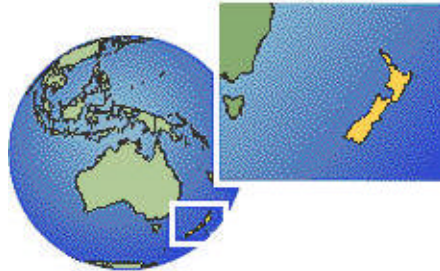


## TALES FROM A TOGAF PRACTITIONER IN AUSTRALASIA



**VISH VISWANATHAN**

**Managing Principal- CCANDC Solutions**

**Regional Partner- The Open Group (Australia/New Zealand/ASEAN)**

**Vice Chair-Asia/Pacific Architecture Forum**

*CC and C Solutions*

# PROLOGUE: SIGNIFICANCE OF EA TO AUSTRALASIA

## Global Needs for EA

- ✓ Rationalisation
- ✓ Integration
- ✓ Better ROI
- ✓ Alignment to business
- Etc ,, Etc

**Plus**

## Regional Needs for EA

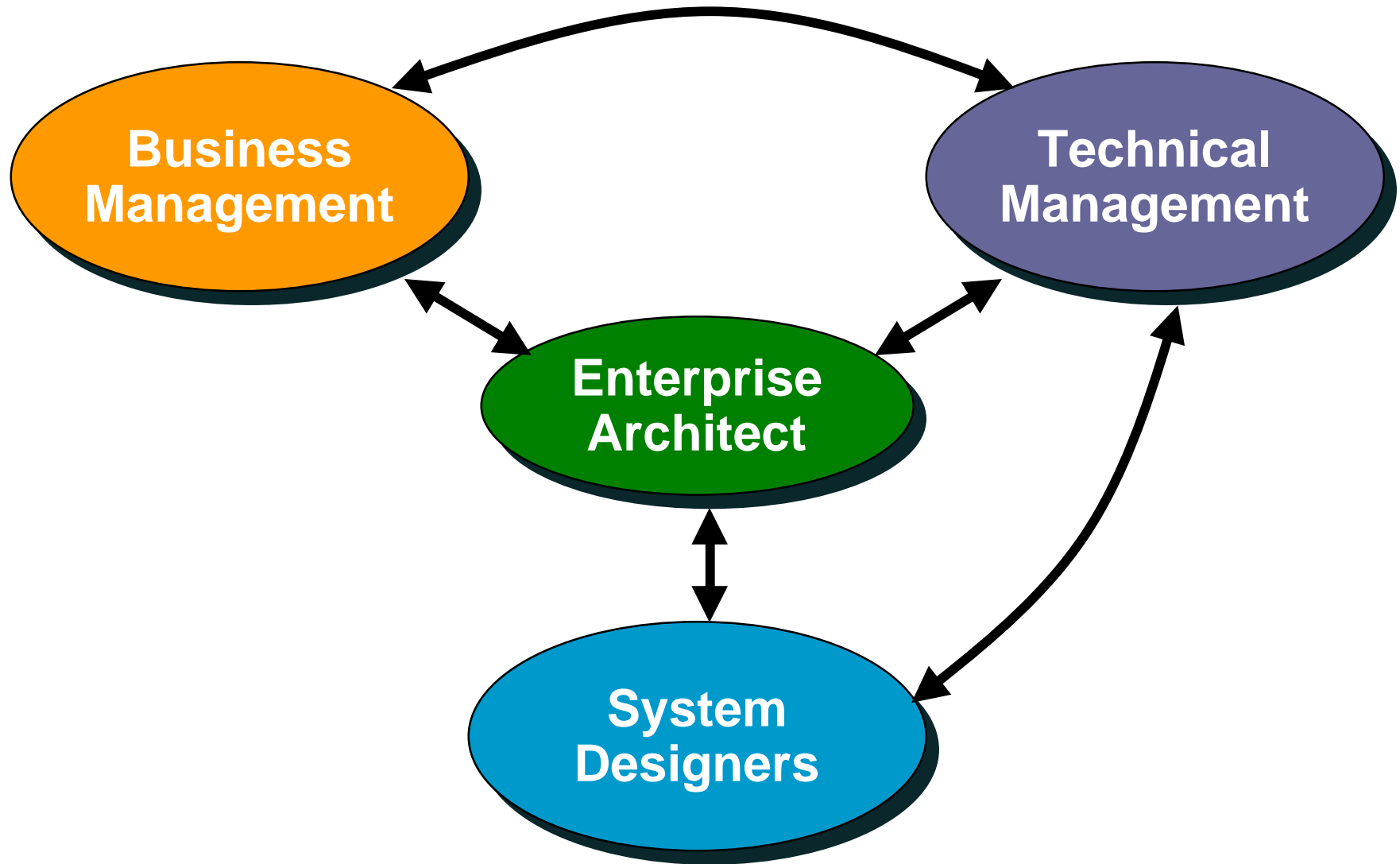
(as dictated by the tyranny of distance)

- ✓ Heavy reliance on remote overseas vendors for products
- ✓ Combination of US, European and Japanese standards
- ✓ Package dependency
- ✓ Several local home-made innovations

## TYPICAL SUCCESS RATES

Outcome	Percentage Of total EA projects	Key Reasons
Complete success	10%	Top management commitment Enlightened CIO Tenacity of the EA leadership Careful management of expectations
Partial success	30%	Top management commitment Enlightened CIO Tenacity of the EA leadership Careful management of expectations
Failure	20%	No top management commitment Unrealistic Expectations Weak EA leadership Untrained personnel Insufficient resources
In limbo	40%	Change of management / direction No resources

# The role of an Enterprise Architect



# CHAPTER 1: National Wealth Management



A  **National** Company

# Overview of National Wealth Management

## Wealth Management



- Broad portfolio of Financial Services across:
  - Australia
  - New Zealand.
  - Europe
  - Asia
- Products for Retail and corporate customers:
  - Financial planning and advice services
  - Wealth creation
    - investments, financial planning, private banking
  - Wealth protection
    - Insurance
  - Succession solutions
    - Superannuation
- Products for Corporate and Institutional customers:
  - Outsourced investment
  - Superannuation
  - Employee benefit solutions
- Created through the integration of
  - National's financial service and funds management businesses
  - MLC Group.
- Internationally, as at 30th September 2002, Wealth Management had over:
  - 2.8 million customers
  - \$64.5 billion on behalf of retail and corporate customers.
  - 3, 300 aligned and salaried advisers who choose to partner with Wealth Management.
  - 5,400 employees



# Overview of Information Technology at NWM

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- ❑ MLC IT was wholly outsourced to IBM GSA in the mid 1990s
- ❑ MLC re established strategic control and management of IT in 1999
  - Architecture was seen as one of the key areas to be “in sourced”
- ❑ Business Technology (IT Function)
  - Part of Corporate Development and Business Technology which is also responsible for business strategy, mergers and acquisitions and business project services.
  - Staff size of about 550 excluding outsourced functions and external service providers
  - Infrastructure largely outsourced to IBM GSA
  - Application Development done through a combination of internal resources and external partners
- ❑ Additional IT functions associated with overseas joint ventures and subsidiaries:
  - UK, New Zealand, Hong Kong, Indonesia and Thailand
- ❑ Architecture function established in 1998
  - Six permanent employees and five contractors/seconded employees.



# Overview of Architecture Team

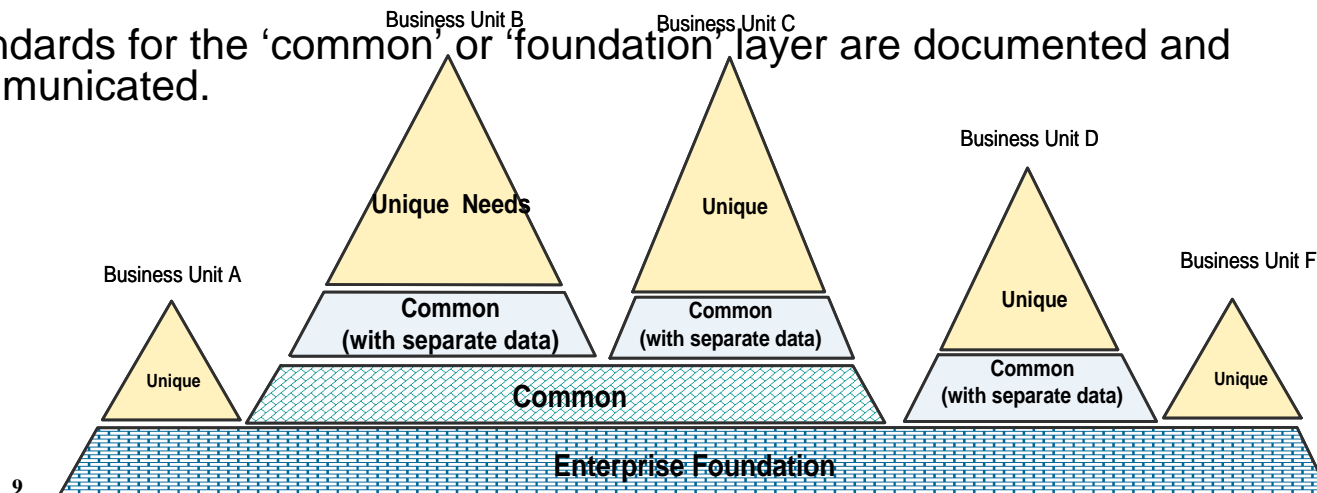
<b>Organisation reporting line</b>	The Architecture function resides within Business Technology and reports to the Head of Business Technology.			
<b>Role</b>	WM Enterprise Architecture	WM Business Unit Architecture	WM Solution Architecture	
<b>Business Unit coverage</b>	Scope of team covers all business units within the Wealth Management division of the National Australia Group. In addition, each architect within team is aligned to specific WM business unit and AD/M teams.			
<b>Business Technology stakeholders</b>	<ul style="list-style-type: none"> <li>❑ Application Development/Maintenance</li> <li>❑ Infrastructure</li> <li>❑ Program Office / Projects</li> <li>❑ Vendor Management</li> </ul>			
<b>Domain / Competencies</b>	Application	Infrastructure	Data / Information	Security





# Federated Architecture Model

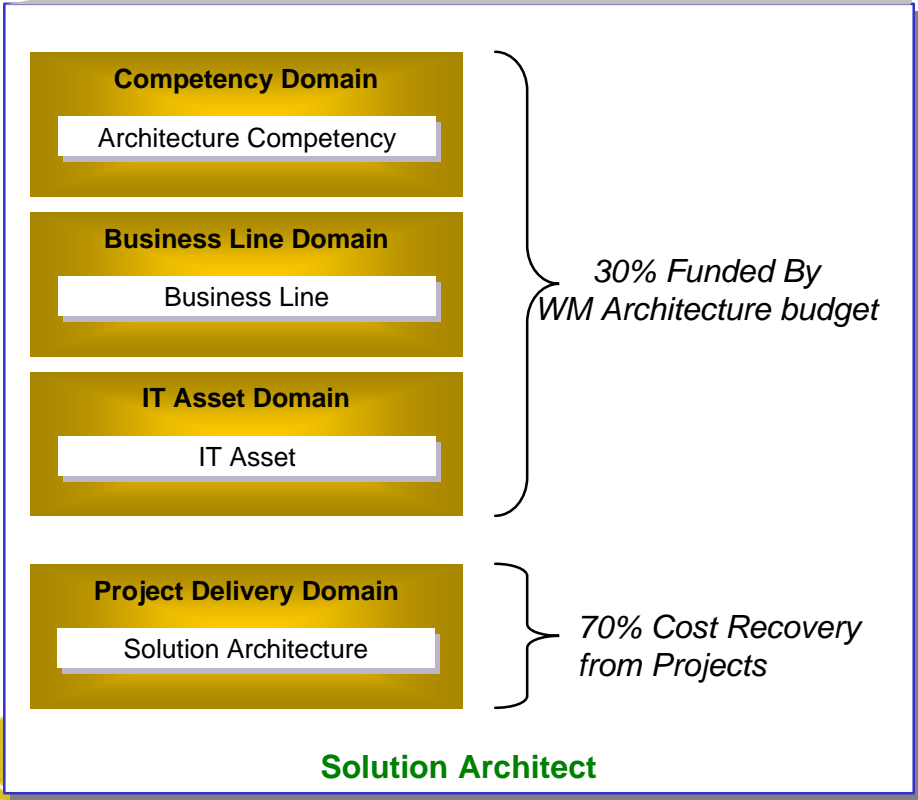
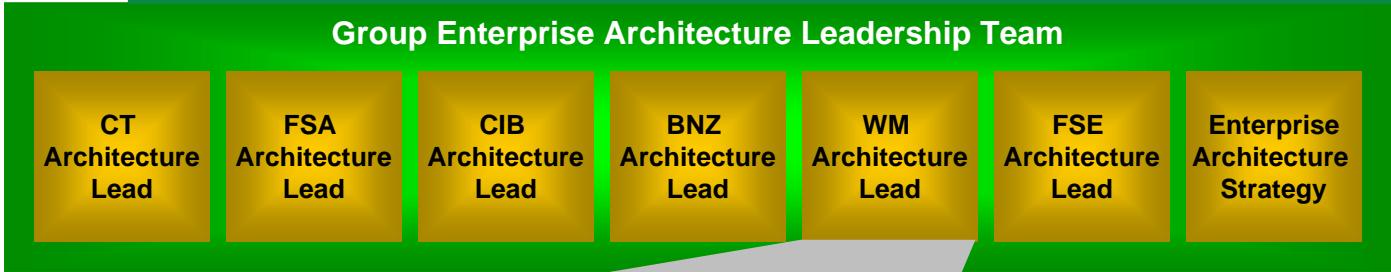
- ❑ One size does not fit all - Technology variation across business units within the National, driven by each unit's specific objectives, resources and priorities.
- ❑ Focus of architecture governance - Ensure common standards are defined and successfully applied across the group for elements of 'common' or 'foundation' building blocks.
- ❑ Proposed solutions need to be assessed against the overall architecture to determine if they are leveraging, contributing or duplicating components.
- ❑ Standards for the 'common' or 'foundation' layer are documented and communicated.



9



# Architecture Domain Model

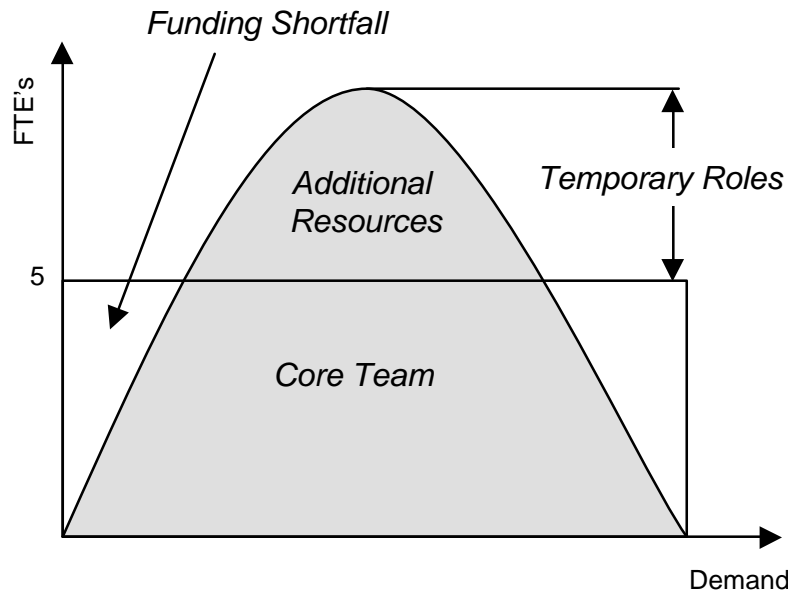


**Assumptions:**

- The business unit architecture leads and the enterprise architecture strategy team make up the Enterprise Architecture leadership team
- Solution architects are aligned to competency domains, e.g. application architecture
- Solution architects are aligned to business line domains, e.g. retail, insurance, distribution
- Solution architects are aligned to IT asset domains in AD/M, e.g. product admin systems, e-business
- The aligned disciplines are expected to require 30% of the solution architects time
- Solution architects are assigned to a project delivery domain, e.g. Amazon, Technology refresh

*Note: percentages will vary across business units*

# Recharge Model



Role	FTE's	Funded	Recovered	Overhead
Team Lead	1	100%	0%	1
Core Team	6	30%	70%	2
Additional	4	0%	100%	0
Total	11	40%	60%	3

## Assumptions:

- Dedicated resource acting as architecture manager
- Core architecture team consisting of dedicated resources independent of demand
- All projects are required to have a solution architect
- 70% of the core team resource costs to be recovered from the projects to which they are assigned
- When demand for architecture resources are in excess of the core team, additional resources are to be added to address the gap
- 100% of the additional resource costs to be recovered from the project that originated the resource request
- Additional resources could be National employees or external consultants

# Definition of key documents

Document	Definition	Building Analogy
IT Strategy	Statement of strategic direction for Business Technology aligned to business strategy.	“Vision of the city”
Migration Roadmap	A list of projects and changes to the IT environment over the next 3 years that will help us achieve the business and IT vision.	Development stages
Application Architecture	A target model of major application functions, their inter-relationships, and how they are perceived by customers, intermediaries, business partners, and staff.	Town plan
Data Architecture	A target model of data required to support business functions and processes	Residential / business zoning
Security Architecture	A view of how WM security policy will be implemented in WM systems.	Police
Infrastructure Architecture	Framework and guidelines for the underlying technology (infrastructure, development and management tools) supporting the application architecture.	Water, electricity, telephone
IT Inventory	High level “catalogue” of key applications and IT infrastructure currently deployed within WM - and relationships between them.	Land Title Office
IT Standards	A list of technologies or statements of direction that has been selected to be implemented and used uniformly within WM. To be applied as “building blocks” for IT solutions.	Building codes and standards
Buy List	A list of approved products and tools, supported by Business Technology, that can be used to build/incorporate into a solution/asset.	Preferred suppliers
Solution/Asset Architecture	Description of the components (function, software, infrastructure) of an IT solution or asset and the relationship between the components.	Building design/plan



# Solution Architecture

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- ❑ Process by which organisation can agree on the high level design of the solution/project, choosing from a list of potential options, plus a mechanism for ensuring that we do build to the solution in the project
- ❑ Provides a consistent format and layout to present IT Solutions.
- ❑ Provides a check list of areas to be covered off.
- ❑ Is intended to be a “living” document that is iteratively refined with progressively more detail.
- ❑ Ensures that Projects advances/progresses towards target architecture so that we can:
  - reduce duplicated functionality across systems
  - eliminate or reduce tactical work-arounds
  - reduce costs
- ❑ Provides a formal document which can be used to assess a Project’s IT solution



# Exemption Process

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- ❑ The process for IT sign-off for projects requires projects to explicitly document and demonstrate compliance, or to seek exemption (see below).
- ❑ Exemptions to standards compliance may be granted based on the following circumstances:
  - Architecture/Standard is not deemed relevant or implementable for valid reasons.
  - Project is pioneering new architectures or technologies.
  - Compliance is judged to be non-economical (even in the longer term) AND does not compromise ability to integrate across applications.



# Chapter 2: Commonwealth Bank



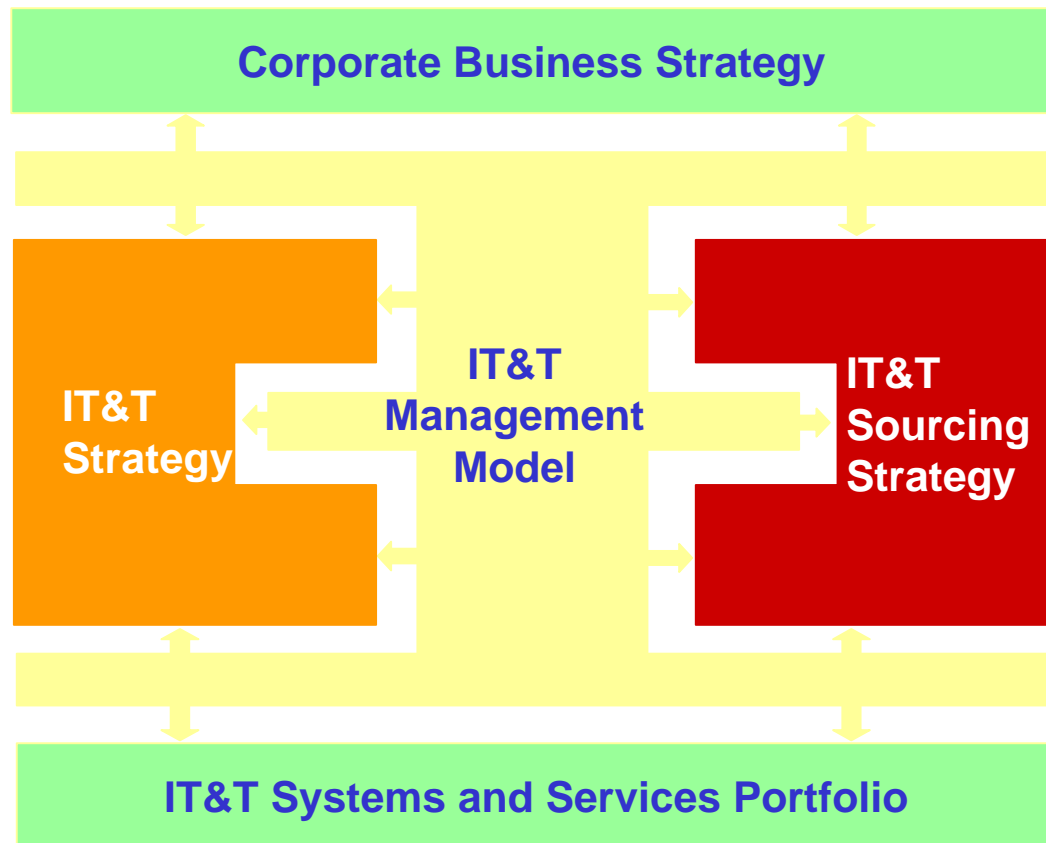
## ... and Australia's Most Accessible Bank\*

<b>Branches</b>	→	<b>1,000</b>
<b>Premium banking centres</b>	→	<b>13</b>
<b>Business banking centres</b>	→	<b>70</b>
<b>ATMs</b>	→	<b>4,000</b>
<b>EFTPOS terminals</b>	→	<b>126,000</b>
<b>Direct Banking calls per annum</b>	→	<b>146m</b>
<b>Registered NetBank users</b>	→	<b>2m</b>
<b>Personal lenders</b>	→	<b>700</b>
<b>Financial planners</b>	→	<b>700</b>
<b>Mobile bankers</b>	→	<b>200</b>
<b>3rd party advisers, brokers and agents</b>	→	<b>10,000</b>
<b>Postal and private agencies</b>	→	<b>4,000</b>
<b>EzyBanking store locations</b>	→	<b>700</b>





# Delivery of Corporate Strategy is enabled by the portfolio of IT&T systems and services



## Outcomes

BU's have flexibility to adapt IT&T to meet their individual business strategies and requirements

The Group benefits from scale by leveraging technology across multiple BUs where appropriate

Both individual BUs and the Group receive optimum value from technology investments

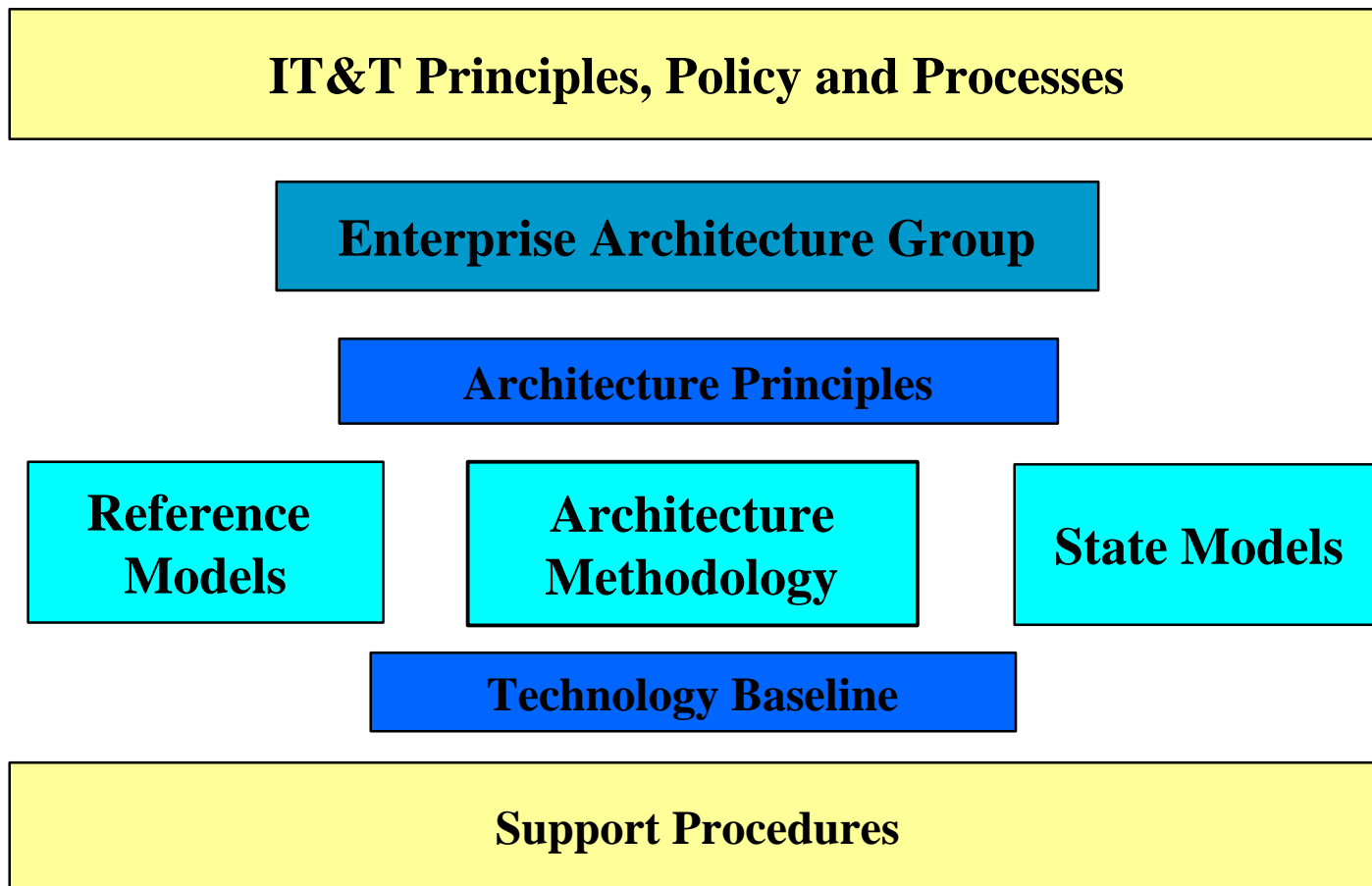


## **The mandate for IT&T Strategy and Architecture has been driven from the Executive team**

- ❑ **Direction from the CEO**
- ❑ **Enabler for Corporate and Divisional Business Strategies**
- ❑ **Bank owns IT&T Strategy & Architecture**
- ❑ **One Architecture for the bank**
- ❑ **Demonstrate that it is Right Architecture**
- ❑ **Ensure realisation of target architecture**



# Have re-established the Enterprise Architecture function over the last 18 months



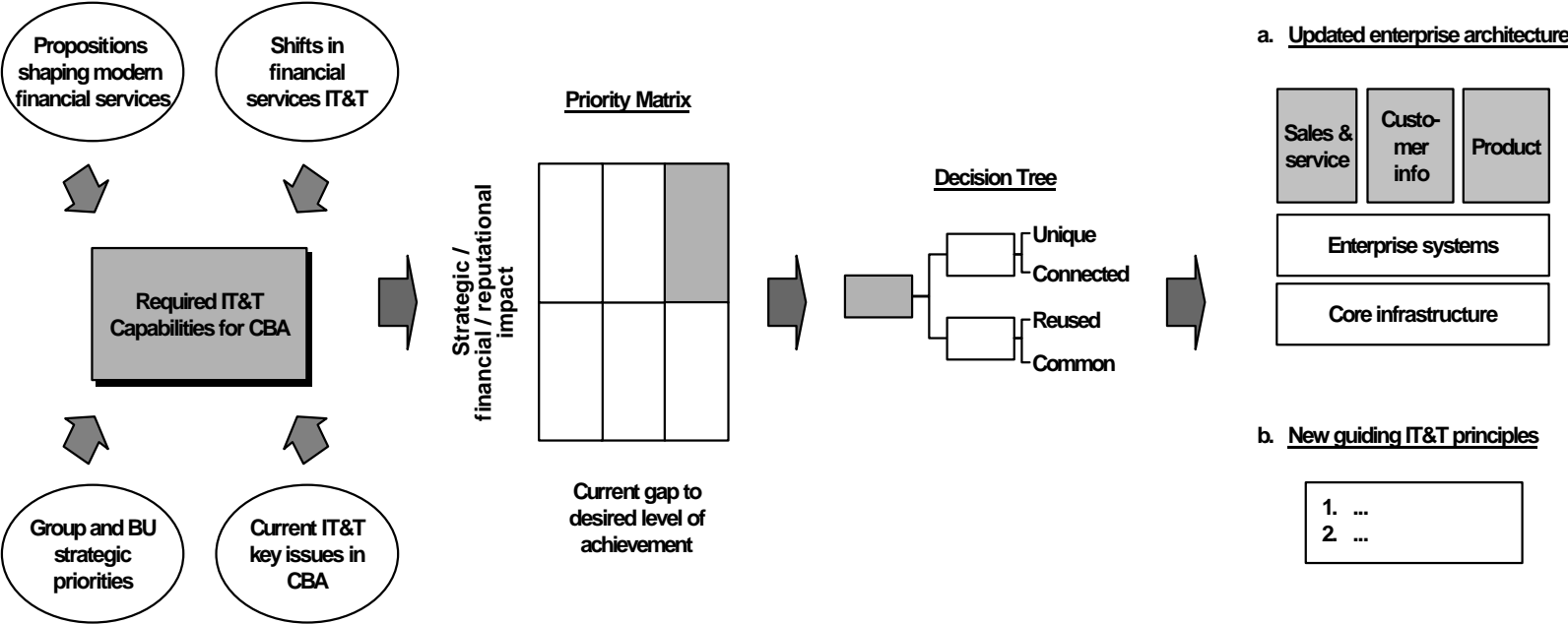
# Uses a four step approach in developing and regularly reviewing our Strategy & Architecture

1. Holistic Approach to Developing Required IT&T Capabilities

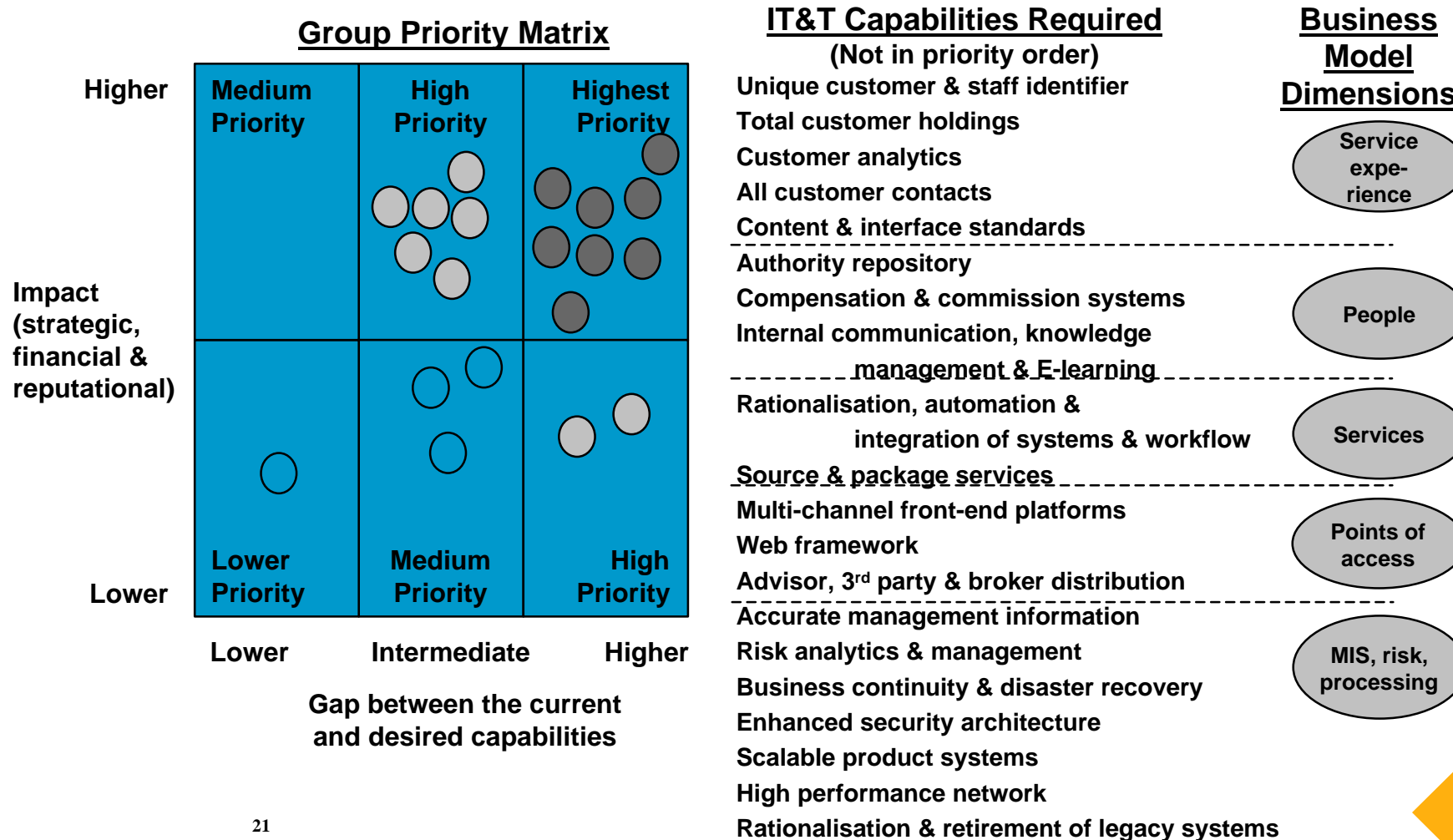
2. Prioritised IT&T Capabilities

3. Approaches For Implementing The IT&T Capabilities

4. Final Outcomes



# Business prioritisation of the identified IT&T capabilities is a key step in achieving alignment...



# ... followed by an agreement of the implementation approach for each capability

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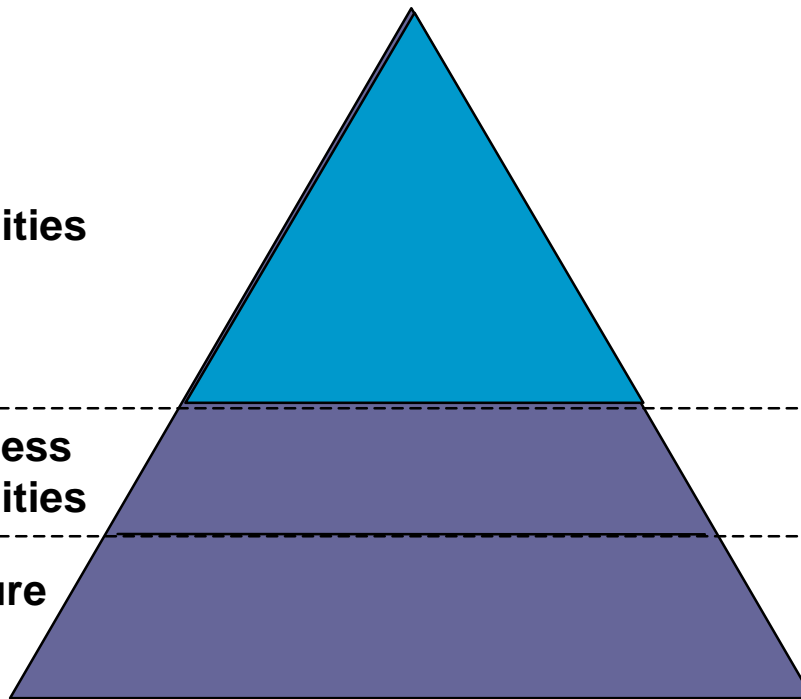
## IT&T Capabilities

## Implementation Approaches

**Business  
Systems Capabilities**

**Enterprise Business  
Systems Capabilities**

**Core Infrastructure  
Capabilities**



Unique

Connected

Reused

Common

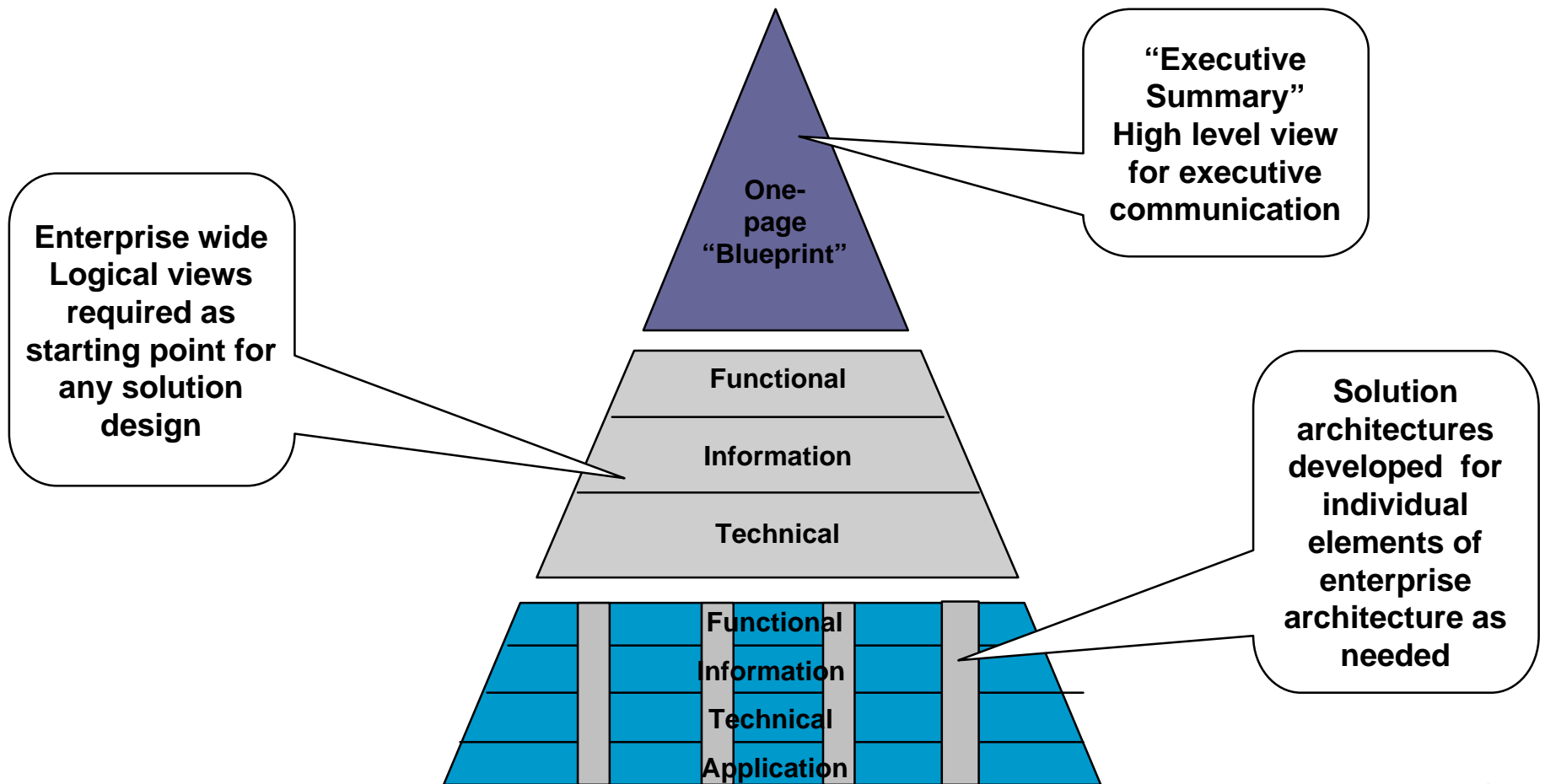
Common

Common



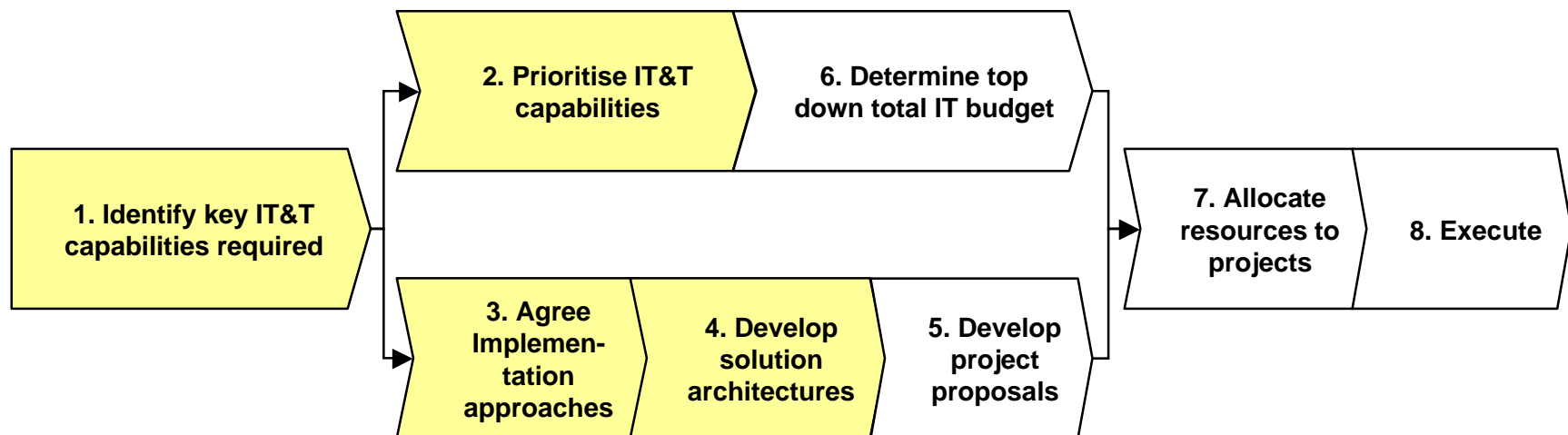
# Three levels of architectural detail are maintained to communicate the target environment

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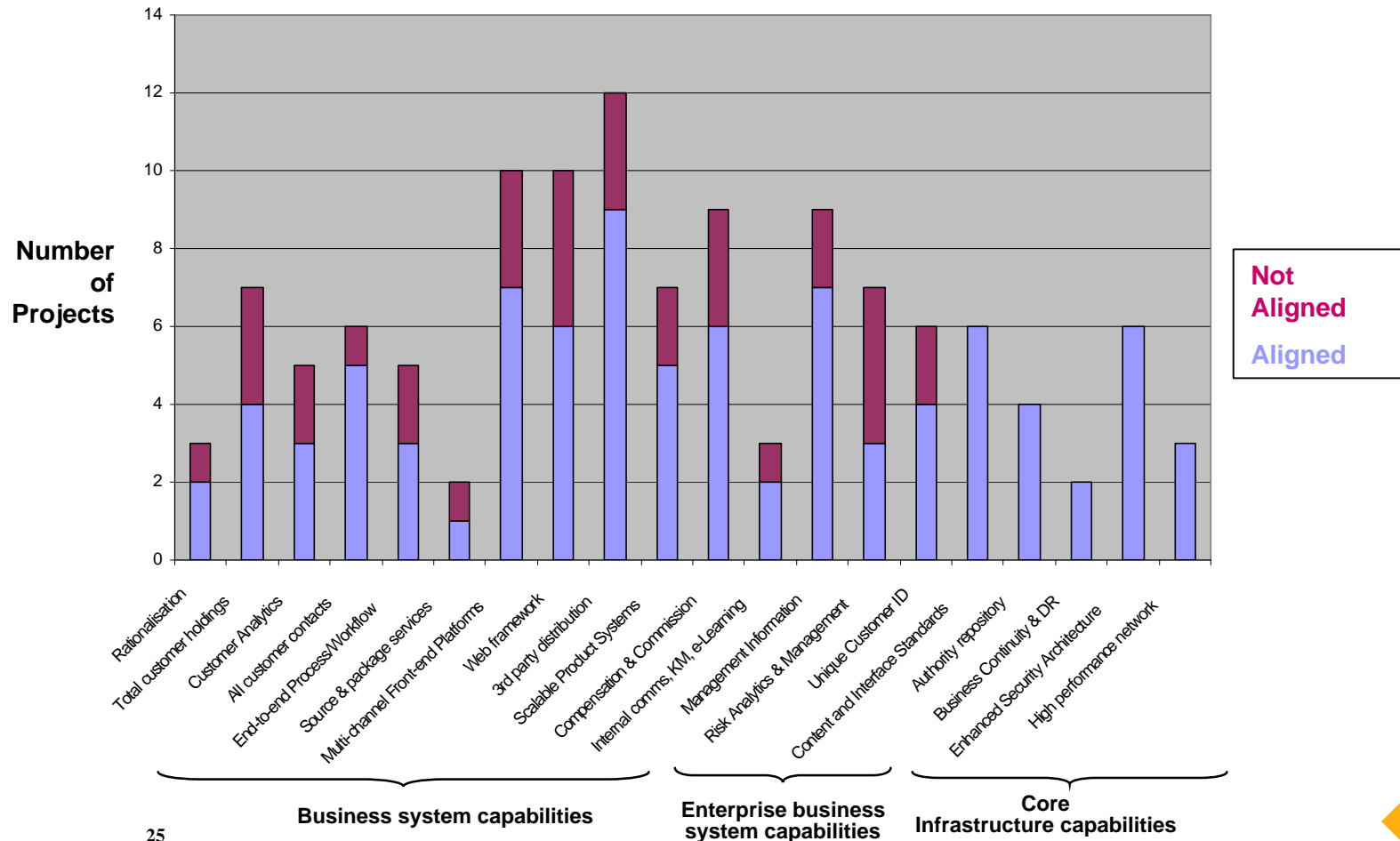
# Execution and use of the Enterprise Architecture is linked into the Business Planning Process

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# Analysis and review of project proposals is carried out in accordance with the agreed priorities and implementation approaches



# Chapter3: Westpac Banking Corporation

# Building a Business Architecture at Westpac

## - Overview

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- ❑ **Westpac's adoption of TOGAF**
  - **Motivation**
  - **Experience so far , strengths and weaknesses**
- ❑ **Business Architecture – why bother?**
  - **Westpac's “Ask-Once” challenge**
  - **Multi-channel interaction management**
  - **Legacy system**
    - **Building the dome**
  - **Beyond the Dome**
- ❑ **Business Architecture Components**
- ❑ **Business participation**
- ❑ **Architecture structure and operation**

# **Westpac adopted TOGAF as a vendor neutral model to use in communicating with our outsource supplier IBM / GSA**

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**Used to collect baseline data (overlap/gaps) and was applied against the following activities:**

- ❑ To provide scope and context information in documentation**
- ❑ As the model to map the current product & services portfolio**
- ❑ Embed the model into the way we describe and think about standards by providing context and scope information when our Standard's Review Groups discuss standards.**

**Gets value from applying TOGAF in these settings – however, it is not without issues:**

- ❑ Many readers are not familiar with the model and need education.**
- ❑ Some technologies don't fit neatly, e.g. BPM related technologies and service based architectures.**
- ❑ Does not provide useful guidance in defining a business architecture.**

# A complete enterprise architecture includes a business architecture

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- ❑ A business architecture “sits above” a technical architecture.
- ❑ It provides a model of business process and function.
- ❑ It provides a link between function and data.
- ❑ It allows technology planners and architects to understand gaps and overlaps in business function requirements and plan development.
- ❑ It provides a framework for assigning priority to function development by linking to business priorities.
- ❑ Building one is not a trivial task!

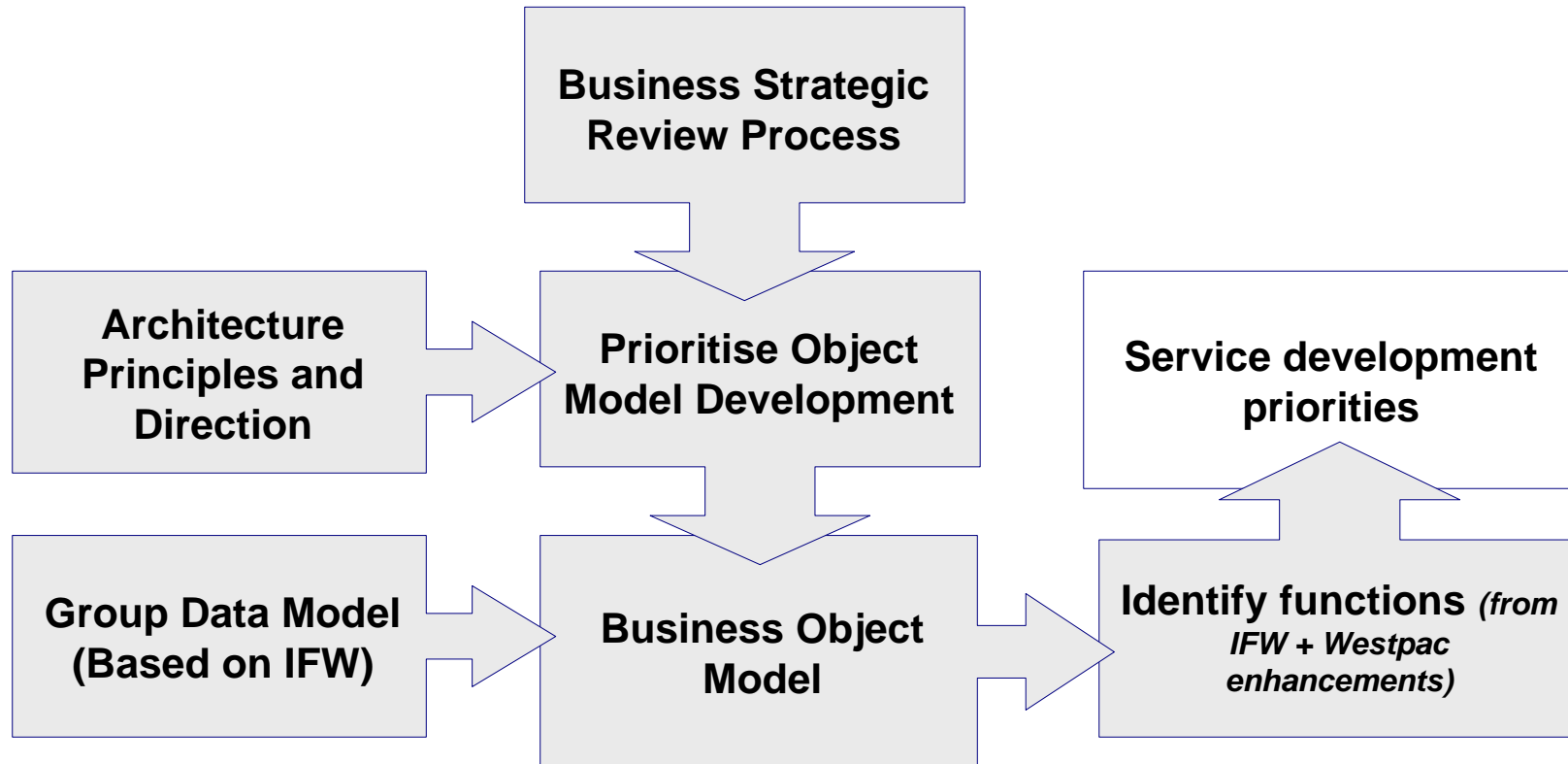
## Westpac has made good progress in building reusable services.

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- ❑ Westpac have built a strong base of reusable services – especially for customer information.
- ❑ Has developed and promoted a model called, “the Dome”, that is a service interface to legacy applications and data.
- ❑ The focus is now shifting from a heavy “data orientation” for services to a business process orientation – linking together functions from multiple applications to create reusable business services.
- ❑ Moving beyond the Dome means that Westpac needs a robust and comprehensive business object model. It is based on IBM IFW.

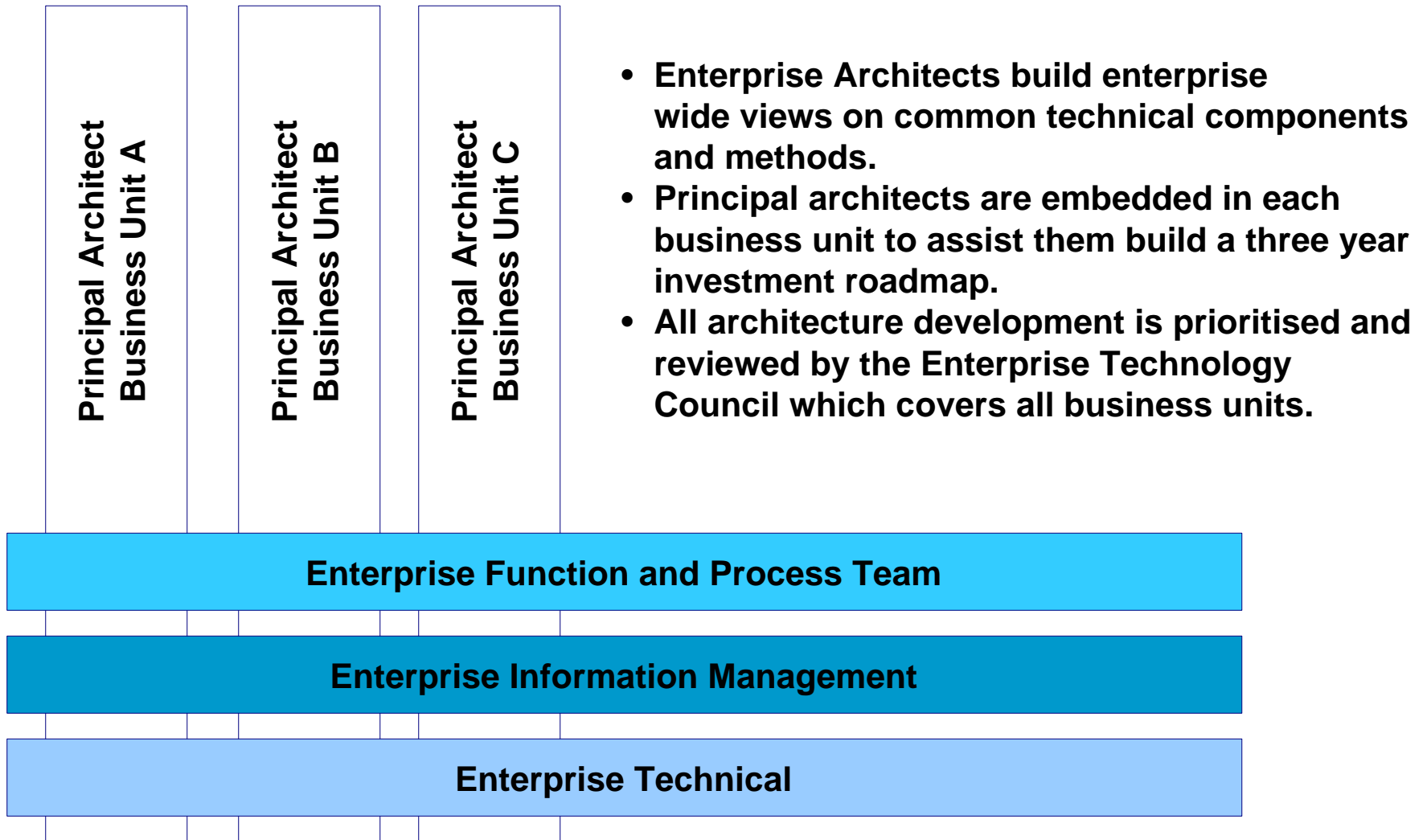
# The business architecture has a number of interlocking components

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# Governance is key to successful BA development

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## **SUMMARY :**

### **Key Success Factors**

#### **National :**

- **Unique EA / Solution Architecture interaction model**

#### **Commonwealth :**

- **Innovative IT &T capability matrix and agreement with business units**

#### **Westpac:**

- **Strategic alignment of Banking specific Business Architecture and TOGAF**