

Project Controls Expo, Australia – 26<sup>th</sup> November 2019

Melbourne Cricket Ground, Melbourne

## Integrated Project Controls - The Path to Maturity

---

**Jonathan Jacobs**

Director, TBH

**Ali Dibaj**

Associate Director, TBH



# About the Speakers

## Jonathan Jacobs – Director, TBH

- Jonathan has over 20 years' experience as a planner, PMO and project controls specialist and has worked extensively in both the United Kingdom and Australia. Jonathan has a broad range of skills gained on a variety of projects valued between \$1m and \$50b across a diverse range of industries including major resources, oil and gas, transport infrastructure, power, water, health, commercial and residential construction.

## Ali Dibaj – Associate Director, TBH

- Ali is a degree qualified Civil Engineer with over 17 years' experience in Project Controls, Planning Management, Program Management and Asset Management across highly complex multi-disciplinary portfolios and projects. His experience in the construction process, enables the development, implementation and management of accurate project controls systems and processes with a high focus on planning, cost management, estimation, risk, and quality assurance



# About the Topic

## Topic outline

A robust project controls process integrating cost, time, risk and reporting is necessary to ensure that projects achieve their outcomes and deliver benefits to the organisation and customers. The key to achieving successful project controls is through continued development of People, robust Processes for individual project controls disciplines and integrated Technology to provide the organisation with One Source of Truth.

The purpose of TBH's methodology is to analyse current processes with regard to project controls as part of a maturity assessment, determine what a practical end state looks like, perform a gap analysis and provide recommendations on areas for improvement with advice on how to implement any changes.

The end state solution will be developed over a number of phases. The first of these phases and the subject of this report is Discovery and Recommendations



# Maturity in Project Controls – are we getting better?

## Time for Action... Challenges ahead

More complex Projects... Programs... Portfolios...

Tighter timescales...

Lower margins...

Greater RISK profiles/unknown Contingency's.....

## So what's changed?!?

# What's needed?

Better & smarter People?



Better ways of working?

Quicker and more efficient tools?



# People Challenges!

Skills Training and Competency Development – Where? – on the job?

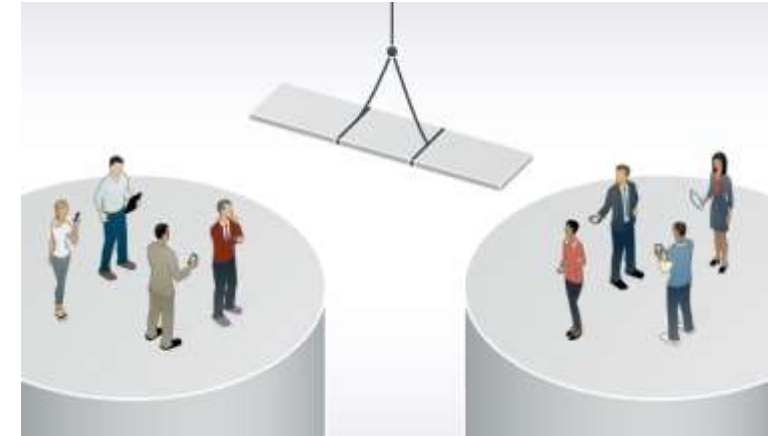
Professional development and accreditation – Who?

Company investment?

Silo'd functions!

Do these people add value to the delivery of the project?

Leadership



# Process Challenges!

Consistency of approach

Which Framework shall I adopt?

What is Best or the Right practice?

Are IBR's adopted?

Who does thorough Schedule analysis?

Who does Float analysis?

Who resource loads schedules?

Who cost loads schedules?

Who implements regular SRA's?

Who has an integrated approach to Time, Cost and Risk analysis? IBR...

Is BIM/Digital Engineering adopted and used effectively for analysing performance?



# Systems Challenges!

Which tools are available?

Does it do what I want?

Is it user friendly?

Does it link (integrate) with my other business tools?

How long does it take to update?

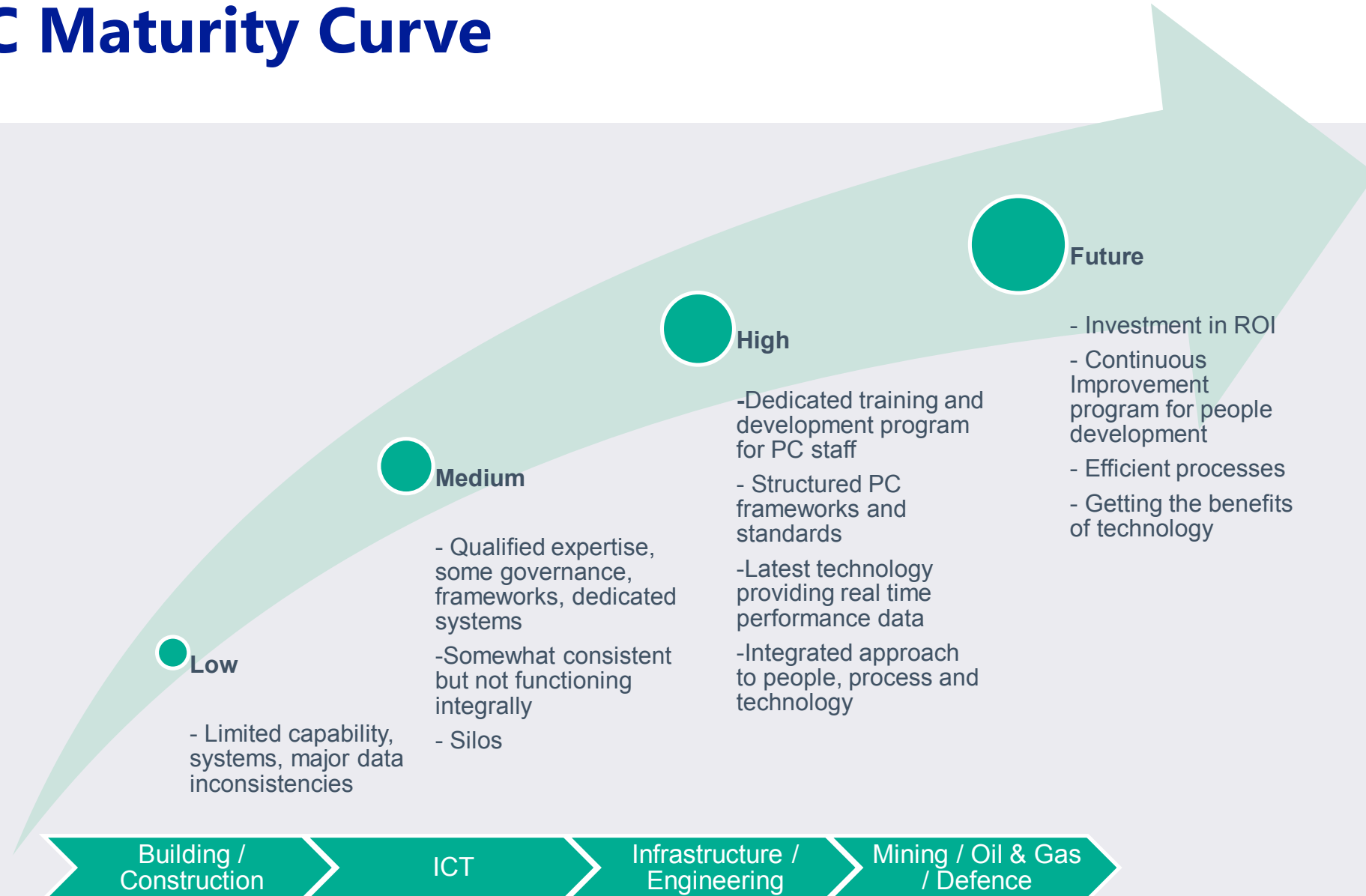
Does it do real time reporting?

How much will it cost to establish and rollout?





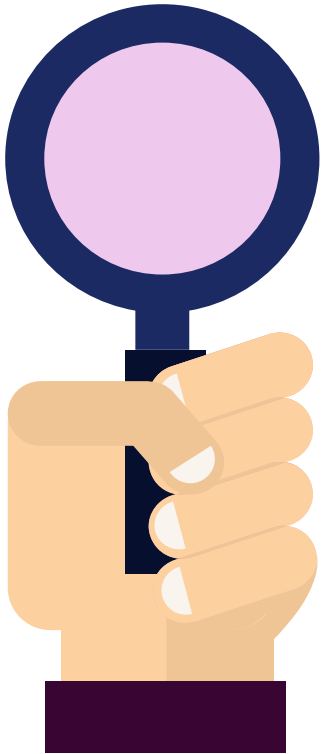
# IPC Maturity Curve



# Project Controls - Sector Maturity

Sector	People	Process	Systems/Technology
Oil & Gas/Resources	Highly multi skilled	Strong governance	High tech integrated systems
Defence	Multi skilled	Strong - IBR/EV	Integrated systems
Infrastructure & Engineering	Semi skilled/working in silo's	Inconsistent– PMO's	Mostly Standalone
ICT	Semi skilled	Inconsistent– PMO's	Standalone
Building/Construction	Functionally skilled ie; Planning	Basic principles	Standalone

# But ... How do you measure the unmeasurable?

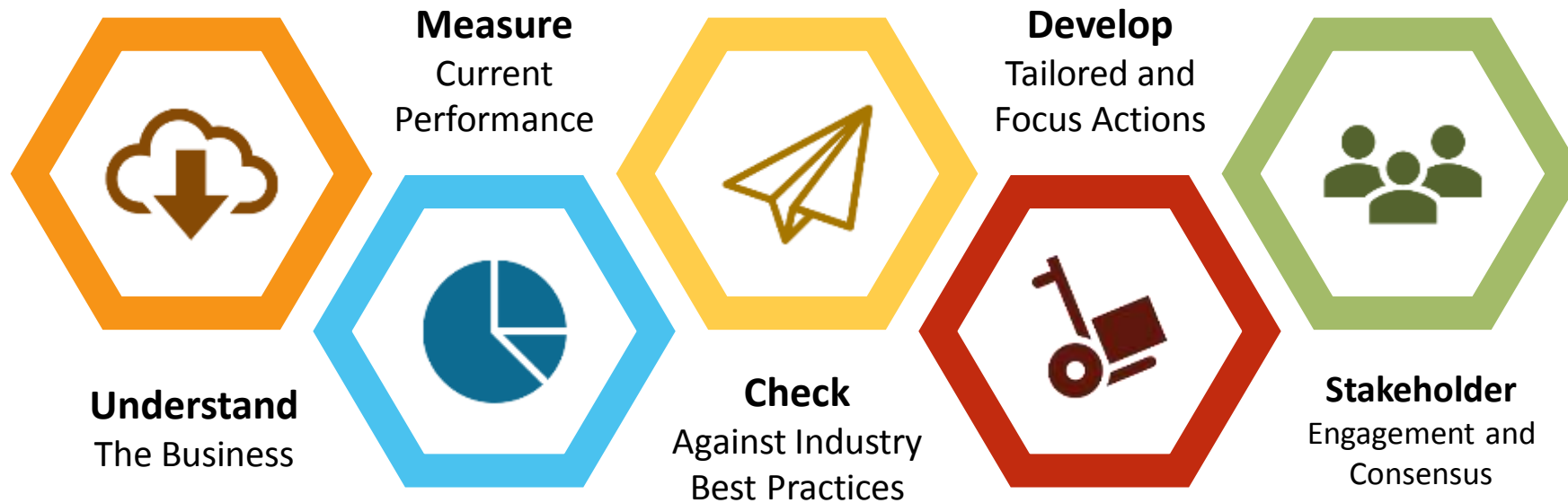


- Tangible (Number of schedule's with cost integration)
- Intangible (Quantification of Performance, effectiveness, etc)

## Odiorne's Law:

*"Things that do not change will remain the same," and its corollary, "If you want things to be better, you probably will have to change something."*

# IPC Maturity Assessment - Objectives



# IPC Maturity Assessment – Methodology



## Diagnosis

The evaluation state began with diagnostic meetings, workshops and review of the existing processes, procedures and systems to identify existing practices and organisational maturity. The goal is to determine which processes are currently in place and gauge how effective they are at achieving their intended purpose

## Scoring

The key best practices are organised around a range of project controls and project management fundamentals. This is the benchmark for assessment and assesses and identifies best practice gaps.

## Gap Analysis

The Gap Analysis assessment is carried out, identifying current and future state capabilities and areas to focus on. The score for each band is clear, specific and measurable.

## Scope and Objectives

Identify and document interim and future state capabilities. Develop key principals which will form the basis of our recommendations

## Project Plan

Project plan, budget, change management and communication plan approved and being implemented.



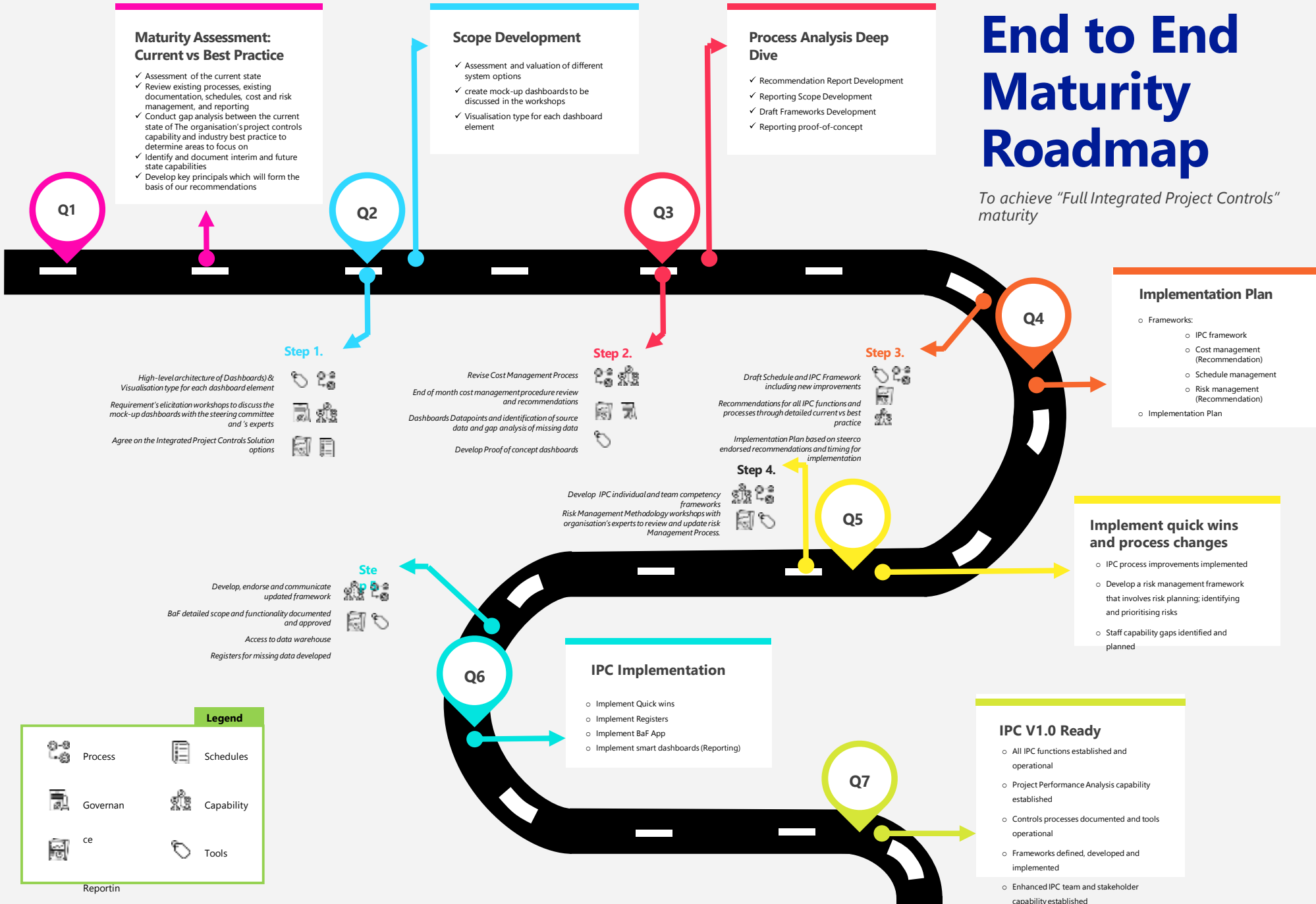
# Integrated Project Controls- Metrics Assessment

IPC Maturity Assessment	As-Is	To Be
1. WBS/OBS/CBS Alignment	1	4
2. Planning and Scheduling (Time Management)	2	4
3. Cost Management	2	3
4. Reporting	2	4
5. Document Control	3	4
6. Estimating, Benchmarking and Historical Data	2	4
7. Risk Management	2	3
8. Change Control	2	4
9. People Skills and Training	2	3
10. Interface Management	1	4



# End to End Maturity Roadmap

To achieve "Full Integrated Project Controls" maturity



**Legend**

	Process		Schedules
	Governance		Capability
	Tools		

Reportin



# Capability outcomes

- CSC Charter and Operational Model uplifted
- Management Controls in place
- Use of documented processes (e.g. QRG's, Standards and training packs)
- Front Door resource and Cost estimation established in Project Server

# Maturity steps

Update PMO charter to reflect new functions (e.g. Resource Demand management, Planning Scheduling, Governance and Communication)

Implement Governance and Communications changes (e.g. Forums, Terms of reference, reports, escalation management)

Ensure all schedules and reporting are complying to cadence



## Key Components

## What do we get?

### Function

### Resource & Demand Management

### Planning & Scheduling

### Governance & Communication

### Standards

- Operational Level Agreement
  - ✓ Roles and Responsibilities
- Schedule Management Plan

- Schedule Management Plan
  - ✓ Schedule standards and KPIs
  - ✓ Planning and schedule creation
  - ✓ Roles and responsibilities

- PMO Charter Updates
  - ✓ Vision and mission
  - ✓ PMO Functions
  - ✓ PMO Team structure
- IMTG Governance Document

### Processes

- Schedule Management and Control
- Resource Allocation and Approval

- Schedule Management and Control
- Project, Work package and BAU Management

- Escalation management
- Governance meeting Terms of Reference
- Portfolio reporting

### Tools & Templates

- Microsoft Project Server
- SharePoint Reporting
- Project Dashboards
- Quick Reference Guides
- Intranet content updates

- Microsoft Project Server
- SharePoint Reporting
- Project Dashboards
- Schedule Templates
- Quick Reference Guides
- Intranet content updates

- Microsoft Project Server
- SharePoint Reporting
- Project Dashboards
- Qlik
- Intranet content updates

### Training, Feedback & Org. Change Management

- One-on-one coaching and support
- Lunch and learn sessions
- Quality reviews

- One on one coaching and support
- Lunch and learn sessions
- Quality reviews

- Coaching of PMO team
- Governance Forum Participant feedback