

# Performance Measurement

A woman with blonde hair, wearing a grey sweater, is pointing her right index finger towards a red line graph on a screen. The graph shows an upward trend with some fluctuations. The background is a warm, yellowish-orange color.

## National Construction Industry Performance Benchmarking

# Agenda

- ▶ CCG National Benchmarking Programme
  - ▶ Progress Briefing
- ▶ Outcomes Reporting
  - ▶ Developing the KPIs



# Our Vision

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## ► Vision

For the New Zealand construction industry to realise maximum value to all clients, end users and stakeholders and exceed their expectations through the consistent delivery of world-class products and services for the benefit of all New Zealanders.



# Our Mission

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## ► Our Mission

The Construction Clients' Group aims to deliver **improved industry performance resulting in a measurably better built environment.**



# Industry Targets

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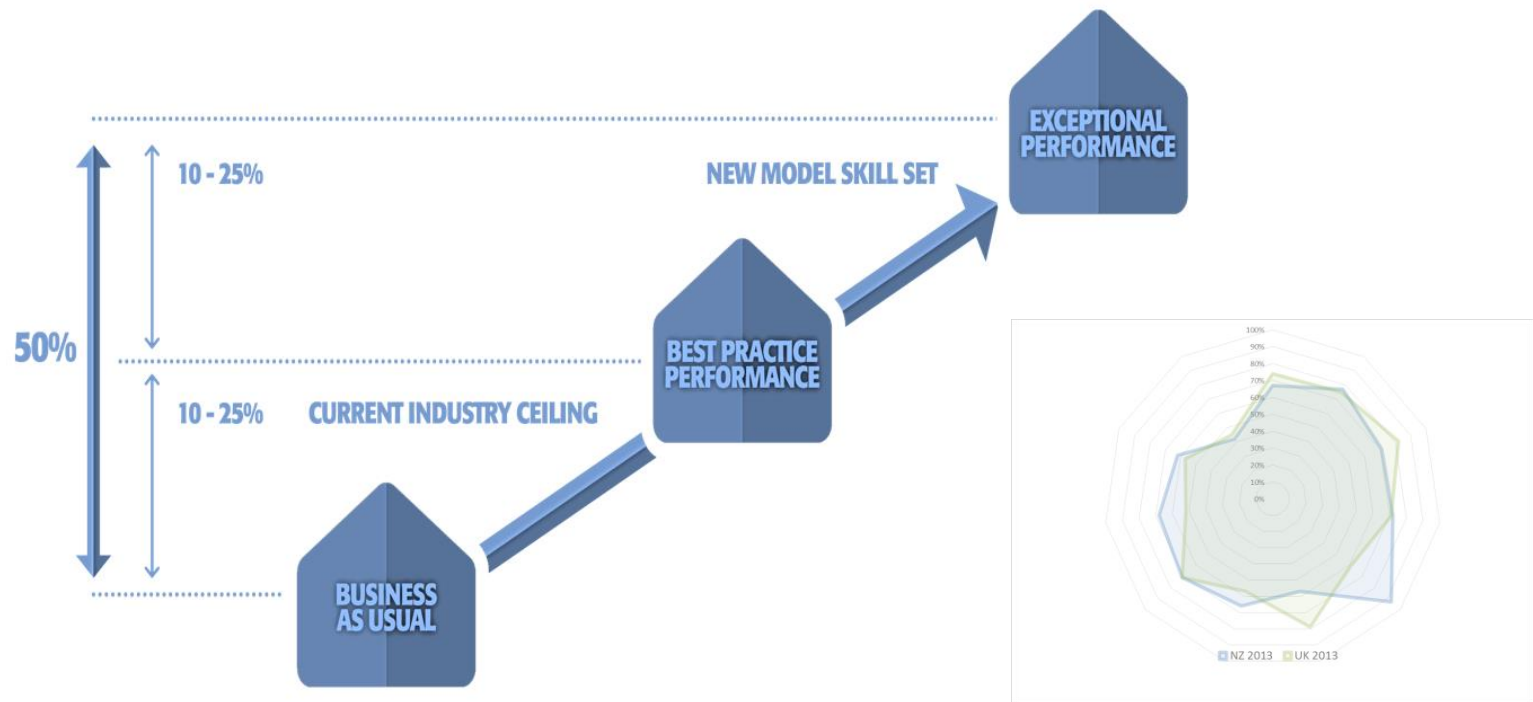
- ▶ Increase the value of the construction sector by transforming the way it works from end to end and raise its productivity by **20 percent by 2020**. Achieving this will add 2% to the country's GDP - around \$3 billion each year.
  
- ▶ CCG Response.....

# UK Government sets stiff Targets for 2025

**A burning platform for transforming performance**



**A fit-for-purpose, streamlined industry by 2025**



# 6 Project Measures (KPIs) Summary

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Six Key Suites of Measures



# 6 Project Key Result Areas (KRAs) Summary



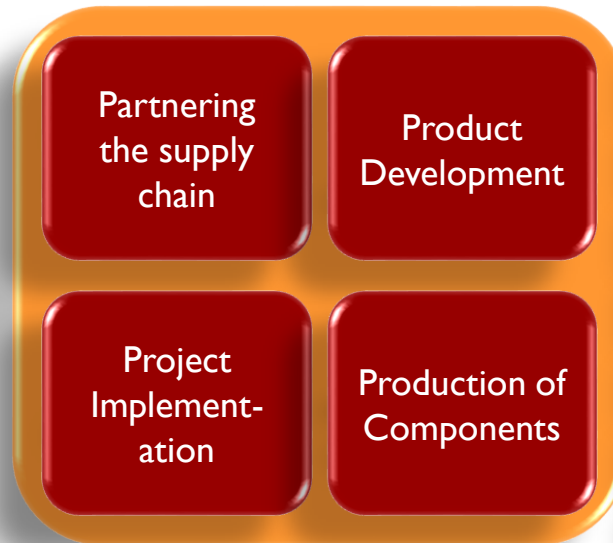


# How do we Improve Performance?

## Behaviours

- Committed Leadership
- Focus on the Customer
- Product Team Integration
- Quality driven agenda
- Commitment to people

## Processes



## Results

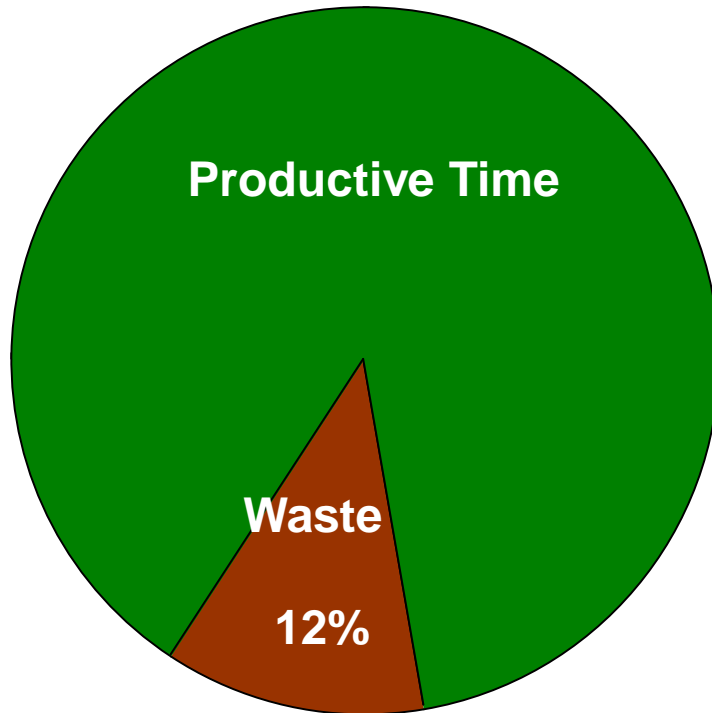
- Capital Cost -10%
- Construction Time -10%
- Predictability +20%
- Defects -20%
- Accidents -20%
- Productivity +10%
- Turnover & Profits +10%

► Reduction in Waste, Year on Year

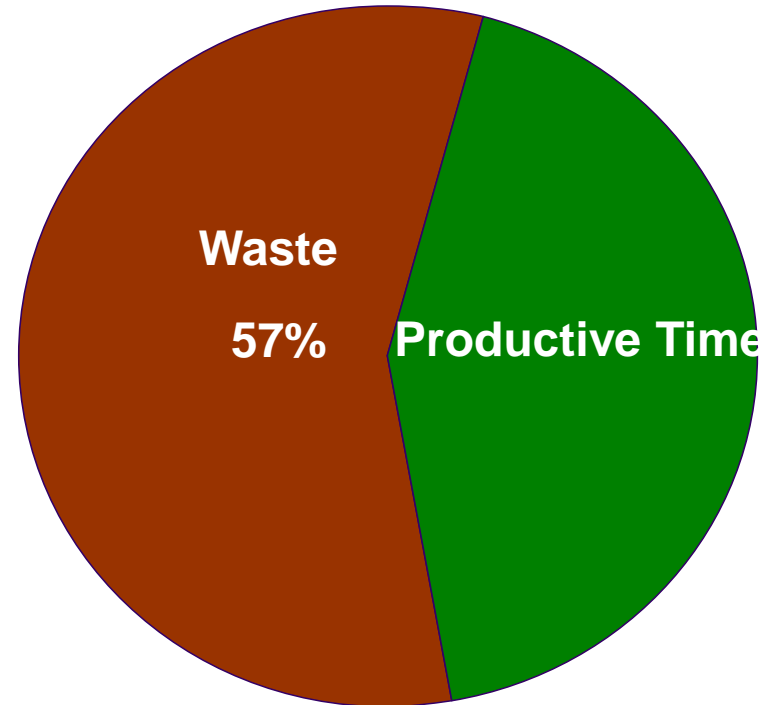
# Why Benchmark?

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- ▶ Sir John Egan: 30% Waste

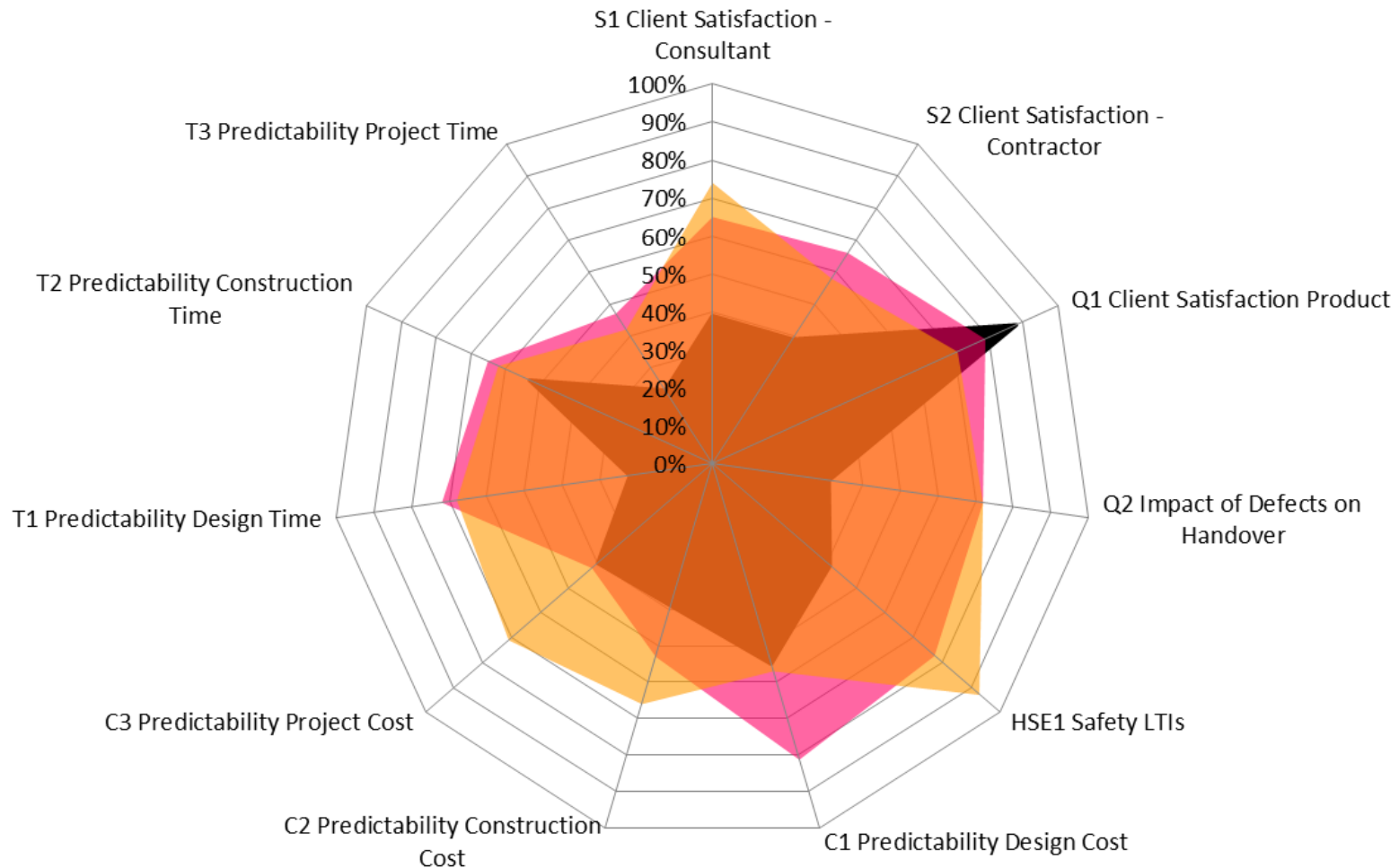


**Manufacturing**



**Construction**

# National Industry Performance 2006, 2011, 2013



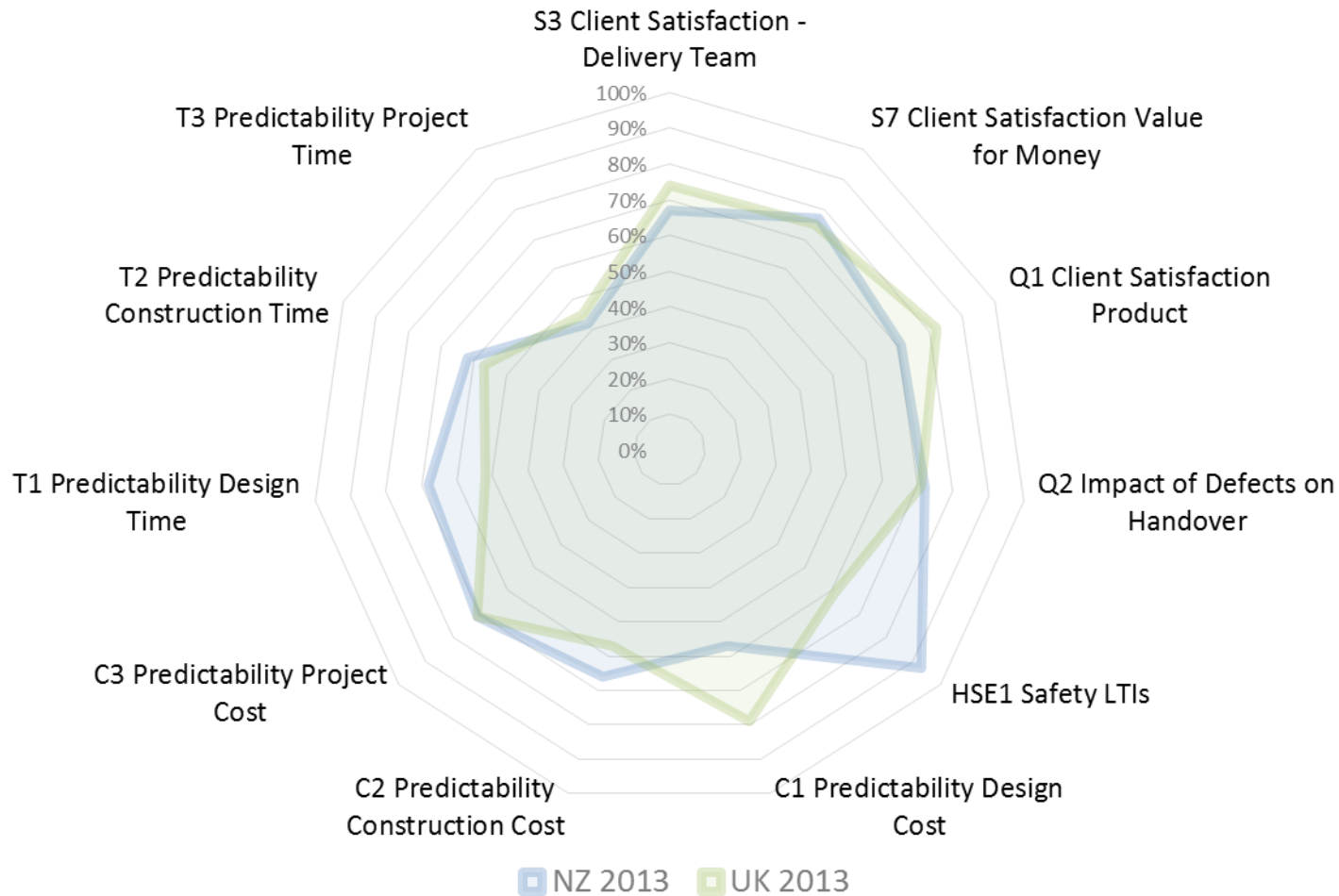
■ 2006 ■ 2011 ■ 2013

# National Industry Performance: 2014 Report

KPI Suite	KPI	Measure - % Projects	2004	2005	2006	2011	2012	2013	This Year	All Years
SATISFACTION	S1 Client Satisfaction - Consultant	% Scoring 8/10 or better	62%	79%	39%	65%	56%	74%	↑	↑
	S2 Client Satisfaction -Contractor	% Scoring 8/10 or better	62%	79%	39%	66%	74%	58%	↓	↓
	S3 Client Satisfaction - Delivery Team	% Scoring 8/10 or better	-	-	-	80%	72%	67%	↓	↓
	S4 Delivery Team Satisfaction with Client	% Scoring 8/10 or better	-	-	-	-	78%	57%	↓	↓
	S5 Use Lead Consultant Again?	% Scoring 8/10 or better	-	-	-	-	74%	66%	↓	↓
	S6 Client Satisfaction Use Contractor Again?	% Scoring 8/10 or better	-	-	-	79%	86%	79%	↓	↔
	S7 Client Satisfaction Value for Money	% Scoring 8/10 or better	-	-	-	75%	88%	77%	↓	↔
QUALITY	Q1 Client Satisfaction Product	% Scoring 8/10 or better	73%	82%	88%	79%	83%	71%	↑	↔
	Q2 Impact of Defects on Handover	% Scoring 8/10 or better	40%	78%	31%	72%	80%	72%	↓	↑↑
	Q3 Defects Clearance Period	% where defects are cleared within 14 days	-	-	-	60%	55%	75%	↑	↑
SAFETY	HSE1 Safety LTIs	% Projects with zero LTIs (Lost Time Incidents)	33%		41%	77%	87%	93%	↑	↑↑
COST	C1 Predictability Design Cost	% on target or better	53%	55%	55%	81%	79%	57%	↓	↔
	C2 Predictability Construction Cost	% on target or better	42%	54%	39%	53%	61%	66%	↑	↑
	C3 Predictability Project Cost	% on target or better	33%	48%	40%	42%	68%	71%	↔	↑
TIME	T1 Predictability Design Time	% on target or better	38%	52%	22%	72%	67%	68%	↔	↑
	T2 Predictability Construction Time	% on target or better	65%	73%	53%	65%	63%	62%	↔	↔
	T3 Predictability Project Time	% on target or better	34%	50%	23%	47%	69%	42%	↓	↑
PROFIT	*P1 Profit (Pre-tax Profit) Company KPI*	Median % profit before interest & tax	10%	10%	7%	-	6.6%			

# National Industry Performance: 2014 Report

## International Benchmark - UK



# Why would you benchmark your performance?

- ▶ Which one are you?
- ▶ Do you know?
- ▶ What's your evidence?



# Current Drivers

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- ▶ High Performance Client
  - ▶ Client of choice
  - ▶ Best tender prices
  - ▶ Demonstrate Value for Money
  - ▶ Ability to run Alternative Procurement
- ▶ Best Value Supplier
  - ▶ Supplier of choice
  - ▶ Demonstrate Value for Money
  - ▶ Repeat business
  - ▶ Ability to negotiate on Alternative Procurement

# Who's Benchmarking?



**Waitaki** DISTRICT COUNCIL





# Call to Action

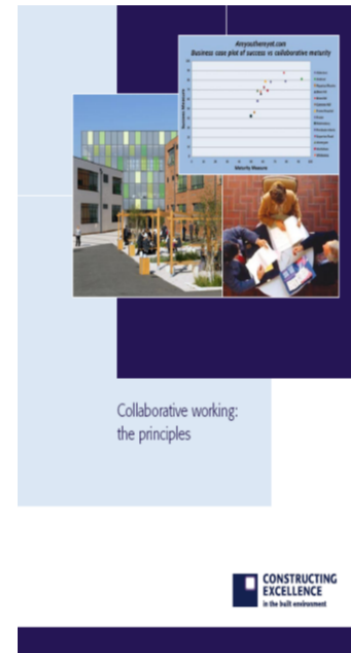
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- ▶ Provide project data
  - ▶ Projects completed in 2014
- ▶ Join the CCG National Benchmarking Board
  - ▶ Launch 2016
  - ▶ Register interest now
- ▶ Sponsor the programme
- ▶ Start measuring your performance

# UK Constructing Excellence Response

## Achieving Vision 2025

- ⇒ Collaborative working
- ⇒ BIM
- ⇒ Lean
- ⇒ **VALUE in use**





**Construction  
Clients' Group**  
CONSTRUCTING EXCELLENCE



## Benchmarking Industry Outcomes

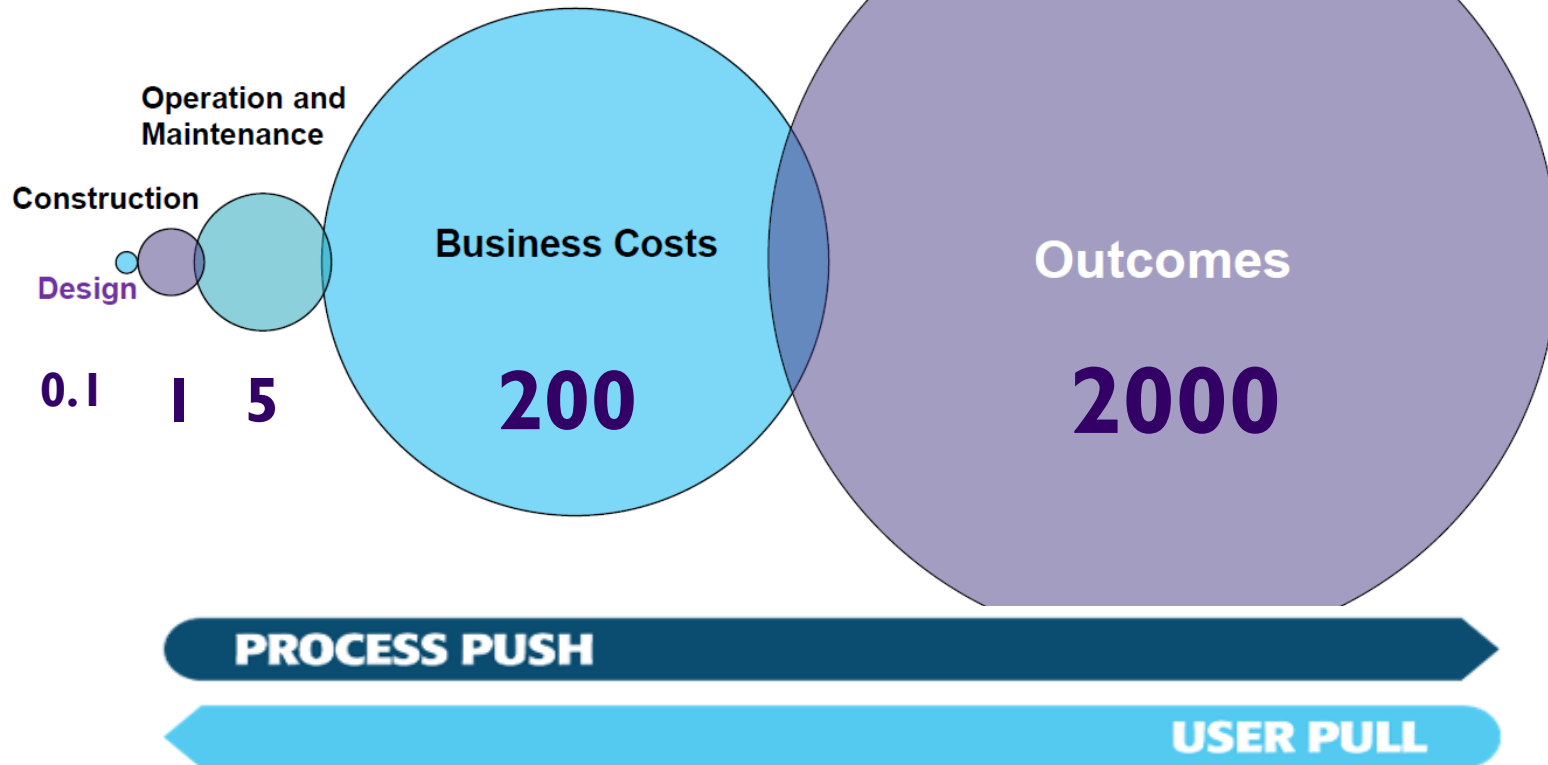
Construction Clients' Group, Wellington, September 2015



What are we all trying to achieve in the Built Environment?

# The real value of client outcomes (1-5-200)

The value of client outcomes far outweighs the project costs



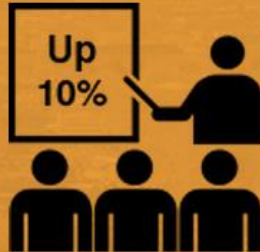
# The real value of client outcomes (1-5-200)

## High quality buildings can...



Speed up recovery  
in hospital by

**27%\***



Improve learning  
in schools

**10%\***



Increase productivity  
in the workplace

**20%\***



Help reduce  
crime rates

**67%\***

*\* 'The value of good design: How building and spaces create economic and social value'  
Commission for Architecture and the Built Environment (CABE)*

# The real value of client outcomes (1-5-200)

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**“better quality buildings  
and public spaces improve  
the quality of people’s lives”**



**85% agree\***

# St Francis of Assisi Academy, Liverpool - sustainability delivering value

## Green values help academy top new league table

“A school which offers its pupils a green-focused education has won plaudits for having the best teaching standards in the country....”

*The*

*Independent*, 11 Jan 2007

The Academy of St Francis of Assisi	
Contractor	Wm. Bull
Client	Management Academy Trust
Cost (incl. VAT)	3.15
Client location	2001
Publication date	December 2006
Region	North West
Category	Education
Contract value	4.12 million
Project completion	May 2006 - Sept 2006
Website	Sustainability, Wm Bull

The Academy of St Francis of Assisi is a 100% faith Academy for 11-18 year old students in the Merseyside area of Liverpool. One of the Government's new 'Right to Education' academies, it was co-sponsored by the Roman Catholic Church and Church of England, with the DfES.

The building was designed to combine learning with a specific focus on the environment. The steel frame, solar panels, rainwater harvesting system, wind turbine, solar panels, and an innovative sustainable curriculum, all contribute to the building's green credentials. The building also uses green technologies to support learning and energy efficiency.

Wm Bull was the main contractor for the building, which was completed in May 2006. The project was managed in partnership with the client, the Academy of St Francis of Assisi, and the DfES. The building is a prime example of sustainable design in education.

**Key People and Philip Brown**

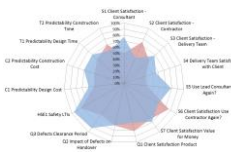
Philip Brown has been instrumental in the development of the building, which is a prime example of sustainable design in education. He has worked closely with the client and the DfES to ensure that the building meets all the requirements of the 'Right to Education' programme.

“The excellent GCSE results and the fact that our students finished top of the national league tables for progress can rightly be attributed to the impact the building had on their studies”





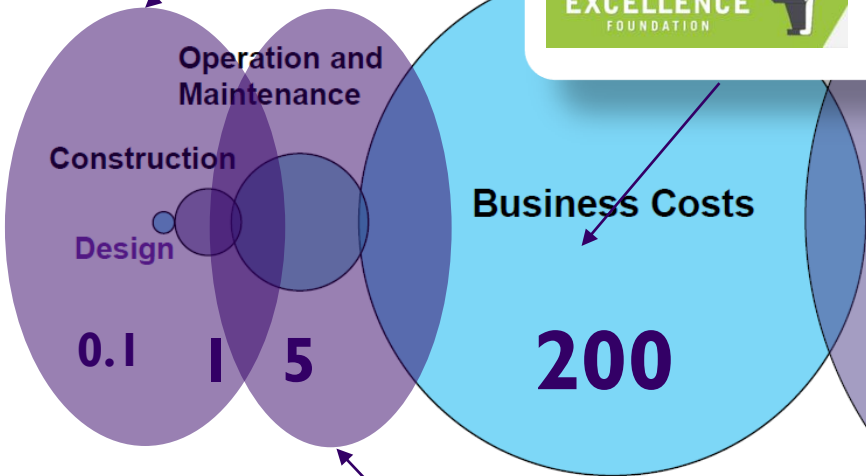
# So what should we benchmark?



CCG International KPIs



Baldrige Business Excellence



Outcomes

2000



FMBP Group PLUS...





## Peckham Library, UK, Stirling Prize Winner

- **Replaced two existing libraries**
- **Cumulative use went up 3 times**
- **Book borrowing increased 8 times**

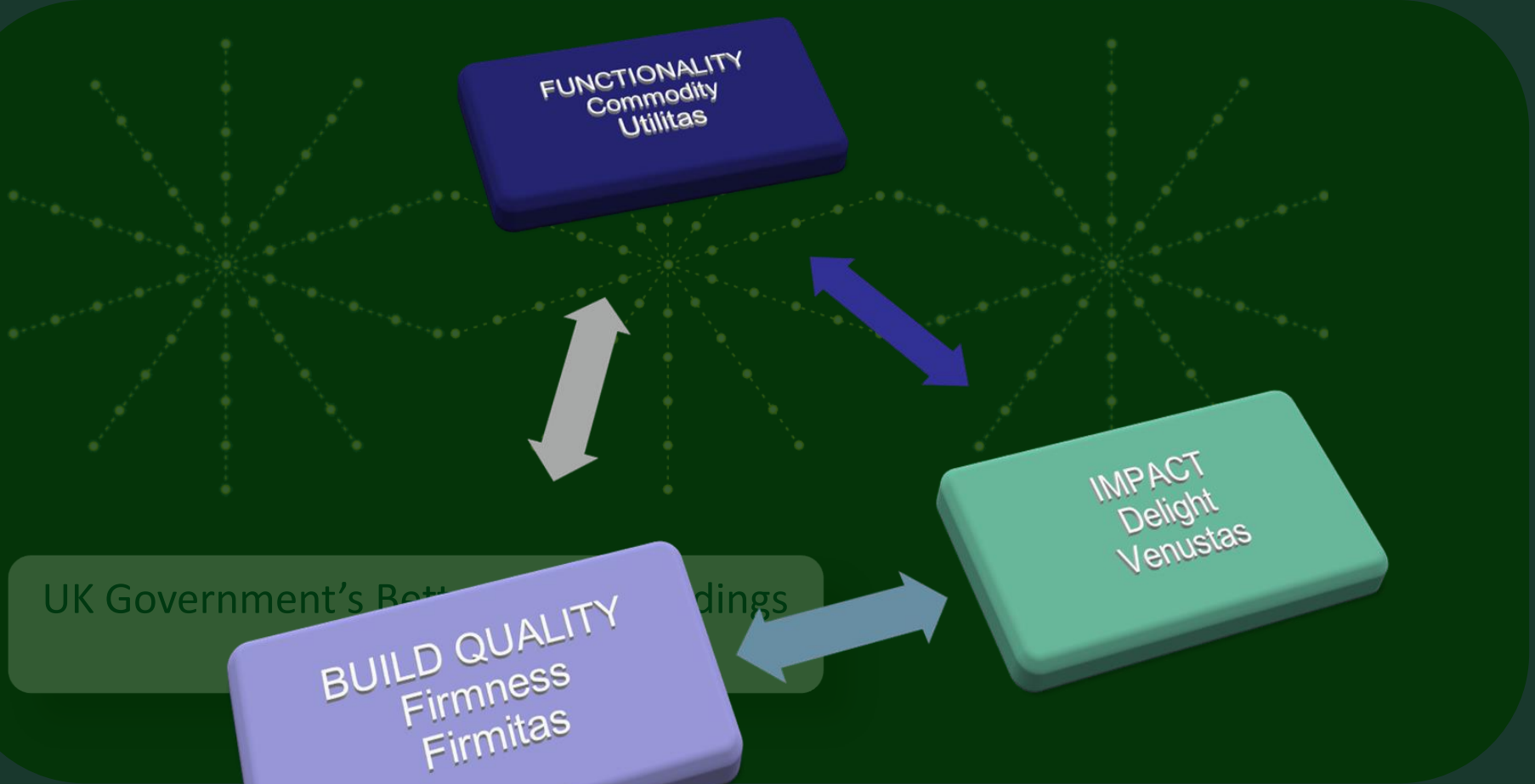
# CIC DESIGN QUALITY INDICATOR

**FUNCTIONALITY**  
Commodity  
Utilitas

**IMPACT**  
Delight  
Venustas

**BUILD QUALITY**  
Firmness  
Firmitas

UK Government's Better Buildings



Process  
Industry  
International  
Key  
Performance  
Indicators



Types of  
Measure  
we need

Product  
Outcomes  
Design Quality  
Indicators?  
Other?

Sustainability  
of Process *and* Product



What OUTCOMES are we all trying to achieve in  
the Built Environment?

Efficiency

Fitness for Purpose

Cost in use

Visual Form

Effectiveness

Sustainability

Engineering Systems

Kerb Appeal

Net to Gross

Context



Aesthetics

Performance

Attention to detail

# What OUTCOMES are we all trying to achieve in the Built Environment?

Robustness

Access

Space Standards

Location

Daylight

Flexibility

Functionality

Meaning

Comfort

Safety

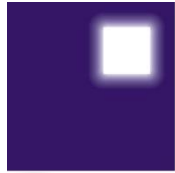
Order

Innovation

Air Quality

Finishes

Acoustics



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Clients' Group**  
CONSTRUCTING EXCELLENCE

Thank You