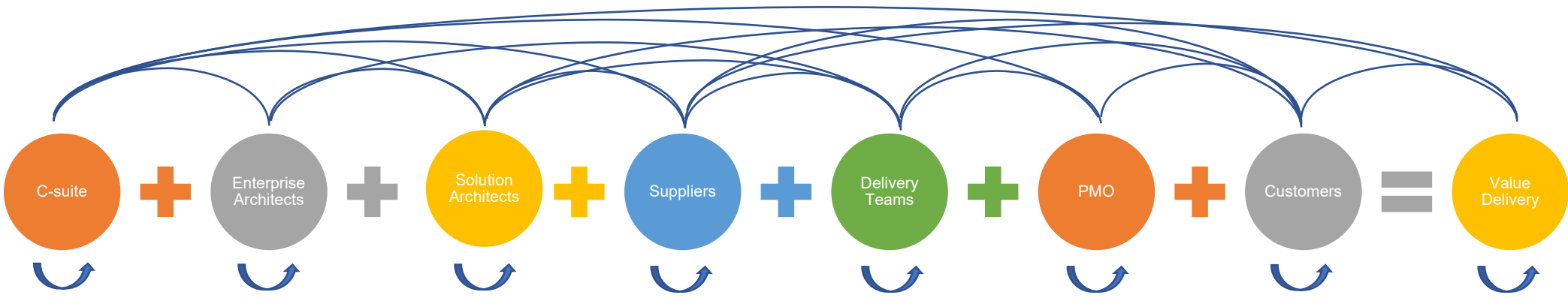


How does collaboration accelerate and increase value delivery?

# Architecture Context



Simple view – multiple teams underpinned by a linear process



Collaboration reality – multiple decisions with continuous iteration

# Typical Challenge

## Direction

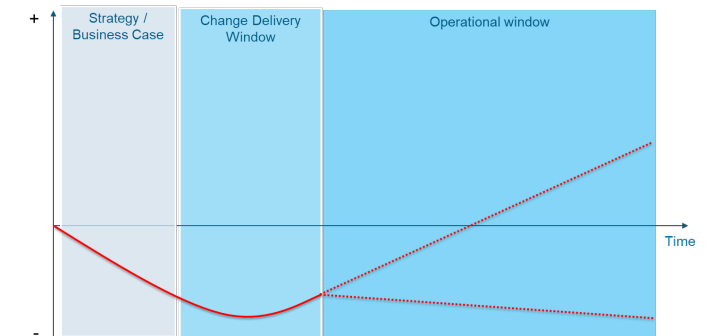
- Strategy with no plan
- Plan with no strategy

## Governance

- Budgets & decisions aligned with organisation topology, not value delivery
- Governance and behaviours that stifle agility
- Lack of inter-departmental management (aka touch points)
- Conflicting ways of working, tools, techniques & methodologies
- Designs locked in too early or too late
- Suppliers locked out of the decision
- Customers overlooked

## People

- Ineffective use of intellectual capital
- Conflicting team and personal goals
- Limited time, skills & experience
- Different experiences, background and languages



Higher investment  
Slower time to impact  
Reduced reward  
Lower predictability

# Collaboration Value

## Conway's law

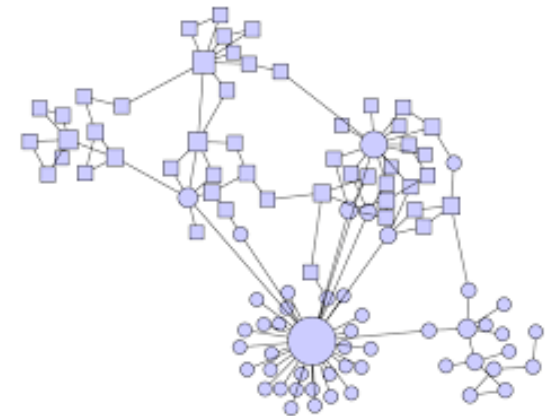
- *“Any organization that designs a system (defined broadly) will produce a design whose structure is a copy of the organization's communication structure”*
- In other words - your approach to collaboration dictates your value delivery

## Collaboration seeks to address the limitations of your organisation topology.

- Organisation structures are always evolving, as too are the lines of collaboration
- Collaboration is at multiple levels – team/department/external

## Large-scale collaboration is not always the answer.

- Cohesion (internal collaboration) within teams is equally important
- Does not mean boiling the ocean or the need to account for every perspective. Prioritisation is key.



Team Topologies can help and hinder the network of collaboration

However, topology does not exclusively dictate collaboration.



# Practical Approach

## Win hearts and minds

- Identify shared inter-departmental value

## Understand & Manage the touch points

- How and when teams should interact

## Minimise barriers to entry

- Simplify approach
- Simplify the message
- Universal language

## Embed governance that enables agility

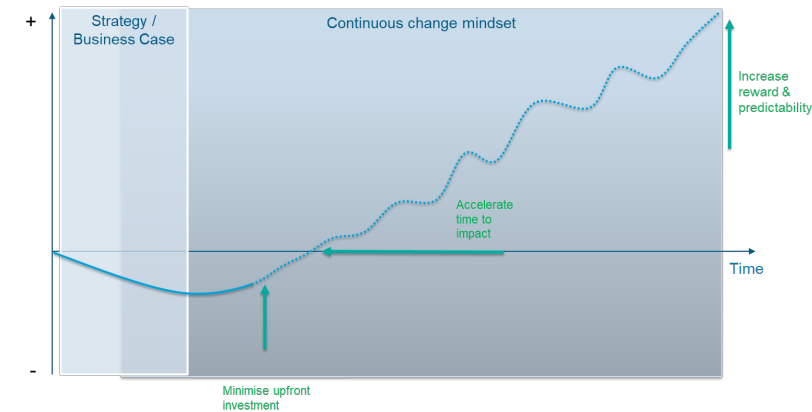
- Standardise ways of working
- Build a shared mental-model (supported by transparent model-based designs)
- Drive inter-departmental ownership

## Iteratively grow

- Create a Land and Expand pathway
- Prioritise your collaboration by the value derived

## Treat as a 'Complex Adaptive System'

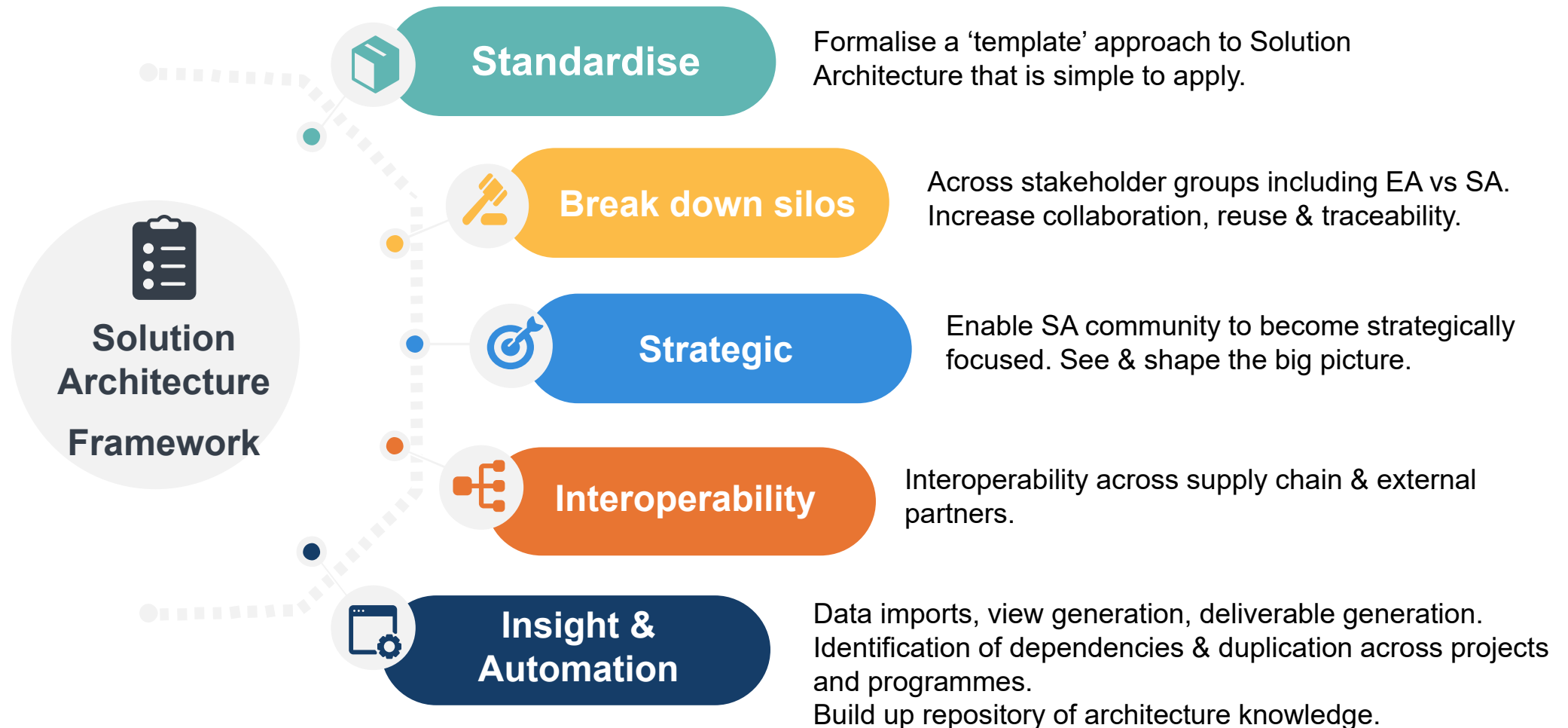
- Provide clear purpose
- Enable self-organisation
- Provide transparency
- Shared mental-model



Lower investment  
Faster time to impact  
Increased reward  
Higher predictability



# Example – Framework Objectives




# Key Framework Aspects



**ArchiMate**

Common  
architecture  
language



**Viewpoints**

Common viewpoints to  
answer common questions



**Training**

Workshops,  
videos, user guides




**Traceability**

Impact assessments  
& mapping between  
EA & SA



**Collaboration**

EA's, SA's,  
internal/external



**Tooling**

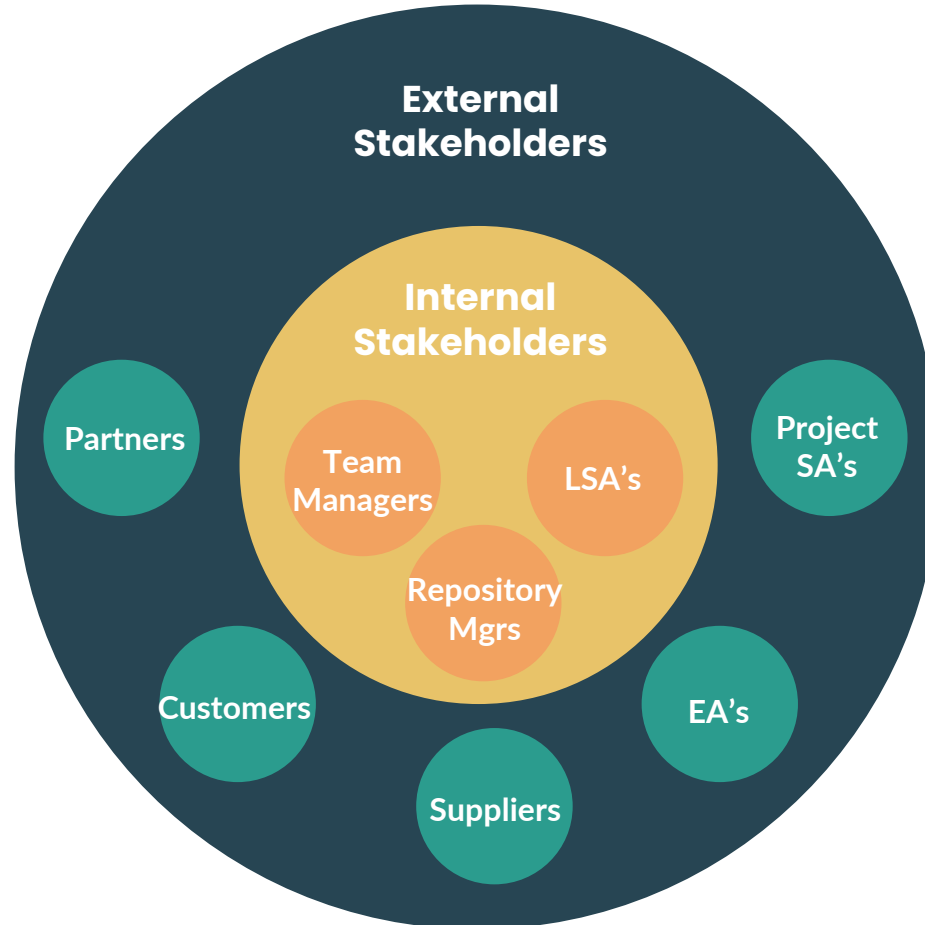
Automation,  
Architecture repository,  
reporting & dashboards

# Ecosystem Stakeholders

## 01

Targeted training across different personas:  
admin vs designer vs consumer

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## 02

Centralised Repository Management  
team. Collaboration of EA & SA

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## 03

Architecture design collaboration  
across EA & SA communities.  
Permissions via groups

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## 04

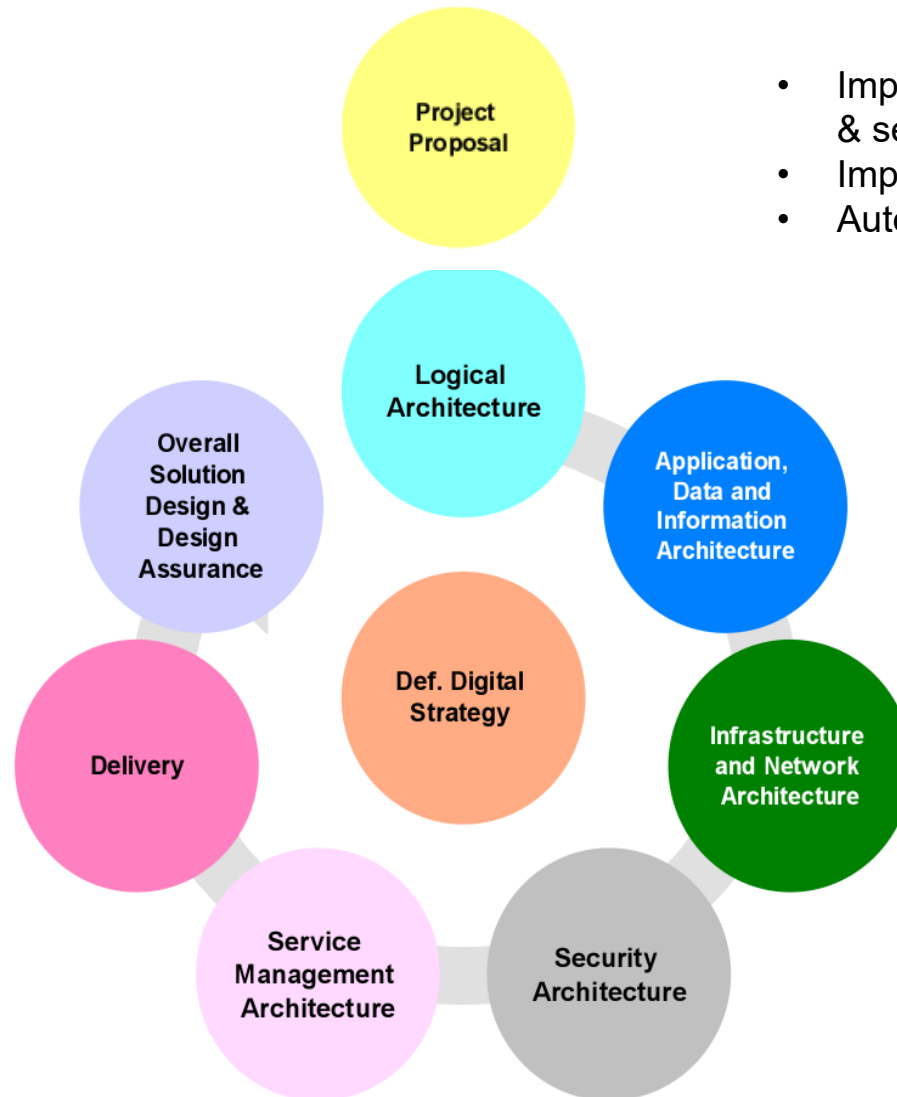
Common solution architecture ways of  
working via training, videos & user guidance.

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# Solution Architecture Design Approach

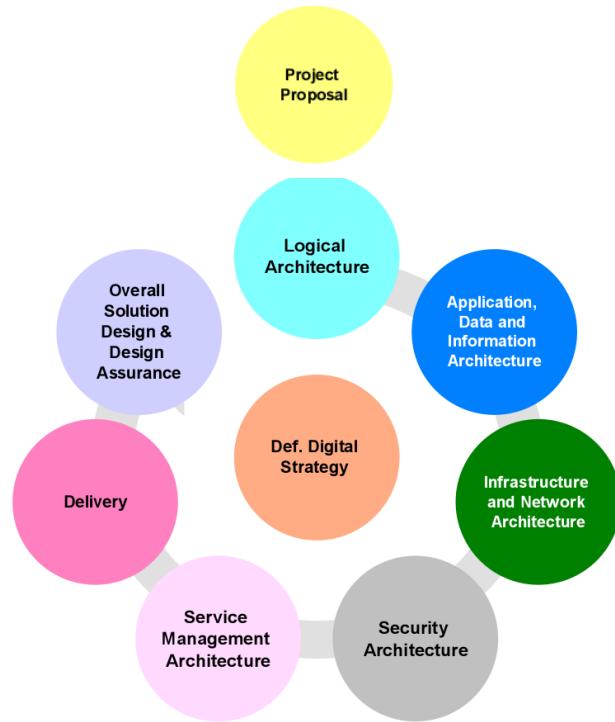
- Impact assessments of key EA artifacts (principles & services).
- Import of project data via Excel spreadsheet
- Automated view generation.

- Automated & templated deliverable generation.
- Consistent deliverables for architecture review boards.



- Workshops held with SME's to identify key questions.
- Viewpoints designed to answer key questions.
- Exemplar architecture views created across key design phases.
- Templated working space for model design activities.

# Viewpoints



- Viewpoints, templates & exemplars published to architecture repository.
- Training sessions & videos published for designers (SA's, EA's).

**Logical Solution**

<b>Service Overview</b>	<b>Logical Layered View</b>	<b>Requirements realization view</b>
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**Delivery Roadmap**

<b>Transition Architectures</b>	<b>Project Scope</b>	<b>Project Roadmap</b>	<b>Application Life cycle view</b>	<b>Technology Life cycle view</b>
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**Application & Data**

<b>Application Usage view</b>	<b>Application Behavior View</b>	<b>Application Structure View</b>
<b>Application Cooperation View (High Level)</b>	<b>Application Cooperation view (Detailed)</b>	
<b>Information Structure View</b>	<b>Implementation and deployment view</b>	

**Technology Infrastructure**

<b>Technology view (High Level)</b>	<b>Technology View (Detailed Level)</b>
<b>Infrastructure Networking View</b>	<b>Physical view</b>

**Service Management**

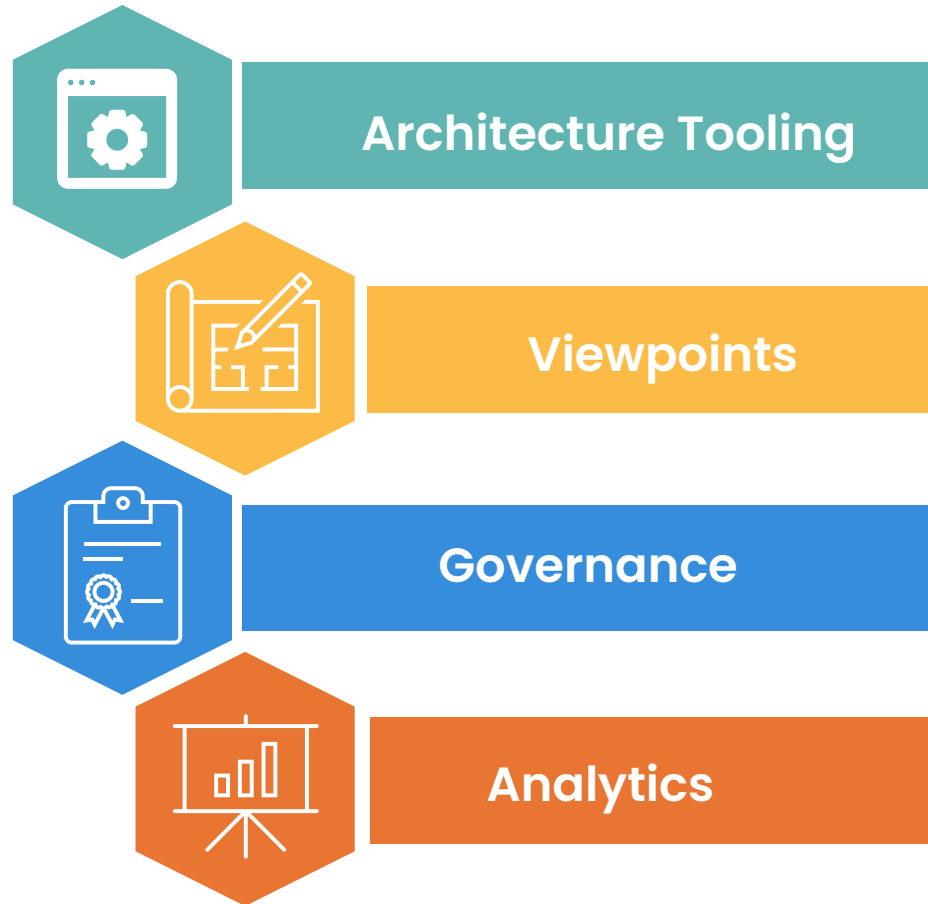
<b>Service Management Resolver Groups</b>	<b>MSP Service Contracts</b>	<b>Service Management Service Realisation</b>
<b>Federated ITSM Tooling</b>	<b>Configuration Items (CI)</b>	
<b>CI Integration</b>	<b>ITSM implementation &amp; deployment view</b>	

**Security**

<b>Risk and security view - metamodel</b>	<b>Vulnerability and Control Assessment Example</b>
<b>Security Domain &amp; Data Classification</b>	

# Simple Soundbite Training

(15 minute videos)



- Quick start guides for installation & support
- Overview of governance processes
- Hands-on training on each viewpoint, its purpose, & key questions
- Shared exemplars
- Importing Excel data
- Generating views & deliverables for review boards
- Metamodel compliance checks to ensure data quality
- Model queries for specific questions
- Project & portfolio reports & dashboards
- Generation of solution design packs



# Key Ingredients

## FROM

Fruitlessly **aiming to align**

Start with a **meta-model**

Attempt to align **multiple departments** in one go

**Train everyone** in everything

Focus on **linear gateways**

Worry too much of **org structure**

Place **blame** on your collaborators



## TO

Understand the **shared value**

**Simplify** and understand the key decisions

Go on a **journey** land and expand journey

Provide simple **soundbites**

Drive **iteration & adaptability**

Explore the **inter-team networks** & touch points

Seek to develop **shared assets**



# Q&A



**THANK YOU**  
for your  
**ATTENTION!**



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