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MEASURING COLLABORATION

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Constructing Excellence Performance Measurement Forum
14th October 2020
@constructingexc #CEPMF @GreenwoodCLtd

Brief

CE Performance Measurement Forum

... to help measure, benchmark, understand and improve project performance on established KPIs against the rest of the construction industry

... strongly aligned with the development of KPIs with the CIH and the CLC

... focus on best practice in collecting and analysing project data, enable CE members to share data in a trusted, safe-space and extract meaningful insights

Measuring Collaboration

- Collaborative Working Recap
- CW Models and Measures
- Performance Measurement Recap
- Case Study
- Recommendations

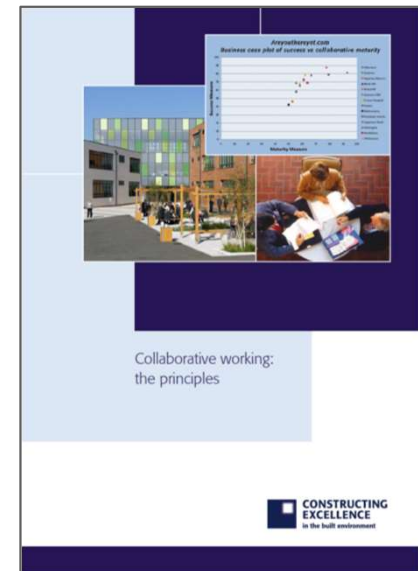
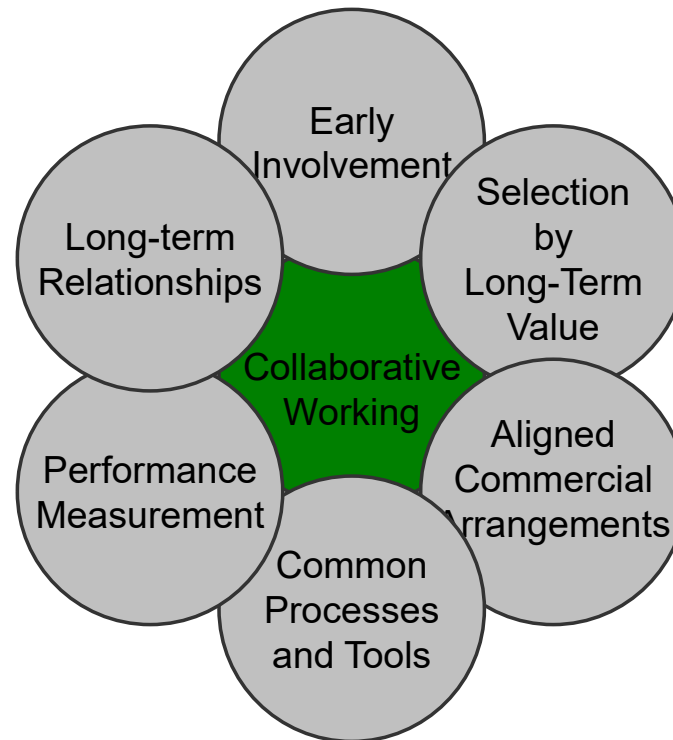
Collaborative Working - What?

Three Overriding Principles



'Collaborative Working - The Principles',
Constructing Excellence, 2011.

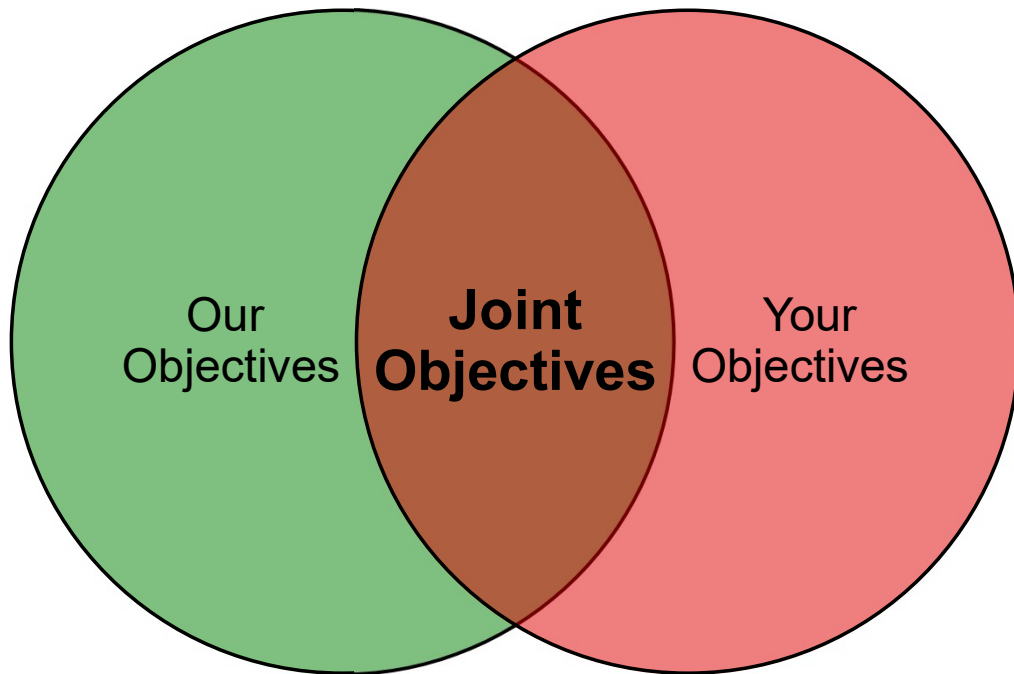
Six Critical Success Factors



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Objectives Drive Performance Measures



➔ Key performance indicators

'Mutual Objectives' from 'Partnering in Practice'.
© Paul R Greenwood, United House Ltd, May 2003.

A collage of documents related to housing partnerships and maintenance charters. The documents include:

- The Stort Valley Partnership**: A collaboration between Stort Valley Housing Association, consultant Miller Mitchell Burley Lane, and contractor United House Ltd. It outlines the mission, objectives, and methods for improving local homes and communities.
- Maintenance Charter**: A document outlining the commitment to customer satisfaction, safety, and the environment, with a focus on installing heating systems to all properties.
- Portsmouth City Council**: A document outlining the council's commitment to working with partners to improve housing and community services.
- Greenwood Consultants**: A document outlining the company's commitment to providing high-quality consulting services to its clients.

Collaborative Working - Models and Measures

People, Contracts, Processes + Systems, Codes, Standards

Collaborative Working - Models and Measures

People, Contracts, Processes + Systems, Codes, Standards

- Housing Forum Partnering Toolkit
- Institute for Collaborative Working CRAFT Model
- Strategic Forum Integration Toolkit
- Integrated Collaborative Working Toolkit [ex-SF toolkit evolving @Beh4Coll]
- Infrastructure Client Group Alliancing in Infrastructure Delivery CofP
- ISO 44001 Collaborative Business Relationship Management Systems
-

Potential Assessment Criteria

- *Compliance with model*
- ...
- Leadership
- Behaviours
- Competencies
- Alignment
- Mutuality
- Risk profile
- *Trust*
- ...
- *Performance*

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ICE Alliancing Toolkit

	Deciding	Creating	Delivering	Sustaining
Behaviour	Deciding Behaviour	Creating Behaviour	Delivering Behaviour	Sustaining Behaviour
Integration	Deciding Integration	Creating Integration	Delivering Integration	Sustaining Integration
Leadership	Deciding Leadership	Creating Leadership	Delivering Leadership	Sustaining Leadership
Commercial	Deciding Commercial	Creating Commercial	Delivering Commercial	Sustaining Commercial

'Alliancing Code of Practice - Self Assessment Tool',
Institution of Civil Engineers, 2015.

ice

Institution of Civil Engineers

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DISCIPLINES AND RESOURCES

CIVIL ENGINEERING RESOURCES

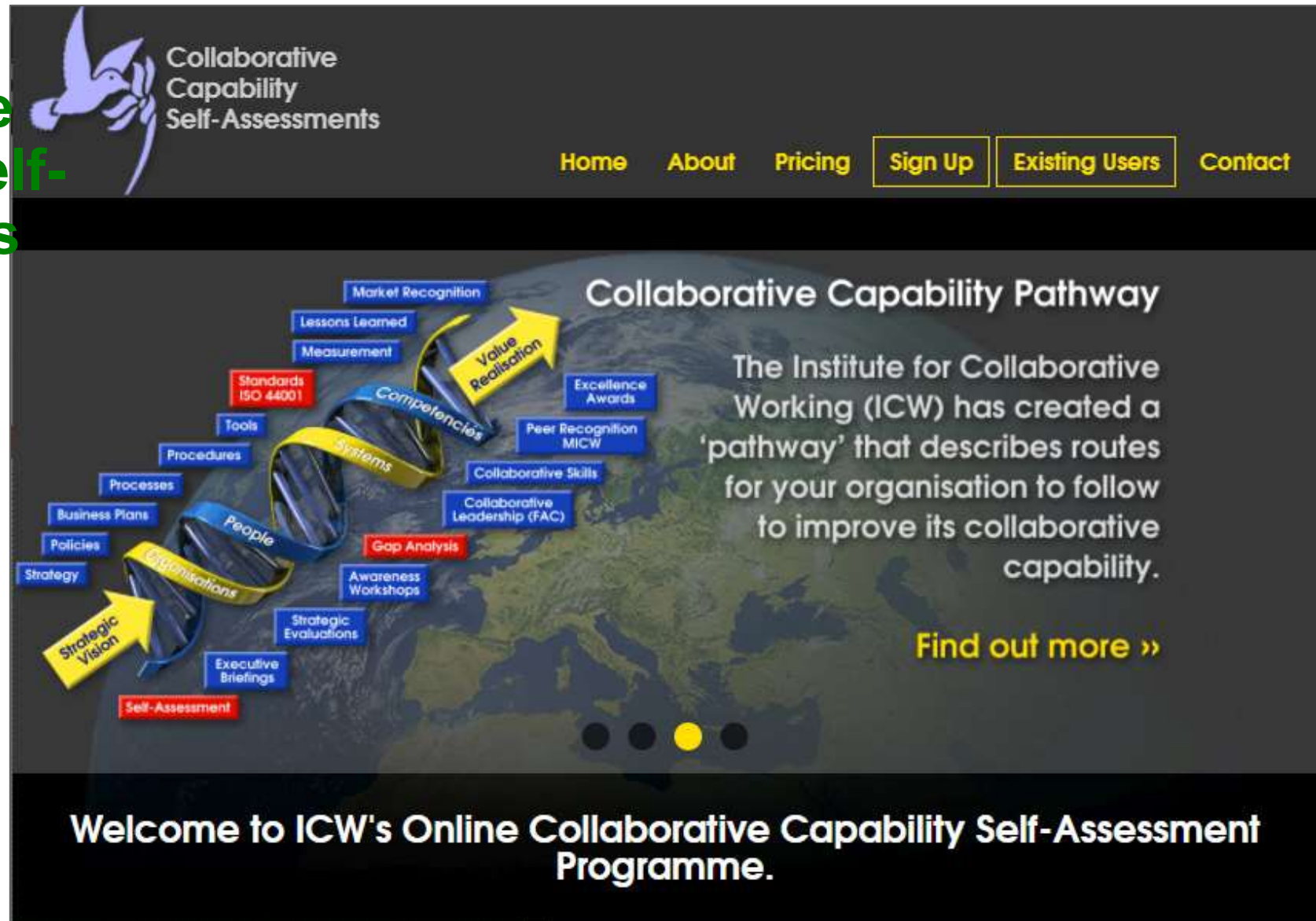
BEST PRACTICE

Alliancing Code of Practice - Self Assessment tool

This excel-based tool is for self-assessment to identify areas that need improvement when conducting an Alliance, either before or during the Alliance.

Feedback

ICW Collaborative Capability Self- Assessments



The banner features a dark background with a world map. On the left, a logo of a bird holding an olive branch is next to the text 'Collaborative Capability Self-Assessments'. A navigation bar at the top right contains links: Home, About, Pricing, Sign Up, Existing Users, and Contact. The central part of the banner is titled 'Collaborative Capability Pathway' and includes a large yellow arrow pointing upwards, labeled 'Value Realisation'. To the left of this arrow is a DNA helix structure with four strands labeled 'Organisations', 'People', 'Systems', and 'Competencies'. Various boxes representing different stages and tools of the pathway are arranged around the helix, including 'Strategic Vision', 'Self-Assessment', 'Executive Briefings', 'Strategic Evaluations', 'Awareness Workshops', 'Gap Analysis', 'Collaborative Leadership (FAC)', 'Collaborative Skills', 'Peer Recognition MICW', 'Excellence Awards', 'Market Recognition', 'Lessons Learned', 'Measurement', 'Standards ISO 44001', 'Tools', 'Procedures', 'Processes', 'Business Plans', 'Policies', and 'Strategy'. To the right of the DNA structure, text reads: 'The Institute for Collaborative Working (ICW) has created a 'pathway' that describes routes for your organisation to follow to improve its collaborative capability.' Below this text is a yellow button that says 'Find out more »'. At the bottom, a black bar contains the text 'Welcome to ICW's Online Collaborative Capability Self-Assessment Programme.' and a set of four dots, with the third dot from the left being yellow.

Collaborative Capability Self-Assessments

Home About Pricing Sign Up Existing Users Contact

Collaborative Capability Pathway

The Institute for Collaborative Working (ICW) has created a 'pathway' that describes routes for your organisation to follow to improve its collaborative capability.

Find out more »

Welcome to ICW's Online Collaborative Capability Self-Assessment Programme.

ISO 44001 + ISO 44002

Collaborative Relationship

Maturity Assessments

BS ISO 44002:2019
ISO 44002:2019(E)

Table 8 — Maturity assessment profile (MAP)

	Attributes ^a	Ability ^b	Attitude ^c
A	The organization has well defined	The organization has a high level of personnel with experience in operating collaborative working arrangements supported by an effective skills development programme and a recognized track record for effective implementation.	The organization has clearly defined visions and values together with policy commitment to collaborative working which is openly supported by its leadership and cascaded throughout its internal and external communications.
		The organization has a number of individuals at all operating levels that have experience and demonstrable skills for effective collaborative working and a limited skills development programme.	The organization has isolated cases of implementing collaborative working arrangements but limited evidence that successes have promoted any wider application to harness the benefits.
		The organization has an appreciation of collaborative approaches but a limited resource pool of experienced personnel and no skills development programme.	The organization has no demonstrable evidence for developing collaborative working or external recognition of value chain benefits in its external relationships.
		The organization has no recognized capability or experience in the area of collaborative working and no personnel development in place.	The organization has established robust trading relationships with no indications of consideration for collaborative working.
		The organization's processes and procedures.	
		The organization should have experience of the organization with respect to collaborative relationships. If the organization should develop training programmes to support its strategic aims.	
		The organization should be driven from the top and it should assess whether the concepts of collaboration are implemented externally and internally, by top management.	

Annex D

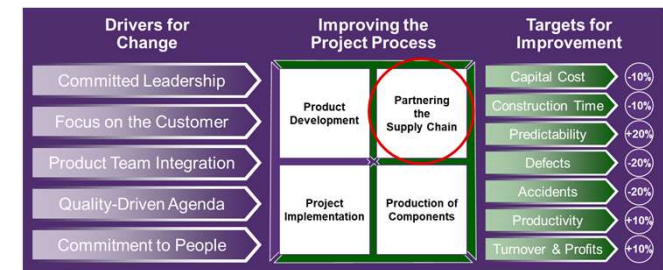
(informative)

Relationship maturity matrix

Table D.1 — Outline structure for collaborative business relationship management development maturity matrix

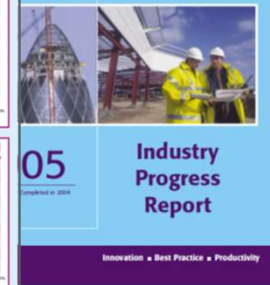
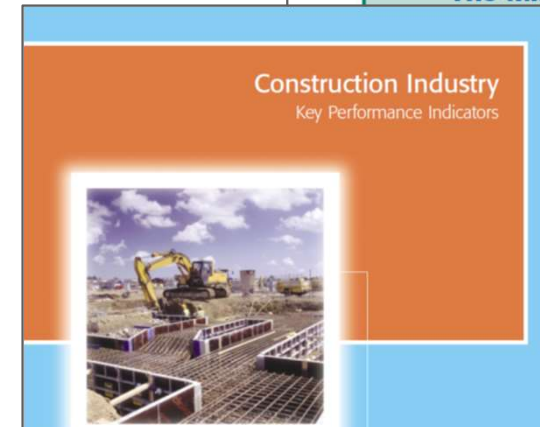
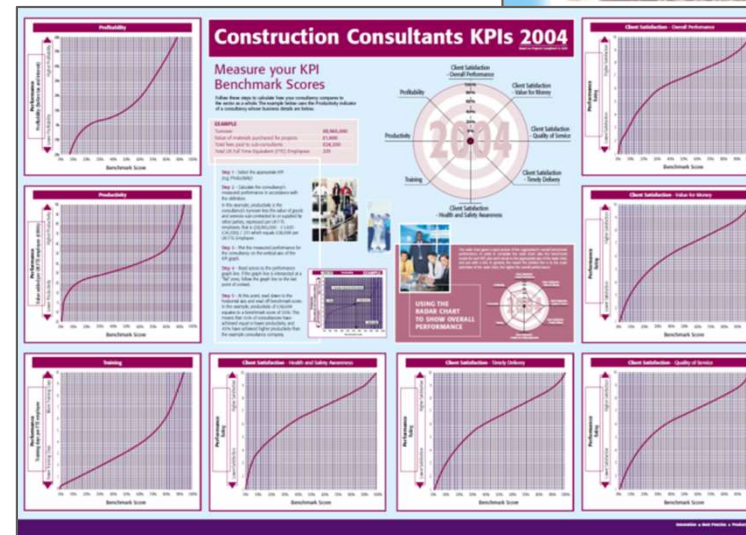
Clause	Maturity category			
	D	C	B	A
	Limited application	Low level of maturity	Medium level of maturity	High level of maturity
	An organization where collaborative working has not yet been used but is being considered for the future	An organization where collaborative working is understood but is operated only in isolated cases	An organization where collaborative working is understood but not fully integrated	An advanced organization where collaborative working is fully integrated into policy and operational practices
4. Context of the organization	The organization has recognized the potential value of col-	The organization has started to implement collaborative working	The organization has incorporated collabora-	The organization has strategically recog-

Performance Measurement



Performance Measurement

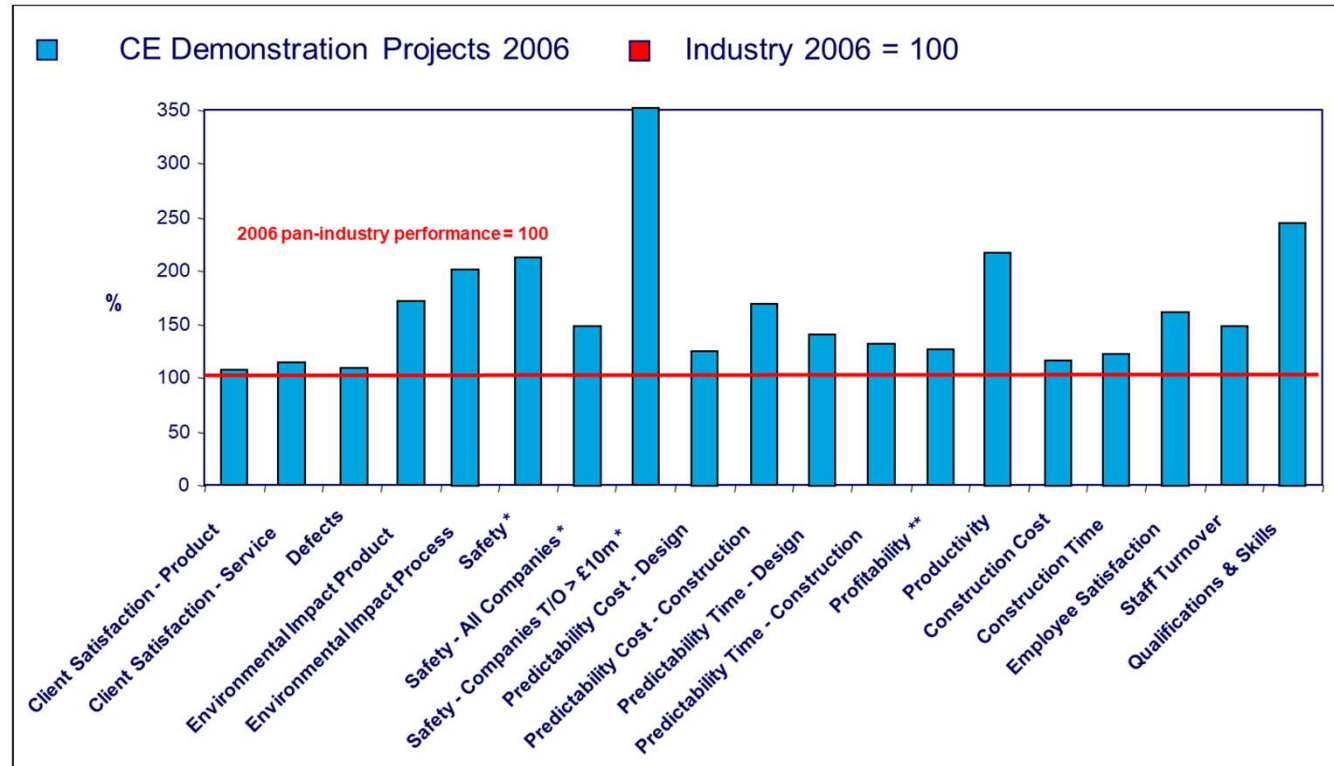
- Standard framework for measurement of the performance of the industry against the Rethinking Construction targets
- Industry performance reported annually
- Headline performance indicators
 - strategic benchmarking at business- and project-level
- Secondary performance indicators
 - Sector or operational measurement and benchmarking
- Diagnostic performance indicators



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CE Demonstration Projects

- CE Demo Project programme inaugurated to prove that new ways of working produced objectively better results
- Collaboration a Demo Project pre-requisite
- Comparison of the performance of CE Demo Projects versus industry →
 - 600 projects
 - 1,300 organisations
 - £8bn total



First published in the Constructing Excellence Demonstration Projects Report, 2006.

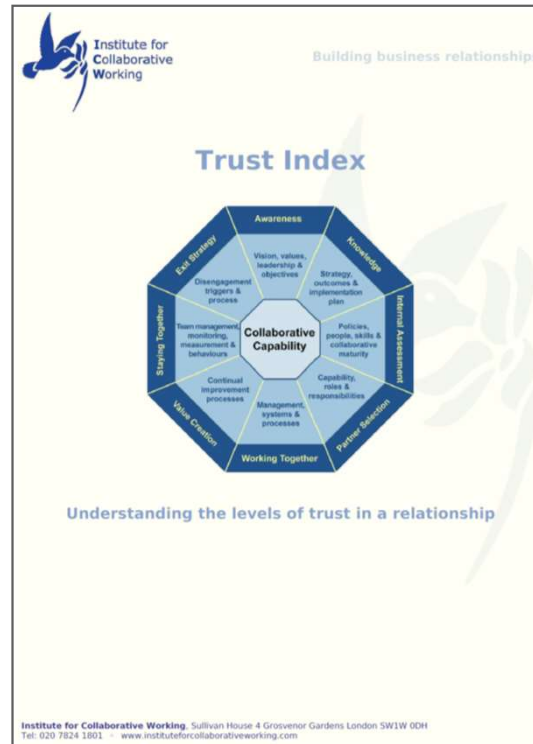
Project Case Study
Trust and Satisfaction Measurement
Measurement against Headline and Diagnostic PIs

Measuring Trust

Survey Basis

ICW Trust Index

- Client and Constructor
 - Performance
 - Openness
 - Honesty
 - Responsiveness
 - Commitment
 - Fairness
 - Information sharing
 - Communication
 - Early warnings
 - Extra mile



CE Industry KPIs

- Client Satisfaction
 - Product
 - Service
 - Value for Money
- Constructor Satisfaction
 - Overall
 - Information
 - Payment



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Trust - Client

Performance Summary

Project Trust Analysis

Performance Summary

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Project

Scope/Milestone **Client Response**

Date 01 February 2018

Overall Response

No of Requests	6
No of Replies	6
Response Rate	100%

Individual Question Performance

	Individual Criteria Scores									
	Performance	Openness	Honesty	Responsive- ness	Commitment	Fairness	Information Sharing	Communic- ation	Early Warnings	Extra Mile
No of Responses	6	6	6	6	6	6	6	6	6	6
Response Rate	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Mean Score	3.7	4.0	3.5	3.7	4.5	4.0	3.5	2.8	2.2	4.5
	73%	80%	70%	73%	90%	80%	70%	57%	43%	90%
Target or Benchmark	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Improvement Areas

1	Protection
2	Based on this scheme, better programming
3	Honest communication
4	Providing information to make informed decisions
5	Being realistic and clear on risks
6	Honest to programme and delivery issues
7	Communication
8	Programme transparency
9	Sensible sequencing
10	
11	
12	

CE KPIs - Client

Performance Summary

Project Trust Analysis

Performance Summary

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Project

Scope/Milestone

Date

Overall Response

<i>No of Requests</i>	6
<i>No of Replies</i>	6
Response Rate	100%

Individual Question

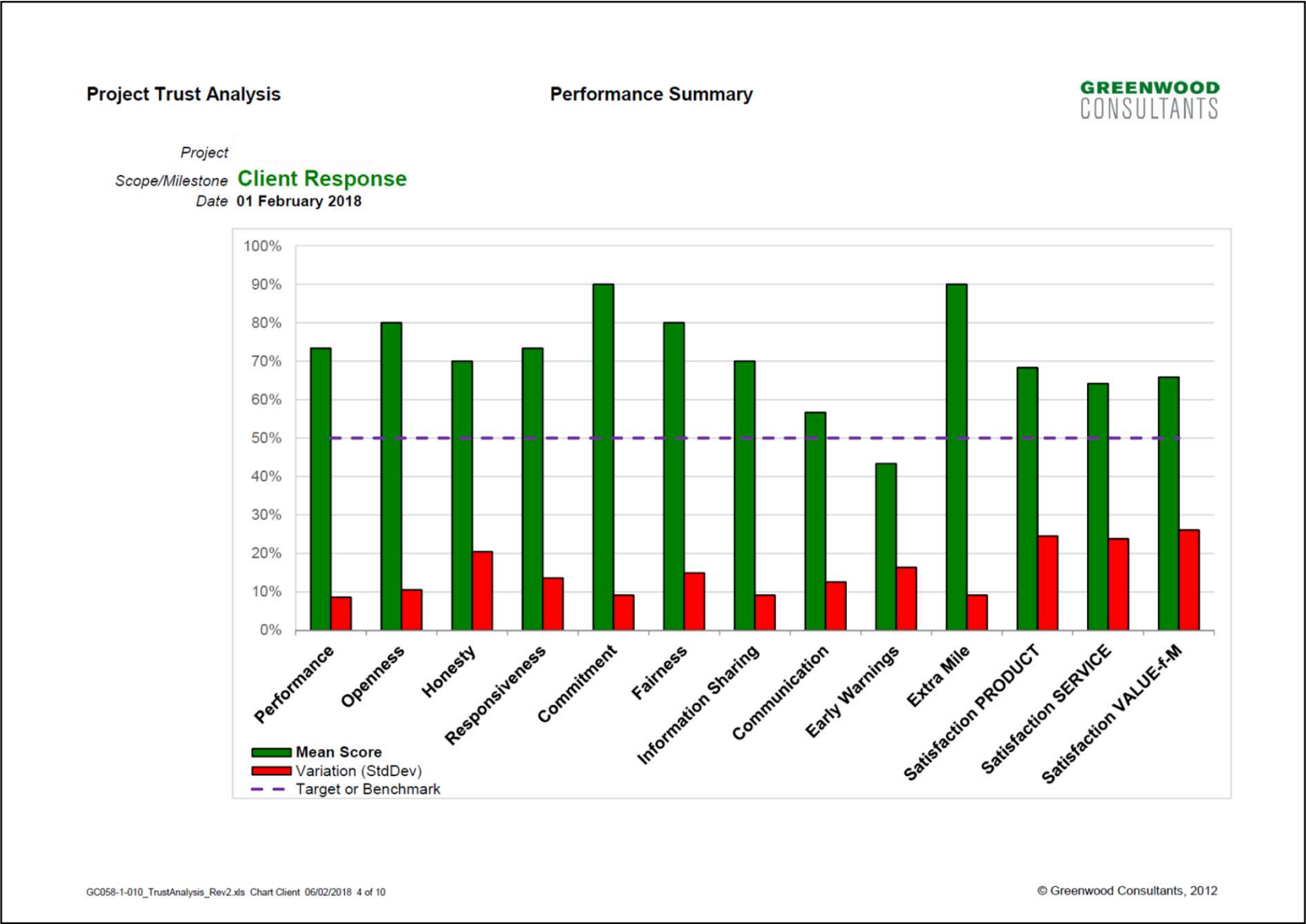
	Overall Satisfaction		
	Satisfaction PRODUCT	Satisfaction SERVICE	Satisfaction VALUE-f-M
<i>No of Responses</i>	6	6	6
<i>Response Rate</i>	100%	100%	100%
Mean Score	6.8	6.4	6.6
	68%	64%	66%
<i>Target or Benchmark</i>	0%	0%	0%

Improvement Area

1	Time to complete
2	Standard of finish
3	Attention to detail - challenge sub-cons and designers more
4	Be more in control of secondary elements - regulatory approvals
5	Protection overall
6	Own snagging and general finishing
7	Sequence of works
8	Simple design
9	Finishing the project and getting off site
10	Clear communication
11	Consistency of delivery across projects
12	Trying to see through the clients eyes

Trust + KPIs - Client

Bar chart



Trust - Constructor

Performance Summary

Project Trust Analysis

Performance Summary

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Project

Scope/Milestone **Constructor Response**

Date 06 February 2018

Overall Response

No of Requests	7
No of Replies	7
Response Rate	100%

Individual Question Performance

	Individual Criteria Scores									
	Performance	Openness	Honesty	Responsive-ness	Commitment	Fairness	Information Sharing	Communic-ation	Early Warnings	Extra Mile
No of Responses	6	7	7	7	7	7	7	7	7	7
Response Rate	86%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Mean Score	3.3	3.0	3.4	3.1	3.6	3.1	3.1	2.3	2.7	3.1
	67%	60%	69%	63%	71%	63%	63%	46%	54%	63%
Target or Benchmark	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%

Improvement Areas

1	Communication
2	Information sharing
3	Communication amongst themselves
4	Positivity/appreciation of efforts (there was a negative midset toward the whole job)
5	Requirement for a single point of contact for all information to be channelled through
6	They need to better manage expectations within - particularly across the various departments
7	Communication
8	Honesty
9	Integration of all team members into decision making
10	Allowing adequate time for decision making
11	Their team communication
12	Managing expectations
13	
14	

GC058-1-010_TrustAnalysis_Rev2.xls Summary Con 06/02/2018 5 of 10

© Greenwood Consultants, 2012

CE KPIs - Constructor

Performance Summary

Project Trust Analysis

Performance Summary



Project
Scope/Milestone
Date

Overall Response

No of Requests	7
No of Replies	7
Response Rate	100%

Individual Questions

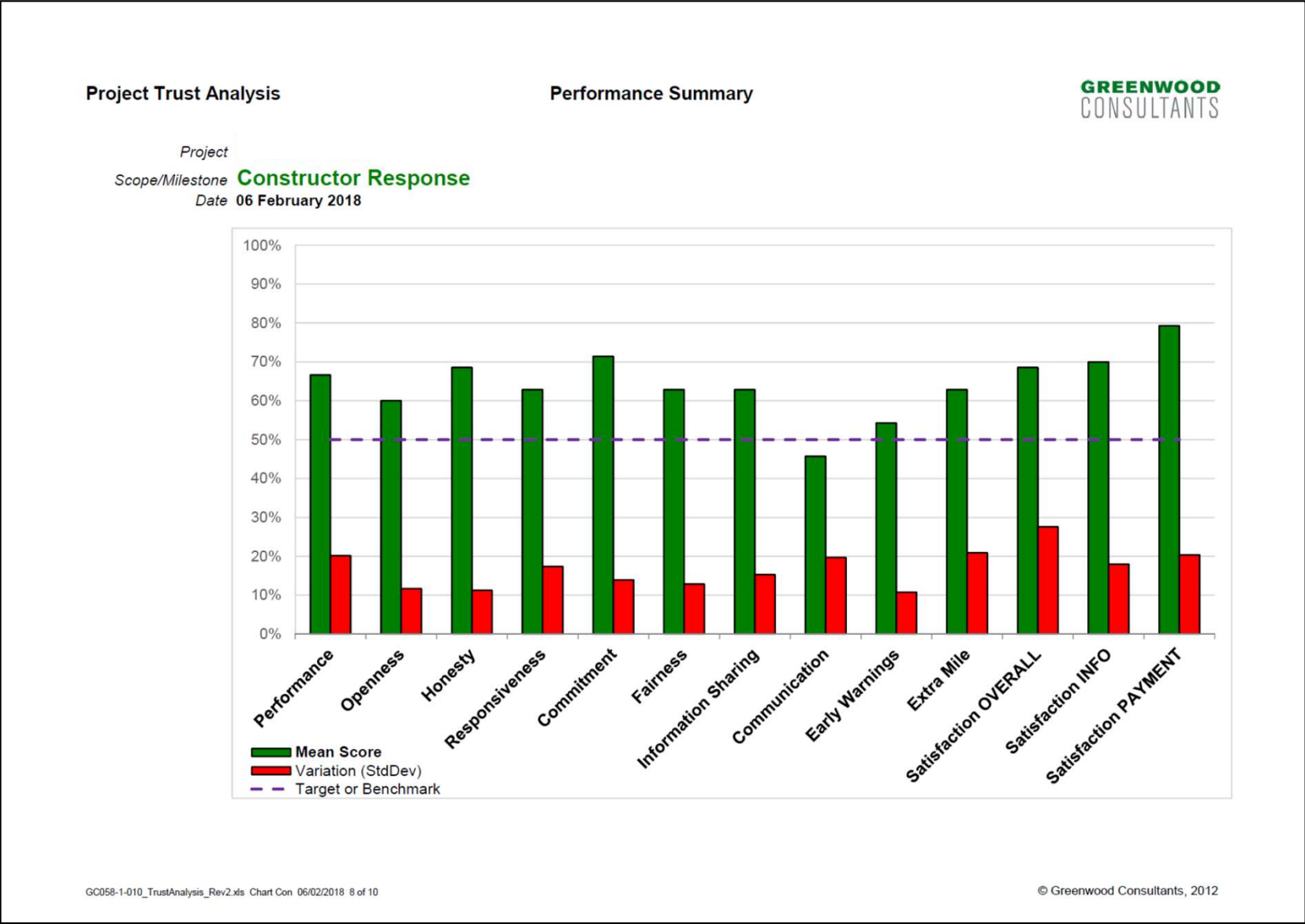
	Overall Satisfaction		
	Satisfaction OVERALL	Satisfaction INFO	Satisfaction PAYMENT
No of Responses	7	7	7
Response Rate	100%	100%	100%
Mean Score	6.9	7.0	7.9
	69%	70%	79%
Target or Benchmark	50%	50%	50%

Improvement Area

1	Provision of information
2	Communication
3	Decision making
4	Planning for sales early in a job
5	Communication
6	Honesty
7	Value of quality before cost
8	Time predictability - adequate time to fully resolve site queries
9	Making final decisions
10	Responsibility for decision making
11	
12	
13	
14	

Trust + KPIs - Constructor

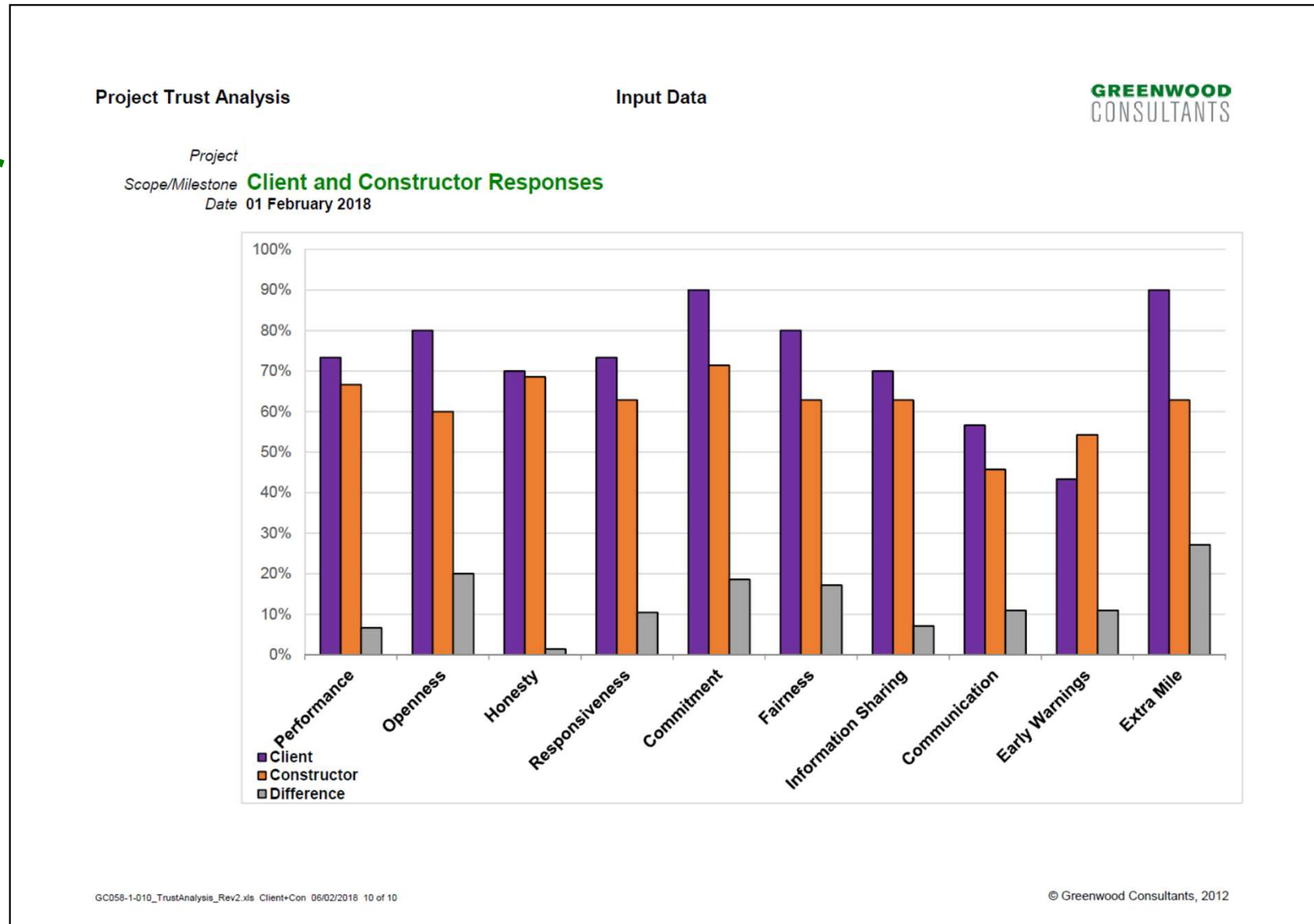
Bar chart



Trust

- Client + Constructor

Bar chart



Recommendations

for the CE Performance Measurement Forum

Recommendations

KPI Database Input Criteria

- Identify collaborative frameworks as part of the database input criteria:
 - Procurement Route
 - Contract Type
 - Contract Form
 - Industry Initiative/
Framework

Evidence of/for Collaborative Working

- Include a breakdown of project performance versus collaborative or contractual framework in the annual industry performance report

Maturity Model

- Consider signposting or supporting development of a construction-specific model. [analogous to the proposed BIM MM]
- Example baselines:
 - ICW MAP
 - Behaviours for Collaboration



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Thank you

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