Architectural Engagement Through The Project Lifecycle
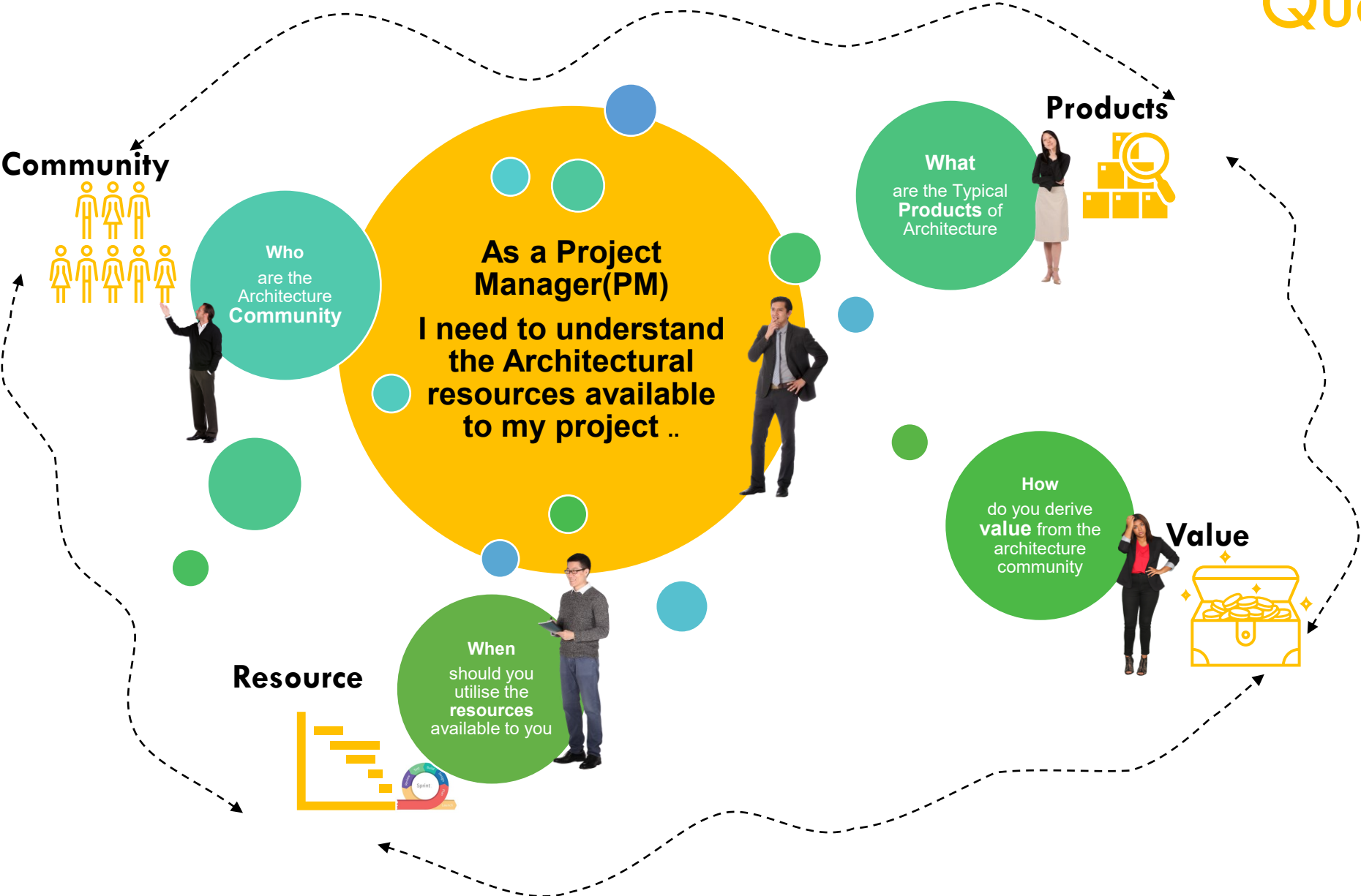
A Project / Programme Managers Guide
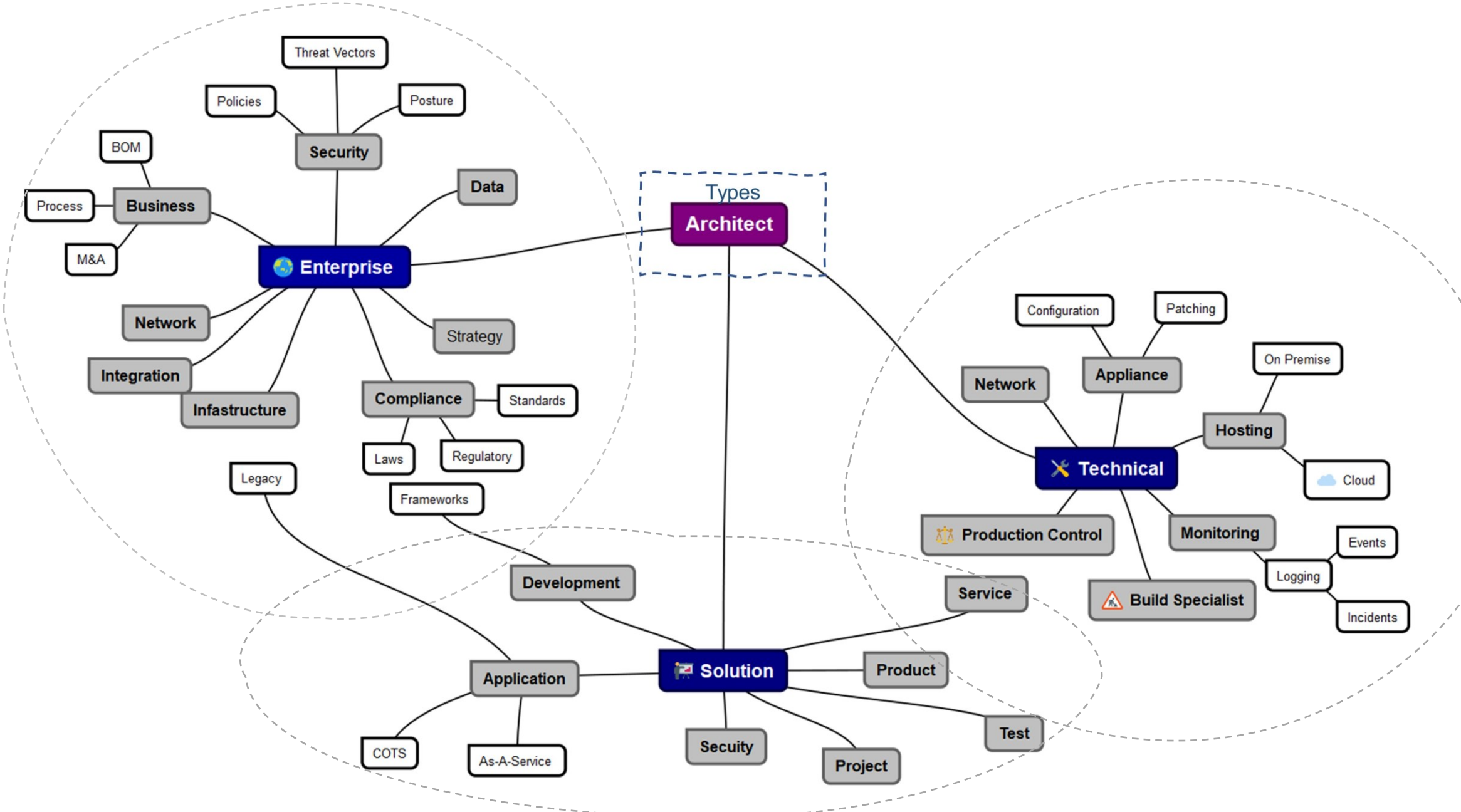
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**Project Management
Specialist Group**

Wednesday 23rd November 2022
London, UK

Question…

Community

Products

Who are the Architecture **Community**

What are the Typical **Products** of Architecture

As a Project Manager(PM) I need to understand the Architectural resources available to my project ..

How do you derive **value** from the architecture community

Value

When should you utilise the **resources** available to you

Resource

30 Mins

www.s-ea-t.com

The Architecture Community
Enterprise Architects

- **Stakeholder Management**

- **Maintain and socialise the <u>macro</u> viewpoint of the technology ecosystem**

- **Map and maintain the business technology requirements and the associated capabilities.**

- **Managing Business requirements to support the current and future operating model/states of the organisation.**

- **Managing systems compliance to internal and external standards**

- **Manage the inventory of systems and components**

- **Managing Technical Debt**

- **Drive *technical value for money***
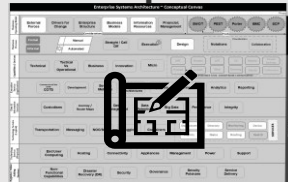
- **Strategic** input into the technology roadmaps of the organisation to *shape, form and stabilise* where required.

- **Influence** decision makers on technology investment – current & future

- Provide systems **consultancy**, guidance, and assurance to large Programmes

- Understand the Business Value Streams, Capabilities etc and review and **assure** Solution Designs produced both internally and by 3rd party suppliers against the streams.

- Ensure that **governance** mechanisms, such as review boards, principles, etc. are maintained and supported and are part of project gates

- **Police** the standards through Project and Programme engagement

- Represent the organisation with **3rd parties**, for example Systems Integrators and Standards bodies

- Understand the **impact** of the introduction of new technology into the technology landscape of the organisation.

- Develop and promote a catalogue of reusable proven **patterns**

Organizational / Industry ~ Strategic / Macro View

Solution Architect

Solution Architects work with the projects and programmes with clearly articulated outcomes and are responsible for the delivery of designs, impact analysis, compliance to standards and support the needs of the project

At a minimum they can;.

- Assist with technical problem Identification
- Cost Estimation for technical work packages
- Contextualise problems
- Eliciting the non-functional requirements
- Deliver he High-Level Solution Design
- Identify the Technology 'Pick List'
- Work on the Route to Live
- Support transition into Service

Solution Architects
"Drive the move between a Business/Technical Problem once identified to the delivery of a Systems Solution when applicable"

DRB

Tactical / Operational / Delivery View

# The Architecture Community
Technical Architect

- **Technical** Architects with Solution Architect to assist in the realization of the solution.

- TAs are a <u>key project resource</u> especially at the delivery stages of the project

- They work with the technology enablers and deploy, manage, and support the running of the services required for the business to operate
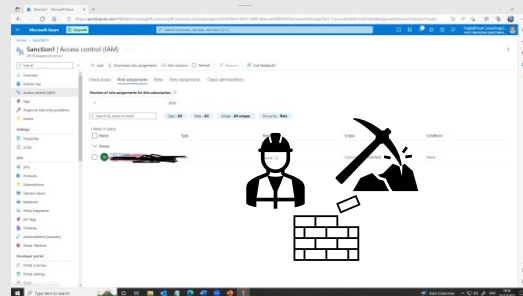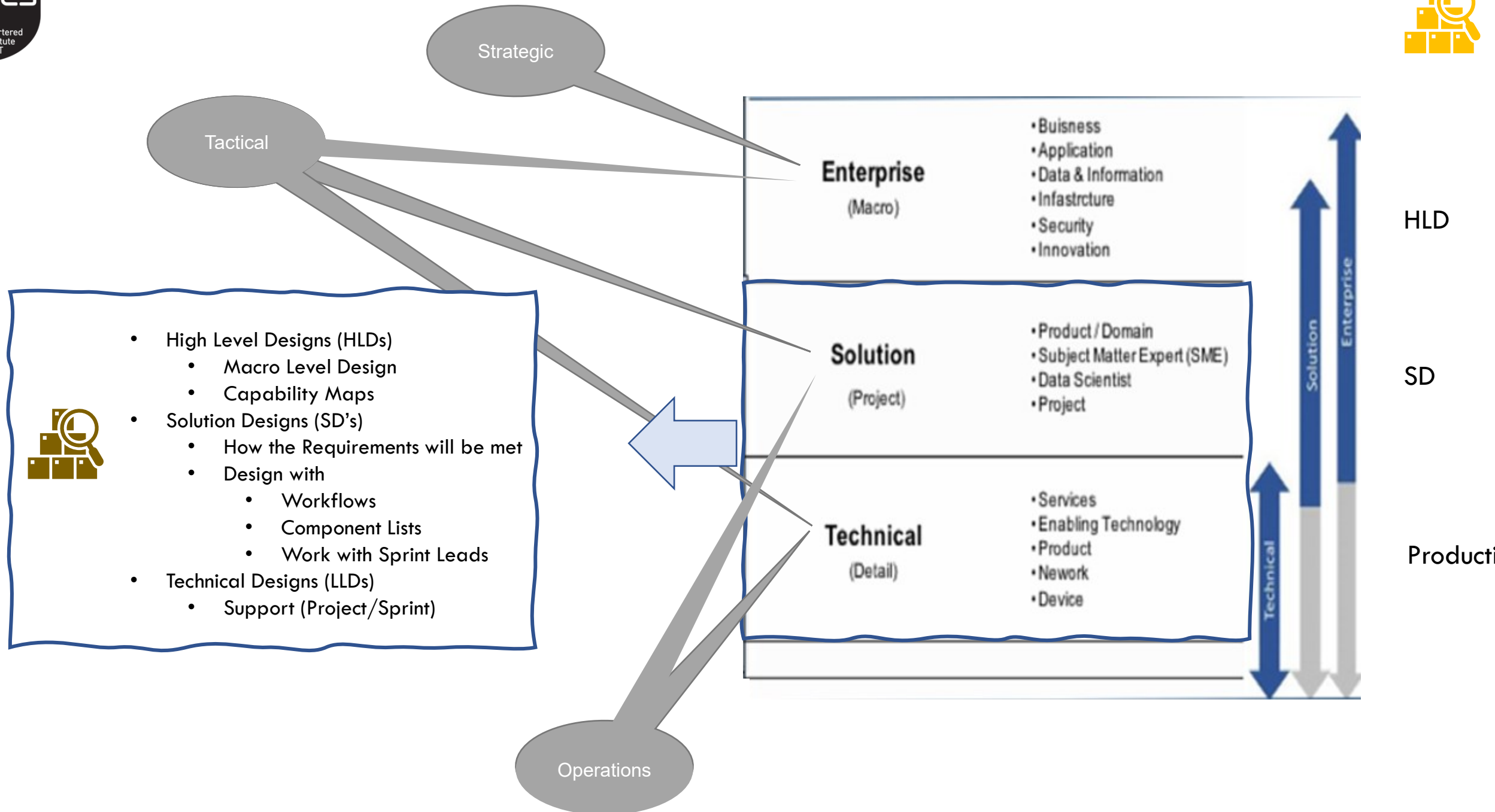

- Delivering **technical designs** and standards and the associated approvals from the formal governance channels

- **Awareness and understanding** of the 'as is' technology estate and technology components deployed in the organisation

- Providing technical **recommendations** and options based on solution designs which can cost-effectively be realised in the production environment

- Mitigating any technical **risks** that could occur through the introduction of new technology into the landscape of the organisation

- Providing input into the appropriate innovation funnels for the **analysis** of new technology

- Keeping abreast of **technology trends**, attending industry events to ensure product roadmaps are understood by the Solution and Enterprise Architects.

- Ensuring that **production acceptance** for projects is delivered and managed.

- Performing **Impact assessments** on selected technology

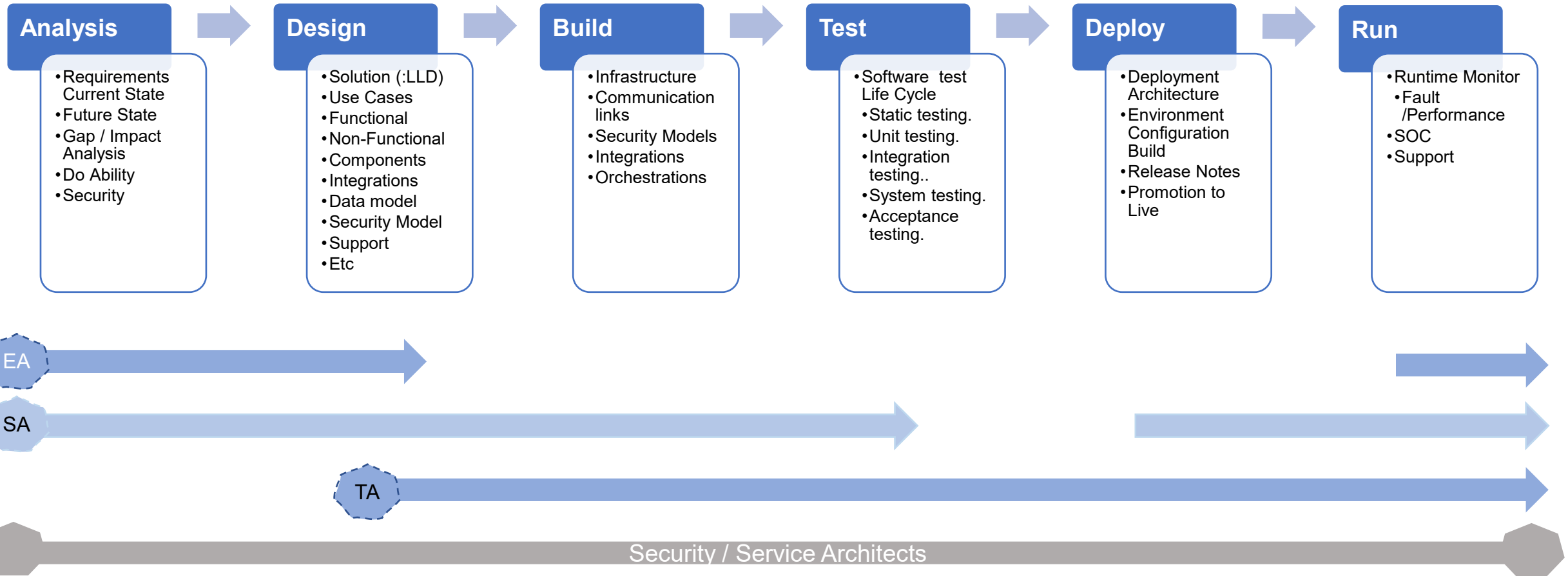# The Architecture Community – Products (Summary)
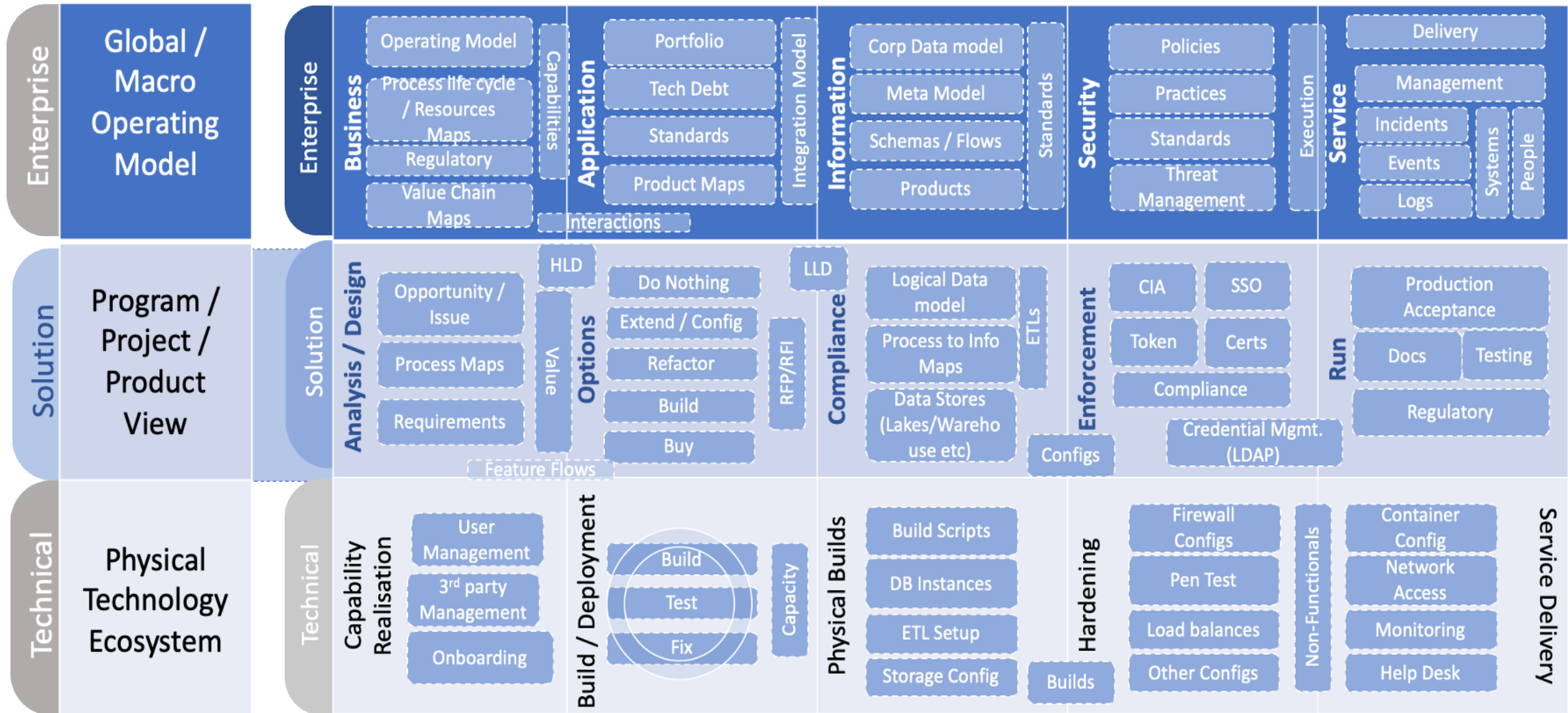
Architect acts as a Technical Authority, to establish technical guard rails and drive establishment of an architecture runway with which the teams can apply design concepts to evolve their design incrementally within the guard rails.
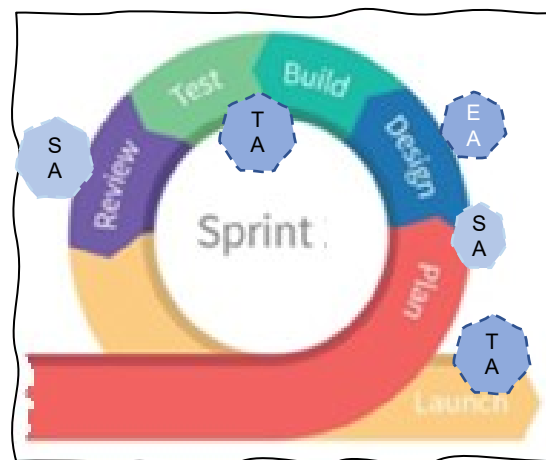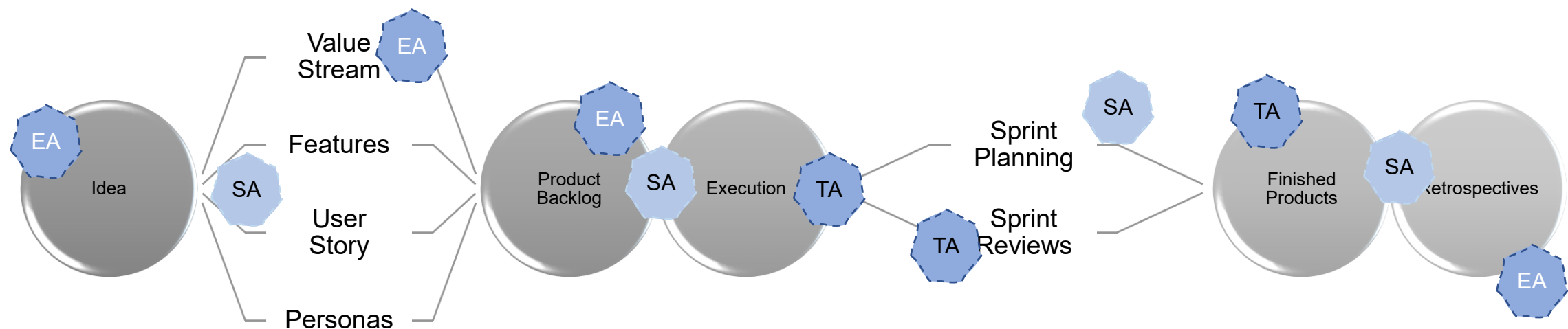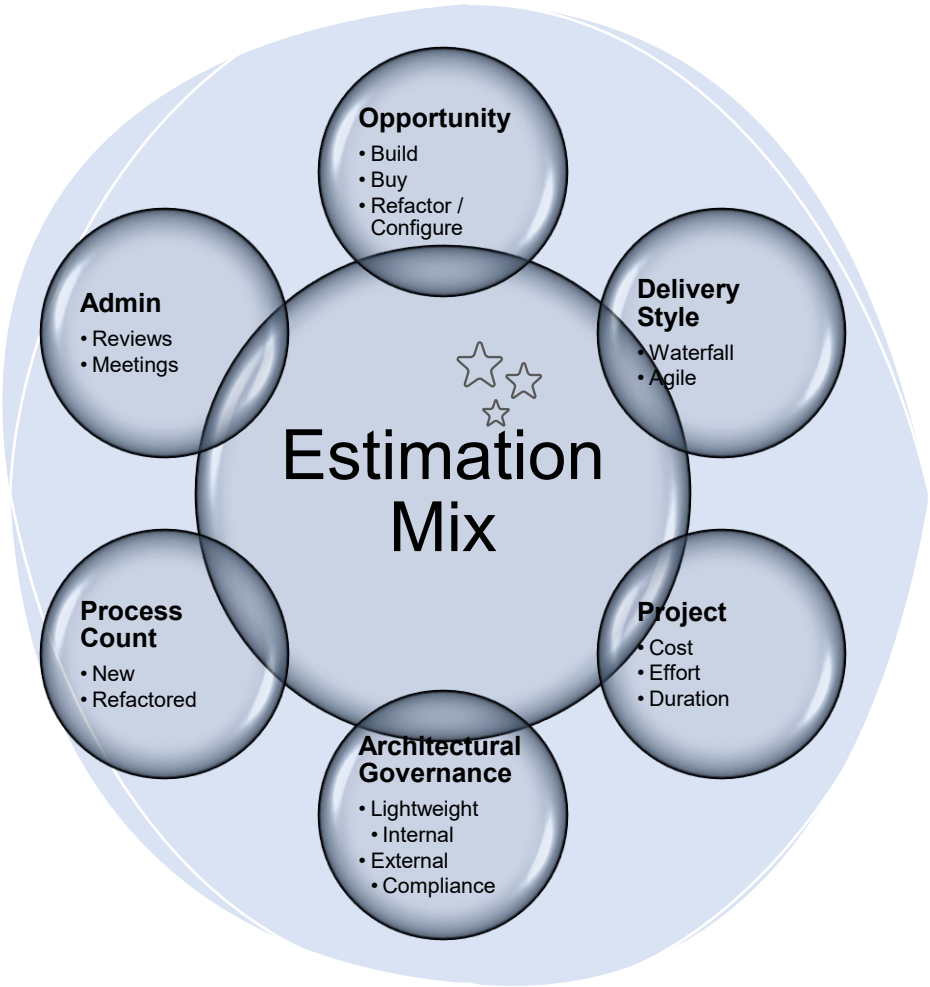
Waterfall Touchpoints

Analysis
- Requirements Current State
- Future State
- Gap / Impact Analysis
- Do Ability
- Security

Design
- Solution (:LLD)
- Use Cases
- Functional
- Non-Functional
- Components
- Integrations
- Data model
- Security Model
- Support
- Etc

Build
- Infrastructure
- Communication links
- Security Models
- Integrations
- Orchestrations

Test
- Software test Life Cycle
- Static testing.
- Unit testing.
- Integration testing..
- System testing.
- Acceptance testing.

Deploy
- Deployment Architecture
- Environment Configuration Build
- Release Notes
- Promotion to Live

Run
- Runtime Monitor
- Fault /Performance
- SOC
- Support

EA

SA

TA

Security / Service Architects

Agile Cycle Touchpoints

Estimation (Effort) Considerations

Project Type (XL, L, M, S)	Activity	Typical Outputs	Waterfall	Estimated Effort	Agile	Estimated Effort
- Size .. Cost , Outcome (Level Of Transformation), Scope	Feasibility	• Options Paper • Gap Analysis • Impact Assessments	Per Deliverable	Effort will be aligned to the project type – where small projects will require 'light weight' designs and arms length guardrail controls	Days	The effort will map direct to the sprint activity, there are however some activities which will be cross cutting and will require multiple sprints e.g. integration, performance modelling, security – the non functional stuff!
	Requirements Analysis / Traceability	• Capability Maps • NFR • Product Backlog			Weeks	
	Solution Design (HLD)	• Document • Inventory • Support Model			Weeks	
	Solution Walkthroughs	• Governance • Black Hats • Acceptance	Prep-Time / Presentation Time		Days	
	Component Selection / Backlog Definition	• Req Map • User Stories • Pattern Usage • Tech Debt			Days	
	Sprints / Build	Definition of Number of Sprints	Per Stage N/A		-	
	Testing	•Static testing. •Unit. •Integration.. •System. •Acceptance.	Per Type		Days/Weeks	
	Production Acceptance	Release Notes	Subject to Scale		Days	
	LLD / Security		(L) – 2-3 Weeks (S) – 4 -5 Days		Secuity Audit / Control Coverage	

What are the challenges, you have faced, when working with the Architecture Community ?

Open Discussion….

20--25 Mins

URLs

- **SFIA - The global skills and competency framework for the digital world - https://sfia-online.org/**

- **Architectural Services / Touch Points - A Project / Programme Managers Guide This presentation ..**
  - **The Blog** https://dalbanger.blogspot.com/

- Enterprise Systems Architecture: Aligning Business Operating Models to Technology Landscapes (Paperback) – Amazon / Springer (https://link.springer.com/book/10.1007/978-1-4842-8646-3)

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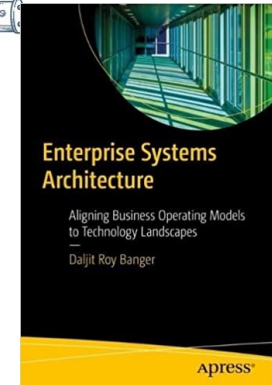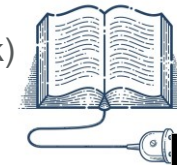
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