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National Grid's Project Controls Journey

Bring Energy to Life

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Project Controls EXPO

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Past, Present & Future

- Provide an overview of National Grid's journey
- Established a centralised Project Controls function
- How does it look in the here and now?
- What does the future of Project Controls look like?

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Introduction

PAST	Needs case	Establishing the foundations	Challenges
PRESENT	Building on foundations	Governance & control framework	Continuous improvement cycle
FUTURE	Future areas of focus	The next generation	Structured development

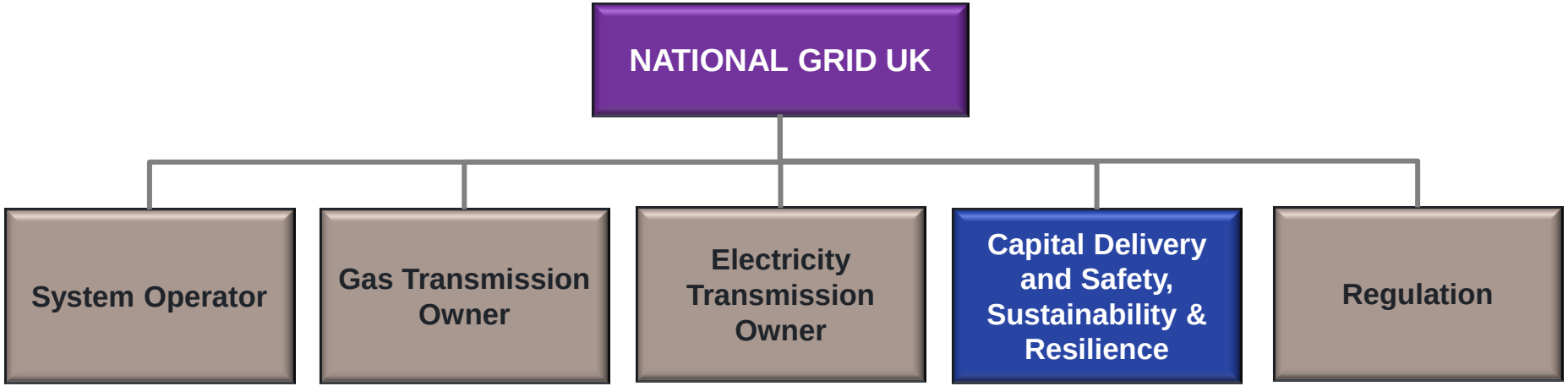
NATIONAL GRID - PROJECT CONTROLS MATURITY

VISION
CREATE & EMBED PROCESSES
CULTURE CHANGE
CONTINUE TRAINING & DEVELOPMENT
BUSINESS AS USUAL

BUILD ON FOUNDATIONS
STEP CHANGE IN PERFORMANCE

DELIVERY VEHICLE OF CHOICE

National Grid UK



Past, Present & Future

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Needs Case

REGULATORY CHANGE

- Demonstrate and focus on value
- Introduction of RIIO – output based agreement
- Demand for transparency

INDUSTRY CHANGE

- Changing electricity market
- Demand forecasts
- Competition

ENHANCE POSITION

- Enhance National Grid's reputation
- Demonstrate value
- Maintain shareholder confidence

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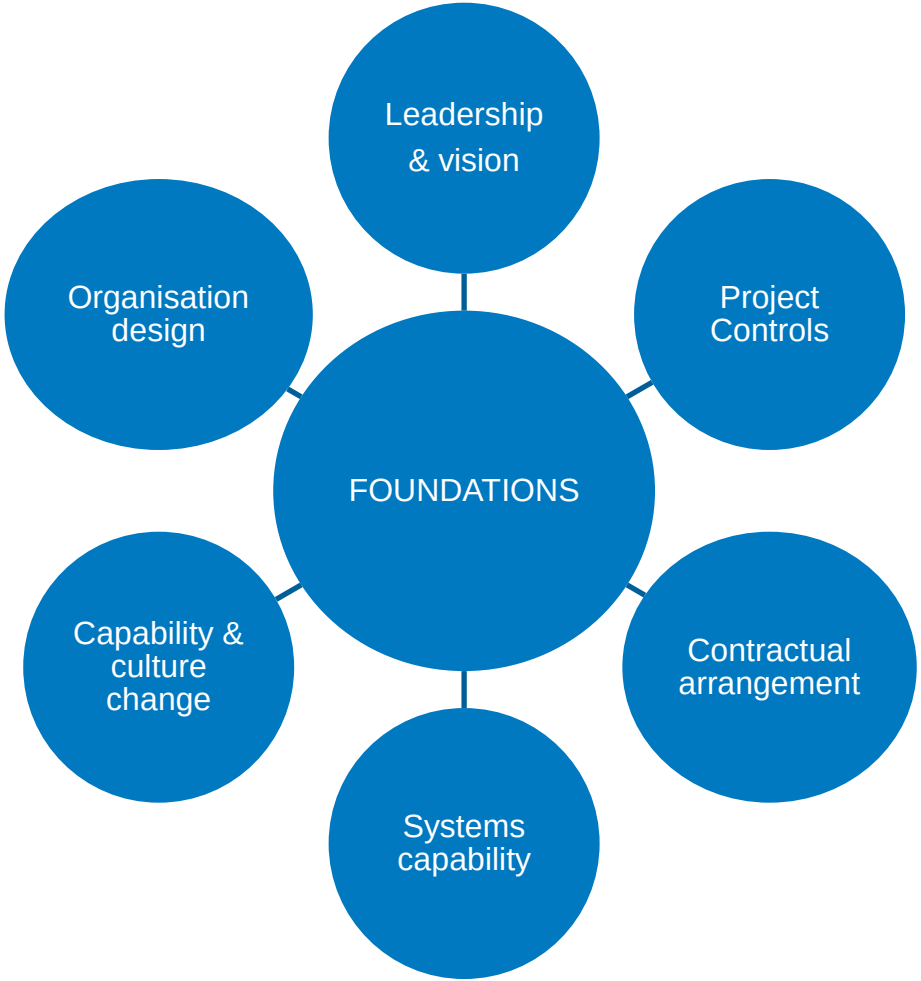
Leadership & vision
Organisation design
Project Controls
FOUNDATIONS
Capability & culture change
Contractual arrangement
Systems capability

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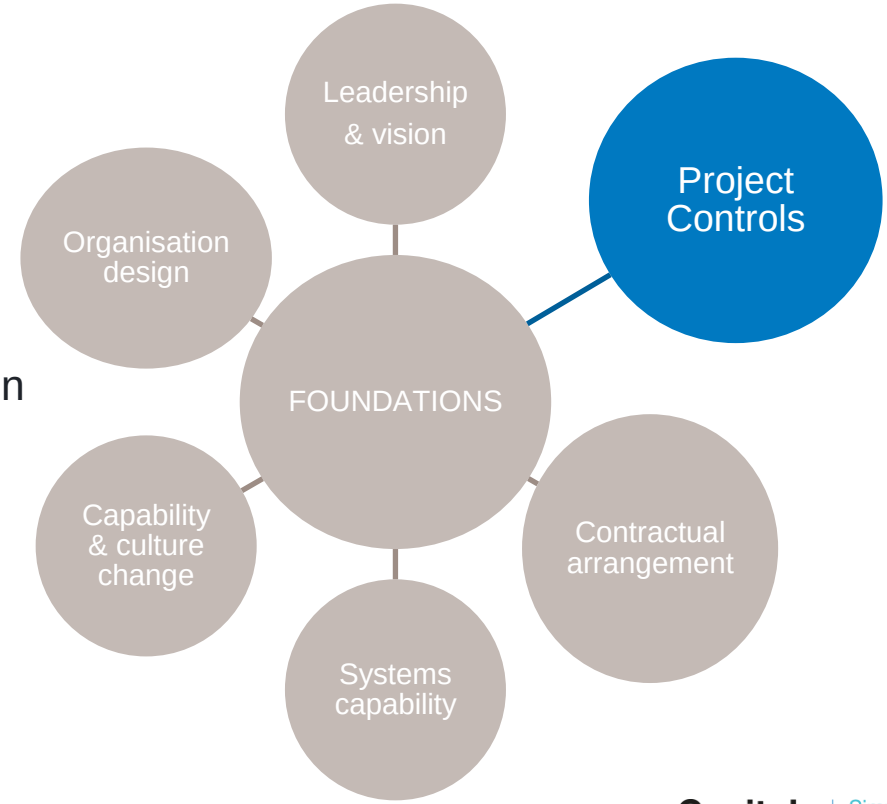
The foundations of Project Controls

- Trust
- Estimating Hub
- Planning Team
- Cost Engineering function
- Change Control & Governance
- Standardised management information
- Reporting team
- System configuration
- Reporting calendar
- Contractual arrangements
- Training & support



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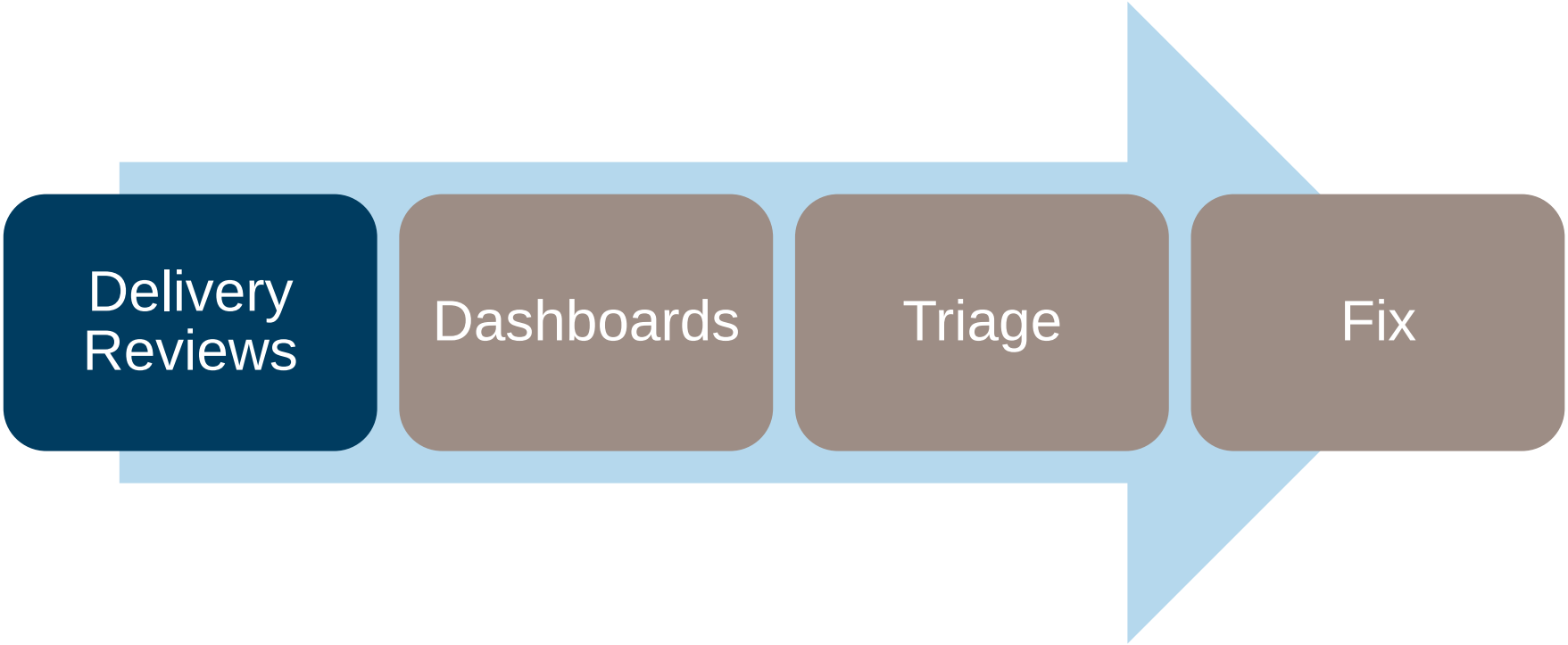
Stage 1 – Basic control & governance



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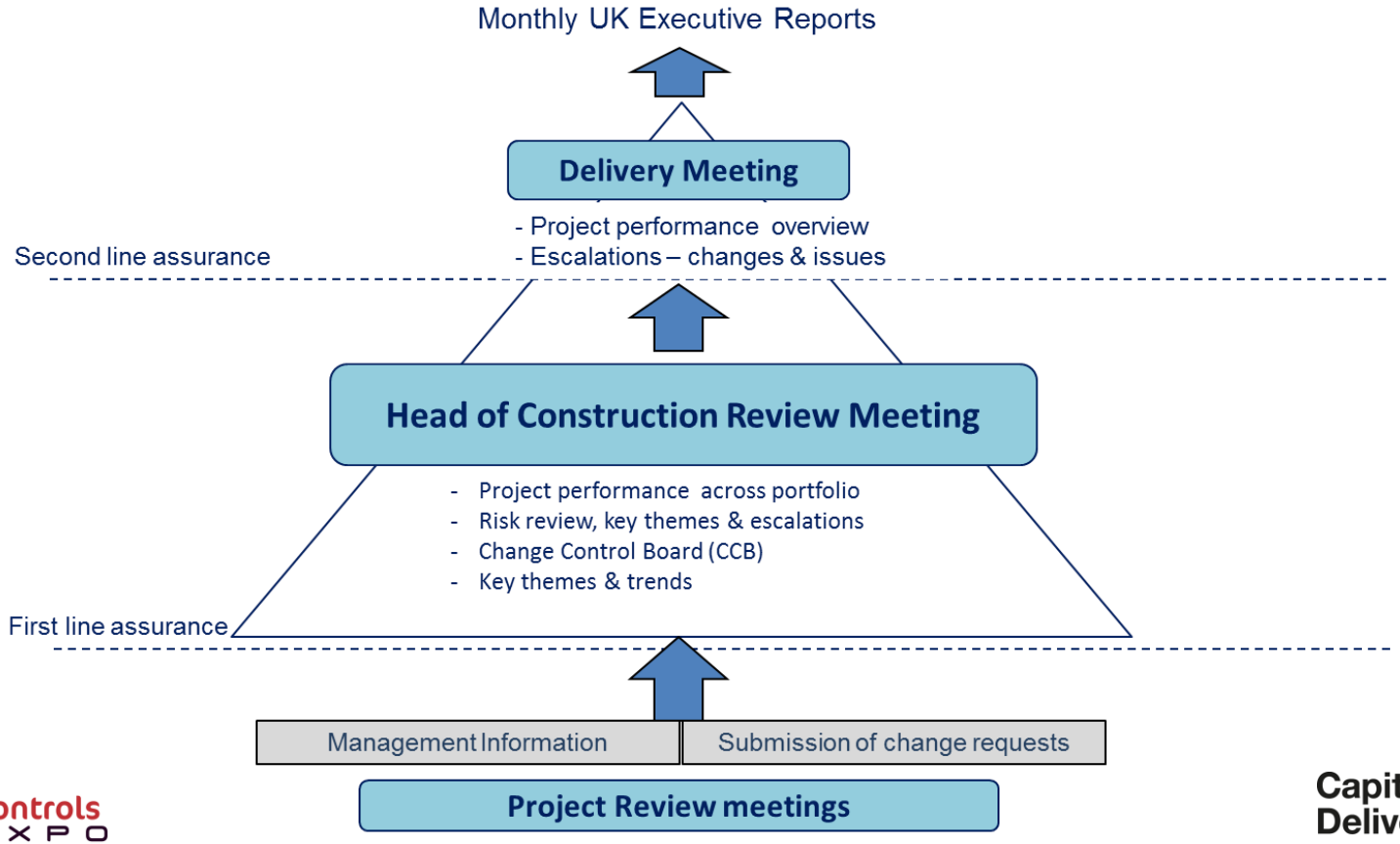
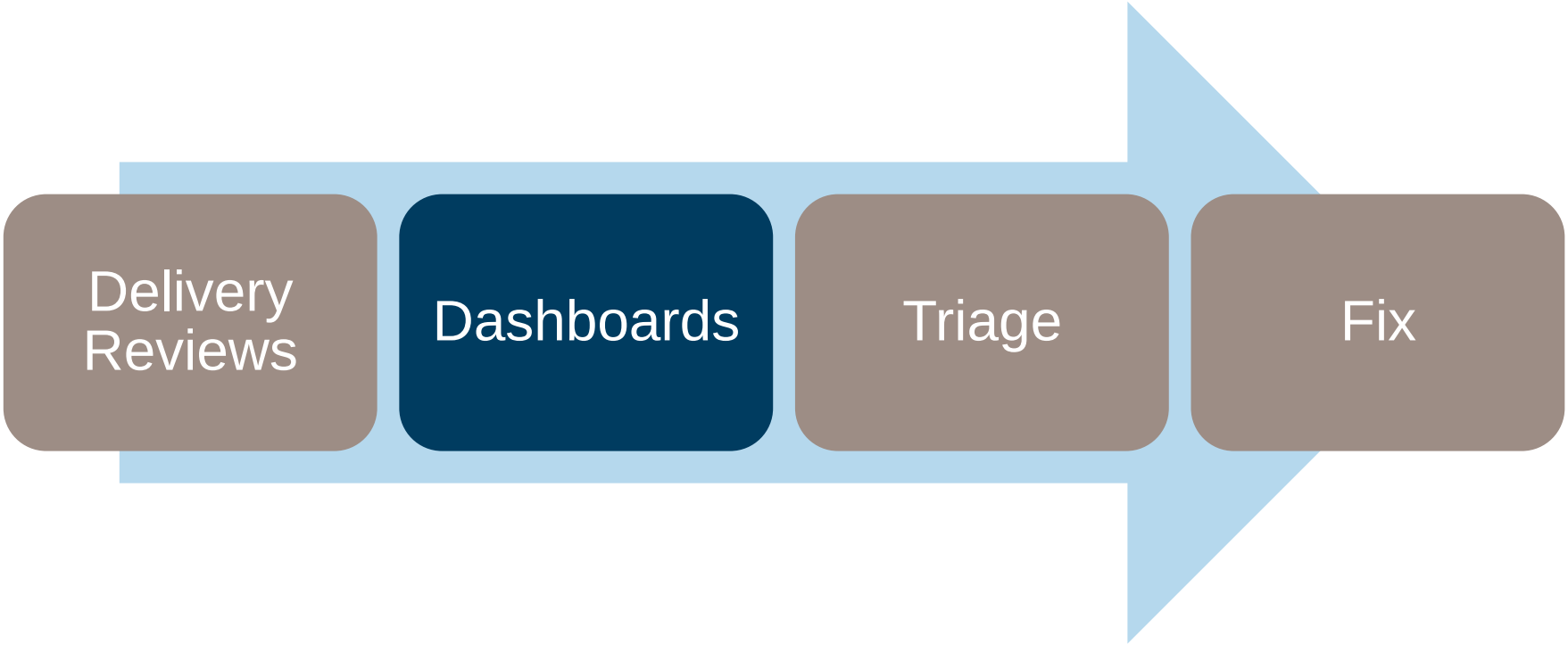
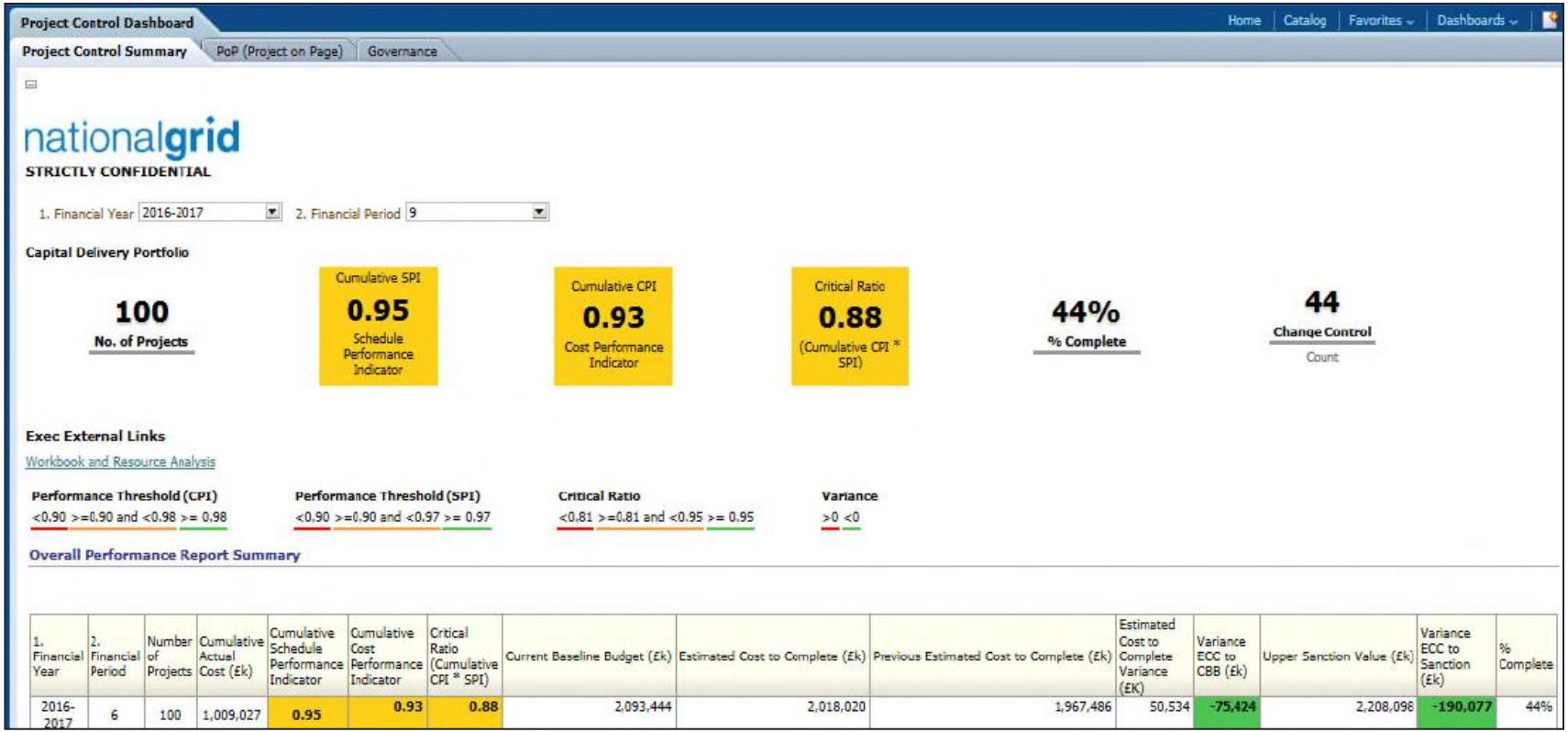
Project Delivery Review Framework



Stage 1 – Basic control & governance



Dashboards



Project Control Dashboard

Home | Catalog | Favorites | Dashboards

Project Control Summary | PoP (Project on Page) | Governance

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STRICTLY CONFIDENTIAL

1. Financial Year 2016-2017 2. Financial Period 9

Capital Delivery Portfolio

100 No. of Projects

Cumulative SPI 0.95 Schedule Performance Indicator

Cumulative CPI 0.93 Cost Performance Indicator

Critical Ratio 0.88 (Cumulative CPI * SPI)

44% % Complete

44 Change Control Count

Exec External Links

Workbook and Resource Analysis

Performance Threshold (CPI) <0.90 >=0.90 and <0.98 >= 0.98

Performance Threshold (SPI) <0.90 >=0.90 and <0.97 >= 0.97

Critical Ratio <0.81 >=0.81 and <0.95 >= 0.95

Variance >0 <0

Overall Performance Report Summary

1. Financial Year	2. Financial Period	Number of Projects	Cumulative Actual Cost (£k)	Cumulative Schedule Performance Indicator	Cumulative Cost Performance Indicator	Critical Ratio (Cumulative CPI * SPI)	Current Baseline Budget (£k)	Estimated Cost to Complete (£k)	Previous Estimated Cost to Complete (£k)	Estimated Cost to Complete Variance (£K)	Variance ECC to CBB (£k)	Upper Sanction Value (£k)	Variance ECC to Sanction (£k)	% Complete
2016-2017	6	100	1,009,027	0.95	0.93	0.88	2,093,444	2,018,020	1,967,486	50,534	-75,424	2,208,098	-190,077	44%

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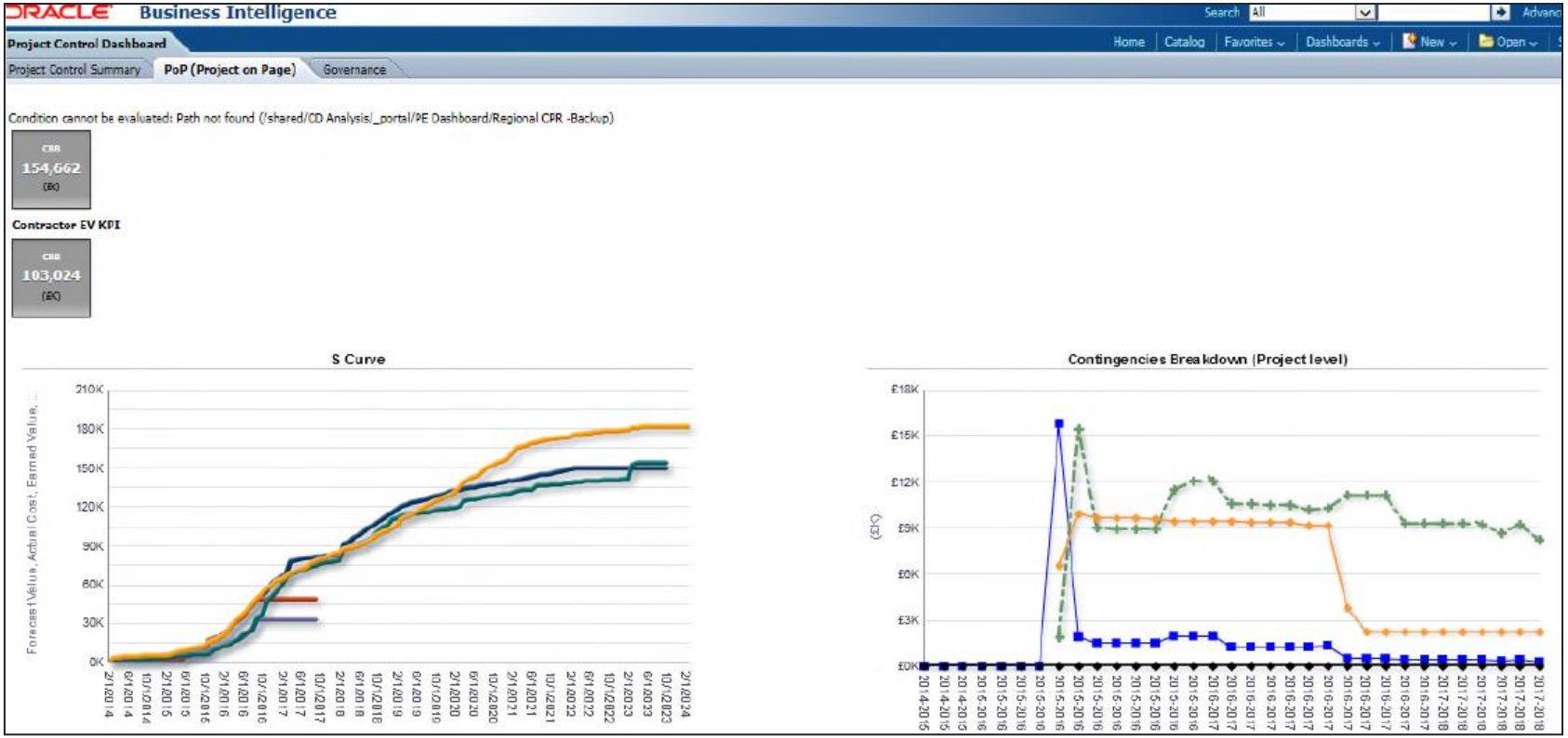
Dashboards – ability to drill down



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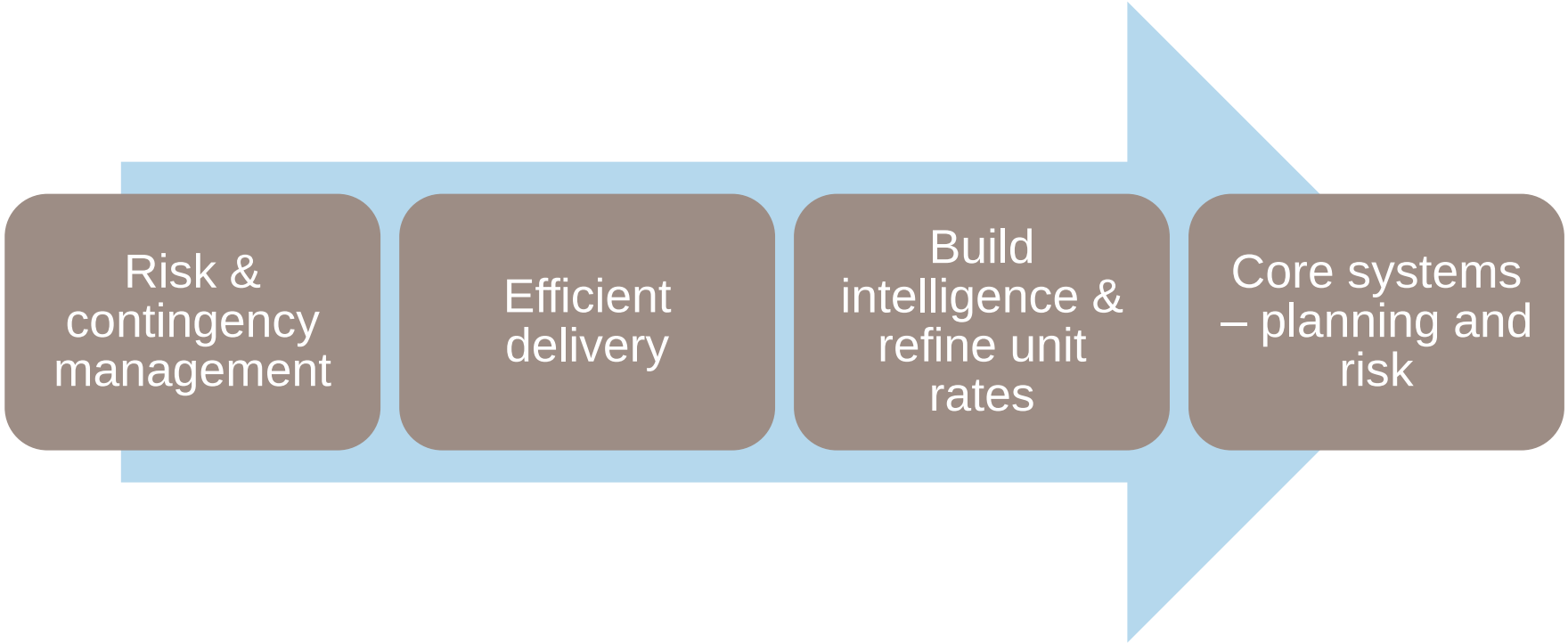
Stage 2 - Efficiency



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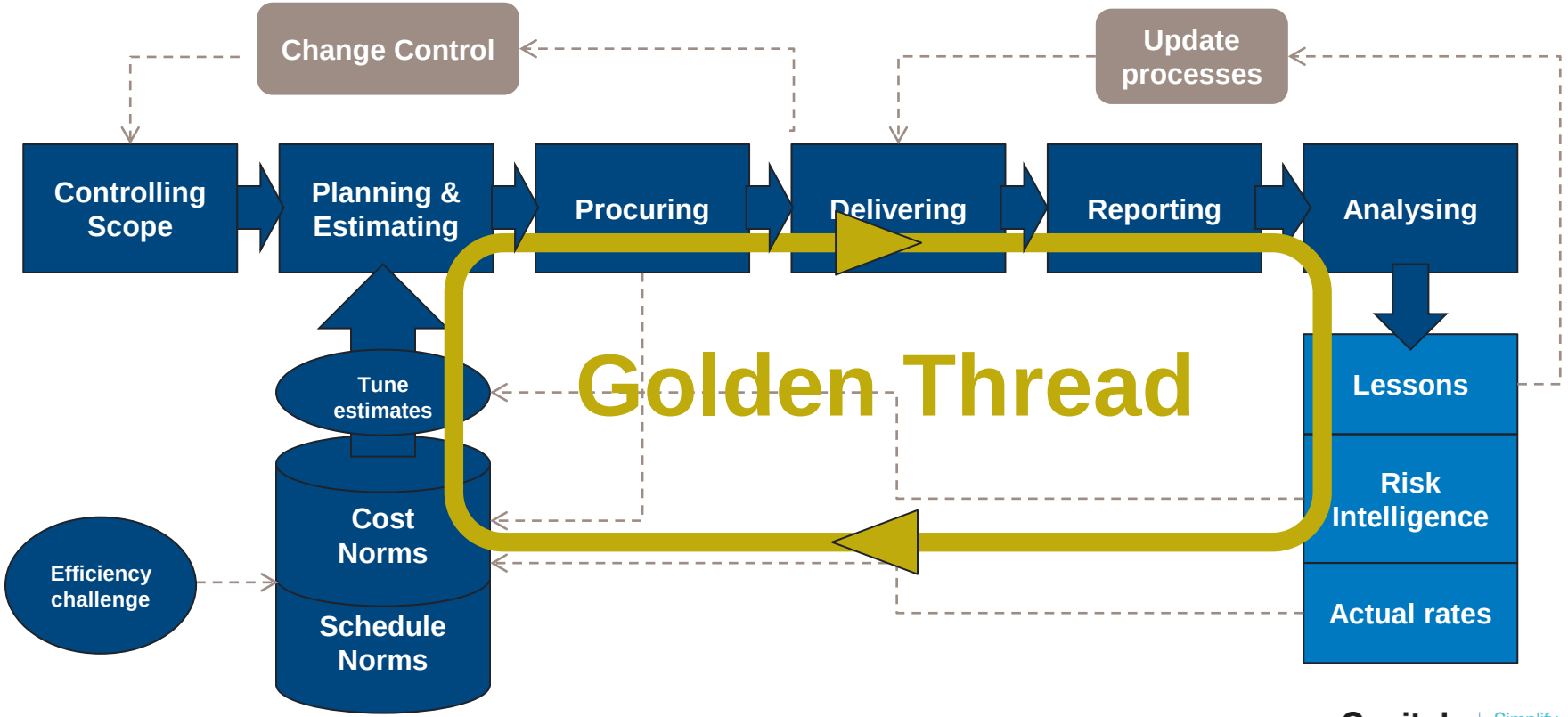
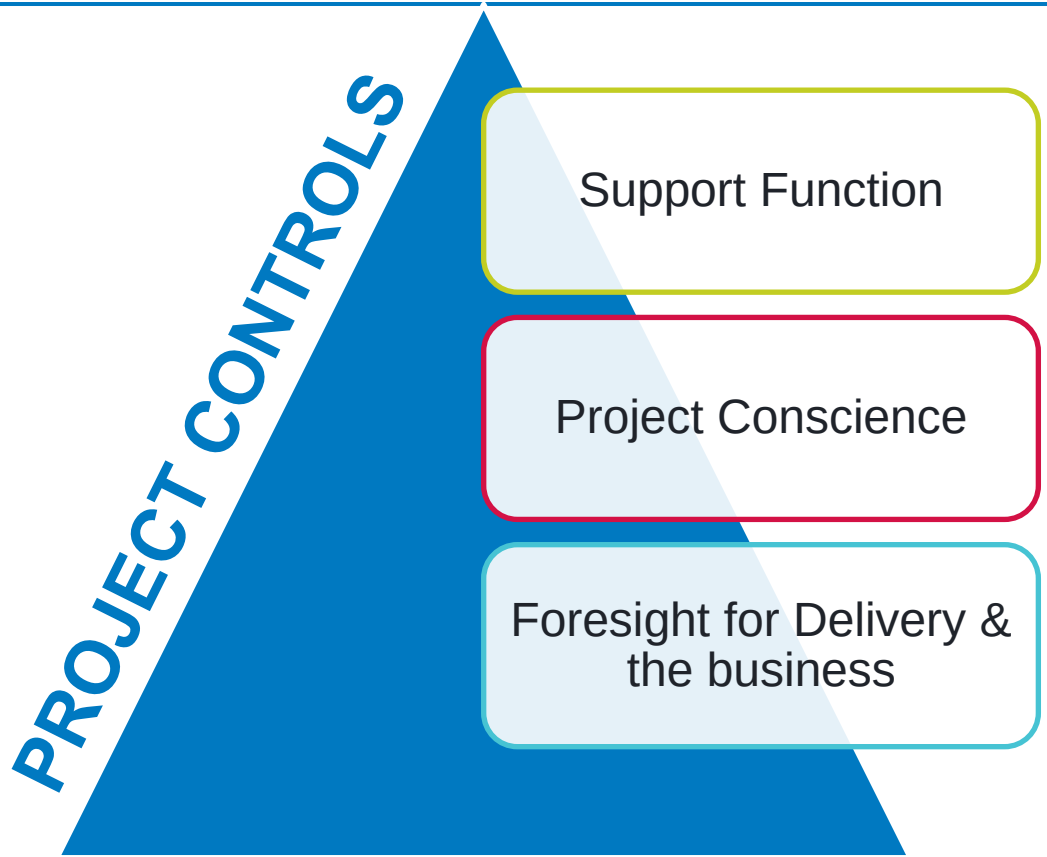
Golden Thread – Continuous Improvement



Collaborative Mandate



Past, Present & **Future**

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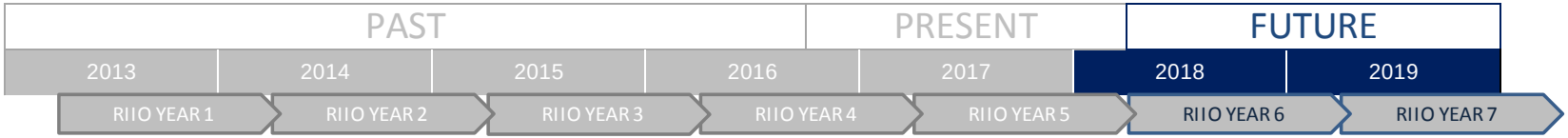

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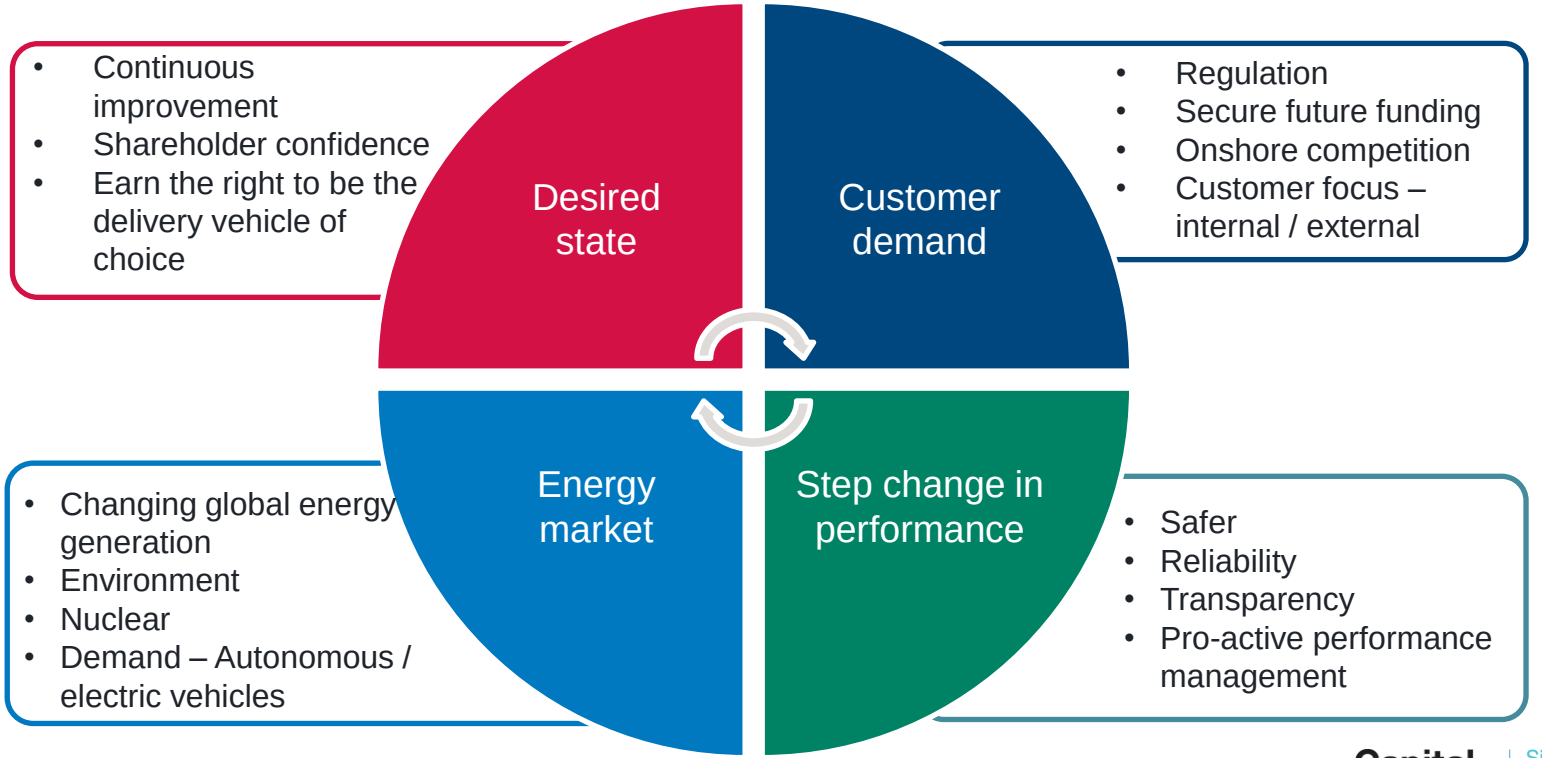
Why change?


Desired state
Customer demand
Energy market
Step change in performance
• Continuous improvement
• Shareholder confidence
• Earn the right to be the delivery vehicle of choice
• Regulation
• Secure future funding
• Onshore competition
• Customer focus – internal / external
• Changing global energy generation
• Environment
• Nuclear
• Demand – Autonomous / electric vehicles
• Safer
• Reliability
• Transparency
• Pro-active performance management

What are we doing?

People

- Succession planning
- Automate & up-skilling (multi-discipline)
- Higher Apprenticeship Scheme
- People are the future to take this forward

Systems

- Investing in our systems
- Integrated systems
- Improving accessibility
- refining dashboards

Improvement Plan

- 18 month Project Controls Improvement Plan
- Voice of the customer
- 10 Workstreams
- 30 Initiatives

Foundations

- Creating and embedding foundations
- Culture has changed
- Continuous improvement
- Enhancing the changes

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How does this benefit us?

P6

Eclipse

Risk

Golden Thread

People

Training

Higher Apprenticeship Scheme

Summary

Bring
Energy
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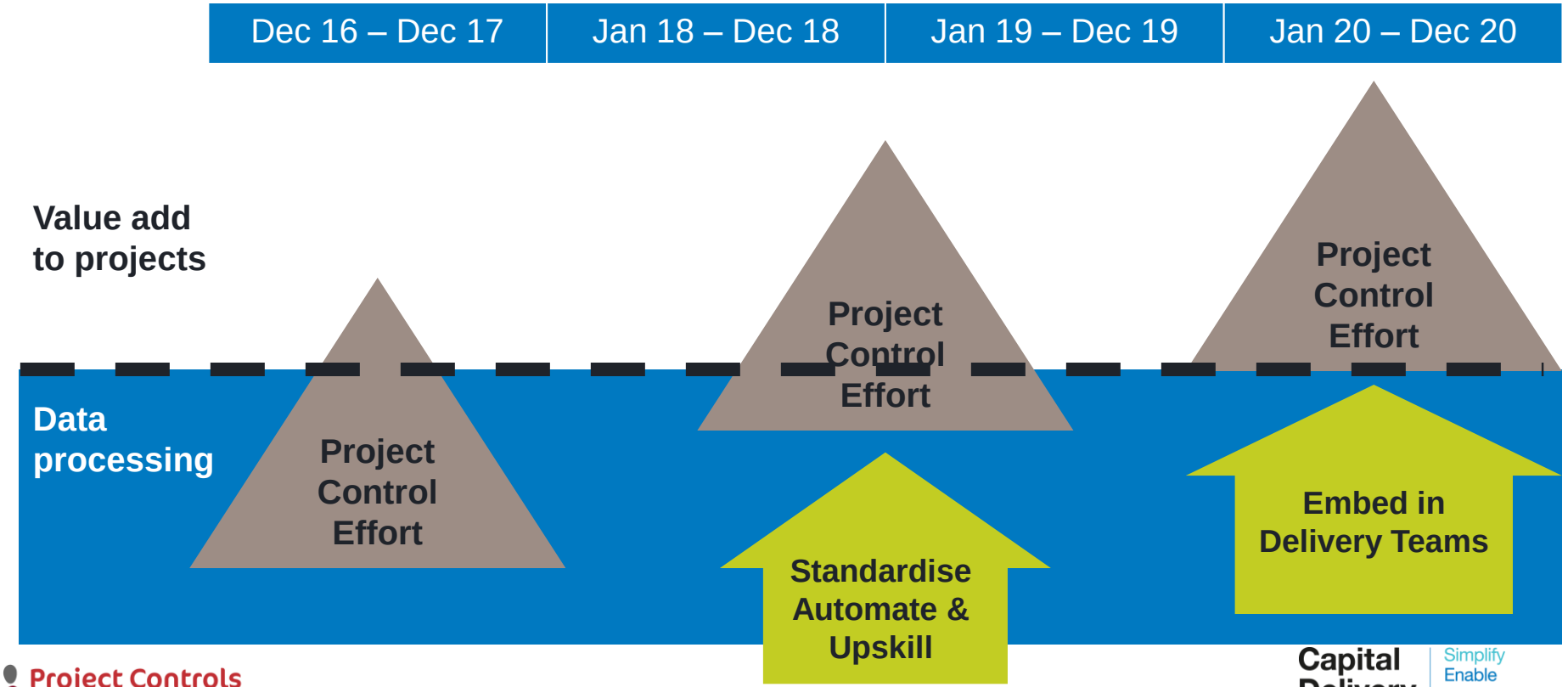
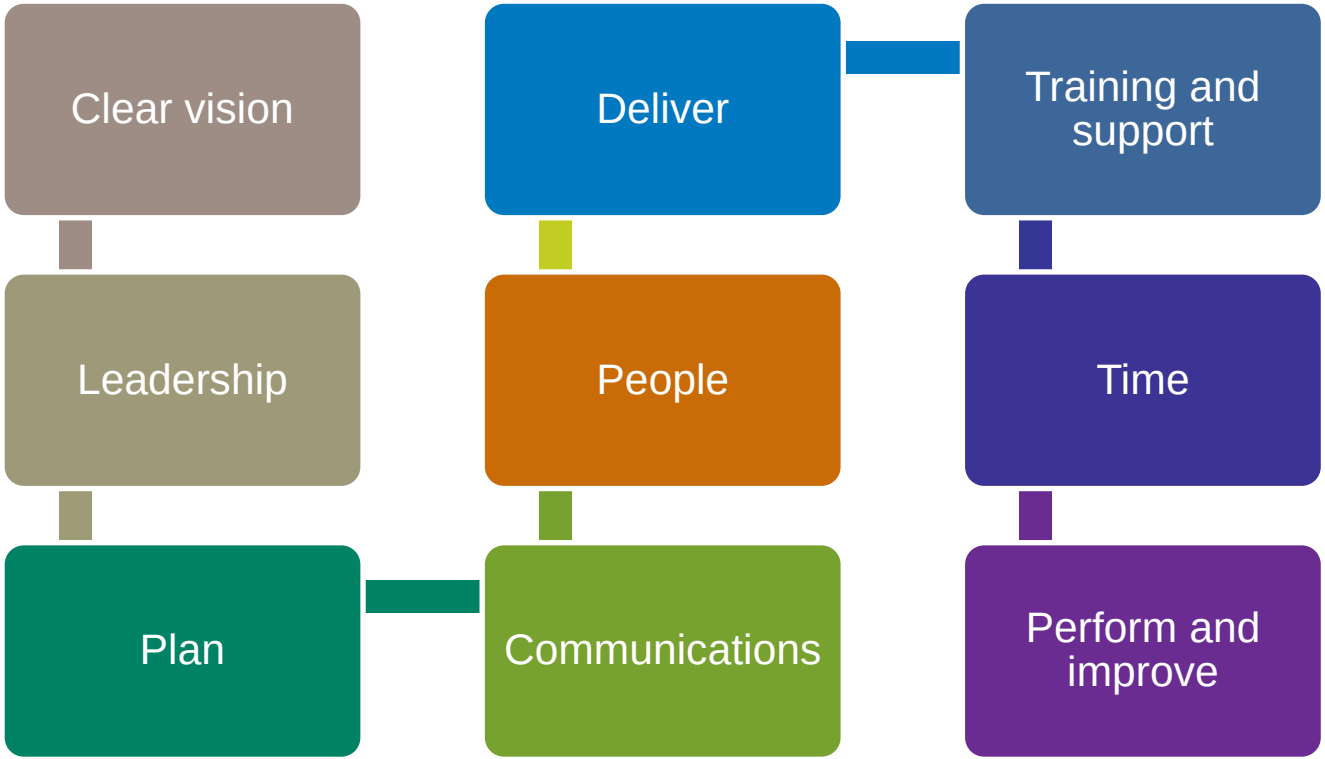
Summary


Dec 16 – Dec 17
Jan 18 – Dec 18
Jan 19 – Dec 19
Jan 20 – Dec 20
Value add to projects
Data processing
Project Control Effort
Project Control Effort
Project Control Effort
Standardise Automate & Upskill
Embed in Delivery Teams

The Journey


Clear vision
Deliver
Training and support
Leadership
People
Time
Plan
Communications
Perform and improve

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