

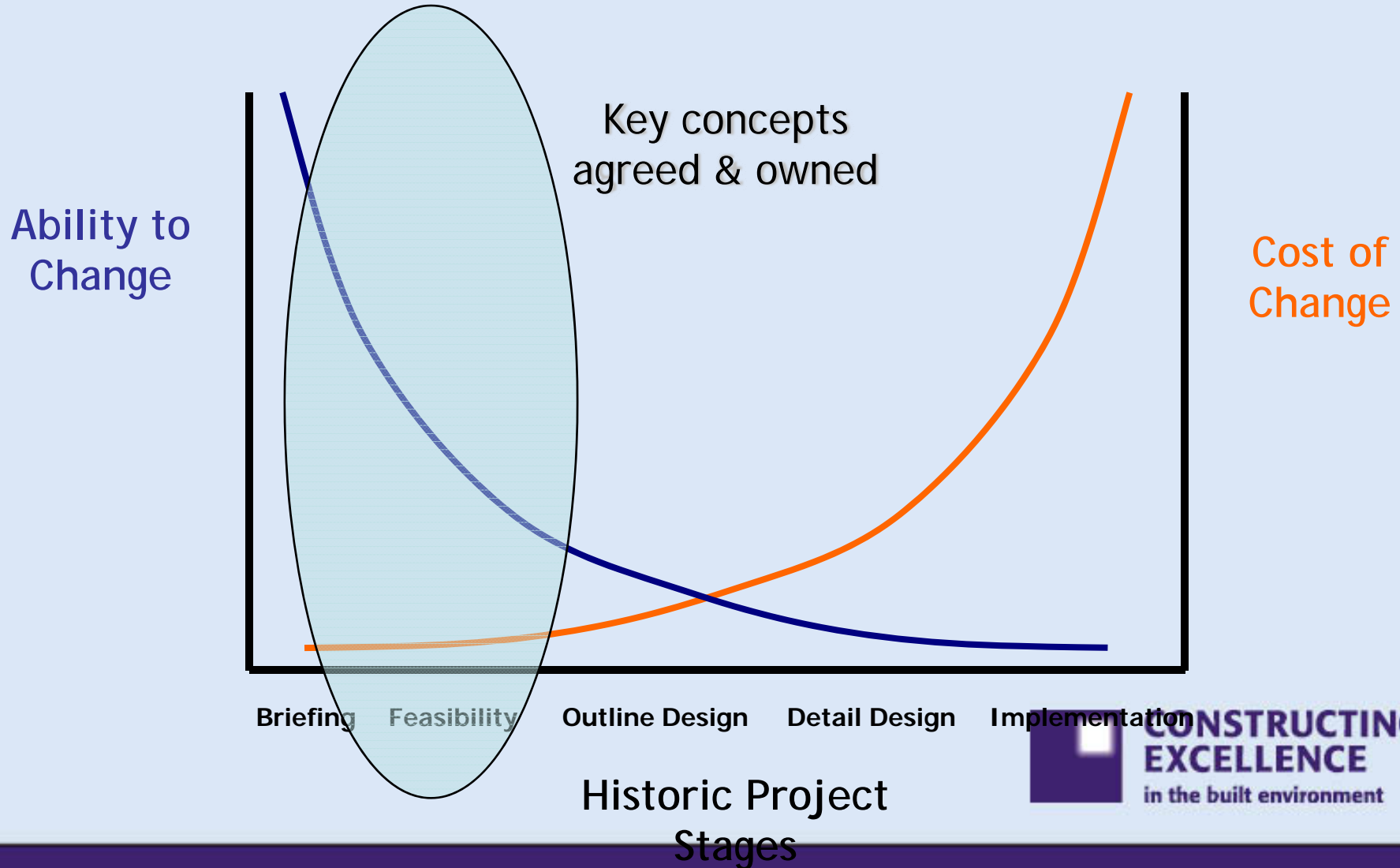
# Delivering value through collaborative working

Neil Jarrett, Collaborative Working Centre

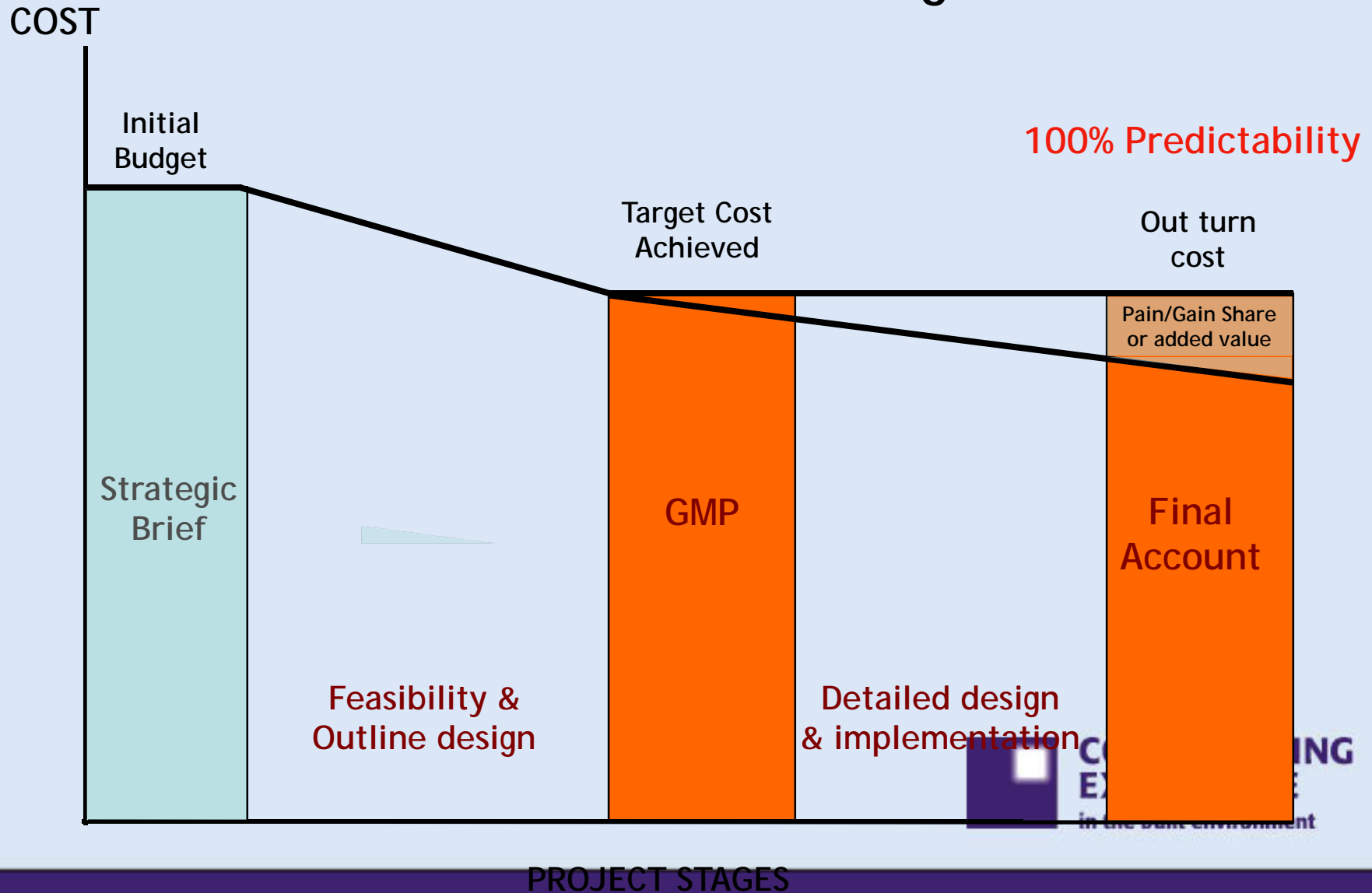


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# Involve Supply Chain Early To Unlocking Benefits



# The Collaborative Budget Process



**What do clients want?**

**More for less**



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# What is “Value”?

$$\text{Value} = \frac{\text{Benefit}}{\text{Cost}}$$

**More  
for less**



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Occupier,  
users

Operator,  
facilities  
manager

Owner,  
landlord

Lead  
procurer,  
client

Consultant,  
adviser

Lead  
contractor

Specialist  
trade  
contractor

Product  
supplier

Manufacturer

# The value chain

## Demand and supply



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7

## **QUESTION**

**Value drivers: what really motivates organisations?**



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# “Values”

## What really motivates firms?

- Financial performance
- Client satisfaction
- Collaboration
- Efficiency
- Employees (attract & retain)
- Environmental impact

- Image
- Predictability
- Repeat business
- Safety
- User satisfaction
- Waste
- Whole life



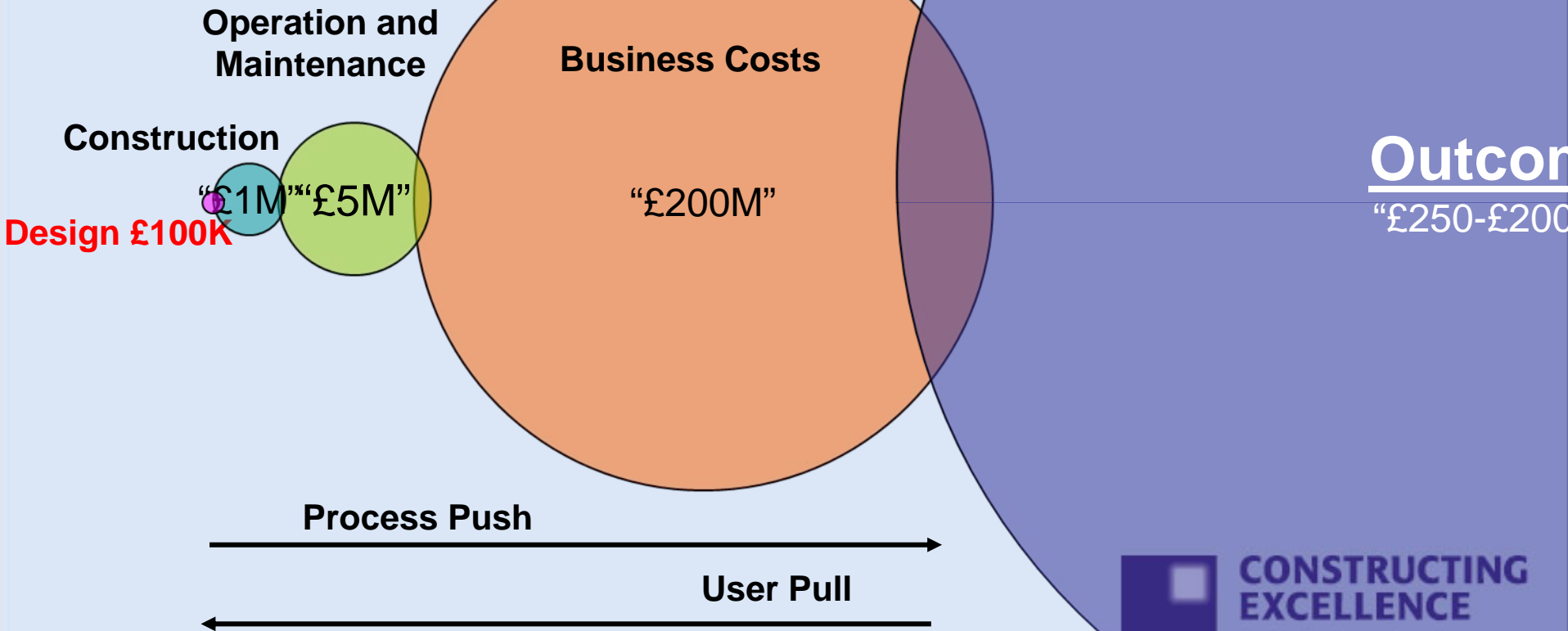
# How the built environment adds value

9

- Workplace productivity
- Competitiveness of investments
- Effectiveness of public services
- Locational value
- Social benefits
- Environmental quality

# What the customer really needs

10



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# What the OFFICE customer really needs

11



Office of Government Commerce

## Business outcomes

Productivity  
Staff satisfaction  
Employee retention  
Absenteeism

### Business Costs

£30M-£200M

### Operation and Maintenance

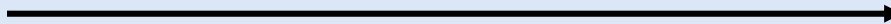
£3M-£5M

### Construction

£1M

Design £100K

Process Push



User Pull



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Source: Royal Academy of Engineering

- CABE/BCO: good environment can increase productivity by 25% and reduce absenteeism by 15%
  - An improvement of 2.5% in staff performance would pay for the building

# What the HEALTHCARE customer really needs



13

**(ANNUAL COSTS)**

**Operation and Maintenance**

**Business Costs**

**Construction**

£1M £4.3M

£42M

**Design** £100K

- Healthcare out
- Clinical outc
- Hospital-acc
- infect
- Safety outc
- Medication er
- Medication
- Re-hospitalisat
- Length of s
- Patient tran
- Costs per unit o
- Patient satisf
- Visitor satisf
- Staff mor
- Staff turno

**Process Push**

**User Pull**



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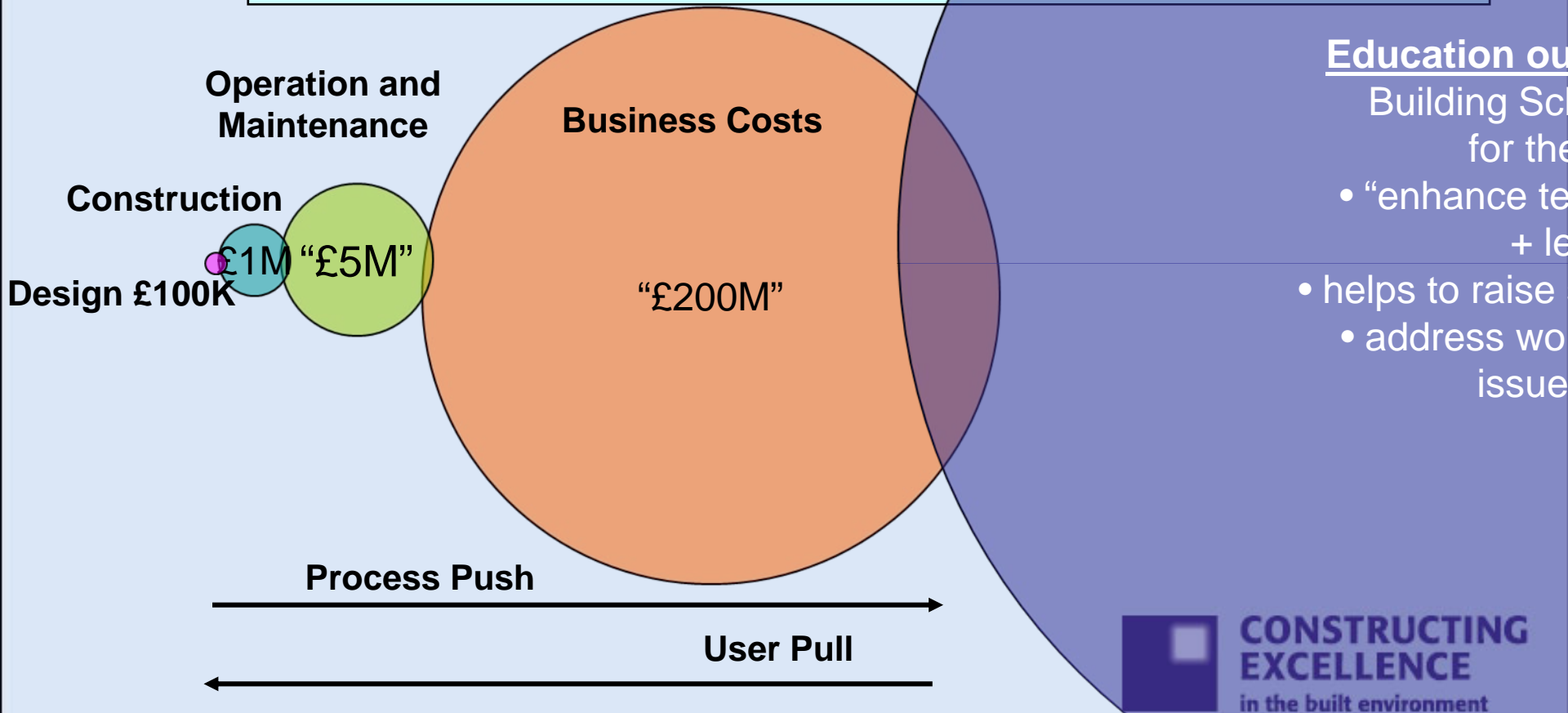
- CAGE: Patients discharged in 6.4 days rather than 8.1 due to better environment
- RICS: £2 billion a year is spent on treating illnesses arising from poor housing conditions



# What the EDUCATION customer really needs

15

department for  
**education and skills**  
creating opportunity, releasing potential, achieving excellence



Source: Royal Academy of Engineering

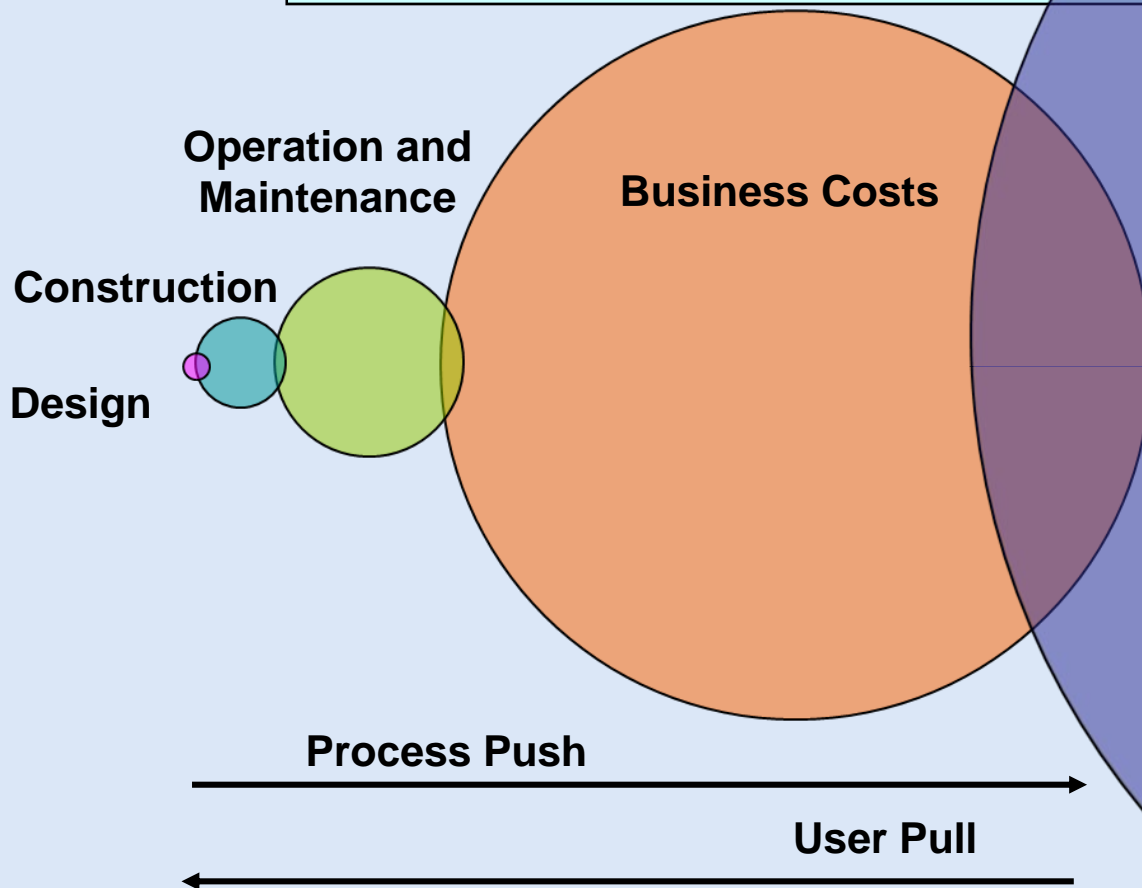
- CAFE: lunchtime supervisors reduced from 8 to 5





# What does the HIGHWAYS customer really need?

17



## Outcome

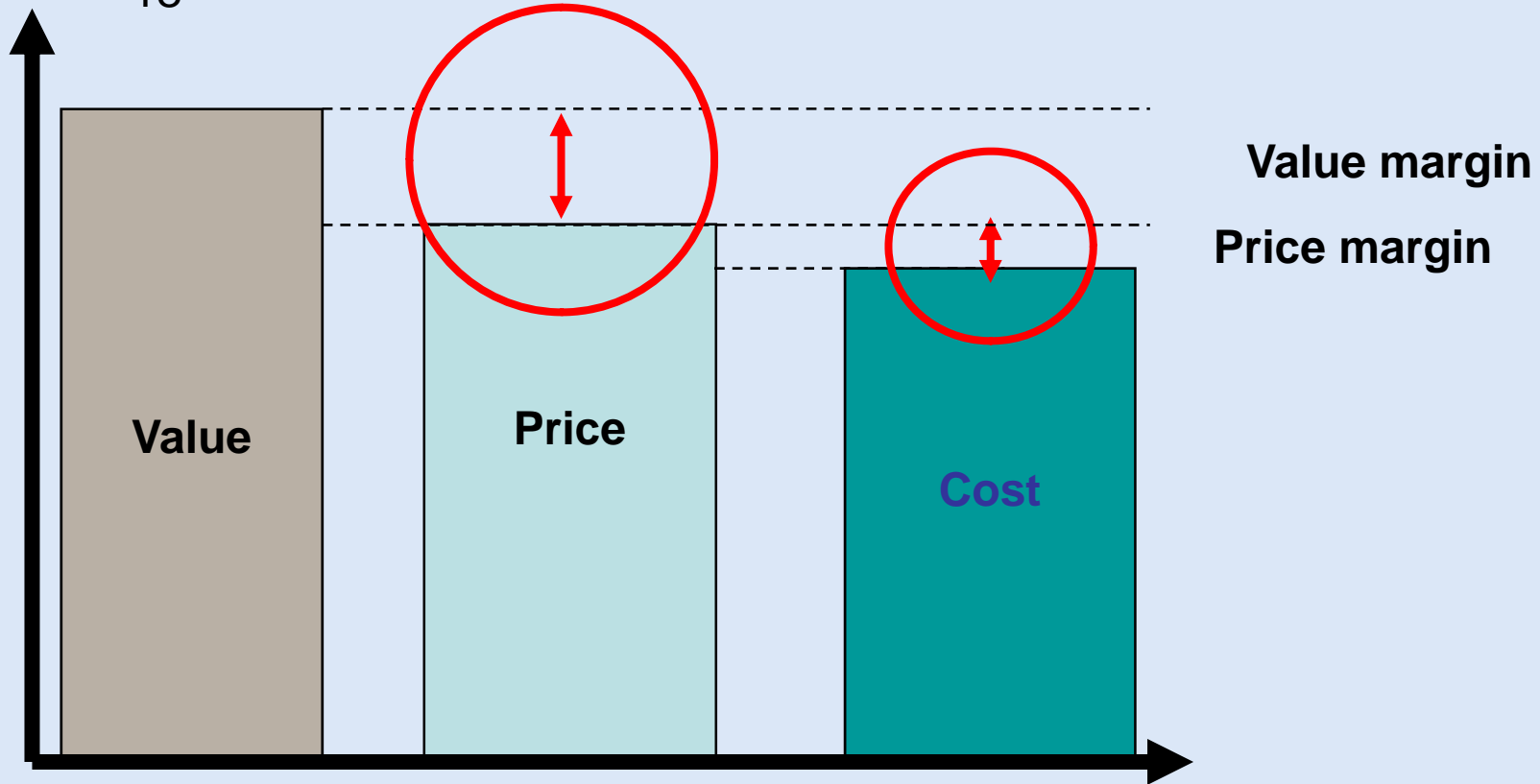
Ability to move from  
Enhanced environ



“Safe Roads  
Reliable journey  
Informed travel



# Opening space between value, price and cost

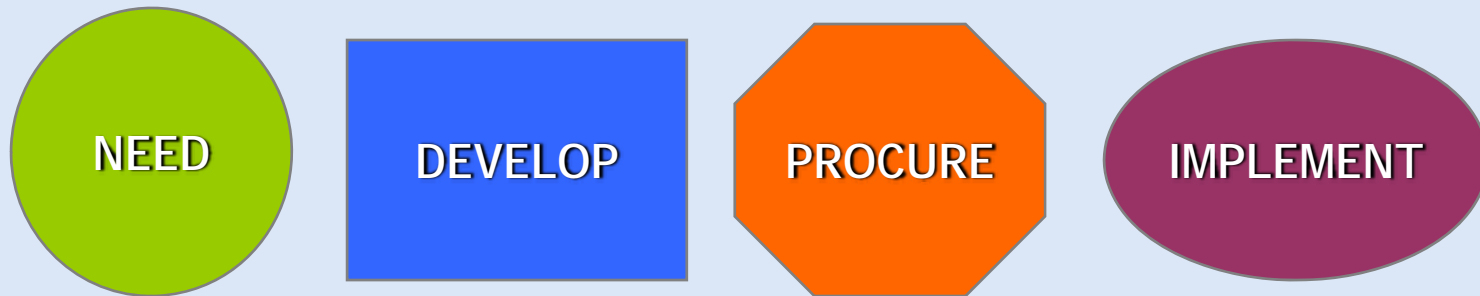


After Prof. Hennes de Ridder



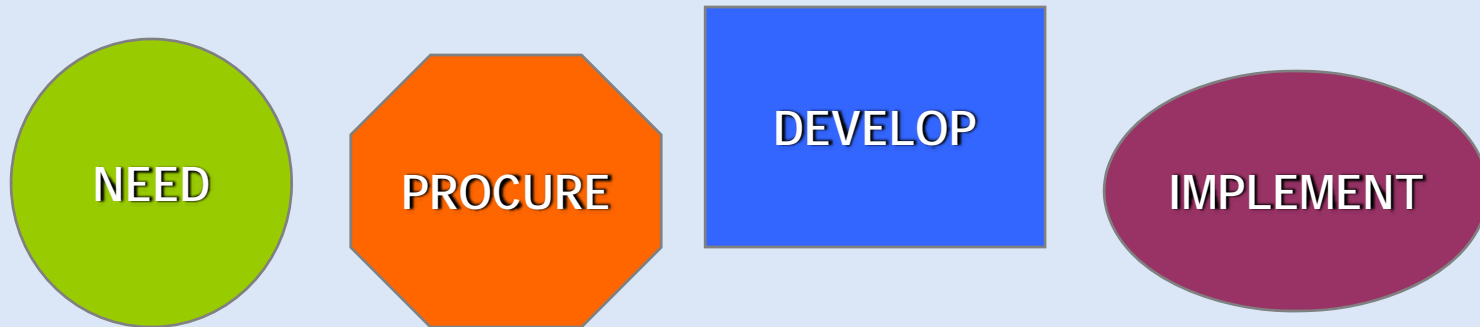
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# The “Historic” Process



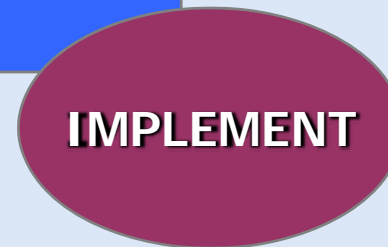
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# The “Transitional” Process



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# The “Aspirational” Process



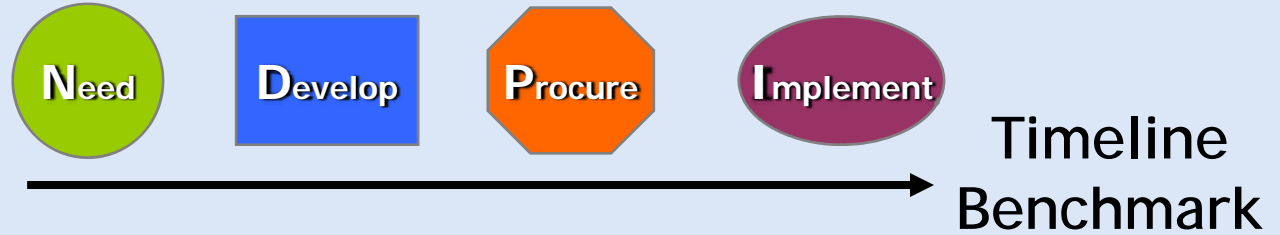
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# Summary

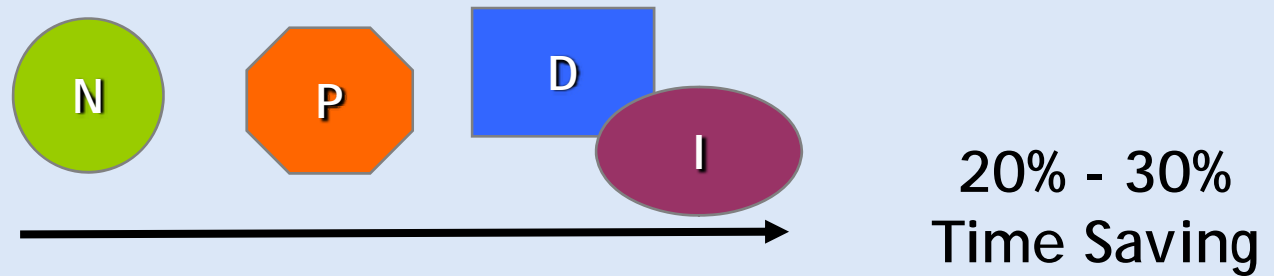
- To achieve effective performance a new integrated model is required
  - There are two strands to integration
    - Supply Chain Integration
    - Project Team Integration
  - Effective integration requires both strands
- Early selection and appointment is a prerequisite
- Government is fully supportive of/leading change

# Summary Integration Process Improvement

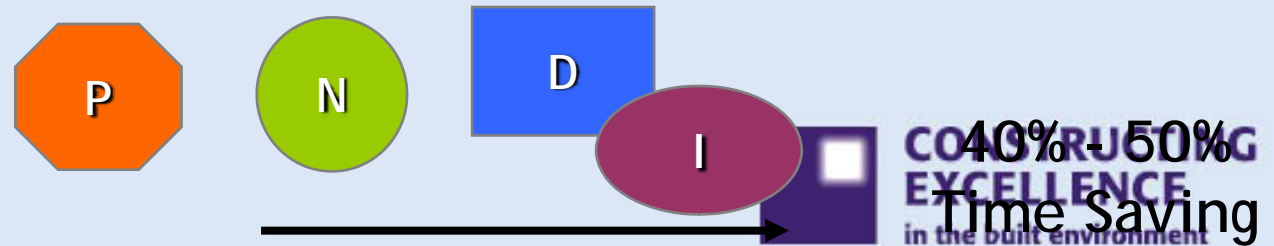
“Historic”  
(Sequential)



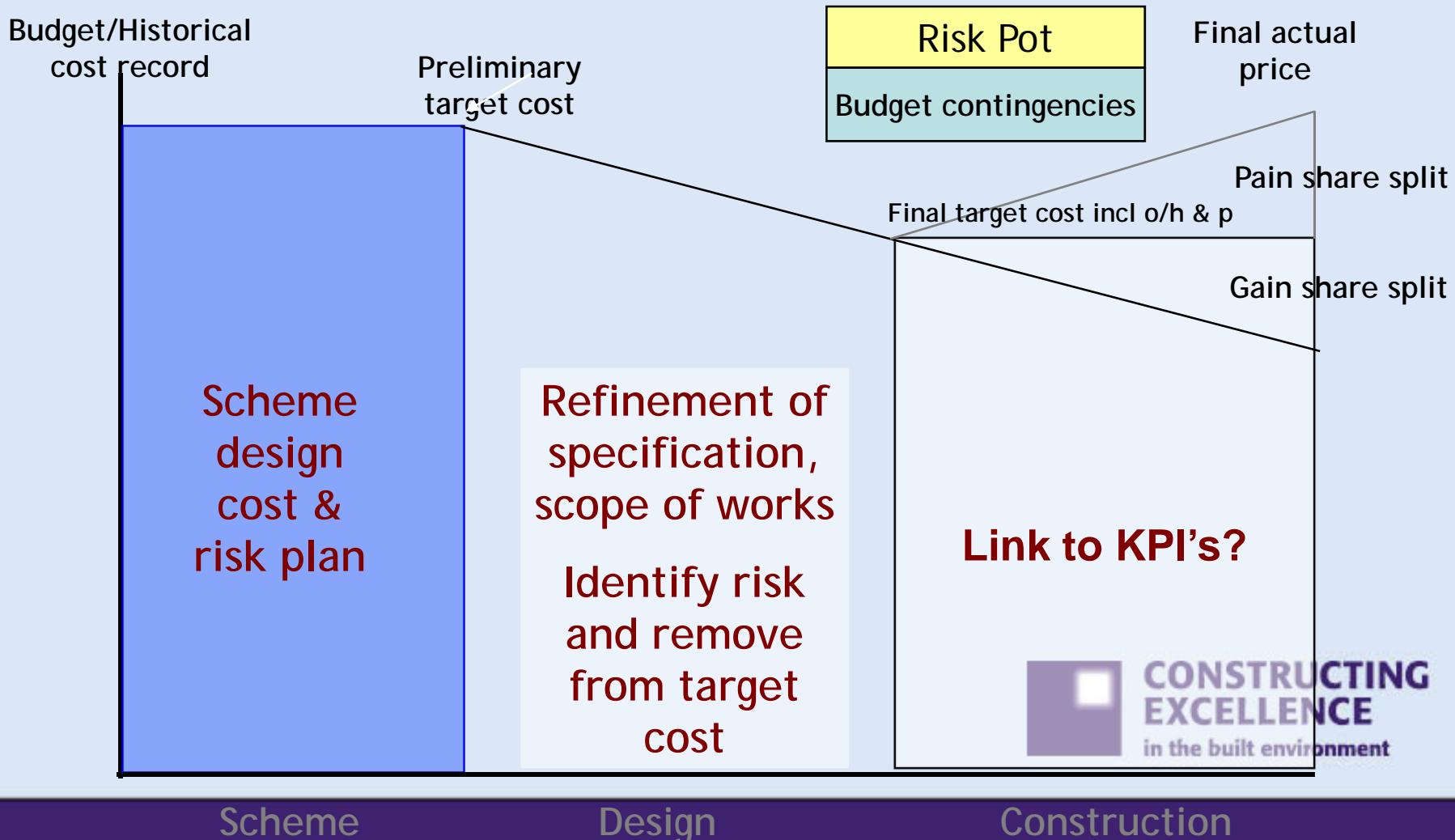
“Transitional”  
(Project Integration)



“Aspirational”  
(Industry Integration)



# Setting target costs and incentivisation





# Benefits Achieved To-Date

## Key Benefits

- Price & Cost reductions – up to 50% in client management, 40% in cost
- Safety improvements
- Productivity improvements 16 – 40%
- Reduction in project lead time up to 50%
- Reduction in Maintenance Cycle 30 – 50%
- Quality improvements 70%
- Improved Client satisfaction up to 90% - tenants, schools, public

## Additional

- 'Best' practice operations & processes = reduced variability
- Improved staff morale and motivation
- Better scheme planning, control & management
- Improved Visual Management



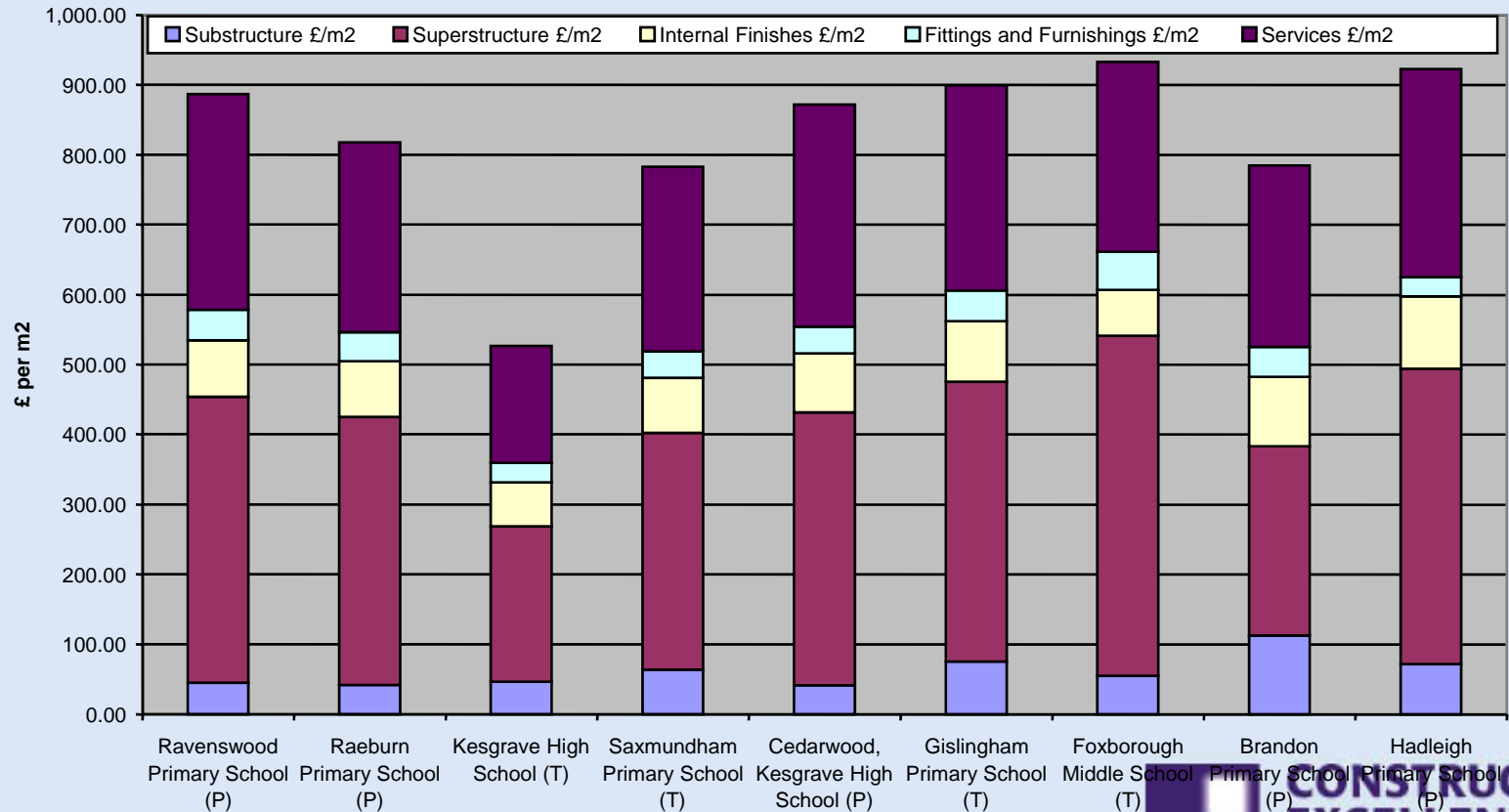
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# Current Position

- Most have piloted partnering on one off projects.
- Some have procured on a target cost, risk and reward sharing basis – but very few.
- Some have set up long term partnerships.
- Few understand integrated processes
- None have yet delivered major ongoing cost efficiency savings.
- Only the most advanced have set target cost improvements



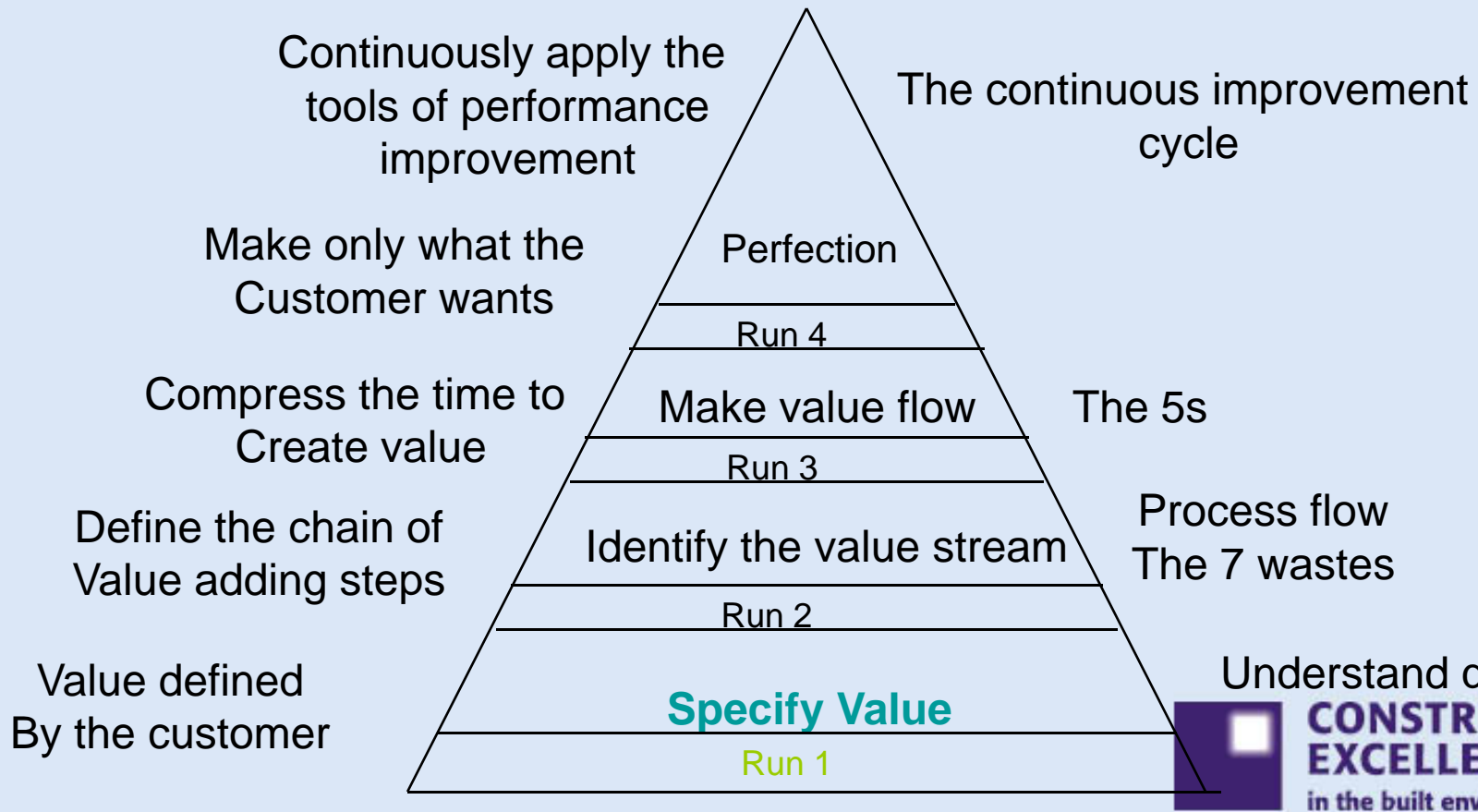
# Comparison of costs of traditional and partnered school projects



# Performance Improvement...

Objective

Tool



# Establish Value Criteria

- Required functionality
- Timescale
- Capital & revenue targets/trade off
- Quality standards
- Aesthetic and environmental performance
- Flexibility and adaptability
- Importance of sustainability
- Expected life
- Disposal strategy
- Attitude to risk

# Two Definitions

## □ Specification

- The detailed description of construction, workmanship, materials etc ....

## □ Quality

- The extent to which the specification is met consistently.



# Specification Versus Quality

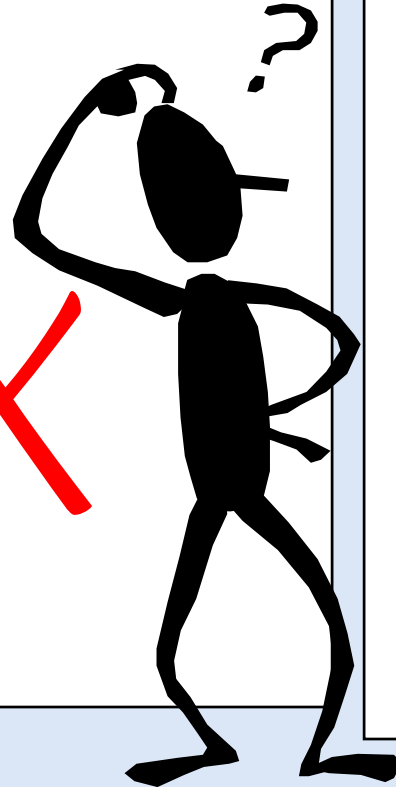
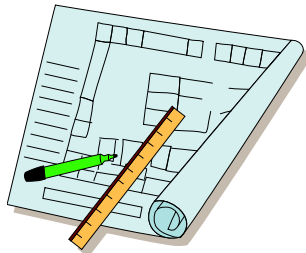
## The key issues:

- Start by understanding the specification.
- There is a fundamental difference between high specification and high quality.
- The specification must not only be right, it must be accessible and clearly understood by all those who use it.

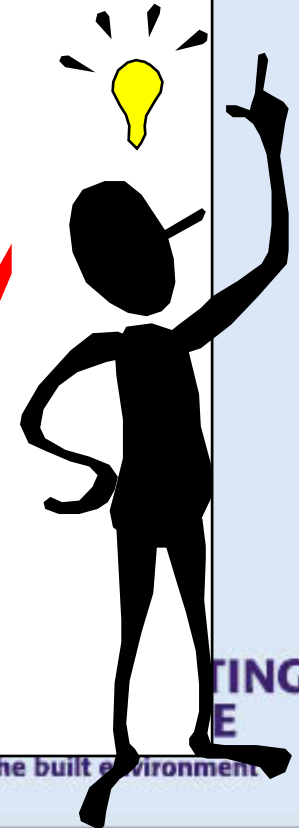
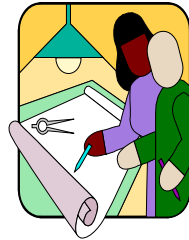
# The Specification Must Be Right And Understood By All!

32

Simple and easy to understand ?



Simple and easy to understand !



in the built environment

TING  
E



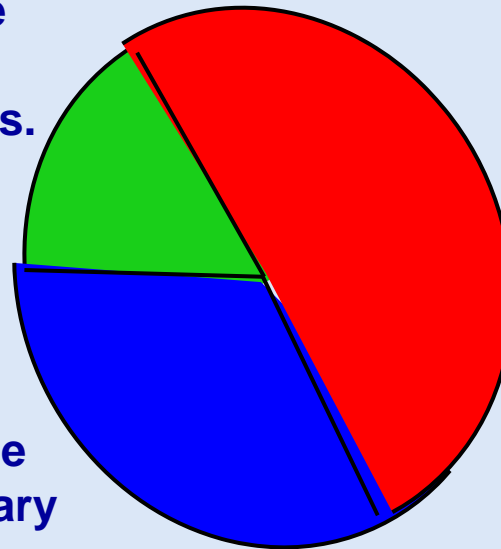
# The Aim: To Measure Work and Waste

## Value Added:

Any process that changes the nature, shape or characteristics of the product, in line with customer requirements.  
(Maximise)

## Non Value Added:

Work that is not Value Adding, but is necessary under current conditions.  
e.g. inspection, part movement, tool changing, maintenance (Minimise)



## Waste:

All other activity.  
(Eliminate)



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# What is a Process Map?

34

## □ Taking the example of Brewing a cup of tea ...

Process	Duration	Time (Minutes)														
		1	2	3	4	5	6	7	8	9	10	11	12			
Find cup	0.5 - 2	█	█	█	█											
Find Tea bag	0.5			█												
Find sugar	0.5				█											
Find milk	0.5					█										
Add ingredients to cup	0.5						█									
Locate kettle	0.5							█								
Fill with water	1								█	█						
Switch on	0.5										█					
Wait to boil	3.5											█	█	█		
Add boiling water to cup	0.5														█	
Stir	0.5															█
Remove tea bag	0.5															█
Serve	0.5															█

Total process time = 11 minutes 30

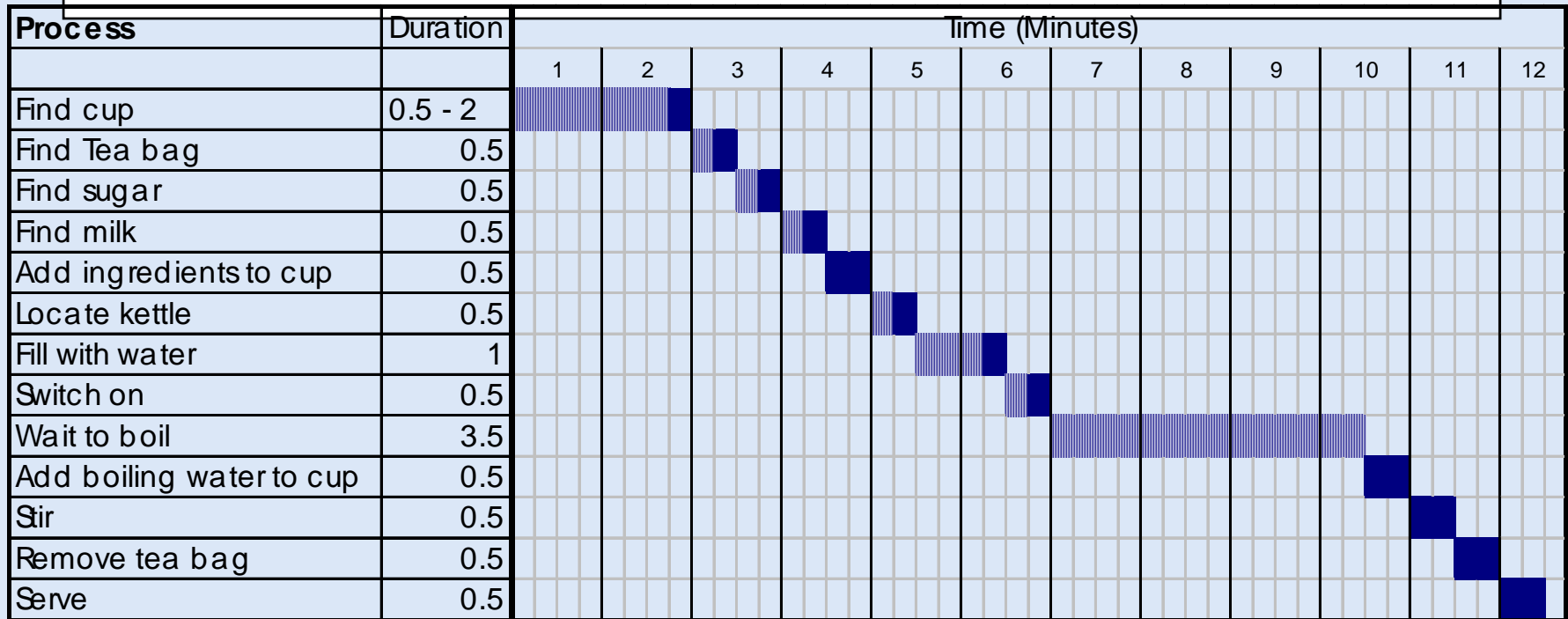


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# Non Value adding / Value adding activities

35

☐ Going back to our example....



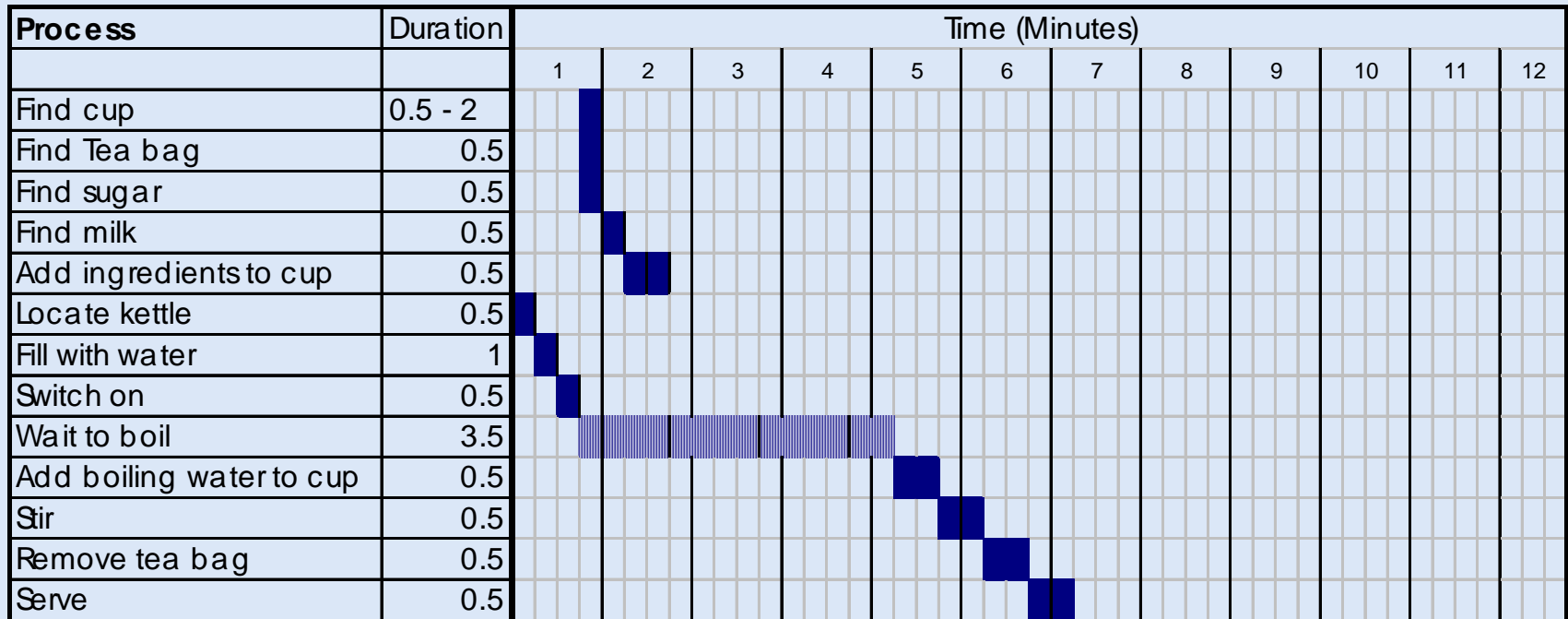
Non Value Adding = 63%    Value Adding = 37%

# Designing a good process

Back to Tea brewing ...

36

Desired outcome: Hot tea with one sugar for my husband



Total time of process: 6mins 15

Non Value Adding = 40%

Value Adding = 60%

Total saving of: 5mins 15 Saving = 105p per cup

(@ £20 per hour, 1 cup per day)



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Over a year = £383.25

# Portsmouth Heating Planned Maintenance

In depth evaluation of labour performance

- Overhead & Profit = £200
- Labour Hrs = £991
- Labour Overhead = £200
- Materials = £1200
- Prelims = £100
- Plant = £20
- Contingency = £50

Total cost / dwelling = **£2761**

Labour Hrs - **£991**

- **£60 – Defects**
- **£126 – Access**
- **£154 – Waiting**
- **£392 – Travel**
- **£35 – Paperwork**
- **£224 – Added Value**



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# The Challenges



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# The Immediate Implications

- Industry partners need to be chosen on capability - although they still must demonstrate cost competitiveness
- Industry partners need to make improved profits
- Long-term relationships are required for Continuous Improvement
- Preferred supplier status depends on improvement
- **And, for all this to happen, the client must have a substantial workstream which will enable the selected contractors to invest in the business processes that underpin collaborative procurement**



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# Developing Skills

- Sustainable Training for Sustainable Communities
- 691 Trainee Placements
- Further 494 Trainees – Future
- Retention rate 86%
- Focus on Black, ethnic minority & female trainees
- Supporting – Strategic partnering arrangement & fully integrated supply chains
- Real focus on delivering the right training, right time for employers and individuals to improve performance in the industry



# Challenges for Clients

- All client stakeholders must understand the process and benefits
- Collaborate to select a contractors and suppliers:
  - On basis of ability to deliver superior underlying value
  - Not lowest price
- Establishing a Collaborative commercial agreement that motivates the contractor's team to work in the clients interests
- Defining a need, not a solution
  - Through the use of an output specification
- Collaborating in optimising design quality and defining functionality
- Understand costs and performance and set targets for improvement



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# Challenges for the Contractor:

## Develop the processes and skills to:

- Establish long-term relations with key suppliers
  - Selected for their capability
  - Relationship established for mutual benefit
- Involve the Supply Chain in jointly developing design, programme, and costs
  - Using VM to optimise functionality and VE to minimise cost
- Participate in Continuous Improvement



# Challenges for the Designer

- ❑ Defining and accepting their role in an integrated design team benefits
- ❑ Accepting that others have valuable contributions to make.
- ❑ Following a defined design process
- ❑ Balancing the need for PI protection with the need to develop the optimum solution for the client.

# Challenges for the Cost Consultant

- Understanding collaborative approaches to ensure proper advice to clients on the most appropriate procurement route.
- Contributing to the design process – to help identify high cost areas and to identify opportunities for cost reduction.
- Developing the skills for target costing and setting up gain, pain incentive schemes.
- Understanding the cost base of suppliers in the supply chain to help target high cost areas for improvement.



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# Challenges for the Supplier:

- Establish long-term relations with contractors & key suppliers
- Be prepared to Open Books and work collaboratively to reduce costs whilst protecting profit
- Contribute early in the project to design, planning and costing
- Develop the processes and skills to ensure deliver of the right product at the right time
- Participate in Continuous Improvement



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# What Everyone Must Do:

- Allow people to deliver to their full potential
  - Through delegation
  - Through training
  - Through facilitation
  - Through incentivisation
  
- All under clear leadership from the Single Point Deliverer



# Top 10 for Collaborative Working

1. Select, involve and commit from the outset
2. Collectively agree needs, objectives and success criteria
3. Assure profit is separate from cost and work open book
4. Agree roles, responsibilities & interfaces - no duplication
5. Define & live the culture and values
6. Empower your people - agree boundaries & problem resolution
7. Work as a seamless team - explore capabilities and use them
8. One Programme with One Budget - nothing hidden
9. Appoint Customer Care Team - manage expectations
10. Celebrate success & share learning



# QUESTIONS

**Are there potential benefits in NZ, and what are they?**

**What are the barriers and challenges to applying in NZ?**



# The objectives of the diagnostic are:

- To assess current state and capability to deliver the significant VFM improvements.
- To prepare an action plan for change.



# Diagnostic categories

1. Strategy, Governance & Structure
2. Client Leadership
3. People
4. Procurement & Team Selection
5. Project Integration
6. Cost Management
7. Process Improvement

Compiled from:

- NAO Maturity Matrix
- BDB Diagnostic
- RALLIE
- Advantage
- Construction Commitments



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# CE/CWC Diagnostic: Critical Success Factors

Strategy, Structure & Governance	Client Leadership	People	Procurement & Team Selection	Project Integration	Cost Management	Process Improvement
Clear strategic objectives & benefits	Client commitment to collaboration	Appropriate Leadership	Procurement for long term improvement	Brief preparation & stakeholder involvement	Setting budgets/initial target costs	Project learning
Client structure to support collaboration	Client capability	Empowerment	Contract risk strategy	Design team integration	Value planning	Performance measurement & benchmarking
Management controls & Reporting systems	Client Leadership	Problem Solving	Project team selection	Scheme 'gateway' process	Open book cost management	Process Improvement
Holistic programming & resourcing	Teamwork & trust	Effective Communication	Supplier chain management	Project structure	Risk contingency management	Defects Management
Sustainable strategy	Training	Commitment	Team and individual Incentives	Collaborative programming	Whole life costs	Standard components and off site assembly

# The CE/CWC Diagnostic Assessment:

We evaluate your current state including:

- Organisation strategy and structure to deliver performance improvement through collaboration
- Client leadership during management of the change and development of effective teamworking.
- Procurement to establish long term alliances that incentives the client, designers, contractors and key suppliers to work together.
- Project integration involving users, contractors and suppliers in design, costing, planning.
- Open cost management to develop a shared understanding of cost and other aspects of performance.
- Process improvement including targets for improvement from project to project and establishing processes and behaviour with everyone trained to deliver continual improvement.

# 1. Clear strategic objectives & benefits

Objectives and benefits are defined in broad terms and communicated to stakeholders

and by costs, quality, time and performance outcomes

and are linked to related projects and sub-projects

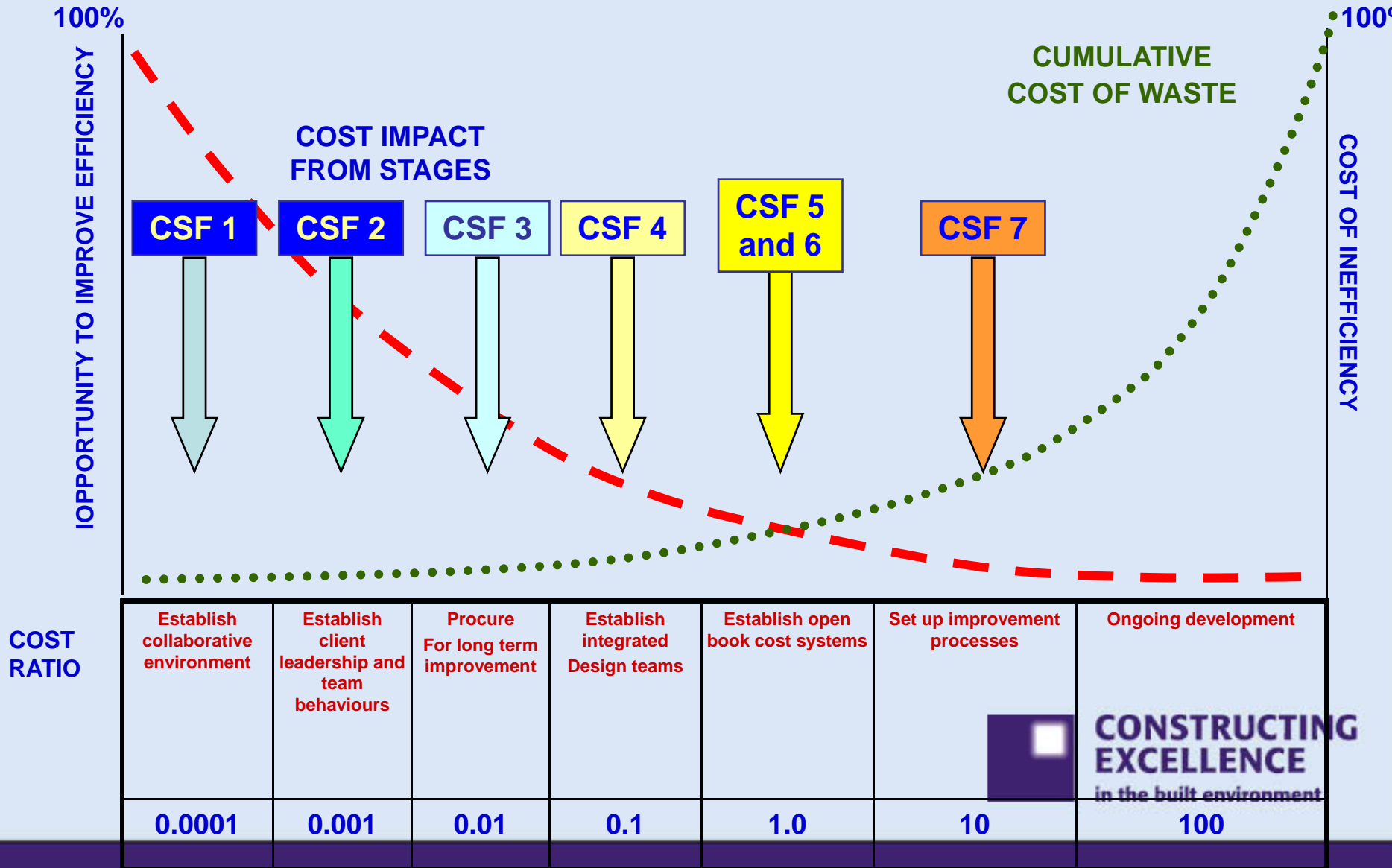
And developed with all key stakeholders

Performance now	
Performance target	
Best Practice	Programme objectives and benefits should be understood and accepted at all levels.
Issues	
Actions & KPI's	

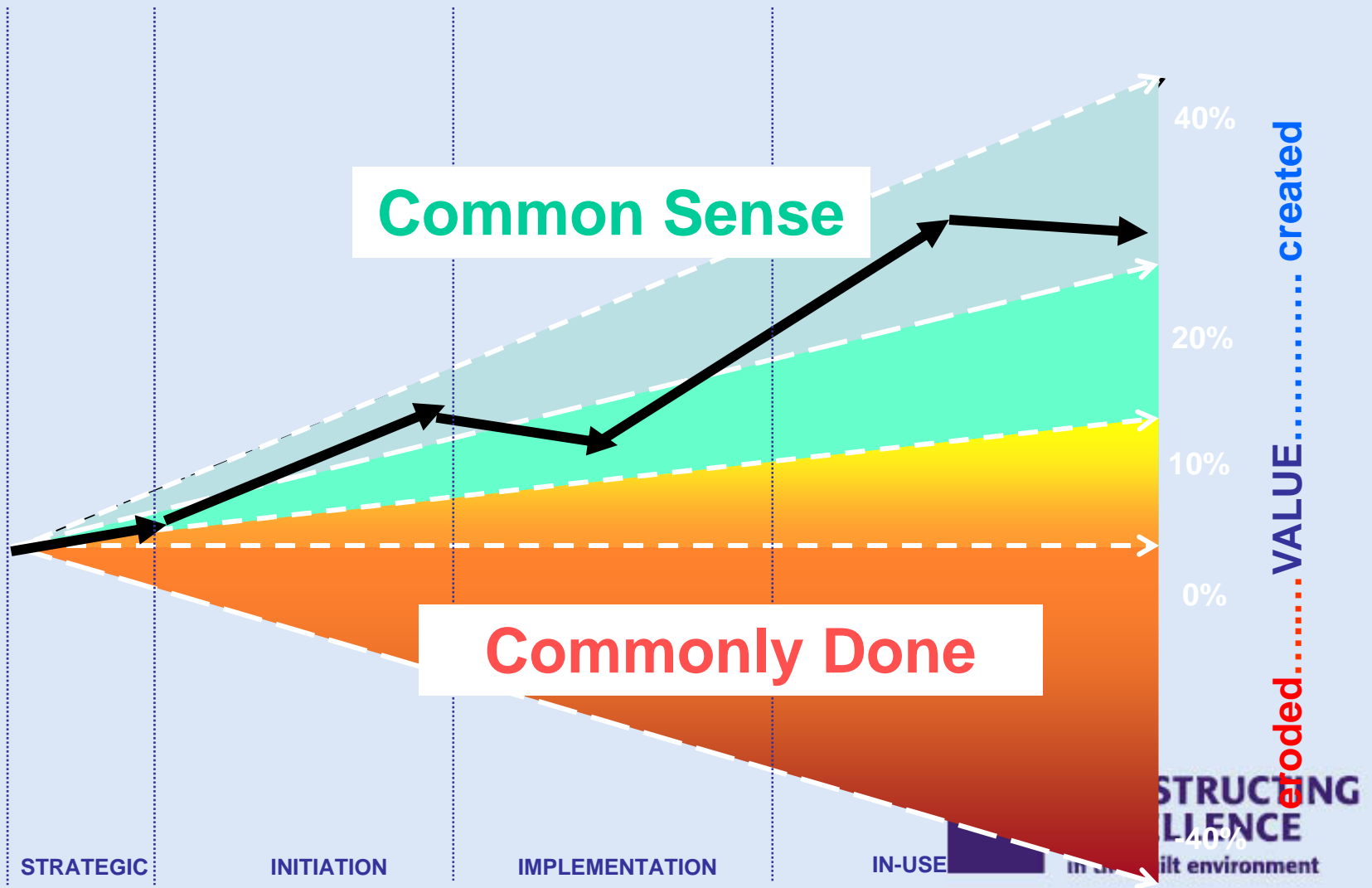


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# Excellence starts with the client

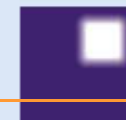


# Excellence can be Replicated



## Diagnostic Step 2: How do we Bridge the Gap?

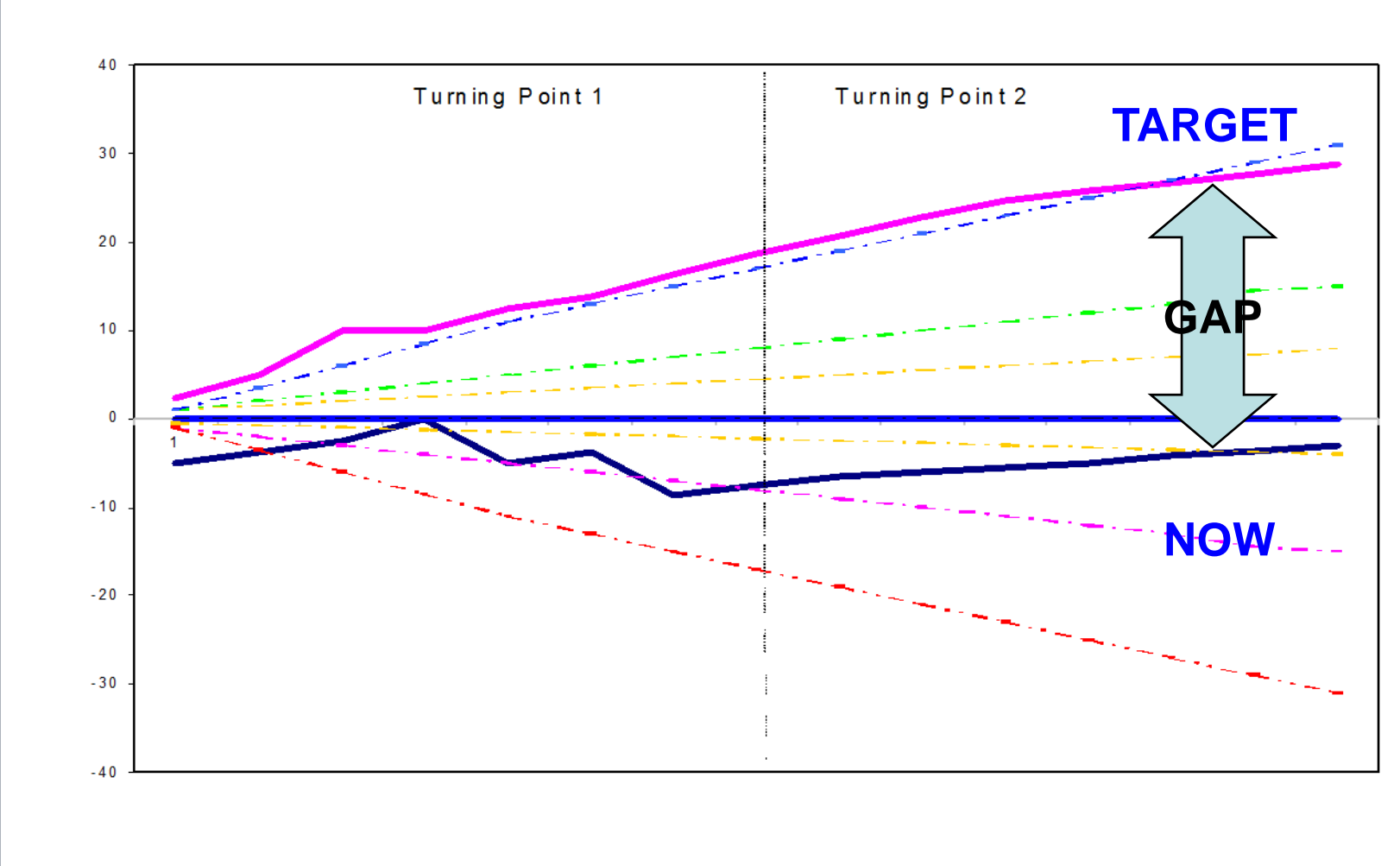
Success Factor Level of Trust	
Current performance	Yellow
Target performance	Green
Issues	Client will negotiate next project with existing team rather than tender
Strategies	Identify potential waste removal strategies which can be carried forward to next project
Actions	<ol style="list-style-type: none"> <li>1. Set up design chains</li> <li>2. Involve trades in concept design for next project</li> <li>3. Co-locate design consultants on site</li> </ol>
KPI's	<ol style="list-style-type: none"> <li>1. Reduced design documentation iterations</li> <li>2. Supply team margins</li> </ol>



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# Charting progress



# CSF 1 Governance

# 1. Clear Strategic Objectives & Benefits

Objectives & benefits are defined in broad terms & communicated to stakeholders ...

& by costs, quality, time & performance outcomes

& are linked to related projects & sub-projects

& developed with all key stakeholders

Performance now	
Performance target	
Best Practice	Programme objectives & benefits should be understood & accepted at all levels
Issues	
Actions & KPI's	



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## 2. Client Structure Supports Collaboration

Functional Client organisation structure with ineffective communication between parts

Good communication supports collaboration between parts

All stakeholders involved through effective communication process

Project teams formed & effectively managing communication with all stakeholders

Performance now	
Performance target	
Best Practice	Client organisation structure should support integration between Client departments & Delivery Partners
Issues	
Actions & KPI's	

### 3. Effective Management Controls & Reporting Systems

Controls are partly in place, or

Fully in place, but lag the project's events & activities

& keep up to date with the project's events & activities

& cover all the projects in the programme

Performance now	
Performance target	
Best Practice	Cost, time, changes & risk controls must be robust
Issues	
Actions & KPI's	

## 4. Effective Management Controls & Reporting Systems (Part 2)

"Upward only" reporting ...

With management actions  
taken as required

& reported within a  
programme

With management actions  
taken in a coherent way  
across the programme

Performance now	
Performance target	
Best Practice	Controls must drive performance improvement through adequate reporting arrangements
Issues	
Actions & KPI's	



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## 5. Holistic Programming & Resourcing

Project programmes prepared on a project by project basis by Client and passed to Delivery team

With some understanding of the effects of other projects

By Programme Planning teams, with full understanding of the effects of other projects

By a Programme-wide Planning team, with input from key stakeholders & regular prioritisation between projects

Performance now	
Performance target	
Best Practice	Programmes, & their projects, are planned & resourced on a holistic basis
Issues	
Actions & KPI's	



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## 6. Sustainable Strategy

Low – by not including sustainability objectives

Moderate – meeting general guidelines or targets

Good – it “aims high”, with clear criteria & targets

Excellent - & is an exemplar demonstrating real benefits.

Performance now	
Performance target	
Best Practice	Sustainability’s profile in the programme is ...
Issues	
Actions & KPI’s	



# CSF 2. Client Leadership

# 7. Client Commitment to Collaboration

Limited commitment at the highest level to make CW work

There is a commitment at the highest level in Client to make CW work

Adequate resources are allocated for organisation, process & people development

Staff have been trained in new roles & responsibilities for collaborative working

Performance now	
Performance target	
Best Practice	CW should be a key focus of business strategy & Senior Management priorities
Issues	
Actions & KPI's	



## 8. Client Capability

Is inexperienced in collaboration, or

Has broad construction experience & understand collaboration principles

Has some directly relevant collaboration experience

Has highly relevant collaboration experience

Performance now	
Performance target	
Best Practice	The Client's Project team must understand & have the skills for collaboration ...
Issues	
Actions & KPI's	



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# 9. Client Leadership

Clients provide inequitable leadership and ruthlessly administer Contract. Limited delegation of authority to Partners

Contract limits relationship development. Authority is delegated to Senior team members

Clients provide equitable leadership to achieve project business case. Authority delegated to appropriate team members

Inspire visionary achievements by supply chain to achieve enhanced project business case. Team members empowered to take responsibility within own competency

Performance now	
Performance target	
Best Practice	Clients must lead through collaboration, assign clear authority & delegate responsibility for delivery to those with the relevant capability ...
Issues	
Actions & KPI's	

# 10. Teamwork & Trust

Most team members are assumed to be untrustworthy by the Client and each other. Us and them attitude exists

Client & team members would like to trust each other. People take responsibilities seriously whole sharing concern for others

Trustworthiness is earned through demonstration & by creating relationships. Project co-operative/partnering exists with project treated as more important than employer

Mutual trust & good relationships are cornerstones to a project environment conducive to wealth creation. Project co-operative exists with project end-user treated as more important than project

Performance now	
Performance target	
Best Practice	A trust between Project Partners is promoted through open communication, honesty & Team working. Effective team working from all stakeholders delivers optimum results
Issues	
Actions & KPI's	

# 11. Training

No resources to support partnership development. All team members are assumed to be adequately trained & responsibility of their employer

Client & Suppliers recognise on-the-job learning can create more value. Resources for capability development & learning across Project teams

Coach/facilitator appointed to assist development of team members. Training has developed collaborative behaviours at Senior Management level

Learning programme for all team members introduced on project as a critical success factor. Extensive internal communications & training have developed appropriate skills through the organisation

Performance now	
Performance target	
Best Practice	Resources & processes should be allocated to train staff & share best practice. Training should be designed to meet the programme's needs
Issues	
Actions & KPI's	

# CSF 3.People

# 12. Appropriate leadership

Directors tell others what to do and how to do it

Directors and managers tell others what to do and how to do it

Directors coach and support managers

Many people are supported & some are empowered  
Leadership qualities established within peer groups, at all levels

Performance now	
Performance target	
Best Practice	Leadership is key to people development and the management structure is a self managed dynamic environment
Issues	
Actions & KPI's	



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# 13. Empowerment

Directors are conservative in their trust of their managers abilities

Directors begin to place trust in their managers, but most managers are conservative in their trust for their people

Skills training underway for all staff. This includes problem solving training. Ongoing improvements in abilities and people ownership of their processes

Complete flexibility is achieved throughout the organisation through people and self managed teams.

Performance now	
Performance target	
Best Practice	People in the business have all the authority need to make decisions and work in dynamic self managed teams
Issues	
Actions & KPI's	



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# 14. Problem solving

Fire-fighting and arson is the primary mode of management

Personal control is the primary mode of management Acceptance by directors that planning and problem solving capabilities are one of the keys to success

All Directors and managers trained in Planning and Problem Solving Methods

All employees and key suppliers trained in planning and Problem solving Methods

Performance now	
Performance target	
Best Practice	The company and the project use the PDSA to set standards and then identify problems and have the skills to resolve and at the lowest level
Issues	
Actions & KPI's	



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# 15. Commitment

Directors and managers abdicate from their responsibility

Directors are committed to improving relationships with customers  
 Directors create a vision of success and share it with managers  
 Managers accept their responsibilities

Directors create a vision of success and share it with all employees, suppliers and customers with manager involvement.

Responsibility is not just accepted but openly taken amongst peer groups. Commitment to success is everywhere

Performance now	
Performance target	
Best Practice	The values of the company/project can be measured/aligned and that the values of the company extend to how people act and how they are measured against
Issues	
Actions & KPI's	

# 16. Customer Focus

Business would be a right if the customer knew what they wanted

Directors and managers appreciate the importance of customer satisfaction

Directors and Managers actively involve external customers in the decision making process  
 All employees understand and accept the internal customer supplier chain and its importance

We are all successful by helping our customers (Internal and external) to be successful

Performance now	
Performance target	
Best Practice	Our value drivers, enhance the business case for internal and external customers
Issues	
Actions & KPI's	



# 17. Effective Communication

Communication – “what’s that?”

Communication is on a top to bottom basis but limited to problems

Top to bottom communication and lateral communication only at management level

4-way communication between individuals and groups at all levels. Communication is owned by all and the organization ‘markets’ itself internally

Performance now	
Performance target	
Best Practice	We know what’s going on and when, working together to manage all information to be able to plan ahead effectively and we can measure what we do
Issues	
Actions & KPI’s	

# CSF 4. Procurement and Selecting the Team

# 18. Procurement for Long Term Improvement

Involves a traditional tender & selecting the least price

Sometimes concludes by not selecting the least price

Long term frameworks impose pressure on Contractors for continual improvement

All key parties are appointed to long term frameworks – Designers, Contractors, key sub-contractors

Performance now	
Performance target	
Best Practice	The Procurement strategy should support long term programme improvement
Issues	
Actions & KPI's	

# 19. Contract Risk Strategy

All risks are contracted out (risk averse)

Price negotiations consider risk allocation responsibility

Contract share risk & reward (target cost with pain/gain) & open book cost transparency are used for all key parties

Over 20% extra value targeted for sharing with Project team

Performance now	
Performance target	
Best Practice	Contracts share risk & reward between all key Partners
Issues	
Actions & KPI's	



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## 20. Project Team Selection

Based on internal availability

With a capability assessment, with criteria set for the project

& on external resource availability

& with an understanding of the impact on related projects

Performance now	
Performance target	
Best Practice	Programme teams are selected for capability & to form an effective team
Issues	
Actions & KPI's	



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# 21. Supply Chain Management

<p>No Supplier strategy or desire to introduce. Suppliers selected on lowest price. Suppliers perceive Contractor to be Client</p>	<p>Supplier selection criteria other than tender price. Procurement strategy identifies areas for strategic partnerships</p>	<p>Targets set for Supplier improvement. Performance regularly assessed &amp; linked to work allocation</p>	<p>Support given to help Supply Partners. Supplier clubs set up to work together to improve. Considerable trust built up with long term Suppliers</p>
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Performance now	
Performance target	
Best Practice	Key Suppliers identified & fully integrated into the scheme process
Issues	
Actions & KPI's	

## 22. Team & Individual Incentives

Incentives are not considered at the start of the Project

The form of Contract itself is an incentivising force

& main Supplier & Client staff have incentives

& so does the whole Supply Chain

Performance now	
Performance target	
Best Practice	Individual & team incentives are linked to incentives within the Contract
Issues	
Actions & KPI's	



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# CSF 5. Project Integration

## 23. Brief Preparation with Stakeholder Involvement

Prescriptive design briefs (do it this way) prepared by Client or Designer in isolation of other one or more key stakeholders

Performance specifications developed by Client & passed to Delivery team for detailed development

Functional design brief detailed & developed by key Suppliers. A consultation process solicits views & opinions of key stakeholders including Users

Briefs are performance indicators of outcomes for end-user satisfaction. With continuing stakeholder involvement during & after completion of the brief

Performance now	
Performance target	
Best Practice	All key stakeholders involved in brief preparation including Users
Issues	
Actions & KPI's	



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## 24. Design Team Integration

Design carried out by Designer in isolation of other stakeholders

Key stakeholders are consulted at the inception of a project & in design development

Design team understand Client's objectives & make proposals that add value to their business. Formalised VM process involving stakeholders used throughout the project

Multi-skilled teams have been established & successfully integrate briefing, design & construction activities

Performance now	
Performance target	
Best Practice	Design carried out by team including key stakeholders – User, Contractor, Suppliers
Issues	
Actions & KPI's	



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## 25. Scheme 'Gateway' Process

Independent reviews (such as Gateway) are never carried out

Sometimes carried out, or are started mid-project

Often carried out, including at the early Gates

Always carried out, and at all Gates

Performance now	
Performance target	
Best Practice	A stage gate process for briefing & design will clarify roles & responsibilities & reduce changes
Issues	
Actions & KPI's	



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## 26. Project Structure

Rigid Hierarchical communications via Project Manager

Hierarchical barriers to open communication being broken down

Set up to deliver flat and functionality based teams

Open delivery teams are set up based on poly deployment

Performance now	
Performance target	
Best Practice	Best person leads the team, each team member understand the strategic plan and is set up to deliver it
Issues	
Actions & KPI's	



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## 27. Collaborative Programming

Unrealistic programmes prepared in isolation

Programmes actively used to monitor progress

Programmes prepared, owned & actioned by all Project team members, programme performance is measured

Programmes include delivery of end-user services & performance trends have visibility, All trades use performance based programming

Performance now	
Performance target	
Best Practice	Those that deliver the Project, the Suppliers, are fully involved in programme development & time compression
Issues	
Actions & KPI's	



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# CSF 6. Cost Management

## 28. Setting Budgets/Initial Target Costs

Initial target costs based on benchmarks or comparable projects

Are validated by independent external third parties

& based on robust business cases

That are reviewed at intervals during the programme

Performance now	
Performance target	
Best Practice	Programme target costs must be robust and developed through team analysis of cost and risk
Issues	
Actions & KPI's	



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## 29. Value Planning

Traditional practice. Brief well specified. Design undertaken by Consultant then passed to Contractor

Construction team understand Client's business process & make proposals that add value to their business

VM used by Project team to compare design options

Formalised VM process used throughout the project

Performance now	
Performance target	
Best Practice	Value Management & Value Engineering practices on every project
Issues	
Actions & KPI's	



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## 30. Open Book Cost Management

Team discussion of design/costs includes Suppliers

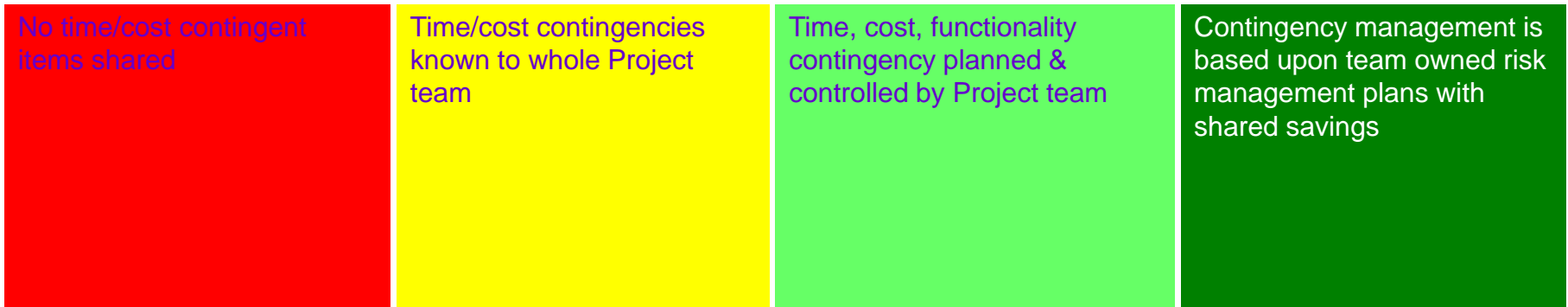
Protected overheads & margins. Target costs & incentives set to impose high pressure to improve

Transparency & detailed understanding of costs of some key Suppliers

The use of Open Book accounting, risk sharing & shared incentives (“pain & gain”) is working successfully

Performance now	
Performance target	
Best Practice	A shared understanding of cost is a pre-requisite for successful collaboration
Issues	
Actions & KPI's	

# 31. Risk Contingency Management



Performance now	
Performance target	
Best Practice	Risk contingencies should be negotiated and ownership clearly assigned
Issues	
Actions & KPI's	

## 32. Whole Life Costs

Are not considered, or

Are considered in principle, but not calculated, or

Are calculated, & used to inform the design

And form part of the evaluation criteria, published in advance

Performance now	
Performance target	
Best Practice	Whole life cost modelling during design will deliver huge savings in operation & maintenance costs
Issues	
Actions & KPI's	



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# CSF7. Process Improvement



## 33. Project Learning

In an ad-hoc unstructured way but feedback & learning processes are absent, or

And by published guidance notes & case studies. Learning processes are in place, but not seen as central, or

And by exchanges with other project teams. Learning processes are in place & seen as central

And by commissioning research or innovation work. Learning is measured in the performance process

Performance now	
Performance target	
Best Practice	The team learns from other projects & within the project itself ...
Issues	
Actions & KPI's	



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# 34. Performance Measurement & Benchmarking

Process performance variance not measured nor analysed

Process improvement measured but not benchmarked

Process improvement triggered by variances to performance benchmarks

Process improvement triggered by variance to other industry benchmarks for similar processes

Performance now	
Performance target	
Best Practice	Performance measured & compared between projects & between Clients
Issues	
Actions & KPI's	

# 35. Process Improvement



Performance now	
Performance target	
Best Practice	Process improvement should be planned & managed
Issues	
Actions & KPI's	

# 36. Defects Management

Defects corrected under duress during defects liability period

Defect correction progressively actioned during project

Defects free on completion: practical completion replaced by completion

Defects free design & construction progressively rewarded

Performance now	
Performance target	
Best Practice	
Issues	
Actions & KPI's	

## 37. Standard Components & Off Site Assembly

Infrequently used, or	Frequently used	& their costs reviewed in-house & with Suppliers	Balancing speed, economy, effectiveness, efficiency, flexibility & innovation
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Performance now	
Performance target	
Best Practice	Opportunities for use of standard components & off site designs are explored with suppliers early in a scheme/programme and delivering improvements in facility performance
Issues	
Actions & KPI's	



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# Feedback and learning