

# **Lifecycle Project Management**

**Steve McGrath**

**Manager (Asset and Project  
Management)**

**Main Roads/Queensland Transport**

**December 2006**

# 1. Introduction

The project management approach in this paper was developed within Queensland Transport, a Department of the Queensland Government

# Australia - Queensland



Australian Report Map  
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# Transport responsibility in Queensland

Queensland Transport (QT) manages

- Public transport and freight policy covering
- Land, sea and air, as well as
- Driver licensing, vehicle and vessel registrations.

Main Roads (MR) manages the road network

Queensland Rail manages the rail network

Port Authorities manage the ports



# Queensland Statistics

- 1.73M square km
- 7,400KM coastline
- 4M population
- 174,000KM roads
- 9,600KM rail track
- 130 Airports
- 20 sea ports
- 3.52M registered vehicles
- > 193,000 recreational vessels
- > 5,700 registered commercial vessels
- 0.6B Tonnes of freight per annum

# Project Management Improvement Approach

1. Develop starting methodology
2. Adopt Project Management Framework
3. Implementation - Culture change approach
  - Investigation Projects
  - Pilot Projects
4. Mentoring/Coaching Panel
5. Training
6. Support through a Project Management Office (PMO)

# 2. Definitions

- What is a Project?
- What is Project Management?
- What is a Project Management Framework?
- What is a Methodology?
- What is the Project Management Body of Knowledge (PMBOK)?

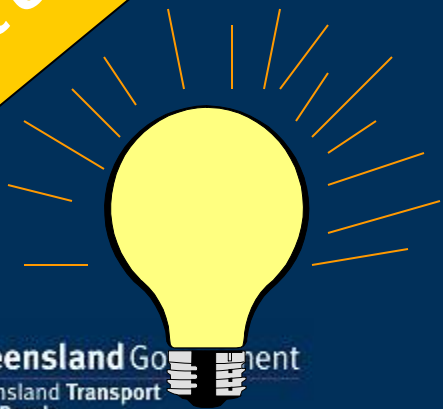
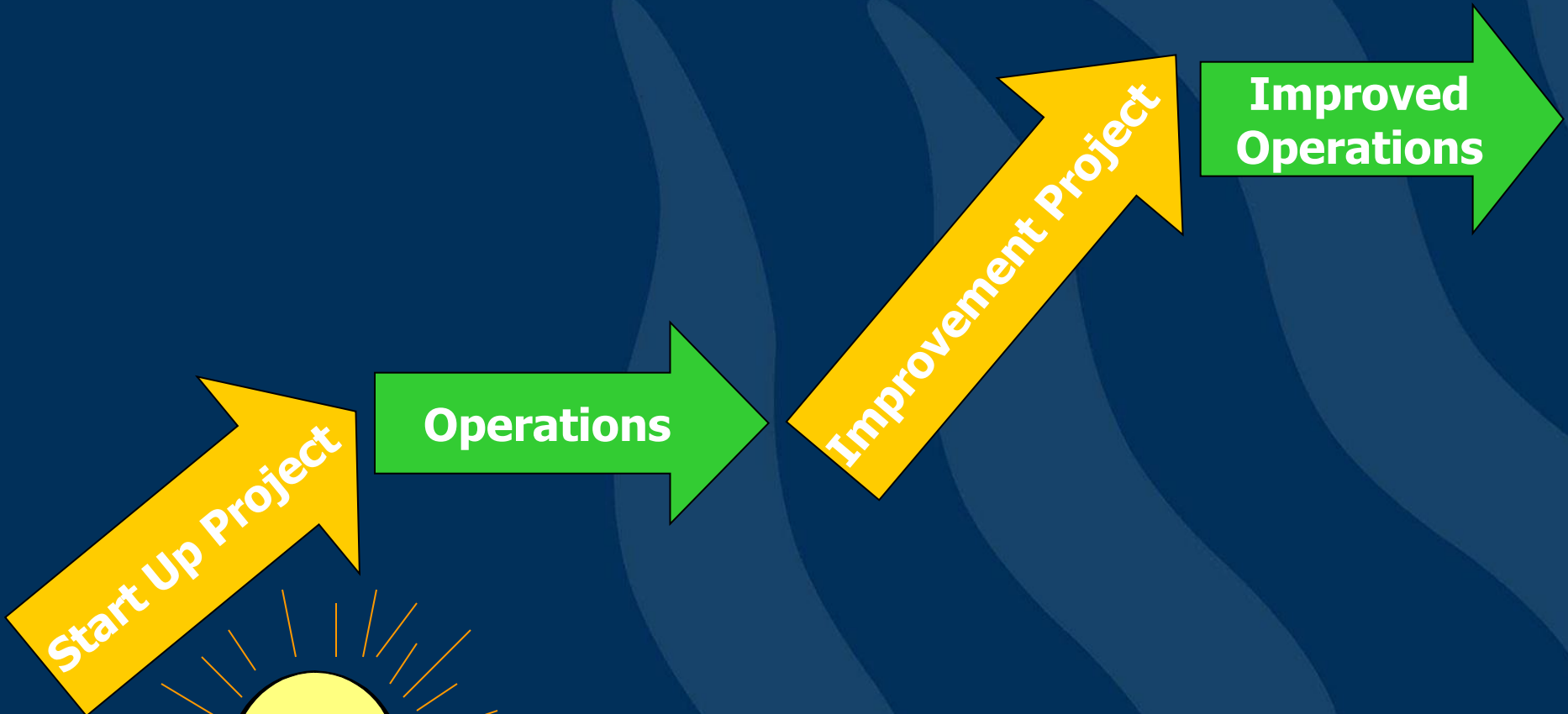
# What is a project?

A temporary endeavour  
undertaken to provide  
a unique product or service

(PMBOK Definition)



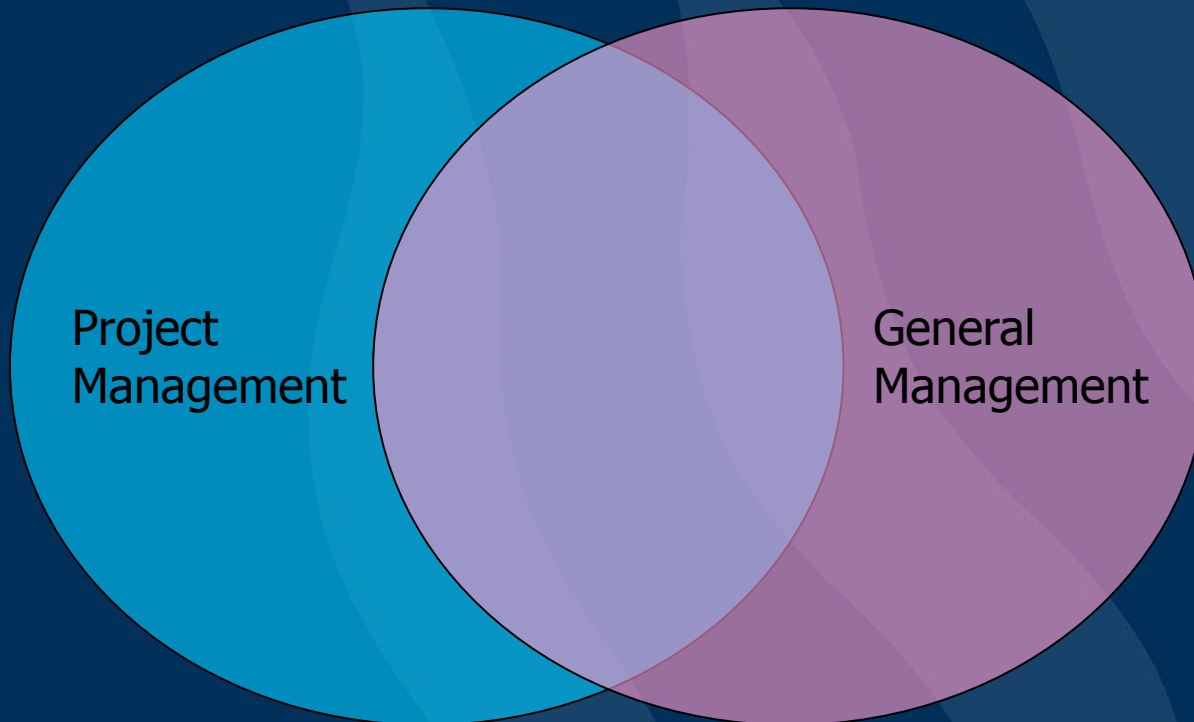
# Relationship between operations and projects



# What is Project Management?

- Project Management is the application of knowledge, skills, tools and techniques to project activities to meet project requirements.
- It is accomplished through the use of processes collected together into a methodology that covers the project lifecycle

# Skills Overlap



# Differences between general & project management (a)

Factor	Project	General/Production
Change		Evolutionary
Time		Ongoing
Quality		Continuous imp
Risk		Stable
Resource		Continuous
Nature		Repetitive
Scope		Exact and detailed
Cost management		Exact and known
Customer involvement		Minimal in production
Org structure		Hierarchical

# Differences between general & project management (b)

Factor	Project	General/Production
Change	Revolutionary	Evolutionary
Time	Finite	Ongoing
Quality	Quantum leaps	Continuous imp
Risk	Uncertain	Stable
Resource	Temporary	Continuous
Nature	Unique	Repetitive
Scope	Defined	Exact and detailed
Cost management	Degree of uncertainty	Exact and known
Customer involvement	Very high	Minimal in production
Org structure	Loose organic flexible	Hierarchical



# What is a Project Management Framework?

**Templates**

**Governance**

**Roles &  
Responsibilities**

**Methodology**

**Approvals**

**Policy**

**Principles**

# What is Project management Methodology?

- The way we do project management around here
- A series of steps and processes and procedures to “do” projects from concept through development (or planning) and implementation to finalisation

# What is the Project Management Body of Knowledge (PMBOK)?

## Methodology

### Elements

	Concept	Develop	Implement	Finalise
1. Scope				
2. Time				
3. Cost				
4. Quality				
5. HR				
6. Risk				
7. Communications				
8. Procurement				
9. Integration				
	Think	Plan	Do	Learn

# 3. The OnQ Framework



# Benefits of a Project Management Framework

Standardisation of:

- Project Governance
  - Gating / approval process
  - Delivery Methodology
  - Documents – Templates
- 
- Improving:
  - Project Management Skills
  - Communication Processes



# 3.1 Principles

- 1 – Both customer and team must be committed to the project
- 2 – Measures of success must be pre determined
- 3 – Planning – first plan, then do
- 4 – There must be a single point of responsibility for both the customer representative and the project manager
- 5 – Control procedures must be established before the project commences
- 6 – Trade-Off –Scope, Time, Cost and Quality must be mutually consistent and attainable
- 7 – The organisational cultural environment must support project teams

## 3.2 Development of Project Management Methodology (a)

- Start implementing technical works
- Then move upstream into project development/design
- Then into planning
- Then into project management as a discipline separate from the content

# Development of Project Management Methodology (b)

**Concept**

**Development**

**Implementation**

**Finalisation**

**Project Management**

**Establish Need**  
**Analyse Options**  
**Business Case**

**Determine Delivery Methods**

**Monitor**  
**-Cost**  
**-Time**  
**-Risk**  
**-Quality**

**Learnings**

**Work Management**

**Planning**

**Design**

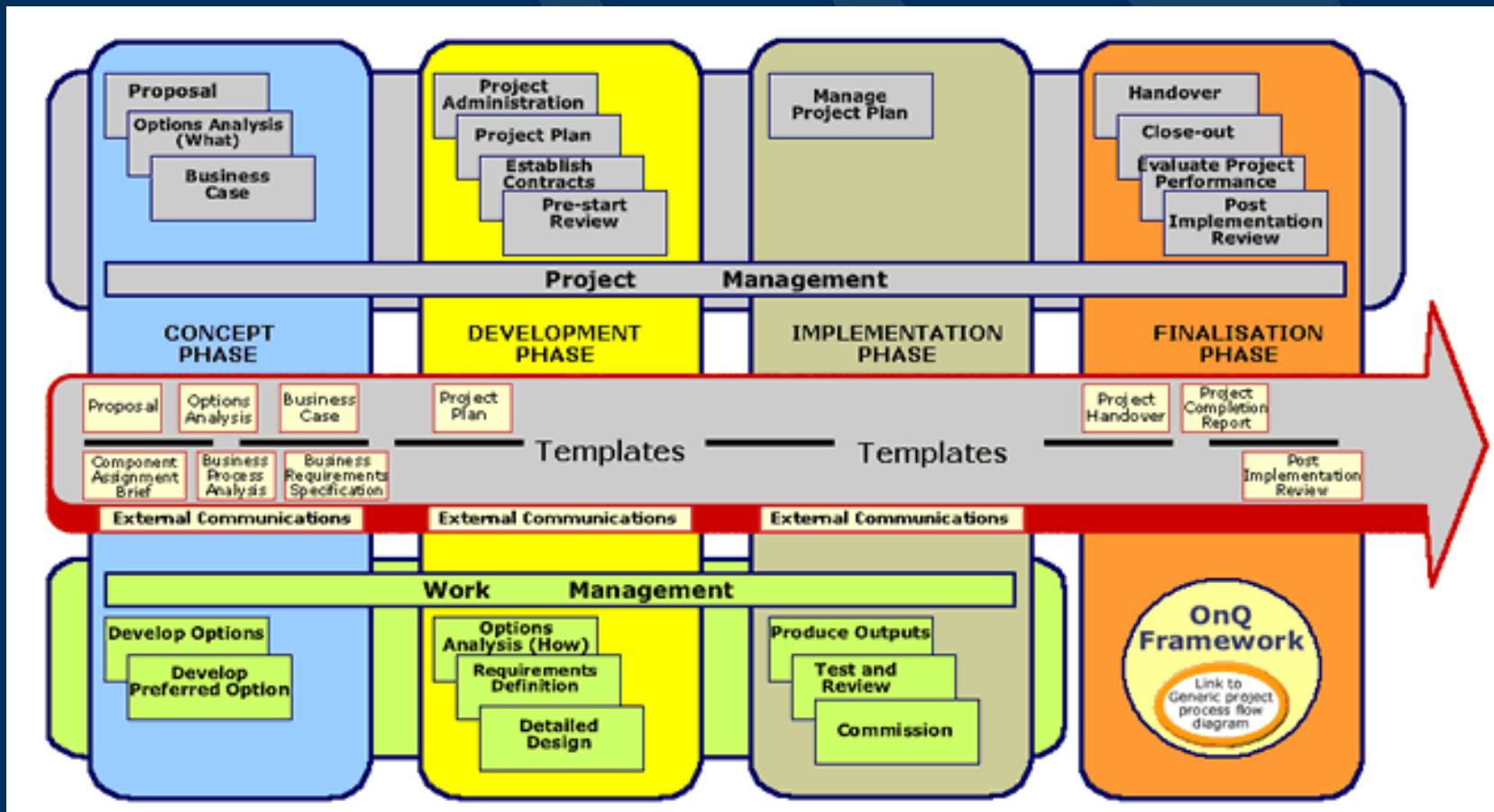
**Construct**

**Handover**

# Organizational Strategic planning for project management

- Is about the development of a standard methodology for project management.
- This methodology can be used over and over again on all of the projects that the organisation undertakes
- It does not guarantee success but does greatly improve the chance of success
- It provides consistency of action
- It need not be complicated

# OnQ Methodology - Process Flow Diagram





# Successful Project Models

Use a  
Methodology

Experienced  
Project Manager  
Leads Team

Team members  
All experienced in  
Project Management

# Methodology Benefits

- Methodology provides a QA system for the generic project management aspects, as distinct from the technical content
- Reduces risk from inexperienced project managers
- Enables inexperienced project managers to perform above their level of experience

# 3.3 Templates

- Project Proposal
- Component Assignment Brief
- Option Analysis
- Business Process Analysis
- Business Requirements Specifications
- Business Case
- Project Plan
- Project Handover Report
- Project Completion Report
- Post-Implementation Review

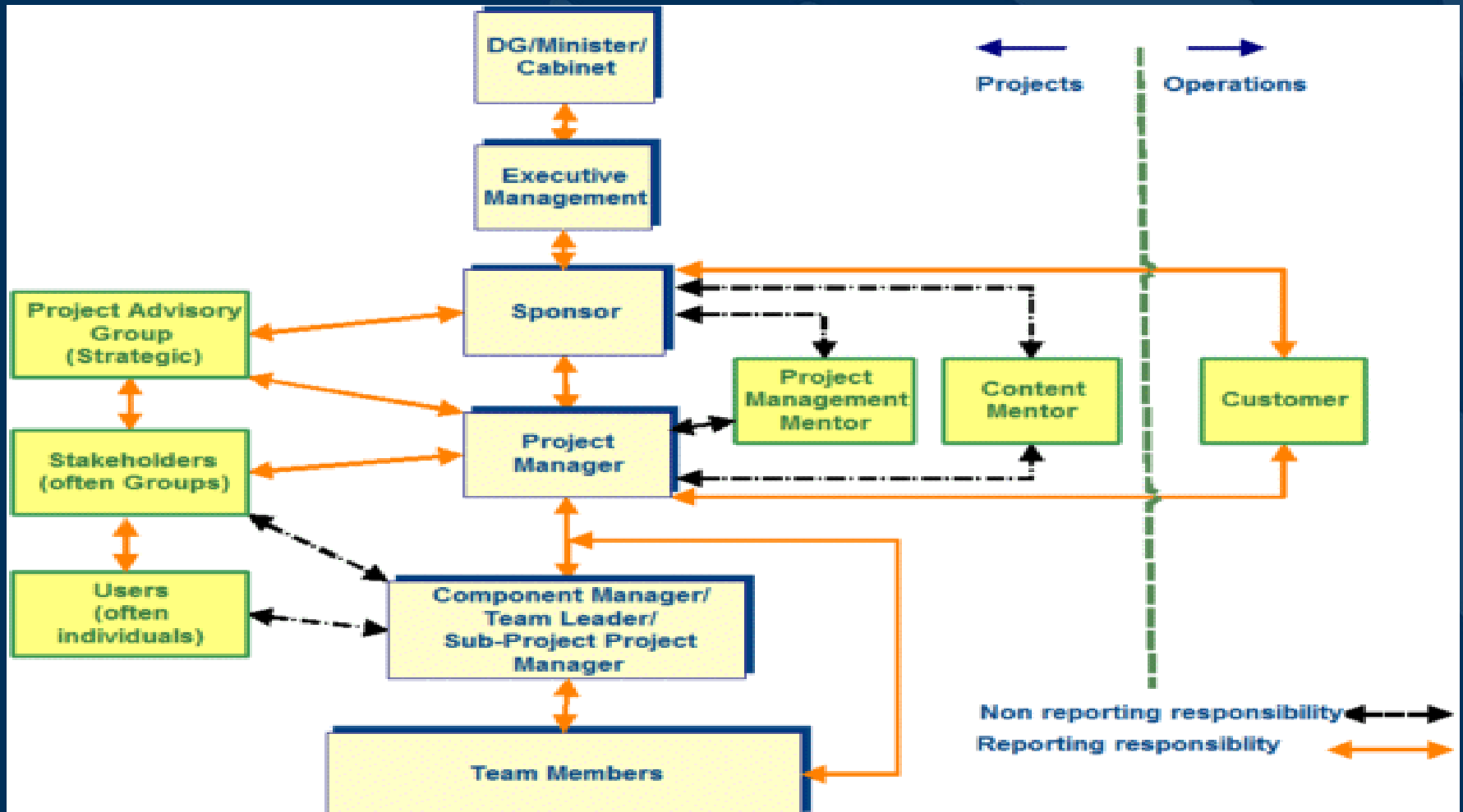
# Project Proposal Contents

1. Introduction - Purpose of this document, References, Definitions
2. Project Customer, Sponsor and Project Manager
3. Stakeholders
4. Background
5. Current situation
6. Purpose/objectives

# Project Proposal (cont)

7. Scope of project - In scope, Out of scope, Related Projects, Constraints, Urgency, Assumptions
8. Impacts
9. Method to date
10. Risks/issues
11. Findings
12. Recommendation
13. Plan to next stage - Action and key dates, Resources and cost forecast

# 3.4 Project Governance Model



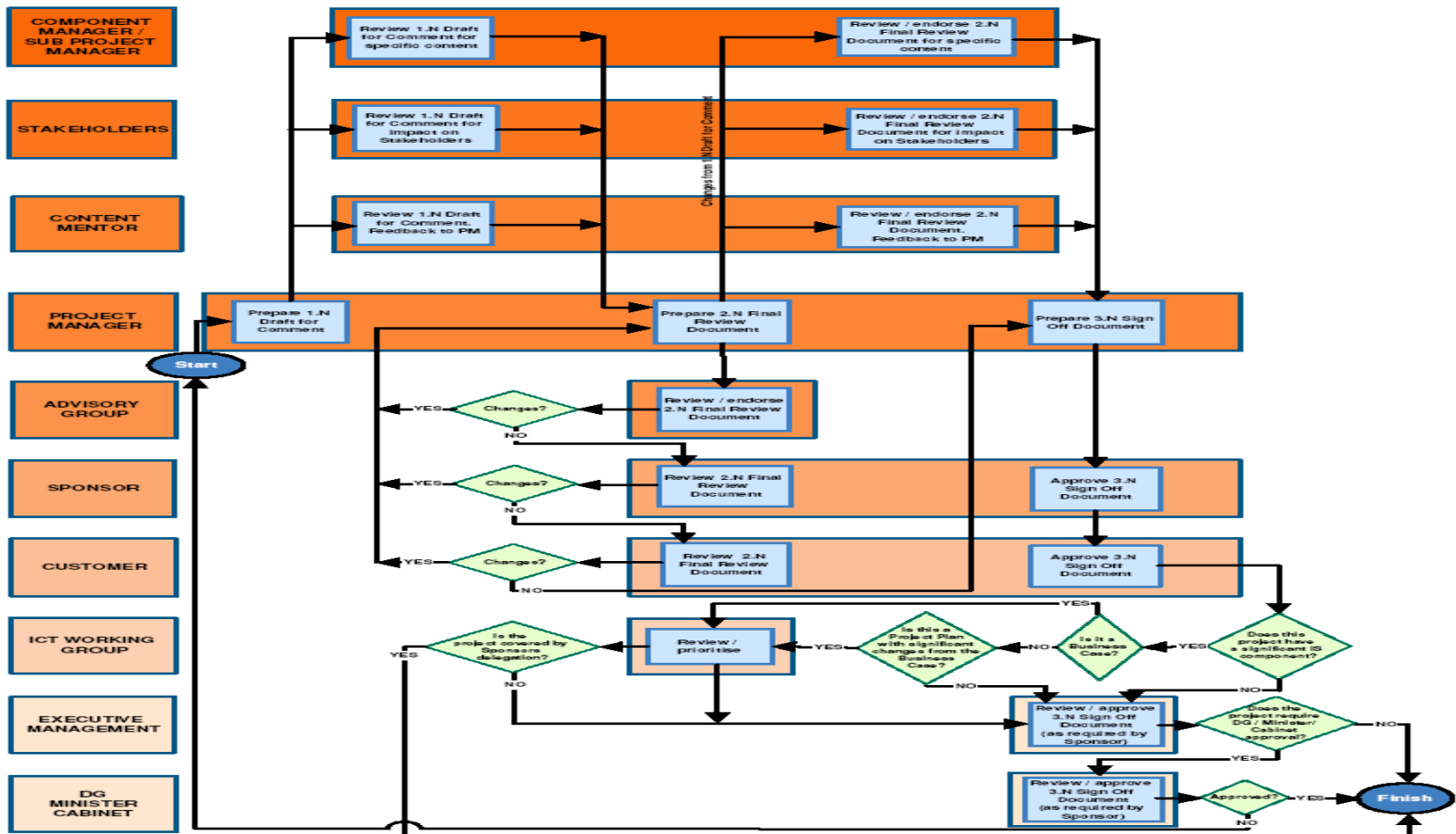
# Roles & Responsibilities

- **Customer** – a person with authority, nominated to represent the organisation(s) that receives the business benefit of the project.
- **Sponsor** – a person with authority nominated to represent the organisation(s) delivering the project.
- **Project Management Mentor** – a person nominated to assist/advise the project manager by providing project management oversight to the project.
- **Content Mentor** – a person nominated to assist/advise the project manager by providing content oversight to the project.
- **Project Manager** – a person appointed to manage a project from initiation through until project finalisation.
- **Component Manager** – a person who manages a project component.
- **Project Advisory Group** – the group advising the sponsor and project manager.
- **Users** – people and organisations that will use the output of the project.



# 3.5 Approval Processes Model

PROJECT DOCUMENTATION REVIEW / ENDORSEMENT / APPROVAL PROCESS  
BUSINESS CASE



# 4. Implementation

## Alternative Approaches to Project Management Improvement

1. Based around a Tool/Software
2. Based around a framework

QT chose the latter

# Culture Change Approach in QT

Stage 1 Investigation Projects

Stage 2 Pilot Projects

Stage 3 Organisational Policy  
Development

Stage 4 Training Delivery

# Investigation & Pilot Projects

## Investigation Projects

- People for People (P4P)
- Inner Northern Busway
- Theft Reduction Initiative Program

## Pilot Projects

- Palm Island Airstrip Reseal
- Public Transport Strategy
- Commercial Ship Information & Registration Management System
- Urangan Boat Harbour dredging & re-development

# Mentoring Approach



# Some cultural issues

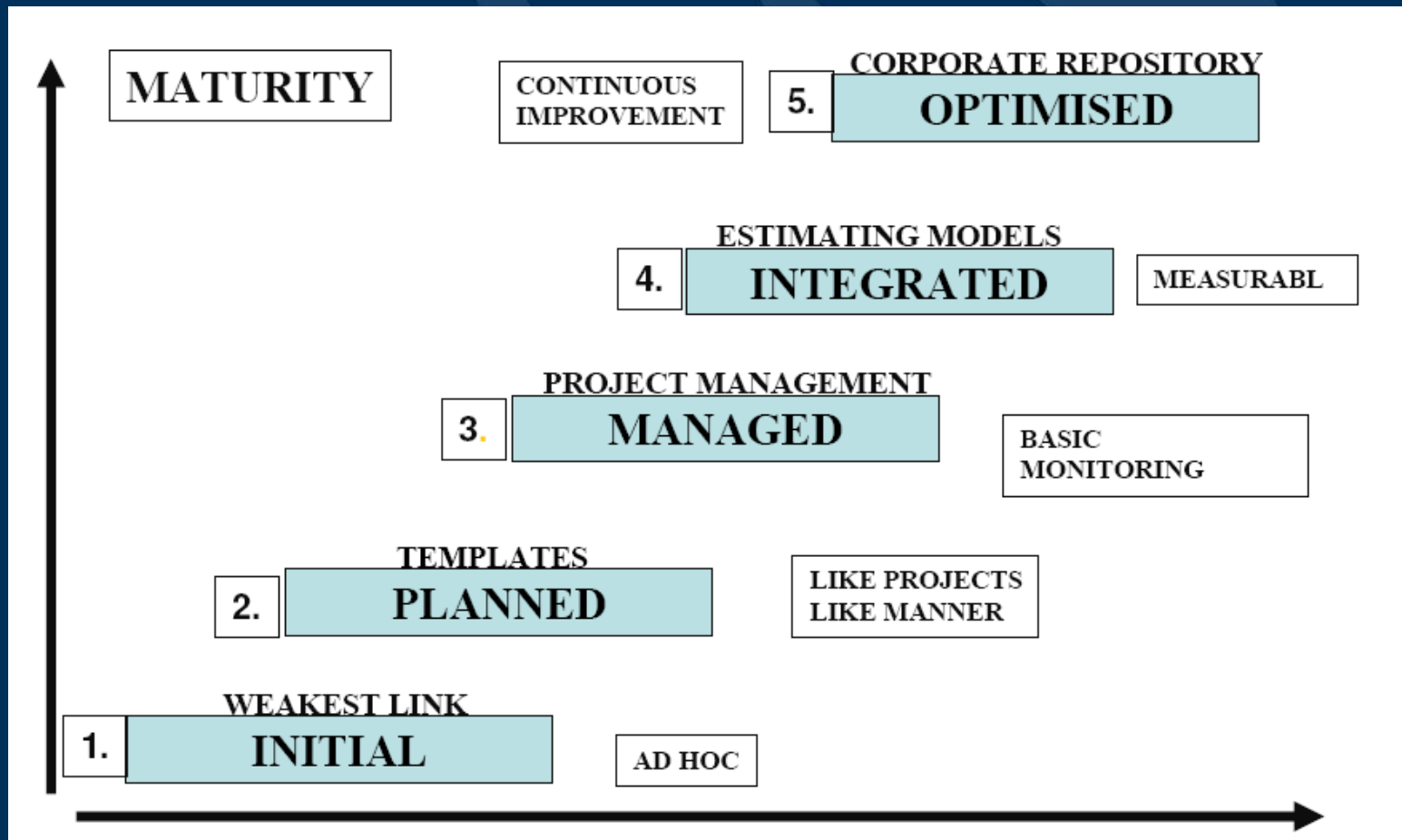
- We don't need Project Management
- PM is an IT/infrastructure tool – not relevant to me
- We know how to manage projects
- We don't have projects
- We work under political imperatives – no time for Project Management
- Our work doesn't need that sort of structured approach

# Maturity Model Levels

- 1. PMBOK - base level entry**
- 2. Methodology**
- 3. Governance**
- 4. Project friendly systems  
integrated into the business**
- 5. Knowledge management in place**



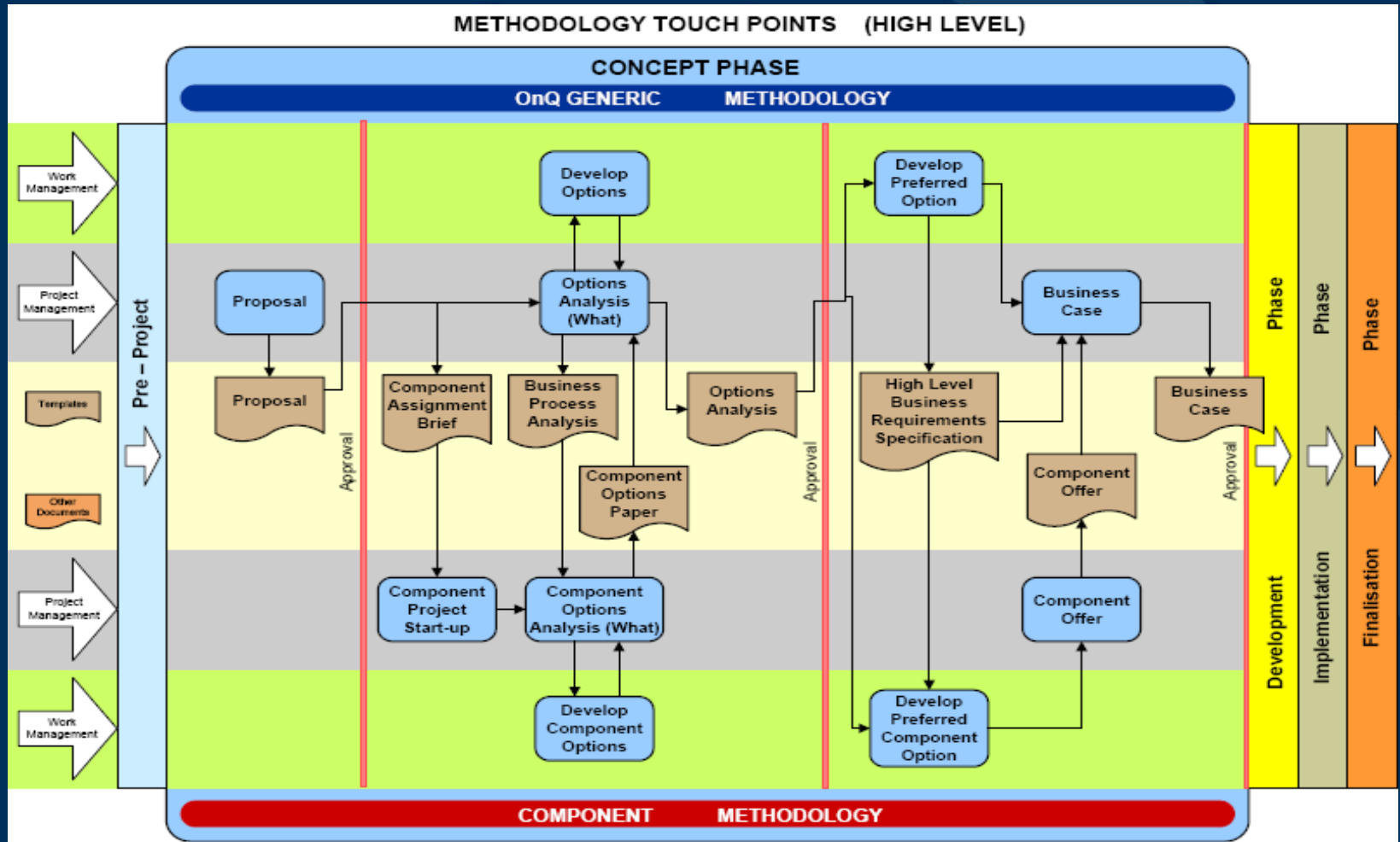
# Maturity Model



# What was Delivered in QT?

- The OnQ framework
- A component methodology with “touch points” relating to the overall methodology.
- A blueprint for how a business can work effectively with its commercial units.
- Tailored training packages.
- Two complete sets of example templates.

# Touch Points



# 5. Mentoring/Coaching Panel

- A mentor familiar with the new framework was provided into key projects;
- This was a key success factor that ensured existing projects weren't delayed by introducing a new system;
- The project support office then went through the procurement process and retained a panel of mentors; and
- A mentor could then be provided quickly to projects in trouble.

# 6. Training

- The training built upon the mentoring
- Courses were developed targeting 3 culture change levels
  - Project Managers (10 Days)
  - Project Team Members (4 Days)
  - Executives/Program Managers (3 Days)

# 7. Project Management Office (PMO)

Two Alternative Models:

1. PMO runs all the projects
2. PMO support other parts of the organisation in managing projects

QT & MR adopted the second model

# 8. Outcomes Achieved in QT (1)

- Savings of \$1M each on two projects
- Reduction in costs and time on projects
- Reduction in rework time and costs post implementation
- Consequent reduction in resource requirement
- Benefits realisation through separating these roles of customer and sponsor
- Project managers
  - became aware of the delays approvals can cause
  - increased their attention on stakeholder involvement
- Organisation and project managers viewed projects from end to end



# Outcomes Achieved in QT (2)

- Provided a means to not proceed with a project
- Provided a process for retaining corporate learnings & developing knowledge management
- Improved internal business relationships
- Standard documentation reduced the disruption of staff turnover
- The number of steering committees substantially reduced
- Less time spent by Executive Directors and Directors on Steering Committees
- Avoided scarce resources wasting time on figuring out process
- Provided more time for creativity on content

# Outcomes beyond QT

- Queensland Government's whole of Government Project Management Group adopted the project management principles for use across the Queensland Public Service in 2002
- OnQ was adopted in 2002 by Main Roads for its \$1B+ (now \$2B) per annum civil infrastructure program
- OnQ successfully applied in a manufacturing environment by Queensland Rail workshops
- The OnQ strategic planning process embedded in the Integrated Planning Framework (ITPF)
- OnQ is currently being implemented in the Coordinator General's Department

# Common Project Problems addressed

- Benefits not realised
- Project outcomes not supported by operations after delivery
- Projects
  - Run late
  - Go over budget
- Developed solutions don't work effectively or aren't accepted by stakeholders
- Rework

# 9. Key Learnings

## a) Stakeholders

- Involve stakeholders early
- Bring stakeholder representatives on to the project team

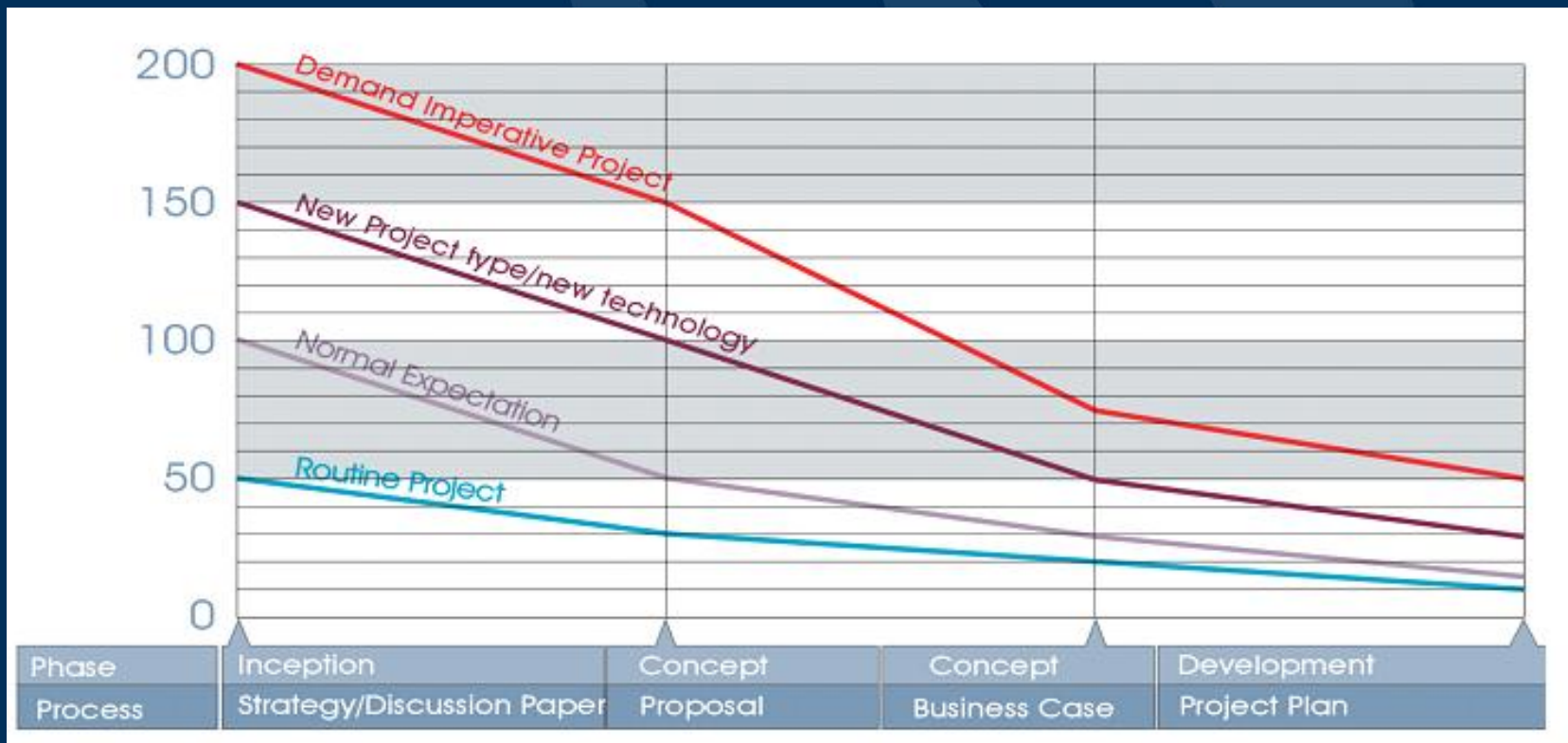
## **b) Factors easily overlooked in standard risk registers**

- Robust Option Analysis in Concept Phase
- Specify up front the business benefits to be realised and success criteria for project output and outcomes
- Appropriate governance arrangements (More saving from this than from methodology)

## c) Governance

- Don't have complex committee structures
- Ensure all projects have a nominated customer
- Separate those who are paying to have the project delivered from those who are trying to prevent it.

# d) Contingency Percentages to be added to Project Estimates

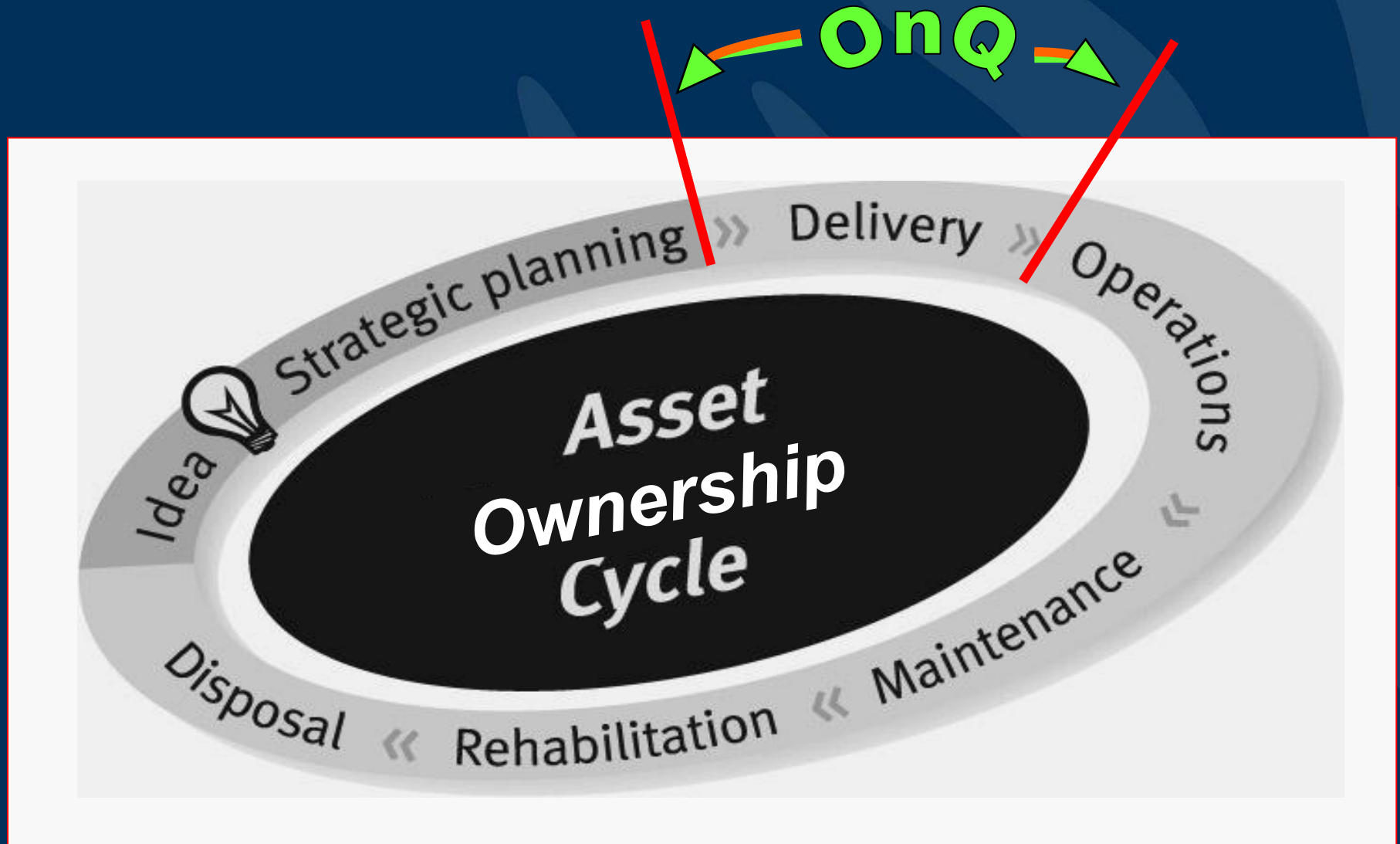




# e) Generic Methodology can be applied to all project types

- **Business & strategy development projects**
  - Theft Reduction Initiative Program
  - Passenger Transport Strategy
  - Digital Driver's Licence
  - TransLink
  - Transport Information Strategy
- **HR change projects**
  - P4P
- **Infrastructure from \$100,000s to \$100sM**
  - Inner Northern Busway & stations
  - Urangan Boat Harbour
  - Palm Island Airstrip
  - All road projects in MR's \$1B pa program
- **Manufacturing**
  - QR workshops locomotive reconditioning

# f) Application to Asset Ownership Cycle



# g) Organisational effort

- After five years success has been significant
- The initiative has reached critical mass and usage continues to increase
- However, constant effort and attention is required to both hold the gains and make further advancement

# 10. Case Study - Translink

**TransLink was established with a budget of \$80M**

**It's purpose was to**

- **Integrate public transport services in South East Queensland (Integrated Ticketing) &**
- **provide a base for more equitable distribution of services across the area**

# TransLink Challenges

- Multiple operators
- Conflicting fare zoning & charging
- No intermodal transfer
- Unequal distribution of services (some frequent services empty and some infrequent services full)

# TransLink Response

- Adopted OnQ methodology
- Accepted a mentor/coach provided by OnQ

The Translink team worked hard work and accepted the mentor's advice on:

- a) Process
- b) Governance
- c) Structure
- d) Stakeholders
- e) Strategy

# a) Process Advice

- Adopted the OnQ methodology
- Completed the necessary templates
- Developed a comprehensive project plan
- Followed the approval processes
- Focused on project planning



## **b) Governance Advice**

- Identified the real customer
- Gave the customer power to control
- Gave the sponsor power to deliver
- Reduced the power of others to obstruct through committee structure
- Ensured stakeholder opinion was obtained and taken into account

## c) Structure Advice

- Establish appropriate committee structures – advisory board, rather than steering board
- Accepted an OnQ mentor
- Appointed a project manager

## d) Stakeholder Advice

- Identified key messages and key stakeholders
- Co-ordinated stakeholder approaches
- Developed a communication plan
- Introduced dedicated change manager
- Developed a change management plan

## e) Strategy Advice

- Focused team on planning – developed a project plan
- Held a risk management workshop
- Implemented Risk Radar
- Developed a network plan and a services plan for the South-East Queensland public transport network

# The Result

- Stage 1 Intergrated Ticketing finished on time and on budget
- Integrated ticketing well received by the community
- Services rationalisation achieved
- 20% increase in public transport patronage achieved in 2 years

# 11. Conclusion

This paper has:

- ◆ Outlined the project Management improvement journey Queensland Transport went through
- ◆ Elaborated on the OnQ project management framework and methodology adopted
- ◆ Covered the organizational learnings from this
- ◆ Given a strategic level case study

It has attempted to provide the context for the various elements of project management that will be presented over the next two days.

# Web Address

OnQ is available on the internet at:

[www.transport.qld.gov.au/onq](http://www.transport.qld.gov.au/onq)

**Steve McGrath**

**+617 33378174**