Revaluing Construction: Australia, Canada, Singapore and USA

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Overview

- Policy position of construction
- Revaluing Construction initiative
- Conclusions
Strategic Research Agenda (SRA)

Research priorities

• Meeting client/users requirements
• Becoming sustainable
• Transformation the construction sector
ECTP SRA – the human dimension

- **Meeting clients’ requirements**
  - Inc. healthy, safe, accessible, stimulating working environments

- **Becoming sustainable**
  - Inc. a living cultural heritage for an attractive Europe

- **Transformation of the Construction Sector**
  - Inc. a new client-driven, knowledge-based construction process
Complex "system"
Construction typified

“Confrontational”

“Inappropriate contracts”

“Informed team members”

“Risk averse”

“Lack of trust”

“Cut throat competition”

“Poor communications”

“Lack of vision”

“Organisational amnesia”
Revaluing Construction

Looking OUT “Perceptions”
- Holistic idea of construction
- Promotion of full value delivered to society
- Awareness of systemic contribution

Shared vision amongst stakeholders

Looking IN “Performance”
- Evolving knowledge and attitudes
- Dynamic decisions and information
- Balance of markets and social capital
- Shared vision amongst stakeholders

Revaluing Construction
Revaluing Construction

Holistic idea of construction
Construction industry sector system

Life cycle of the built environment

- New construction
- Management of the service provided by the structures to the users
- Demolition

Continuous asset, property and facilities management and transaction activities

- Sale / Purchase
- Management
- Operation
- Maintenance

Real estate

Facilities management
The Built Environment is fundamental to the social and economic health of the nation. Encompassing property, construction and facilities management, the built environment industry represents a market equating to around £230bn in 2004 and is therefore a major national economic driver.

The products of the built environment provide the infrastructure within which the rest of the economy operates, influence all aspects of our quality of life and enable the economy and society to function. Our stock of buildings and works represents two thirds of UK manufactured capital and around 20% of total national wealth.
Revaluing Construction

Holistic idea of construction

Shared vision amongst stakeholders
A Canadian clients’ view – a problem industry … ?

Senior Managers Satisfied With Construction Investments in Last 3 Yrs?

- Yes: 94%
- No: 5%
- Don't Know: 1%

But, you don’t have to be sick to get better!

Thanks to Dr Andre Manseau, of NRC for access to this data.
Revaluing Construction Defined

- Value, jointly created, is maximised
- Resulting rewards are distributed equitably
Revaluing Construction

Holistic idea of construction

Shared vision amongst stakeholders

Balance of markets and social capital
Aborigines - alliancing
Revaluing Construction

Holistic idea of construction

Shared vision amongst stakeholders

Dynamic decisions and information

Balance of markets and social capital
Reactive maintenance: current process (MopMit)
Revaluing Construction

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Revalu ing Construction

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Looking IN "Performance"
The Brain: Our three-part creative engine

- **The interpreter:**
  Makes sense of the world (Left brain)

- **The actor:**
  Perceives, senses, & acts on the world (Occipital lobe, parietal lobe, & pre-frontal cortex linked with the amygdala)

- **The comparator:**
  Tests actions vs. physical reality (Frontal lobe/A-10 nucleus)
The ageing developed world

Percentage of population aged 65 and over

- Japan
- Italy
- France
- Germany
- Canada
- UK
- US

Source: United Nations, World Population Prospects
Output

Low income countries, 23%

High income countries, 77%

Employment

High income countries, 26%

Low income countries, 74%

(ILO 2004)
Revaluing Construction

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Shared vision amongst stakeholders
**Society impacts**

<table>
<thead>
<tr>
<th>Vision</th>
<th>A Construction industry that is highly valued by society</th>
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<tbody>
<tr>
<td></td>
<td>Owing to an appreciation of the:</td>
</tr>
<tr>
<td>Society impacts</td>
<td></td>
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<tr>
<td>Excitement</td>
<td>attached to the achievements of, and opportunities within, construction</td>
</tr>
<tr>
<td>Multiple contributions</td>
<td>(short and long term; direct and indirect) that result from construction</td>
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<tr>
<td>Scale, reach and importance of construction industry within the economy</td>
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<td>Sense of direction and ambition shared within the construction industry</td>
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<tr>
<td>Professional and ethical approach in client and other relationships</td>
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<tr>
<td>Flexible, thoughtful and sophisticated approach to on-going problem-solving</td>
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<td>Knowledgeable and skillful workers continuously and progressively educated</td>
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**Driven by:**

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<th>Revaluing Construction priorities</th>
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**“Excitement”**  **“Importance”**  **“Opportunities”**  **“Contribution”**

**“Sense of direction”**  **“Professional”**  **“Ethical”**  **“Flexible”**

**“Sophisticated”**  **“Thoughtful”**  **“Skillful”**  **“Knowledgeable”**

Looking OUT Looking IN
Growing global repository

CIB website

- www.cibworld.nl/revaluingconstruction
- Document archive
- Discussion forum
Around the world, construction processes and practices are under scrutiny. Changing markets, new technology and rising client expectations are stimulating radical reviews of how the industry can be re-engineered to enhance its performance. As such, the industry has been plagued with new initiatives/ buzzwords in recent years, such as lean construction, process modelling, partnering, automated construction, off-site manufacturing and supply-chain integration to name but a few. However, the similarities and conflicts between these theories often causes confusion among researchers and practitioners in the field; the benefits and drawbacks are rarely clear, and the overlaps are not always admitted or pointed out by the authors.

The great complexity and volume of initiatives promoted so far needs to be aggregated to enable the concise development of better working practices in the design and construction industry. Hence, a holistic overview must now be taken to define the appropriate value derived from the construction industry so that

"...the value jointly created is maximised and the resulting rewards equitably distributed between all stakeholders."

This CIB Priority Theme aims to provide a comprehensive and up-to-date guide to the many initiatives and programmes around the World that are seeking to chance and improve the performance of the construction industry. It is being undertaken by the University of Salford’s 8th rated Research Institute for the Built and Human Environment (the highest ranked in the UK), on behalf of the International Council for Research and Innovation in Building and Construction (CIB), the leading international network for innovation in construction. The emerging findings will be used to inform future research agendas globally.
Revaluing Construction
A CIB Priority Theme
Revaluing nirvana?

Creating value for all

Clients / users

Communities / society

Designers / PMs

Manufacturers / Suppliers

Contractors / builders / specialists

Communities / society

Creating value for all