

## Agenda

- KPI's and Benchmarking
- Current Industry KPI's
- Business Opportunities
- Wider Benefits
- Future KPI's
- Discussion

# KPI's & Benchmarking

NEW ZEALAND CENTRE FOR ADVANCED ENGINEERING

A KPI is a measure of a factor critical to success

A Benchmark is the best performance achieved in practice

Benchmarking is continuously comparing your performance against others, then using lessons from the best to make improvements

# Benchmarking is a Tool

NEW ZEALAND CENTRE FOR ADVANCED ENGINEERING

If you do not measure performance you have no basis to plan improvement

Action, not data, drives improvement!

Best practice companies set and achieve highly challenging performance levels

The constraint is the organisations capacity to handle the actions that stem from the KPI results

# Why CAENZ Established the KPI Initiative

NEW ZEALAND CENTRE FOR ADVANCED ENGINEERING

- No means to provide commentary on industry performance
- Creating the measure for enhanced performance
- Proving to Government the importance of the Construction Industry to the NZ Economy

# The CAENZ KPI Initiative

NEW ZEALAND CENTRE FOR ADVANCED ENGINEERING

A starting point, Industry lead, Project focused

A measure of critical construction project success factors

- Cost
- Time
- Quality
- Client Satisfaction
- Safety

Focused on Improvement Opportunities

## Comparing estimated vs actual

- Predictability cost - design
- Predictability cost - construction
- Predictability cost - total project

## Comparing estimated vs actual

- Predictability time - design
- Predictability time - construction
- Predictability cost - total project

Are you meeting your expectations?

- Safety - Lost Time Incidents (LTI)
- Defects



## Client perception vs Contractor perception

- Client satisfaction with service
- Client satisfaction with product

## Opportunities

- Develop closer relationship with clients
- Show active engagement
- Increase likelihood of repeat work
- Word of mouth marketing
- Good reputation

# Business Opportunities

NEW ZEALAND CENTRE FOR ADVANCED ENGINEERING

- Cashflow
- Project cost estimation
- Project completion
- Client relationships
- Client confidence

# Business Opportunities

NEW ZEALAND CENTRE FOR ADVANCED ENGINEERING

- Displaying Best Value
- Improve efficiency
- New work
- ISO/Quality Systems
- Industry standing

## Threat/Risks

- Industry perceived as inefficient
- Loss of respect, poor image
- Risky competitive environment

## Opportunities

- Demonstrate industry efficiency
- Show industry improvement
- Ensure the industry has a sustainable future

## Three years of collection

- Uptake not as good as hoped for
- KPI usage in general
- National dataset

## Feedback

- Extra work to provide & use
- Small number of KPI's
- Limited promotion/provision
- 'What I currently do works...'

# Other KPI's

NEW ZEALAND CENTRE FOR ADVANCED ENGINEERING

Not all may be applicable

Company specific KPI's are possible

The value of the current 10 Industry KPI's is they provide a benchmark for comparison

Expansion of the Industry KPI's is desirable

# Possible Expansions

NEW ZEALAND CENTRE FOR ADVANCED ENGINEERING

## Provision by sector

- New build (residential and non-residential)
- Infrastructure
- Repair & Maintenance and refurbishment (residential and non-residential)

M&E Contractors

Consultants

Environmental



## New Zealand National Construction Industry KPIs 2006



<p><b>New Zealand KPI</b> Productivity: Construction Costs - Housing</p>	<p><b>New Zealand KPI</b> Value: Construction: Productivity - Services</p>	<p><b>New Zealand KPI</b> Value: Construction: Services</p>	<p><b>New Zealand KPI</b> Productivity: Time - Design</p>
<p><b>New Zealand KPI</b> Productivity: Time - Construction</p>	<p><b>Construction system or category performance index</b></p> <ol style="list-style-type: none"> <li>Select the appropriate graph.</li> <li>Plot the proposed performance for the project to compare with construction on the critical axis (i.e. Most active in the performance line (L) if the graph line is illustrated above it with 'most active' below the last point or point).</li> <li>Read down to the horizontal axis (X). This is the corresponding benchmark score (0-100).</li> <li>Plot the benchmark score on the appropriate side of the scale chart.</li> <li>Join all points on the vertical chart with a line, in general, the lower the BPSM the better. For higher the lower performance.</li> </ol> <p>In this example, a performance index is achieved. This equates to a benchmark score of 10%, meaning that 90% of projects in comparison are achieving equal or better performance, and 10% are achieving higher performance.</p>	<p><b>The Spider Chart</b></p>	<p><b>New Zealand KPI</b> Productivity: Time - Construction</p>
<p><b>New Zealand KPI</b> Productivity: Time - Program</p>	<p><b>New Zealand KPI</b> Value: Construction: Productivity - Construction Services</p>	<p><b>New Zealand KPI</b> Productivity: WPI - WPI</p>	<p><b>New Zealand KPI</b> Productivity: Time - Program</p>

# What Is Needed

NEW ZEALAND CENTRE FOR ADVANCED ENGINEERING

- We need your feedback and active promotion
- We need your involvement in establishing further KPI measures
- We need visible leadership from clients