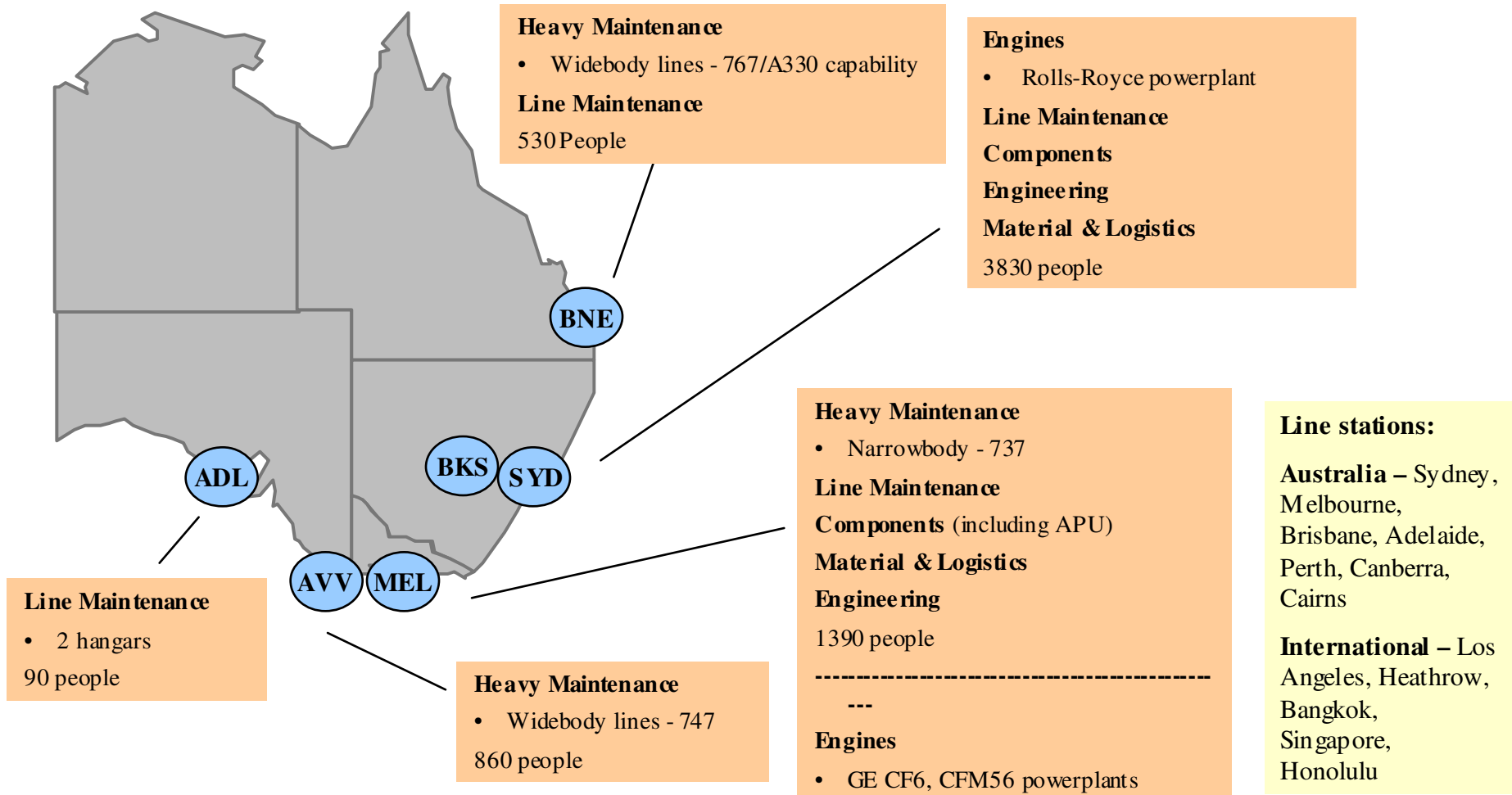
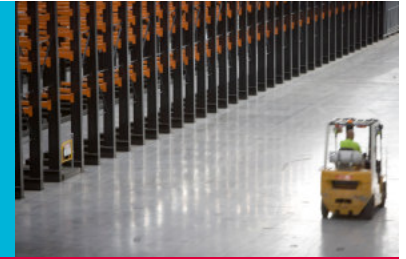


# Qantas Engineering Change Journey

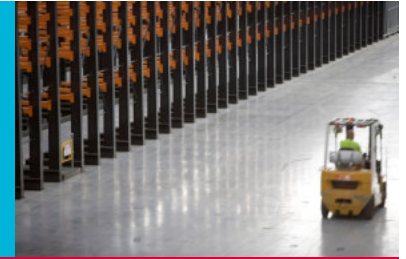
Manager Continuous Improvement  
Heavy Maintenance Victoria  
Patrick McFeeney

# Qantas Engineering Footprint



# The Global Airline Industry

- The challenges we face



There still continues to be a number of factors in which Qantas has no control and they significantly impact the industry in which we compete:

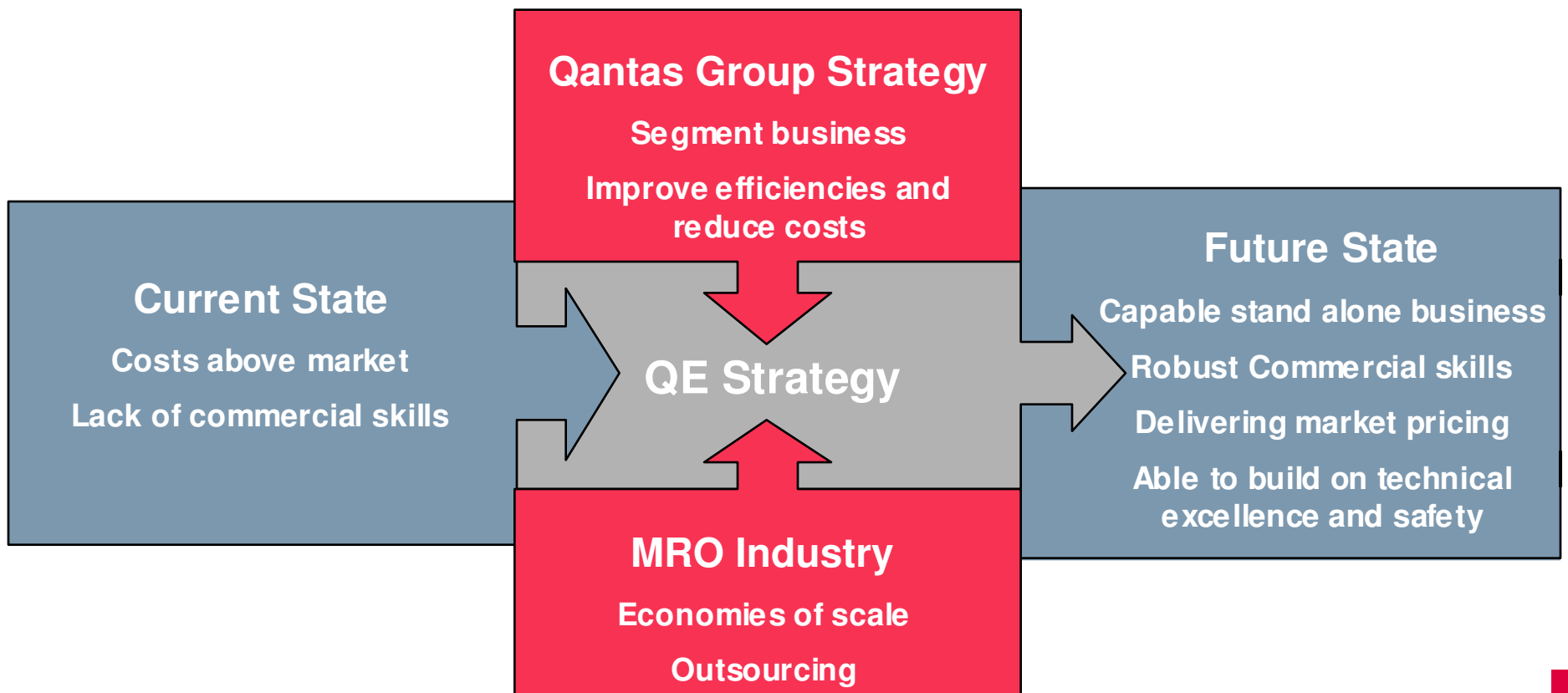
- Fluctuating fuel prices
- Increased security measures
- Emergence of low cost start-ups
- Changing customer needs
- Open skies
- Technology changes
- New aircraft models
- Increased regulatory demands
- Mergers and alliances



**Qantas Engineering**

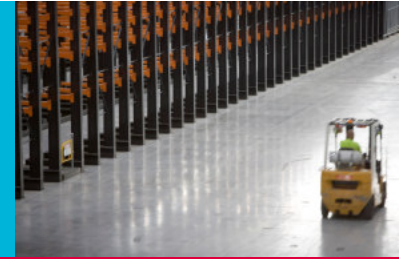
# Drivers of Change

- What this means for Qantas Engineering



# The First Steps

- What needs to change

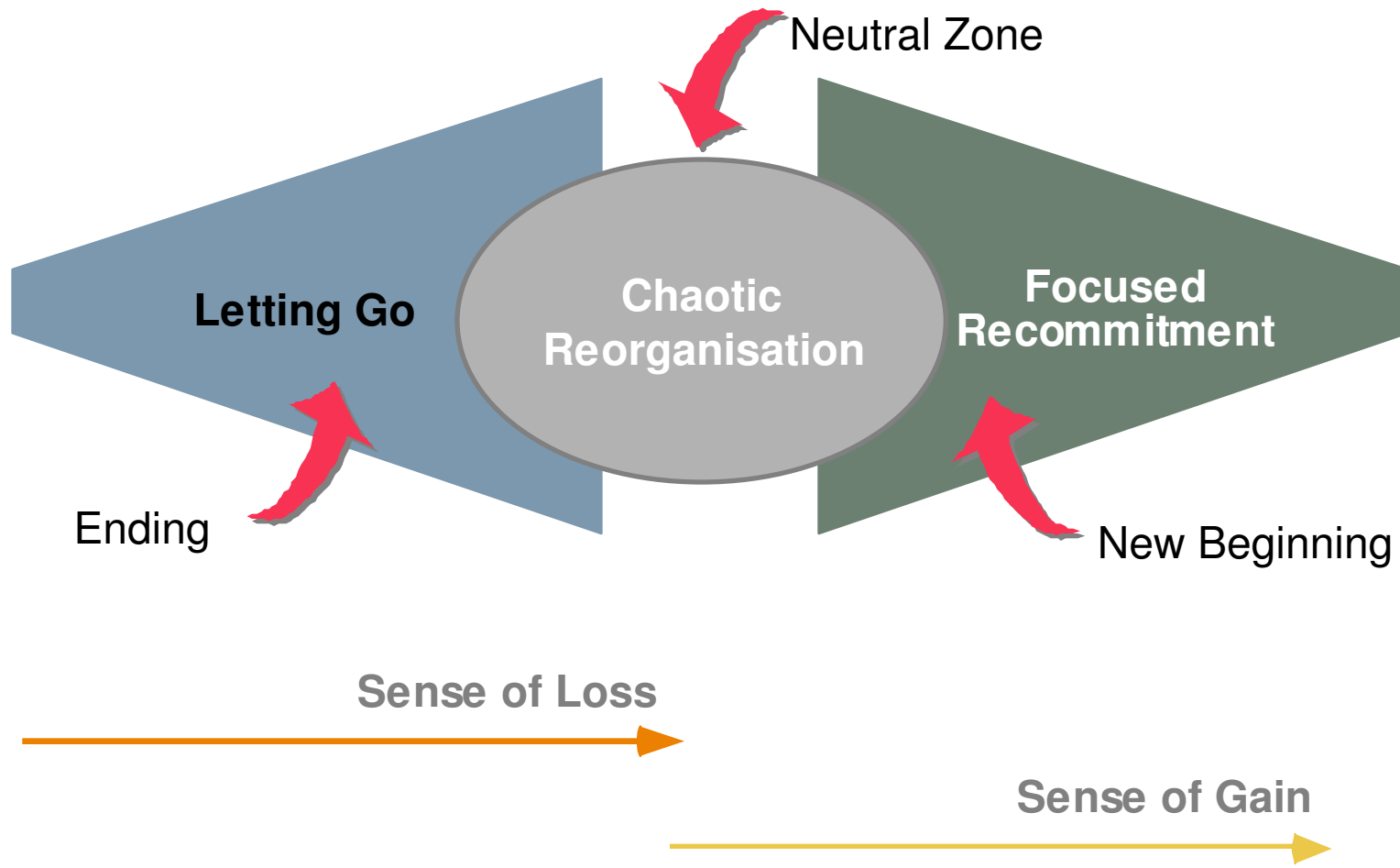
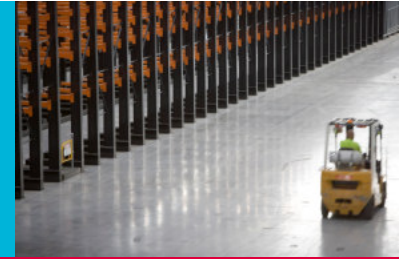


**We started with leadership and it has been the context that underpins our change**

- The identification stage was a pivotal moment of realisation
- It was the “Light Bulb” that change needed to be role modelled by the top team
- Development of new operating style, behaviours, language and metaphors
- Critical need to build effective partnerships within and outside the business
- Focus on task, team & individual
- Multiple application tools
- Leadership/Team Building Challenge
- Protocols - Behaviours



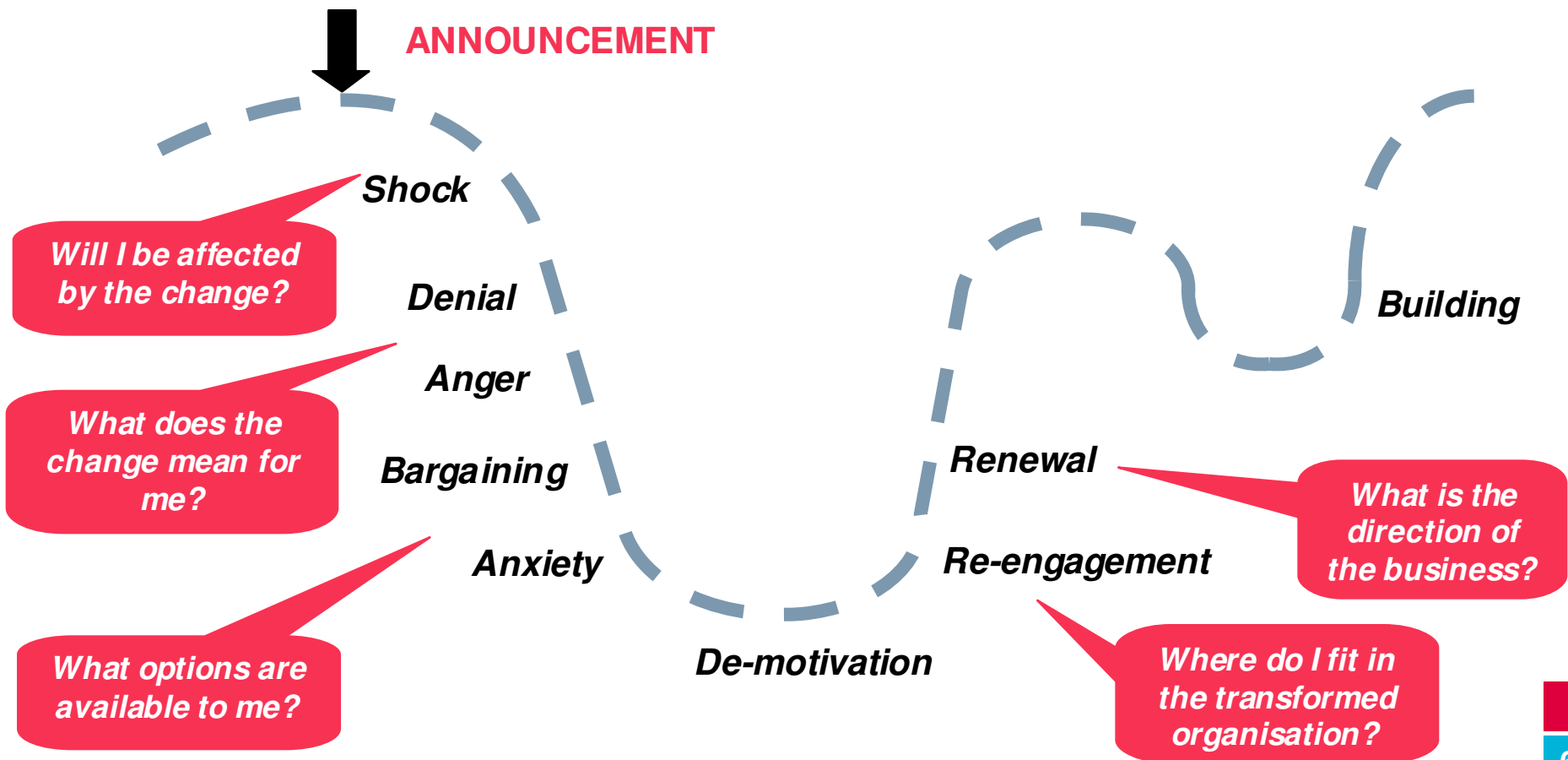
# A pre-requisite for fundamental change is letting go of the past and present ...



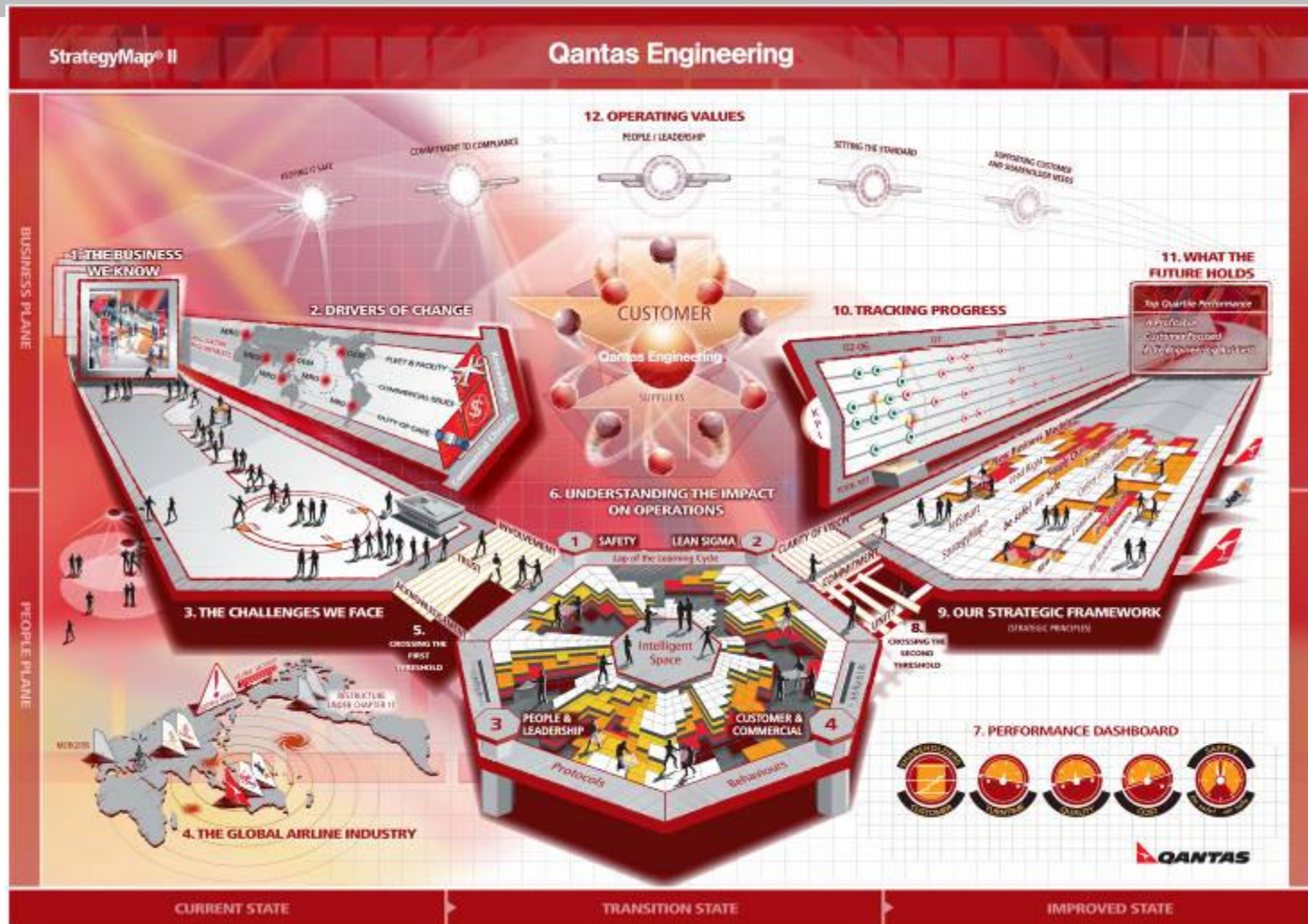
# Managing people through significant change



Employees will experience a wealth of different emotions

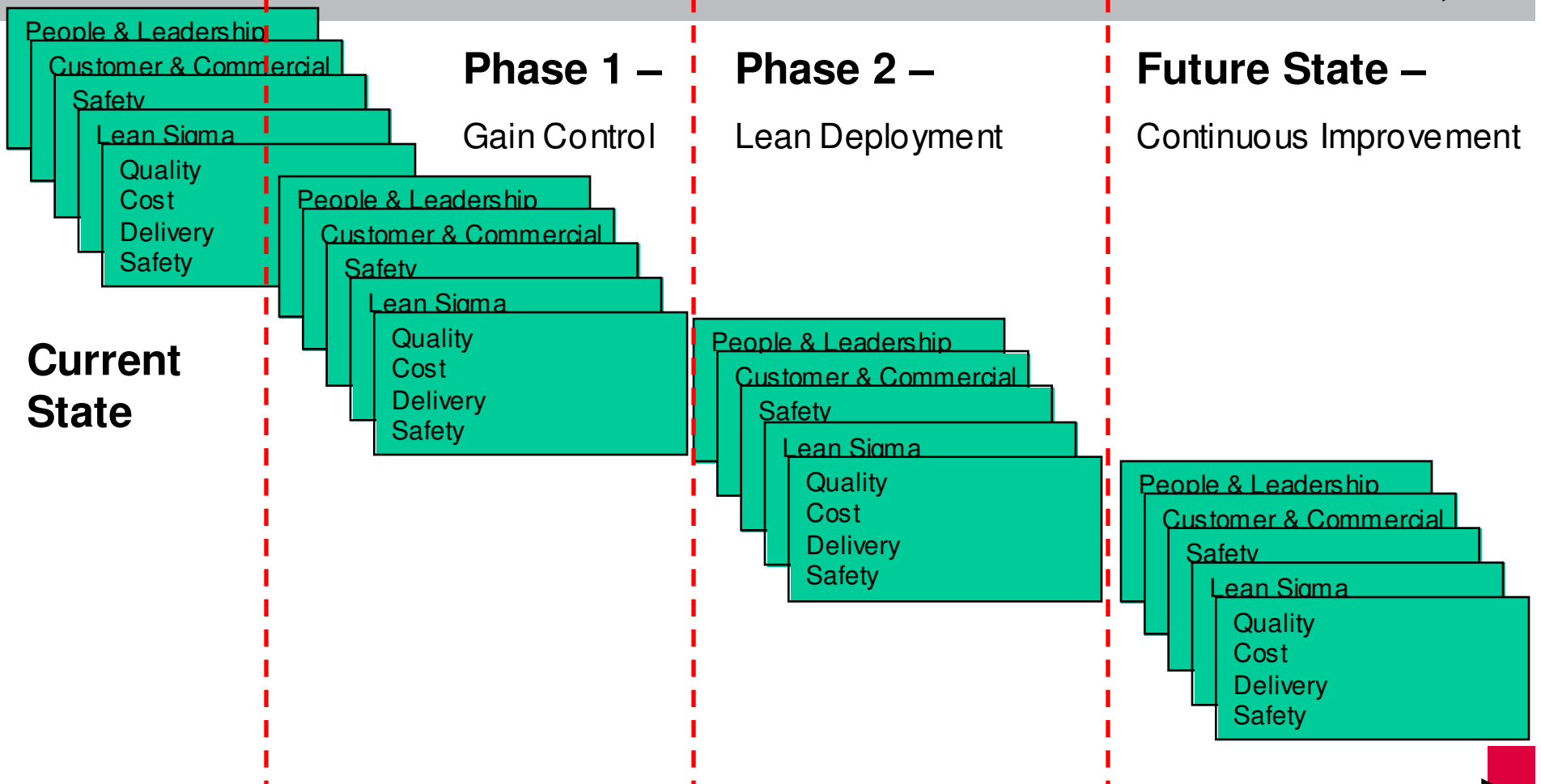
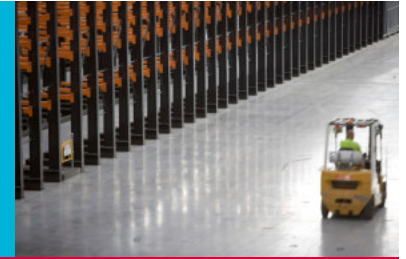


# The Strategy Map has driven the Strategic Communications agenda



Qantas Engineering

# Business Improvement Strategy Summary



# BLUE SKY PLAN

Qantas Engineering.



## PLANNING

**CARD PACKAGE**  
 LEAN  
 THE BEST PACKAGE TAKE  
 MAXIMIZE EFFICIENCY

**LABOUR PLANNING**  
 OPTIMIZE RESOURCE ALLOCATION

**CENTRAL PLANNING - DISNEY**  
 100%

**AVALON PLANNING**  
 DELIVERED ACCURACY TO 1% VARIANCE

## PARTNERSHIPS

**OUR CUSTOMERS**  
 Qantas Engineering  
 CUSTOMER ENGAGEMENT

**LEAN**  
 EXTERNAL SERVICE PROVIDER  
 LEAN MANUFACTURING

**TELSTRA**  
 100% COMPLIANCE  
 TELECOMMUNICATIONS

**COMUNICATION LEVELS**  
 COMMUNICATION LEVELS

**STAKEHOLDER COMMUNICATION**  
 STAKEHOLDER COMMUNICATION

**NEW TOPICS**  
 NEW TOPICS

**STRUCTURE OF CORPORATION**  
 STRUCTURE OF CORPORATION

## KPI'S

**SAFETY**  
 EMPLOYEE PERFORMANCE & MOTIVATION  
 SAFETY

**ZERO DEFECTS - ZERO WARRANTY**  
 ZERO DEFECTS - ZERO WARRANTY

**FINANCE**  
 UNDERSTANDING UNIT COST

**CUSTOMER SERVICE**  
 ON-TIME ARRIVAL, ON-TIME DEPARTURE

**COMPETITION STANDARDS**  
 COMPETITION STANDARDS

**LABOUR AVAILABILITY**  
 LABOUR AVAILABILITY

## PEOPLE

**ATTENDANCE**  
 ATTENDANCE

**RECRUITMENT**  
 RECRUITMENT

**AVALON VALUES**  
 AVALON VALUES

**COMMUNICATION PLAN DEVELOPED**  
 COMMUNICATION PLAN DEVELOPED

**OUR CULTURE**  
 OUR CULTURE

**PEOPLE POLICY**  
 PEOPLE POLICY

## TRAINING

**BUILD YOUR PLAN**  
 BUILD YOUR PLAN

**PROFESSIONAL**  
 PROFESSIONAL

**REDUCE EXTERNAL TRAINING**  
 REDUCE EXTERNAL TRAINING

**HANGAR 3 STORES**  
 HANGAR 3 STORES

**D & L DEPT. ISSUES**  
 D & L DEPT. ISSUES

**IMPROVED PROCESS**  
 IMPROVED PROCESS

**WELOAD & PRE PLANNING**  
 WELOAD & PRE PLANNING

## FACILITIES & EQUIPMENT

**VEHICLES**  
 VEHICLES

**BETTER COMMUNICATION**  
 BETTER COMMUNICATION

**DOCKING**  
 DOCKING

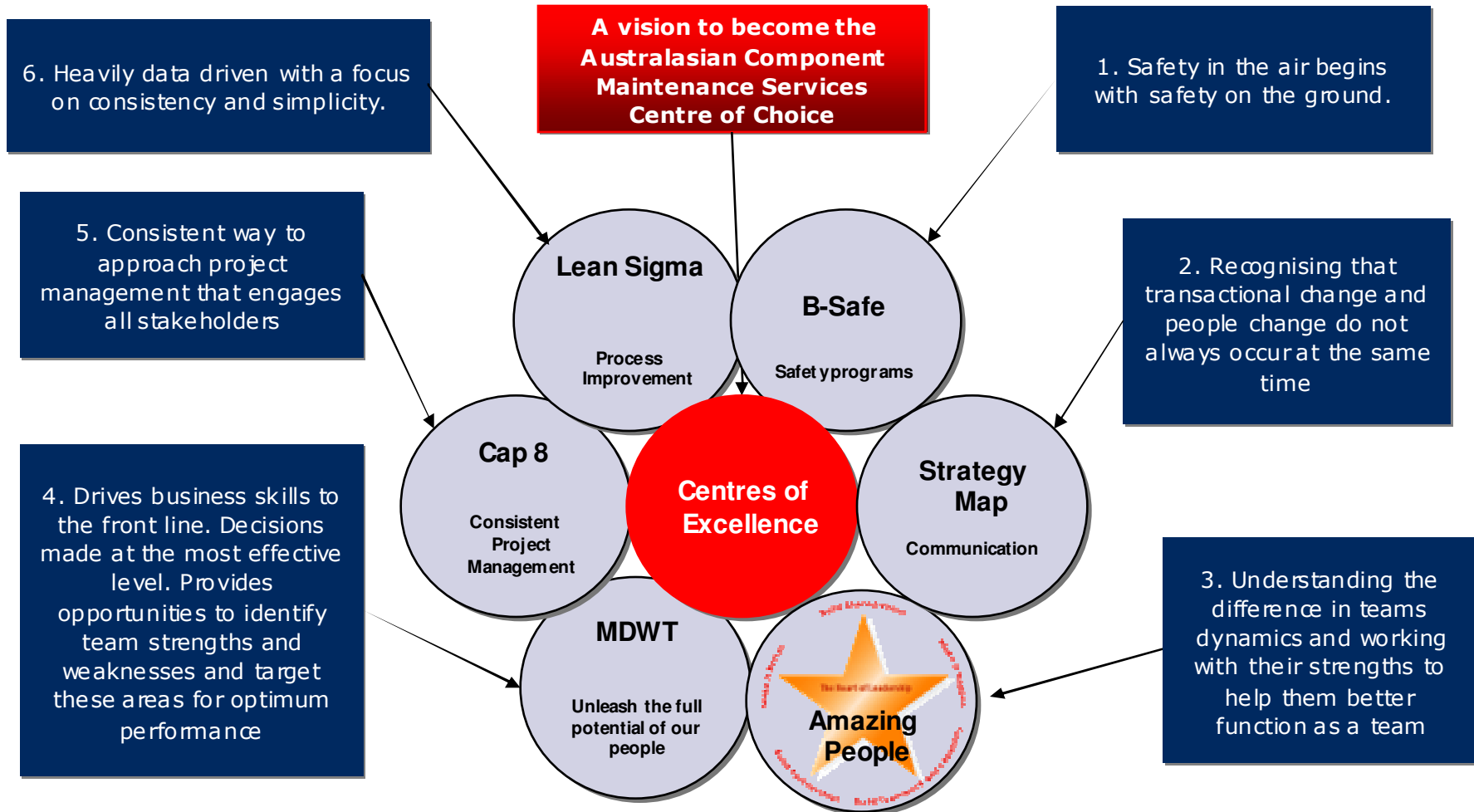
**L.T. PROVIDER**  
 L.T. PROVIDER

**TOOL PROCUREMENT**  
 TOOL PROCUREMENT

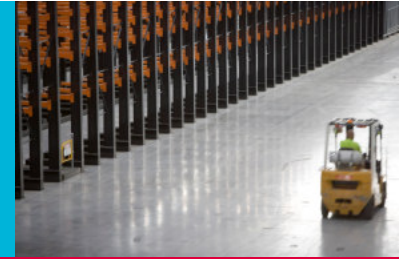
**BUILDINGS**  
 BUILDINGS

**HANGARS**  
 HANGARS

# Arsenal (suite of tools)



# Standardised Work, Work Sequence Boards (Yamazumi)



- Visual plan for checks
- Real time status
- Provides ownership of process to crews
- Approximate 100% on time delivery since implementation



# 4 pillars of our Business : Lean Sigma



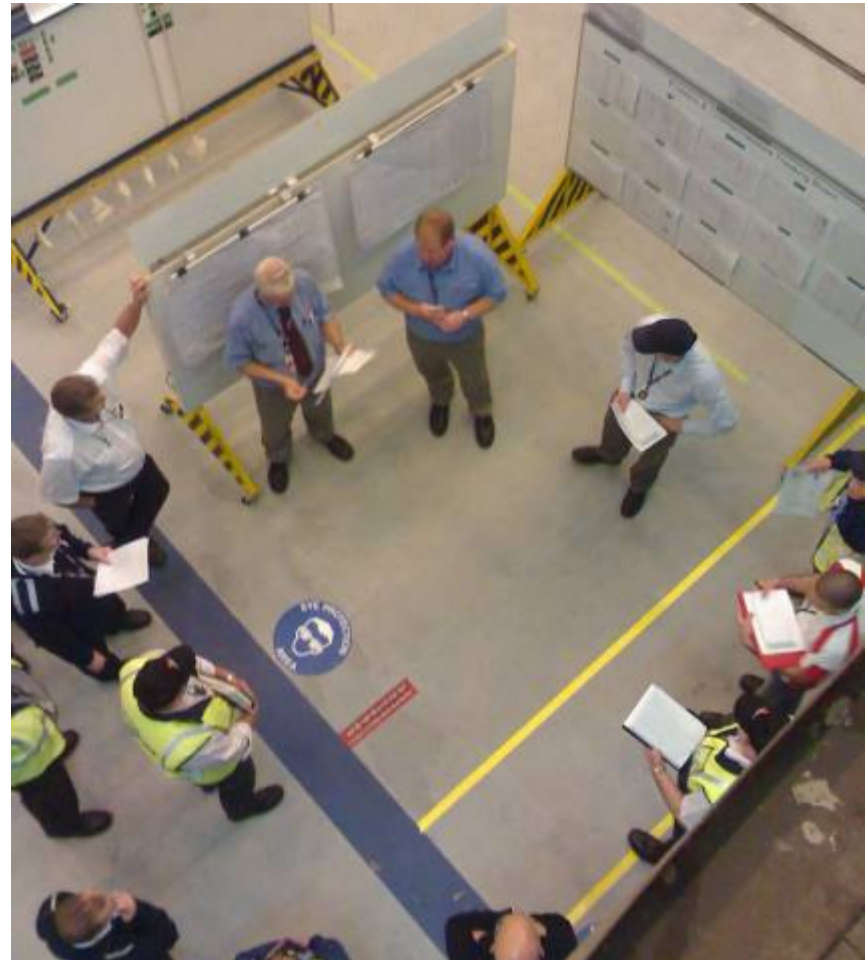
- **Lean Initiatives**
  - Improving Productivity
  - Reducing Waste!



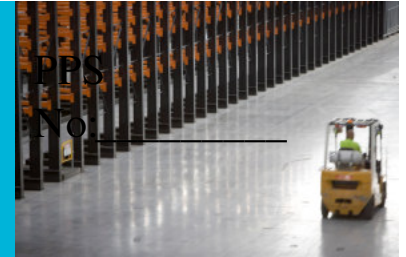
# Problems and Countermeasures



- Reporting Problems
- Immediate Containment
- Taking Ownership
- Long Term Solution
- Problems Permanently Solved



# Practical Problem Solving Worksheet



**Team Leader:**

**Member 1:**

**Member 2:**

**Member 3:**

**Member 4:**

**Problem Definition:**

**Point of Cause:**

Insert Point of Cause Detail

**Containment Action:**

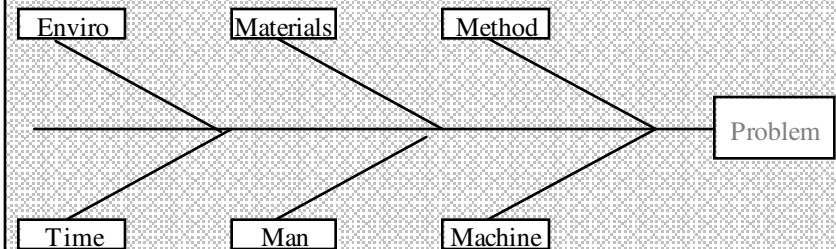
When Implemented:

Where is it:

Who Responsible:

Confirmation Frequency:

**Direct Cause:**



**Root Cause:**

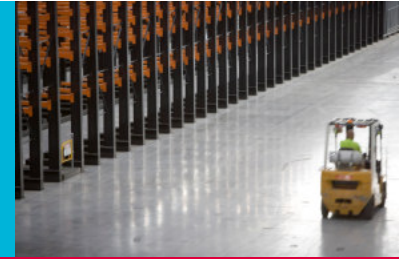
- 1. Why:
- 1. Because:
- 2. Why:
- 2. Because:
- 3. Why:
- 3. Because:
- 4. Why:
- 4. Because:
- 5. Why:
- 5. Because:

**Countermeasure:**

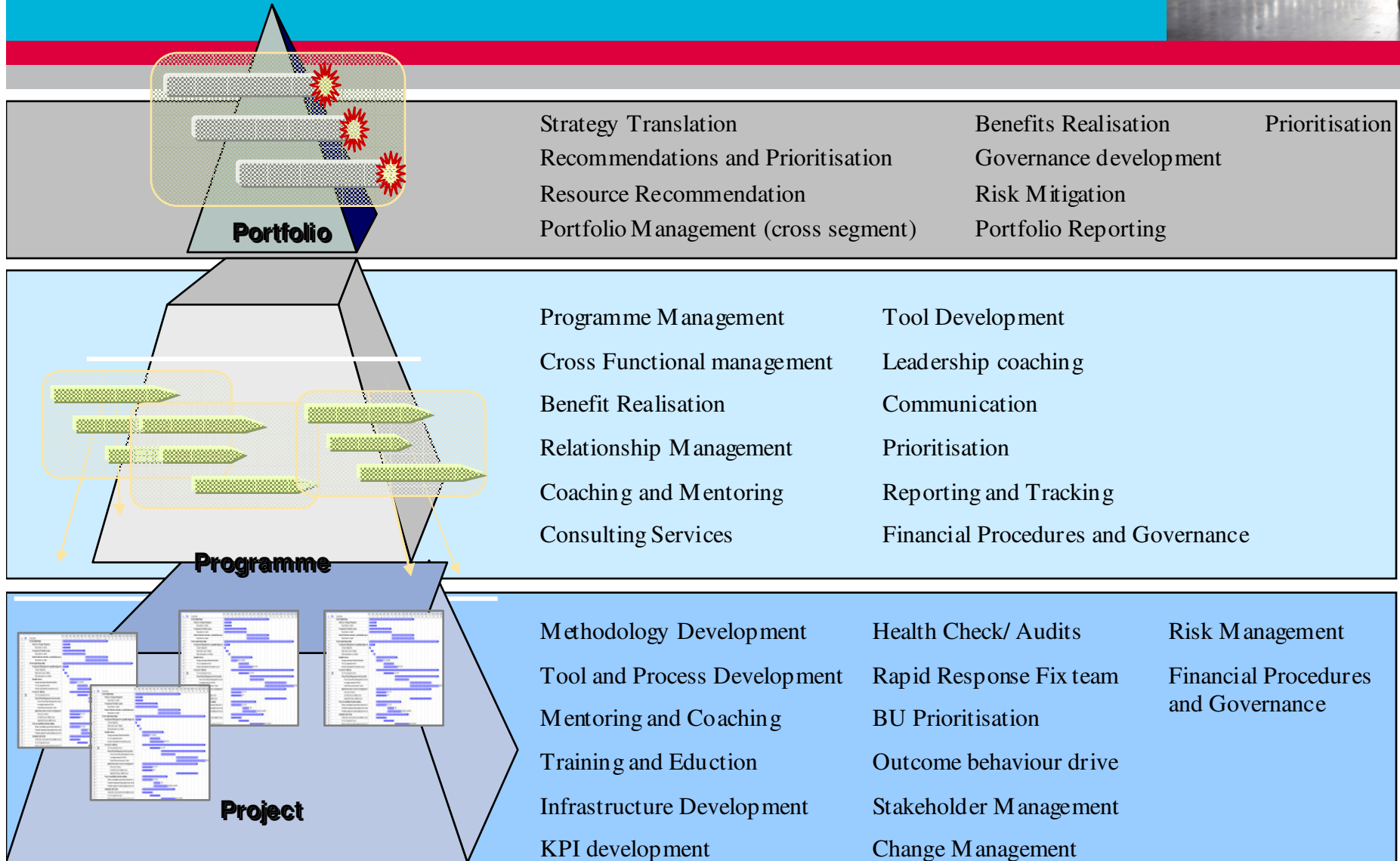
Countermeasures	Impact	S	Q	C	D	↑	↓	Ok/Ng
A								
B								
C								
D								
E								

Key	●	OK	▲	POT	X	NG
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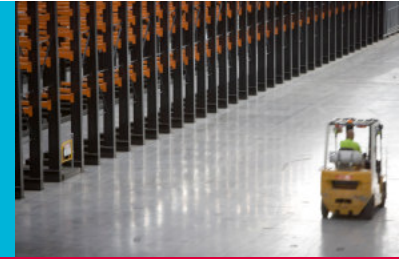
# Avalon Workshops



# Qantas Engineering Program Office

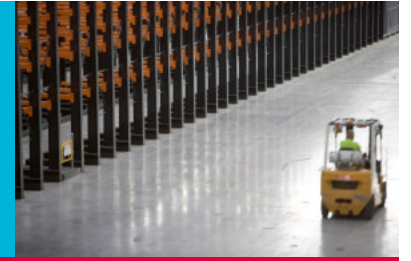


# Getting Lean



- If you are going uphill and taking one step at a time, You are headed in the right direction.
- Employee involvement is the foundation
- All that we have to do to become world class can not be accomplished from the bottom up: it has to start from the top down.
- If your not simple you cannot be fast, and if you aren't fast, you can't win
- Metrics must be few,simple,meaningful and directly linked to the visual targets in the workplace.

# People are the key to World class, Not Technology



“You should submit wisdom to the company.

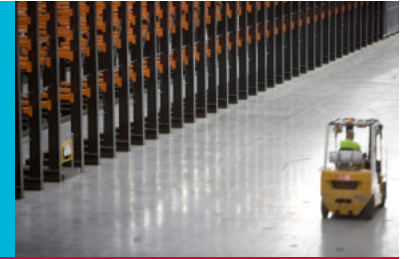
If you don’t have any wisdom to contribute,  
submit sweat.

If nothing else, work hard and don’t sleep. **Or  
resign.”**

**Taiichi Ohno**

Qantas Engineering 

Wrap-Up



# Questions.