# Enterprise Roadmaps

## Achieving Technology Product Maturity

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# Roadmap Issues

Often Product Roadmaps are created that are merely a list of features. These create multiple issues:

- The organisation may not have the right **capabilities** to deliver these features:
  - The product skills may not be available, market research, analytics, data, etc.
  - The business and operational processes may not be in place.
  - The development skills, processes and expertise may not yet exist.
- The **platforms** and **technology** to support the features may not exist or be too immature.
- Features most likely result from a chain of objectives linked via cause and effect.
  - These precursor objectives are not made explicit, not scheduled.
  - These precursors are not understood as critical sub-goals to be achieved first.
  - **Growth and learning** is required prior to addressing objectives related to the features.
- Features alone do not help customers; they may not address the customers actual objectives.
- Today Technology is changing so fast relative to business the technology roadmap is essential

# Technology and Capabilities are Essential

Without the concomitant technology and capability alignment, products will most likely:

- Introduce significant and growing technical debt as features are delivered without the right platforms, they are fast tracked, and built in a one off manner.
- Products may be of poor quality and introduce bugs and outages.
- Reduce the agility of the organization. Short cuts are taken to meet feature deadlines without consideration of what is really required as the foundations for future growth. Later features get more and more difficult to build, development get more costly and integration more difficult.
- Products are delivered late, or not at all as:
  - the technology timelines and resources are not considered.
  - quality goals like: reliability, performance, security etc, were not considered;
  - the required capabilities are not considered, e.g. dev/ops maturity, new sales pipelines.
  - integration to other systems and data, other teams, are not considered.
  - operational needs are not considered
  - different project are not technically aligned so can work against each other, in different directions.
- The product team may not understand why the product roadmap cannot be achieved, the product platform is hard to change, manage and operate,  and why more outages and bugs keep appearing.

# Building Enterprises – for Enterprises that deliver Products.

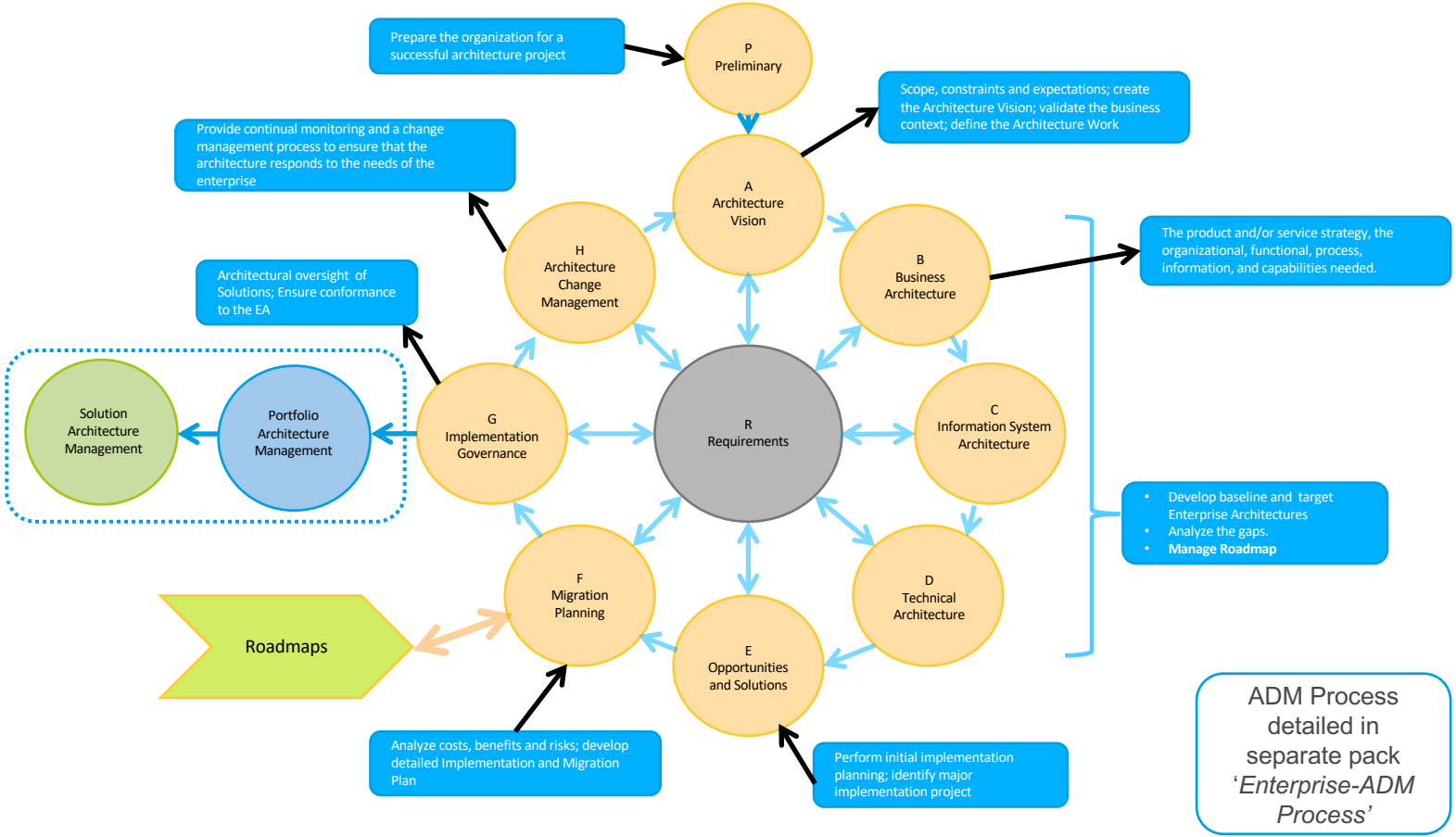
"Enterprise Architecture is the organizing logic for business processes and IT infrastructure reflecting the ***integration*** and ***standardization*** requirements of the firm's operating model."

MIT Center for Information Systems Research, Peter Weill, Director, as presented at the Sixth e-Business Conference, Barcelona Spain, 27 March 2007
(subsequent slides on Operating Models are from this material)

"Enterprise Architecture is a complete expression of the enterprise; a master plan which "*acts as a collaboration force*" between aspects of business planning such as goals, visions, strategies and governance principles; aspects of business operations such as business terms, organisation structures, processes and data; aspects of automation such as information systems and databases; and the enabling technological infrastructure of the business such as computers, operating systems and networks."

TOGAF provides a well known process, called ADM, for Enterprise Architecture.

# Take an Enterprise View to Product Solutions – TOGAF ADM




ADM Process detailed in separate pack '*Enterprise-ADM Process*'

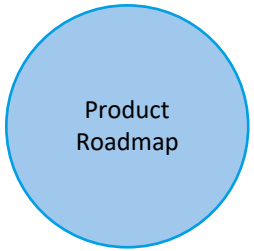
# What does the ADM tell us when developing products ?

There are multiple domains to consider when meeting Enterprise Objectives, and need to consider:

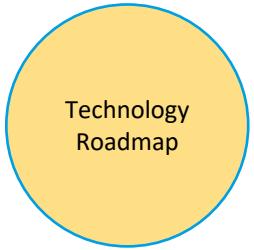
- **An understanding of the Business**, the strategy and goals:
  - What capabilities does the business require to meet its goals ?
    - In a product LOB segment of the business this may be product objectives goals, and strategy
  - How the product segment aligns with Enterprise goals and strategy
- **An understanding of the Information Systems Architecture**:
  - What capabilities are required to deliver information Systems for the product:
    - What data is required ?
    - What applications and systems are required ?
- **An understanding of the Technology required to support the Information Systems**
- **Migration Planning** – how we move from the current state of the enterprise to a desired state.
  - *Product Roadmap*
  - *Capability Roadmap* – what capabilities are required for the product and Information Systems
  - *Technology Roadmap* – what Information systems architectures, platforms and technology are required for the product, how do we schedule these.
  - How the Realities of Technology may constrain the product and business goals – some product goals are just not feasible, too expensive, too ambitious, too complex, or not available in time.

# The 3 Critical Roadmaps

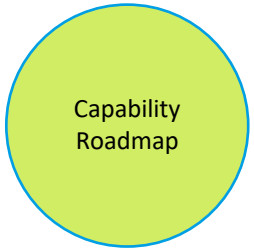
These roadmaps are causal chains of objectives, not shopping lists of items.




The objectives required to provides features and offerings to be made available to existing and potential customers in the future, in a given time frame.

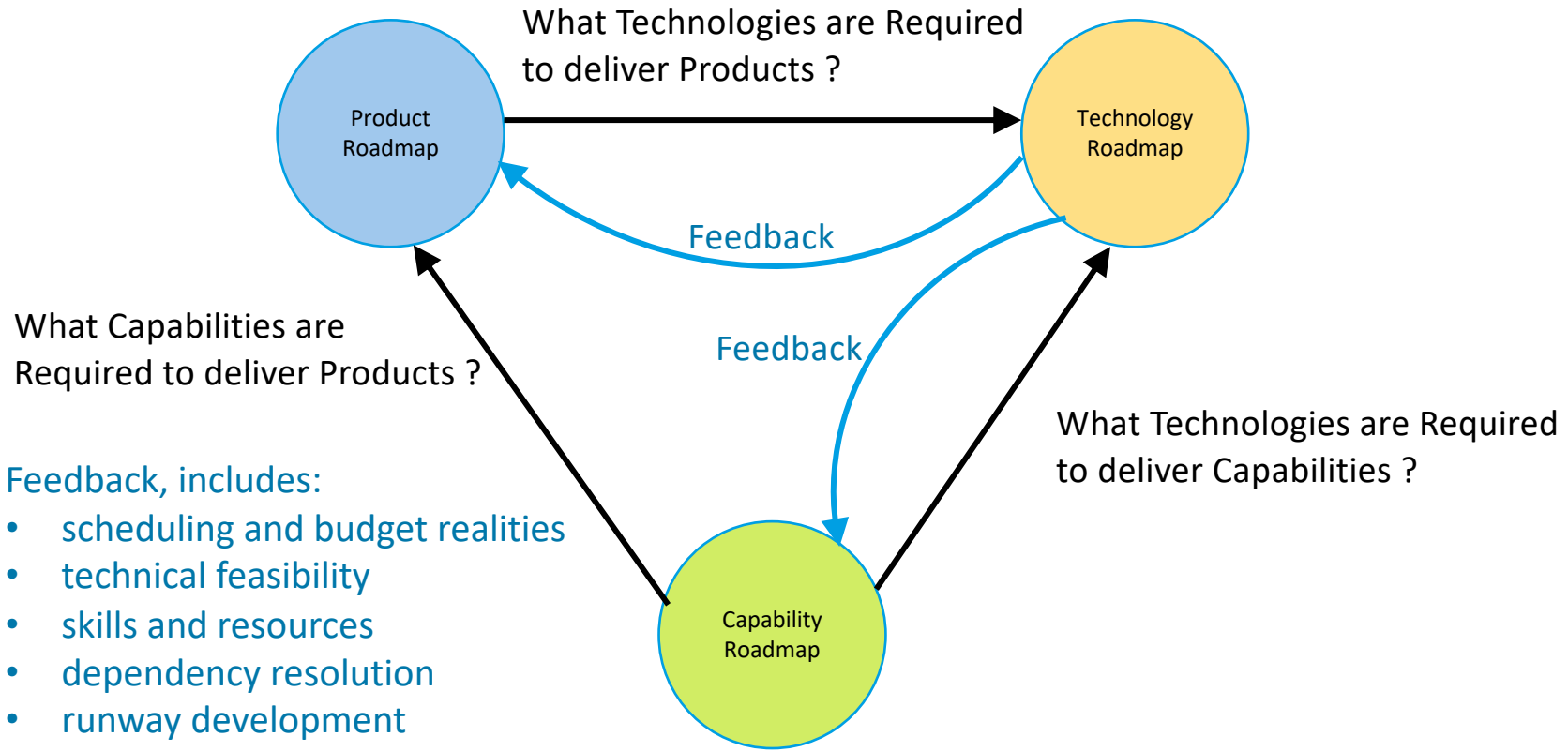



The objectives required to improve our Information Systems, Platforms and Technology, at the right times, to support the business and deliver product and automated processes of a desired quality. Work often precedes feature development to provide platform runway.




The objectives required to provide the capabilities the business must have in place, at certain times, to execute strategy. These require operational needs, realised human and automated processes, information systems and technology. Product work may be dependent on capabilities being in place.

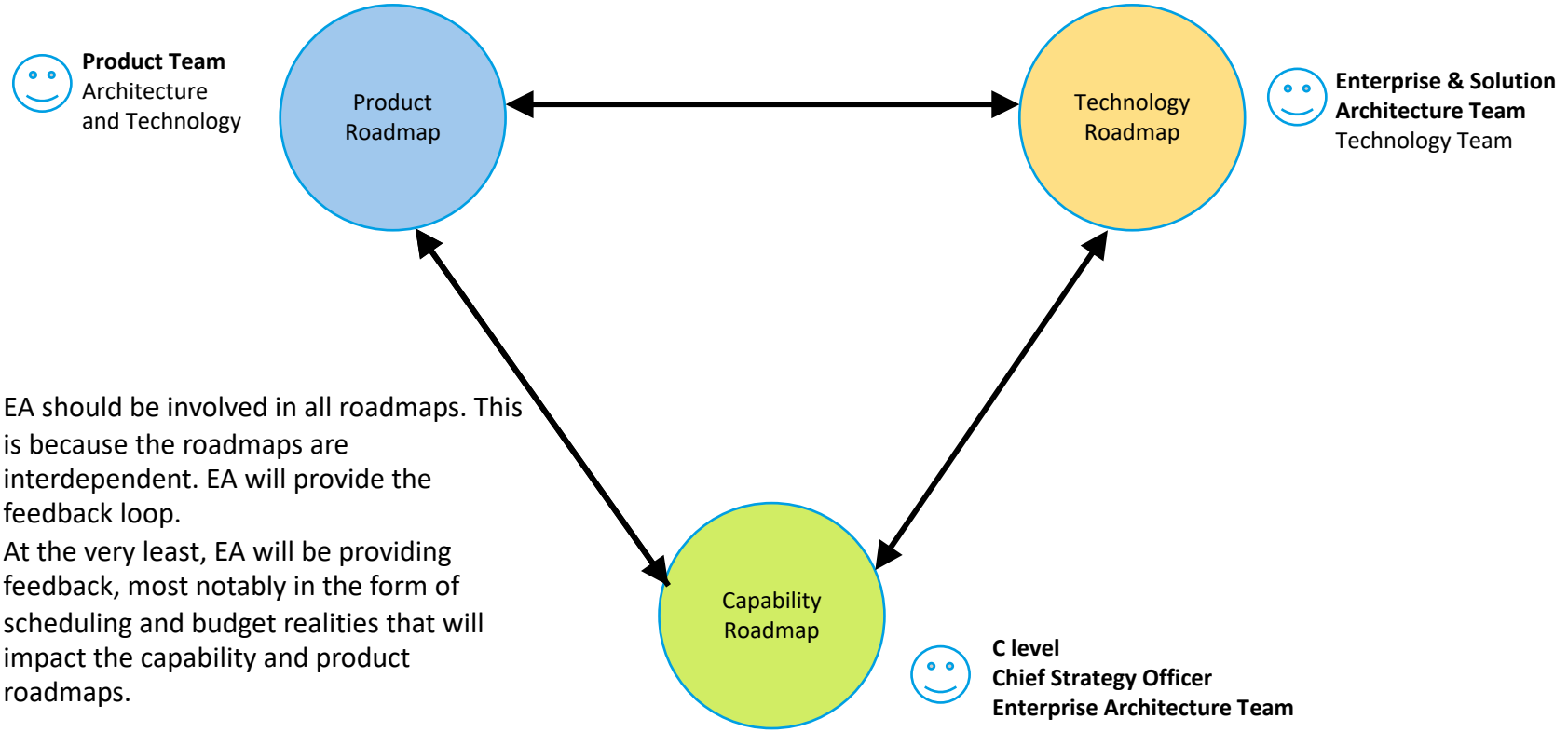
# The 3 Roadmaps are Related / Dependent – Who owns what ?




Feedback, includes:

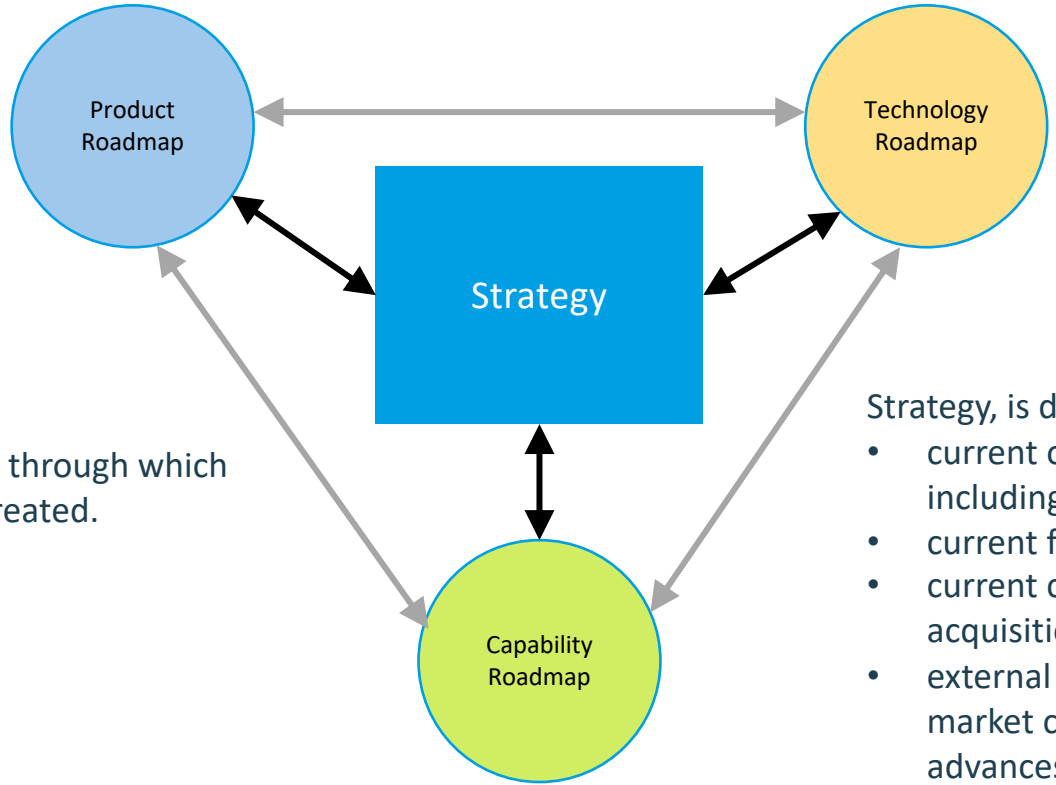
- scheduling and budget realities
- technical feasibility
- skills and resources
- dependency resolution
- runway development

# Who does what – given the roadmaps are independent ?




- EA should be involved in all roadmaps. This is because the roadmaps are interdependent. EA will provide the feedback loop.
- At the very least, EA will be providing feedback, most notably in the form of scheduling and budget realities that will impact the capability and product roadmaps.

# The 3 Roadmaps are driven and aligned by Strategy

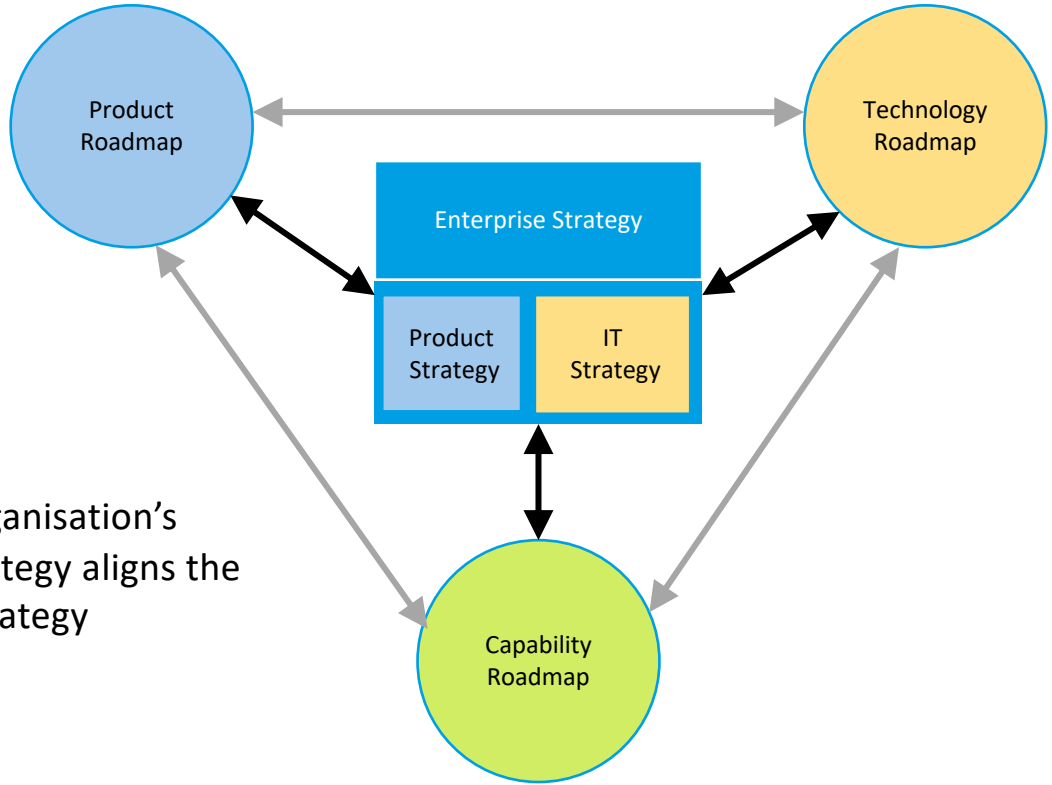



Strategy is the lens through which all roadmaps are created.

Strategy, is dependent on, for example :

- current organizational state including current markets,
- current financial state,
- current capabilities and acquisitions.
- external factors e.g. world events, market conditions and technology advances.

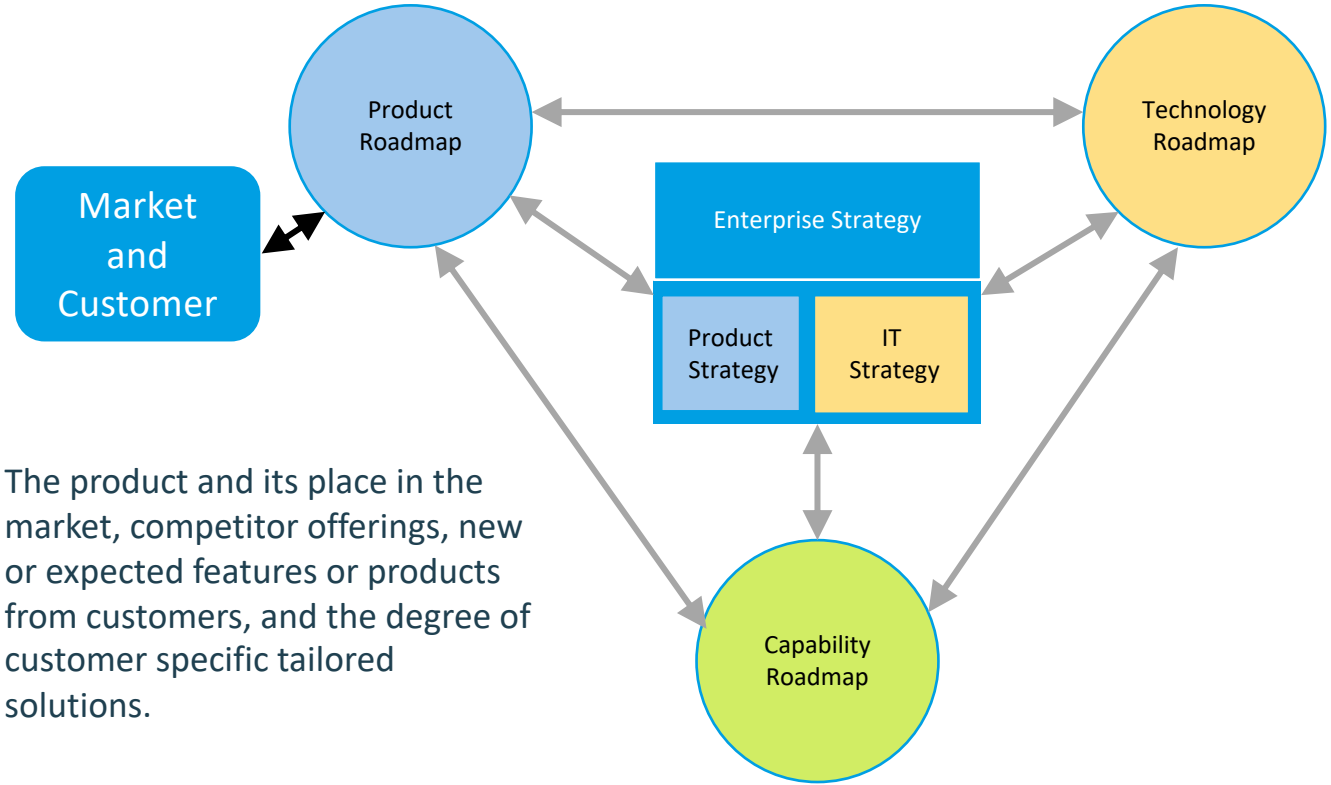
# The 3 Roadmaps are driven and aligned by Strategy




The overall organisation's Enterprise Strategy aligns the

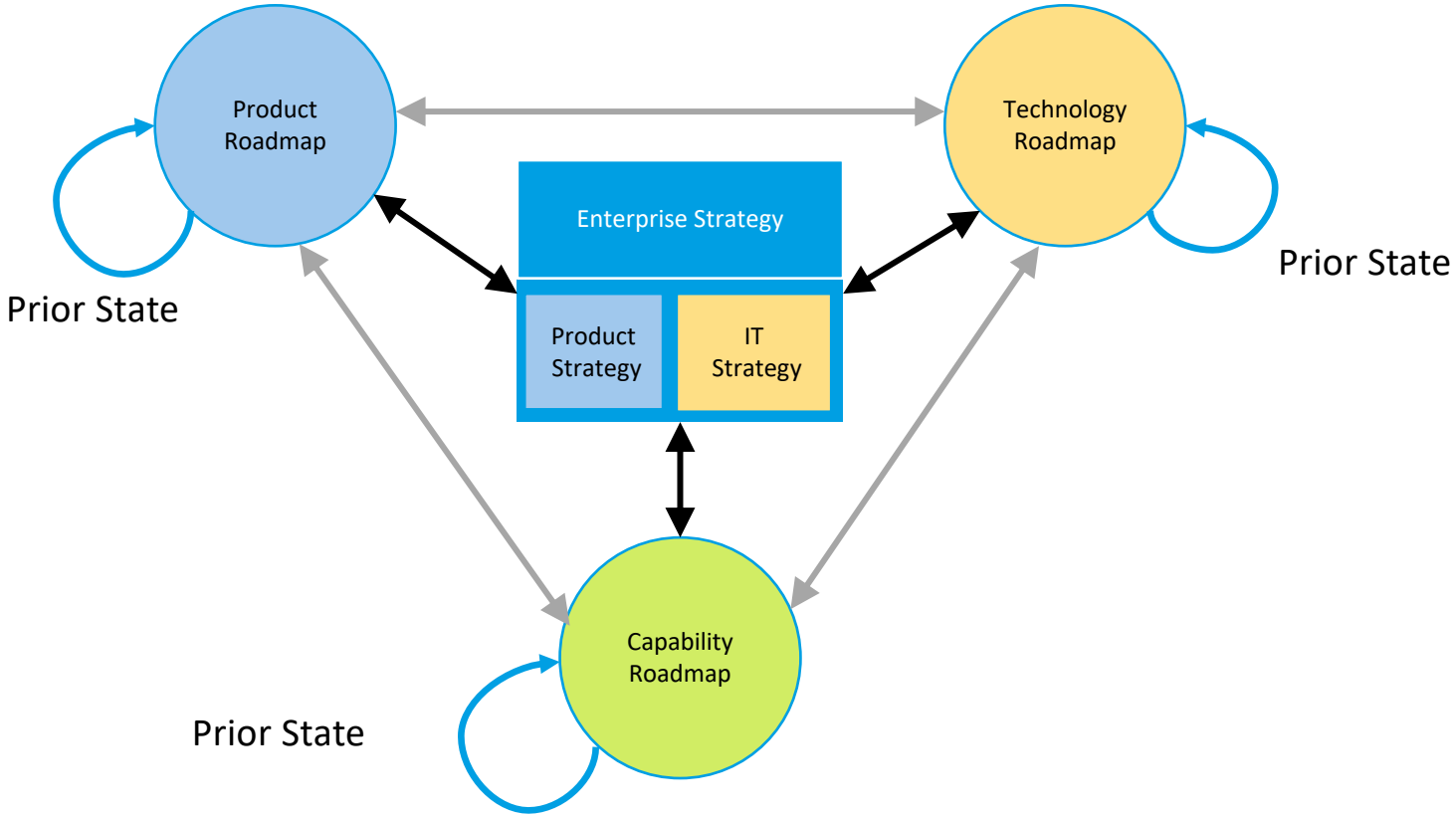
- Product strategy
- IT strategy

# Product Roadmap is dependent on the Market

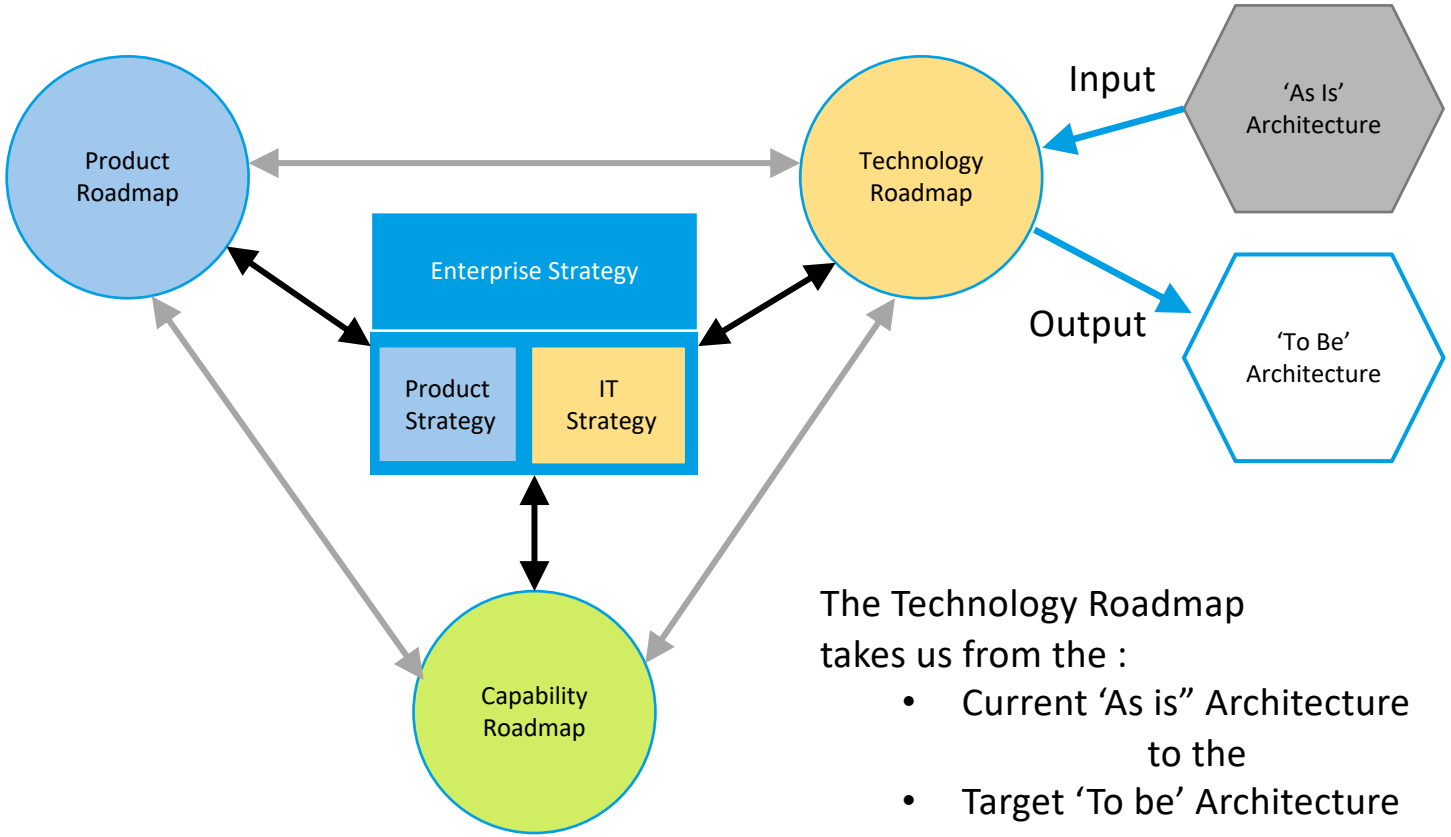



The product and its place in the market, competitor offerings, new or expected features or products from customers, and the degree of customer specific tailored solutions.

# Each Roadmap Iterates - depends on Previous State



# The Technology Roadmap – ‘As Is’ to ‘To be’




The Technology Roadmap takes us from the :

- Current ‘As is” Architecture to the
- Target ‘To be’ Architecture

# How to do Roadmaps ?



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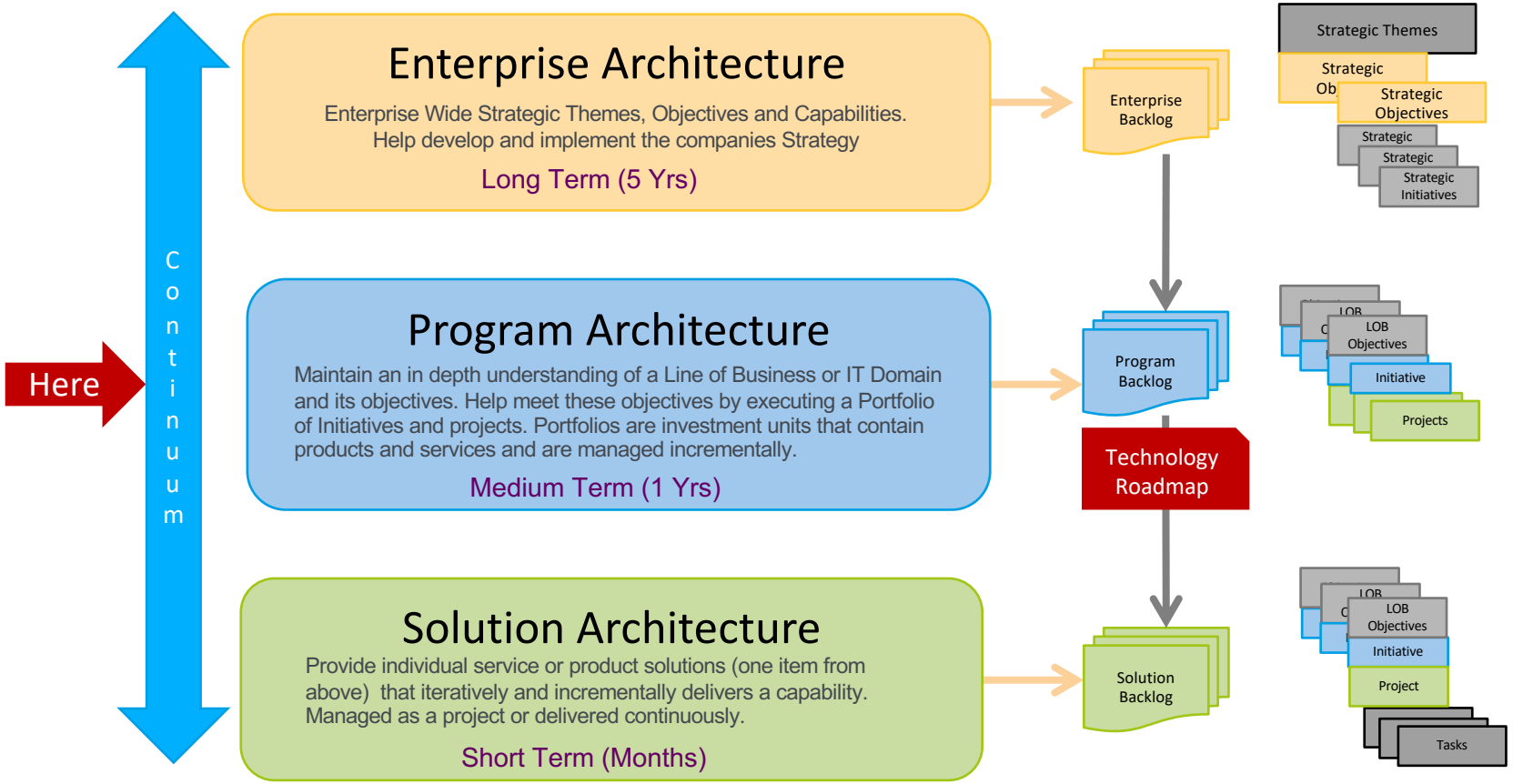
# The Continuum of Architecture Ways






See Appendix for Corporate Management Structure

# Product Portfolio / Program Architecture

Product Program/Portfolio Architecture is about:

- Architecting across a set of solutions, within a particular domain or business segment, in this case a product, to deliver capability increments consistent with the Enterprise and Business direction;
- Providing deep Subject Matter Expertise in the particular business or domain area;
- Provide subject relevant architectural collateral, at a more detailed level than EA;
- Engaging with the business or domain closely to maintain the relationship;
- Help guide and align the Technology Roadmap with the Product Roadmap.
- Help guide and align the Enterprise Architecture Roadmap with the Portfolio Roadmap.
- Manage the Architecture documentation, and reposirotyr material.
- Manage a shorter term focus than EA;

Portfolios provide the way to manage IT investments, and this links with the larger  IT Road mapping process. Portfolio Architecture starts off the conceptual work that will result in an Enterprise aligned Target Architecture.

Road mapping may result in a number of Transition Architecture States, implemented as Initiatives/Programs/Iterative Releases; a portfolio of projects. Two main segment types of work:

1. **Lines of Business**: the projects could be organised by \Product Domain, Program, Initiatives, LOB Segment, or Release. Portfolio Architecture work is transitioned to Solution Architecture for the delivery of a capability packages.

2. **Technical Domains:** Capabilities include: Infrastructure, Security, Integration, Data and Platforms.