



"10 Years since Egan" – G4C Brainstorming Evening

Autumn 2008

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0 Document Control

0.1 Author(s)

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0.2 Document History

Document History		
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0.3 Reference Documents

- Egan Report: Rethinking Construction (1998)
- Egan Report: Accelerating Change (2002)
- London 2012 Construction Commitments

0.4 Distribution

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1 Executive Summary

1.1 Introduction to the report

This report has been written to provide the “10 years since Egan” review group, led by Constructing Excellence, with an overview of the output gained from G4C¹'s brainstorming evening 30th April 2008.

The event was attended by over 80 people representing a diverse range of professions and companies from major contractors, consultants, clients and small partnerships. Professions in attendance included chartered surveyors, structural engineers, mechanical and electrical engineers, architects, planners, solicitors, project managers, and sustainability experts. Experience varied from recent graduates through to company directors.

1.2 Report purpose

The objective of the evening was for G4C members to:

1. Draw on the lessons learnt from the Egan report and their own individual experiences of working within construction to produce a set of proposed changes to radically improve the industry.
2. Debate 7 topics linked to the Egan Rethinking Construction Report (1998) and the 2012 Construction Commitments.

The report presents the pertinent points/ideas and provides recommendations to be taken forward to the review group responsible for undertaking the strategic review.

1.3 Report Layout

The report is formed of the following parts:

- **The Radical Changes identified from the event** – As part of the evening the attendees were given the opportunity to put forward radical changes they would like to see happen within the industry to form a future industry they would like to operate within. These ideas were reviewed and the strongest have been summarised within this report.
- **Next Steps and Recommendations** – The report concludes with recommendations and next steps for the review group to consider.
- **Appendix** – Review of the original Egan recommendations.

¹ Generation for Collaboration (G4C)

1.4 Summary

The radical changes identified from the event were:

- **Raise the profile of the industry to attract a broader range of academic talent**
- **Improve mutual respect between professional disciplines**
- **Develop consultants with a strategic understanding of built assets**
- **Develop one stop solution providers**
- **Improve supply chain efficiency**
- **Implement a set of industry wide KPIs**

The report provides context behind each idea and suggestions for implementation. Whilst most of the ideas have appeared in previous industry report recommendations, the fact they have again been identified suggest further work is required to enable implementation.

Below is a list of recommendations with next steps (in italics) to be considered by the 10 years since Egan review group:

1. **Consider the radical changes within this report and conclude how they align with the proposed future industry improvement agenda being compiled by the review group.**
David Whysall, Simon Poole and Christopher Davies (G4C Board members) to present finalised report at initial working group meeting.
2. **Agree with the G4C board further study desired to support delivery of the “headline” review.**
David, Simon and Christopher have discussed this with Don Ward and Adrian Blumenthal. The authors are able to act as the interface between G4C and the review group over the forthcoming months.
3. **Conclude the most suitable method of implementation for those ideas provided which are to be implemented and set prescriptive timescales with responsible action owners for delivery.**
Likely to form part of the final review recommendations. The implementation ideas within this report should be considered along with others.
4. **Conclude G4C’s role in delivery of ideas to be taken forward and align future business plans.**
G4C would like to have an active role in delivering the recommendations made within this and the final review group report. Aligning the forums future business plan to the report output would ensure this happened.

1 Radical changes identified from the event

This section of the report details changes attendees wanted to see within the UK construction industry.

The majority are ideas that have appeared within industry forums/reports in the past. However, the fact that the same ideas have again been identified demonstrates that change within construction has not occurred as quickly as the champions of the Egan report would have hoped.

1.5 Raise the profile of the industry to attract a broader range of academic talent

1.5.1 Idea

The profile and prestige of a career within the UK construction industry needs to attract people from a broader range of academic disciplines to reflect the increasing diversity of roles and skill sets required for a construction project.

1.5.2 Context

The lack of awareness of the range of careers and opportunities available within the industry (notably the softer skill set areas) is a barrier for potential talent and new methods of work entering the industry.

The number of graduates who have entered the industry over the past 5 years from “non-cognate” backgrounds has increased, and similar levels have to be sustained in order to meet the diverse challenges of modern construction. Attracting a wider range of talent may act as a catalyst for an industry improvement agenda.

1.5.3 Proposal

- A Constructing Excellence and Government backed drive to educate people from a wider range of academic disciplines on opportunities that exist within the industry.
- The industry must demonstrate a commitment to its people (training/education/rewards) so that positive role models can be showcased.
- Professional bodies to work together rather than in isolation to showcase the industry holistically to prospective entrants.

1.6 Improve mutual respect across professional disciplines

1.6.1 Idea

Professionals need to demonstrate a greater level of mutual respect towards each other in order to facilitate greater industry efficiency and collaboration.

1.6.2 Context

G4C prides itself on displaying a healthy respect towards all professional backgrounds and qualification routes. However, it was felt that similar levels of respect are not replicated within the wider industry. Attendees suggested that significant areas within the construction industry continued to harbour views formed on the experiences of outdated working practices.

1.6.3 Proposal

- Implement a high profile campaign backed by professional bodies to remove the barriers that exist between professions.
- Constructing Excellence to consider methods for improving relations among the different professional bodies and showcase examples of effective collaboration.

1.7 Develop professionals with a strategic understanding of built assets

1.7.1 Idea

Support the development of professionals within the construction industry to acquire a strategic understanding of over-arching project success factors and the business need and value of a built asset solution.

1.7.2 Context

It was felt by G4C members that traditional degree courses and professional courses failed to provide the required strategic understanding of how a project translates into a wider business objective. As a result, often technically competent professionals fail to identify the success factors that underpin the delivery of this objective.

Professionals are trained to deliver a specific skill within a project team but may not appreciate where their discipline fits into the business context or project lifecycle.

Consequently, it was felt that every project team member, irrespective of role, should have an understanding of basic success factor principles including appropriate governance, stakeholder management, effective procurement, value management and the importance of collaborative working.

1.7.3 Proposal

- Implement a cross industry professional body that provides accreditation for a strategic built environment consultant post “technical” professional accreditation.
- Professional bodies to adapt accreditation routes to ensure a certain level of strategic understanding is within their professionals without eroding technical skills.
- Companies within the industry to endorse cross professional learning for their staff e.g. chartered surveying graduates are seconded to a structural engineers to gain understanding and vice versa.

1.8 Develop one-stop solution providers

1.8.1 Idea

Encourage the development of industry one-stop solution providers with the ability to take a strategic business objective and deliver a built asset solution.

1.8.2 Context

The present industry generally operates with many different parties (consultants and contractors) offering technical expertise to a client. Clients contract with various companies who bring their own thoughts and products into a project, in the anticipation that the objective is achieved. Parties that are part of a project team are typically brought onto a project at different times and often have different interpretations as to how to fulfil the client's objective.

Having so many parties with varying interpretations being introduced to the project at different stages leads to inefficiency. This is not helped by the traditional dislocation between solution, design and build.

Technical skill sets brought onto a project are typically centred on designing, buying and building an asset. Project teams often fail to consider other success factors that may be critical in the delivery of a project or major programme of work.

The industry is in need of strategic consultants/businesses who can coordinate the most effective approach to taking a business's over-arching objective, translate it into a capital investment solution and then enable delivery of a built asset.

1.8.3 Implementation

- Invest in the development/education of programme management within the industry.
- Educate clients to understand the value of collaborative working.
- Challenge the industry's mindset on its typical approach to the delivery of a built objective – beyond pure technical delivery.
- Promote the concept of contractors and their supply chain coming onto a project earlier in the project life cycle.
- Set up a prototype project that challenges traditional approaches to projects – potentially may see a Joint Venture between builder and consultants.

1.9 Improve supply chain efficiency

1.9.1 Idea

The industry continues to fail in implementing the true principles of lean supply chain efficiency. Supply chains must be developed to minimise waste and maximise value for all parties involved within them. The

industry has failed to learn and adopt principles from other industries such as those shown in the automotive industry.

1.9.2 Context

Although framework agreements are increasingly popular these are often between contractor and client or consultant and client. Project teams continue to invest significant resource in design, often providing bespoke solutions that result in a movement away from the principle of lean thinking. It was felt by G4C members that 2nd and 3rd tier suppliers are not involved in supply chain collaboration and therefore the project team and client lost opportunities to benefit.

Despite recent progress, G4C members believe that off-site manufacture is still in its infancy. However, it was felt that with the rise of the environmental agenda, and subsequent focus on eliminating waste had indirectly supported industry change.

1.9.3 Implementation

- The industry should showcase projects that have adopted lean supply chain principles with the benefits they brought.
- A review of other industries with more mature supply chain processes.
- Shared learning should be championed and passed between clients/sectors and industries.
- Major consultancies should be encouraged to challenge the norm and demonstrate radical new ideas on how to maximise supply chain efficiency to clients.

1.10 Implement a set of industry recognised KPIs

1.10.1 Idea

To implement a common set of industry wide KPIs, linked to the Egan agenda, which are applicable to every major business operating within the industry. The KPI results would be collated and published annually and may even dictate work distribution within the public sector.

1.10.2 Context

There appear to be few people within the industry who disagree with Egan's philosophy but the industry has failed to effectively implement it. A set of KPIs could be created that monitor performance against specific Egan related (or other) directives. The results could be published annually in a "Which" or "JD power²" style publication. The KPIs would be supported by professional bodies, the Government and major organisations.

If the Government or a major construction client were to align future work contracts with performance against the KPIs it would then force businesses to factor the KPIs into their service model. An independent assessor

² JD Power – Independent assessor of car manufacturers performance based on consumer feedback.

would be required to administer assessment of the KPIs. The KPIs could become the performance management tool of the entire industry.

1.10.3 Implementation

- Industry task group inclusive of clients, contractors and consultants to conclude a comprehensive set of KPIs aligned to the Egan (or other) agenda.
- Different KPIs provided for clients, contractors and consultants but all aligned to the Egan (or other) agenda.
- Independent group/organisation formed to provide rigour/audit ability into the results process.
- Media partners formed to support roll out of KPIs and raise the profile of the annual results.
- Government or major construction clients to award work based on results.

2 Next Steps and Recommendations

Below is a list of recommendations with next steps (in italics) to be considered by the 10 years since Egan review group:

- 1. Consider the radical changes within this report and conclude how they align with the proposed future industry improvement agenda being compiled by the review group.**
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A APPENDIX

What the G4C board did

The G4C Board agreed that hosting an Egan brainstorming evening for members would be a good way of generating ideas and debate that could be summarised and taken forward to the 10 years since Egan review group.

The event was held on the evening of 30th April 2008 at the Building Design Centre in London. Adrian Blumenthal from Constructing Excellence opened the evening with a presentation that set the context of the Egan review. The event was then split into two parts.

Firstly, a series of round table debates took place between attendees that focused on 7 key topics. The 7 key topics were taken from Egan's Rethinking Construction Report (1998) and the 2012 Construction Commitments from the Strategic Forum 2012 Task Group:

- Committed Leadership (Egan)
- Focus on the Customer (Egan)
- Integrated teams/Processes (Egan)
- Quality driven Agenda (Egan)
- Commitment to People (Egan)
- Health and Safety (2012 Construction Commitments)
- Sustainability (2012 Construction Commitments)

The event attendees were broken into small groups of between 6 and 10 and given a topic to debate. Groups were organised with the intention of providing debate between people with varying professions, experience and expertise. Debate groups asked to consider progress against the vision set by Egan/2012 commitments, future ideas to support delivery of this vision and major drivers to make the vision happen.

The second part of the evening was an open forum for radical changes attendees wished to see take place within the industry. This was the main body of the report.

7 key topics

Introduction to the topics

To gain perspective on the original Egan report, *Rethinking Construction*, G4C asked participants to discuss whether the five key drivers identified in the report had made an effect on the industry, if they were still relevant ten years later, and as the future generation what action must we take to support the vision.

Two additional drivers for change were taken from the 2012 construction commitments.

One: Committed leadership

Progress Made: The role of the Client in design and construction has become more clearly defined since being identified in *Rethinking Construction*. Commitment from designers and contractors has been established through the use of partnering and framework agreements.

Ongoing Action: Continuity of design and construction teams would be beneficial to clients as working understanding would improve. This would enable all parties to build up closer working relationships and trust. Medium to long term framework agreements, with specific measured performances, or key performance indicators, would allow clients and teams to evaluate progress and implement means to improve.

Role of the next generation: The next generation need to be trained in leadership so that we have the skill and confidence to influence Clients and project teams toward commitment and continuity. Employers to impart a greater sense of project responsibility so that commitments agreed a director level are also adopted at the junior level.

Two: Focus on the customer

Progress Made: Since the Egan report was published there have been a number of bodies and steering groups set up to promote a focus on the client. Greater engagement with the general public has been adopted, recognising the importance of involving stakeholders. Customer surveys are now incorporated into best company practice through the ISO 9001 quality management system. Companies wish to distinguish themselves from competitors by promoting ways in which they focus on the customer.

Ongoing Action: The industry needs to continue to educate clients as to what can be achieved and at what cost. Greater exposure of the professions of the industry and the value that they add will help client understand what end product will ultimately be produced.

Role of the next generation: To increase awareness of the construction professions; to the industry itself, clients, and the general public. The Client will get a better end product from a well briefed design team as they will understand more closely the aspirations of the projects. The next generation needs to have the confidence to open up a dialogue with the Client to determine what the project critical drivers are.

Three: Integrated processes and teams

Progress Made: Partnering and frameworks have been adopted for both public and private clients.

Ongoing Action: To drive integrated processes and teams to a closer working relationship. The industry still finds it difficult to encourage designers and small specialist subcontractors to collaborate at an early stage in the project where the greatest benefit can be realised.

Role of the next generation: A commitment to collaborative working. As technology allows new ways of working the next generation must embrace opportunities to capitalise on this. Design information needs to be shared more widely.

Four: A quality driven agenda

Progress Made: Partnering has produced a better understanding of quality across projects. Benchmarking design quality on site is a method used by design teams. The development of Eurocodes as a cross country set of design standards has enabled a greater consistency of engineering design.

Ongoing Action: Contractors are still not engaged early enough in the design of projects. The knowledge they hold on how to build is an important part of the design process. We suggested that design managers from contractors are appointed by design consultancies to be part of review scheme work at an early stage where greater value can be achieved. This would be of benefit to both parties to share knowledge and expertise.

Role of the next generation: Understanding that the potential to produce better quality design lies with integrated teams and well educated clients. The design team must become more efficient in practice by the use of technology and model sharing to allow greater time to be spent on innovation.

Five: Commitment to people

Progress Made: Companies have embraced national best practice scheme such as *The Investors in People* to show that the industry is competing with other professions.

Ongoing Action: A significant problem that the industry faces is generating the higher salaries required to attract high calibre professionals. If the industry is to compete in recruitment with other professions, such as banking, management consultancy and accounting it needs to be competitive. The industry has to increase its profit margins to make higher salaries affordable and to retain and attract the best people.

Role of the next generation: The next generation needs to seize the opportunity to promote new skills and technologies developed from university that improve efficiency. Greater knowledge sharing needs to occur throughout the industry to enable people to learn from others experiences.

Six: Sustainability

Progress Made: A commitment to sustainability has become an important issue to clients as the current economic, social and environmental conditions have changed since the first report.

Clients are embracing environmentally sustainable solutions and using such tools as whole life asset management to provide foresight into investments. The commercial value of 'green' buildings is starting to be realised whereby clients can recoup their initial investment through tenants who are specifically targeting zero and low energy developments as part of corporate social responsibility.

Ongoing Action: Sustainable low energy design will become an increasing major driver in construction projects. Due to this the whole process of construction, from Client to subcontractors, will need to be reviewed to reduce energy demands and carbon emissions of projects. Waste management and zero carbon projects need to be exemplified and shared with the construction community.

Government legislation needs to be realistic and digestible to the industry. Benchmarked projects and processes need to be shared. A clear and unambiguous definition of environmental sustainability is required to enable the industry to determine where greatest value in R&D³ can be achieved.

Role of the next generation: The importance of embracing sustainable design; this is the single most important issue that the next generation has to face. Clients need to be educated of the design choices where sustainable methods need to be weighted more highly than those which are less so. The next generation must carry this issue forward as a key driver for all projects.

Seven: Health & Safety

Progress Made: There has been a paradigm shift within the industry in regard to health and safety since the Egan report. Due to market conditions clients now expect contractors to have signed up to the 'Considerate Contractors Scheme'. CSCS cards being held by all employees has driven up the basic understanding of H&S. The introduction of the Construction Design Management regulations has placed the focus of H&S with design teams.

Ongoing Action: The industry as a whole needs to respect H&S, especially in the design consultancies where the issue is distanced from the site. The role of the CDM coordinator is a highly specialized to ensure that designers are aware of the effects of their designs. As most sites are multilingual setups need to be respectful that written English is sometimes not the most effective means of communication.

³ Research and development

Role of the next generation: To understand the responsibilities design and building and to champion design that is innovative as well as safe. Closer working between the supply chains to share best practice is required. The industry needs to adopt a zero tolerance stance to health and safety on site to set the level for the next generation.