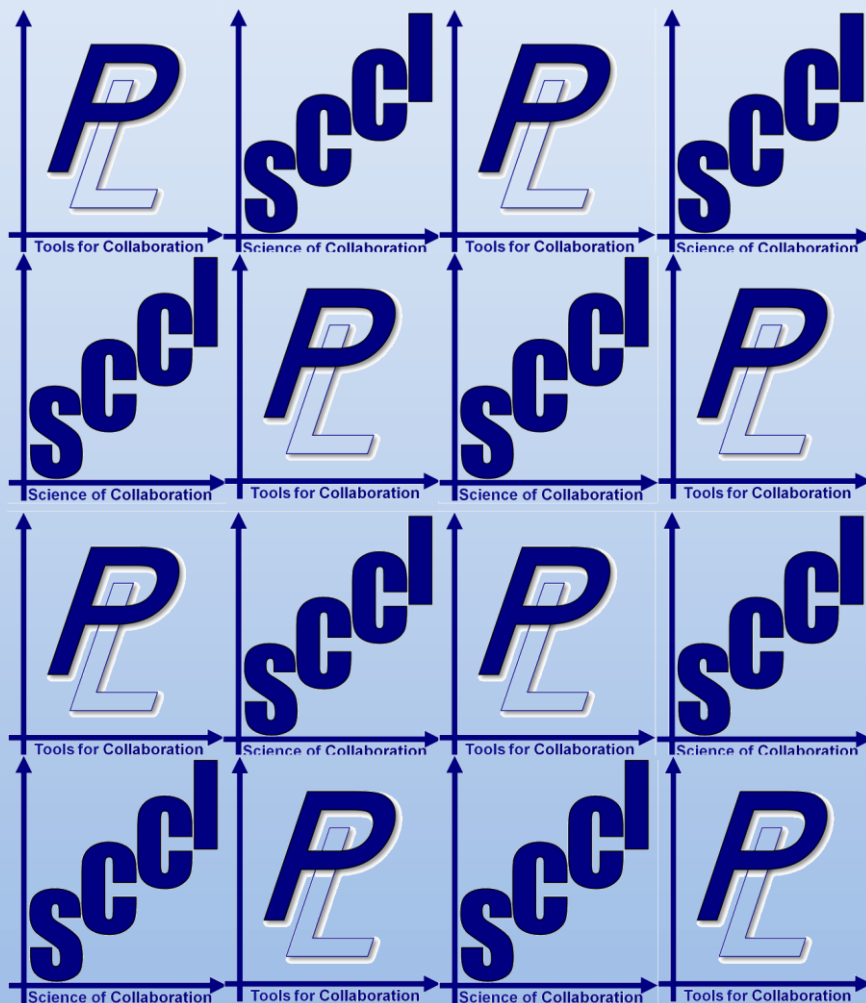


Research Summary

The Construction Sector

2004 - 2018



Andrew Humphries & Linda McComie



Second Edition 2022

First published in Great Britain in 2020 by Humphries and McComie.

Copyright Andrew Humphries and Linda McComie

The right of Andrew Humphries and Linda McComie to be identified as the authors of this work has been asserted by them in accordance with the Copyright, Designs and Patents Act 1988.

Every possible effort has been made to ensure that the information contained in this publication is accurate at the time of going to press and the authors cannot accept responsibility for any errors or omission, however caused. No responsibility for loss or damaged occasioned to any person acting, or refraining from action, as a result of the material in this publication can be accepted by the editors, publishers or any of the authors.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopy, recording or otherwise, without prior written permission of the copyright owner. Nor can it be circulated in any form of binding or cover other than that in which it is published and without similar condition including this condition being imposed on a subsequent purchaser.

Published by

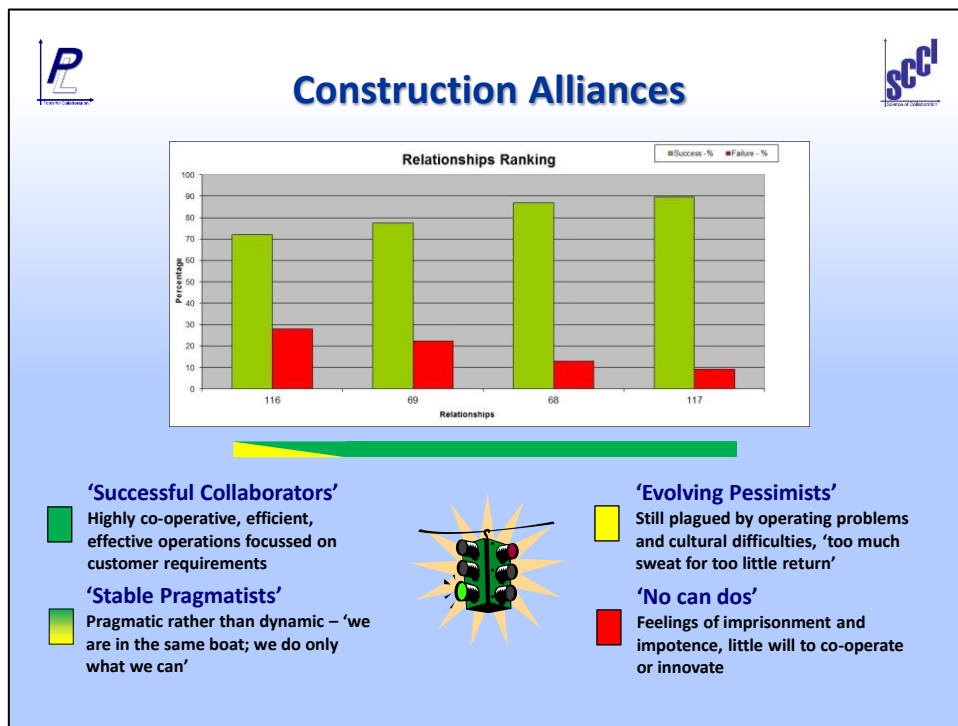
SCCI Ltd
Milton Keynes,
England

Research Summary – The Construction Sector 2004 - 2018

Executive Summary

Between 2004 and 2018 we examined four major relationships involved in a number of national construction projects. This report summarises the findings from our research. It does not concentrate on the individual projects but rather on the particular relationship management features that characterise this sector.

This industry has a long and traditional history where design and construction technology developments continue to have an impact. However, it operates with a multitude of sub-contractors from one-man and a truck or a jobbing brick-layer upwards. As a result our research has exposed a rich variety of relationship dynamics which, at the detailed level, defy easy categorisation. This report tells the story using the words of frontline managers.



We summarise this work in three parts:

- Builder/Designer (69)
- Civil Engineer/Technology Supplier (68)
- Construction Partners (116 & 117)

Their relationship performance is compared in the chart above. They are mostly seen as Successful Collaborators.

Overall Conclusions

The history of major construction projects in the UK is littered with high-profile, time and cost over-runs. Usually, ‘unforeseen technical problems’ was the reason given. This research summary gets under the surface of these relationships and exposes a number of dynamics at play which would have had a significant bearing on their performance.

- There was a general desire to demonstrate collaborative capability to stakeholders looking to future projects
- The lack of a viable joint operating model (Enterprise Relationship Management Plan) from the outset had adverse repercussions that ricochet throughout the long life of these projects. In particular it affected the transition between the Decision Phase and the Operating Phase where continuity and the opportunity to reap the increased value from collaboration was often lost and never regained
- Companies in this sector have struggled to understand the nature of collaboration/partnering and how to implement and manage it. In one situation the designers would not sign off drawings until they were approved by the sub-contractors. The other partner blamed the designer for the delay and increased costs
- In three out of four relationships there appeared to be a general problem of integrating the management of the project team with key departments in the parent companies – all-encompassing enterprise relationship management was missing. This caused delays in decision making which increased cost and risks
- Within two of the relationships a misguided effort to free up innovation and create a ‘can-do’ attitude by the senior managers loosened the reins on change control and financial governance at the operational level. This resulted in uncontrolled design changes with the inevitable cost implications. They had not realised that effective collaboration is a combination of standard governance and teamwork
- There was a culture of ‘good enough’ where due to the perceived ‘nature of construction’ projects, it was accepted that delays and budget overruns were inevitable. This may also have had an adverse effect on innovation and continuous improvement
- In some instances the customer’s sensitivity to price resulted in their supply partner de-emphasising legitimate contingency provisions

“We are not perfect. We deliver about 80% of the time. We are human. Generally when we say we will do something we do it.”

References

Andrew Humphries & Linda McComie (2022), **Implementing and Managing Collaborative Relationships – A Practical Guide for Managers**
Routledge, New York, ISBN 978-1032-1173-86
155 pages

Builder/Designer 1994 - 2004

Background

This was a 10 year old relationship between a Major Civil Engineering Design Company and a Global Civil Engineering Company who had previously worked together on many multi-million £ construction projects.

- Free-flowing, multi-level communications involving partners, agents and clients that ensured a dynamic working environment aimed at achieving objectives

"I speak to any and everybody in their organisation. My opposite numbers don't mind this."

- A highly pragmatic relationship not afraid of confronting difficult post-project lessons and taking appropriate action to create a positive, enjoyable working environment and new working practices

"We want to learn from previous experiences as we feel we can work well together as long as there is a working environment of shared risks."

- The partners were committed to changing industry based culture and working more closely together in the future

"The old engineering ways are behind us and partnership, not the traditional engineering relationship, is the way forward."

"Often designers are 'kicked like a dog' but not in this relationship."

"Programme control is not good. Their explanations for delay were poor. This is the norm in the industry but we are trying to change it."

- The organisation was geographically scattered which made formal relationship management, control and co-ordination problematic

"The design work is spread across too many offices involving too many personalities and managers which cause loss of control."

The aims of the partnership appraisal were as follows:

- To impress a government agency responsible for letting major contracts

"We see the league table from the client as an annual validation of how the relationship is working. There is a common interest and desire to move up the league table."

- To benchmark a long-standing, mixed-fortune relationship
- To identify collaboration improvements so that the team could compete jointly for future contracts more effectively

"Everyone is keen to work together on the next job having learned previous lessons."

"This is the best relationship I have worked with and I would definitely like to see it continue."

Despite the maturity of this relationship and the apparent harmony reflected in the overall 'Successful Collaborators' score a number of issues were apparent.

Governance

Formal relationship management was not established.

- **No clear focus on joint management** so multiple, dis-jointed links between the parties resulted in unresponsive co-ordination and dissonance

“Unfortunately the coherence of the programme lost its way over time. It lost touch with reality and became a monthly firefighting exercise.”

“Performance monitoring was sporadic at the working level because staff did not buy in to it.”

“Our designs weren't looked at sometimes until just before procurement and build. Quite a lot of redesign was therefore needed. We were very prompt and didn't hold things up but it put us under pressure. This was needless firefighting.”

“The open book was very much one way. We had very little appreciation of their costs.”

- **Chaotic organisational co-ordination within each company.** A lack of a consistent, communicated collaboration policy to all levels resulted in a number of issues that increased costs and caused delays

“We have a single point of contact within the organisation but their co-ordinator does not communicate with the appropriate people.”

- **Conflicting priorities**

“I can see a marked difference in the way that our partner's site operatives and the way the board members work/operate. This gives differing views on our performance (i.e. site says 'very poor' board say 'acceptable'). Improved internal communication within our company is required to eliminate this sometimes confusing and potentially demoralising aspect of the relationship.”

“We could not agree a shared web based system to handle data. The resultant information system was cumbersome, caused delays, things got lost, was incomplete, lacked tracking and lacked feedback.”

- **Confusion over who was supposed to be managing sub-contractors**

“The designer is often disrupted by third parties and doesn't put enough emphasis on managing them, consequently they are often perceived by us to be using the lack of third party approval as an excuse for not finalising the design.”

- **Lack of design change control**

“In a very few instances part of the document control system was bypassed and expensive and sometimes unnecessary design changes were made by overly helpful staff. This led to higher costs and left a bad taste in the mouth.”

- **Undermining trust**

“We are working towards a partnership/collaborative relationship but 'currents' within both companies are suspicious of the trend.”

“There was nervousness rather than lack of trust. I always have to remember that however good the relationship one day the tiger may turn and bite my hand off.”

- **Lack of understanding of how practical collaboration is implemented** – a key policy was the reduction in governance in order to ‘promote’ closer working. This resulted in a ‘gung-ho’ attitude to design standards and cost control

“In order to get away from the blame culture, commercial pressures were reduced. This meant that cost overruns came to light too late in the project.”

“The money must not interfere with the day-to-day running of the project.”

“We got a call from a site office. They had sunk a 120 ton piling 3 metres from where it should have been and they were asking us to amend the design. We agreed but nobody took account of the cost implications.”

“We worked all hours, sometimes at no cost, to get things done on time. It was a bit of a knock back when the increased costs were all laid at our door.”

“Towards the back end of the project when the requirement for design changes became more urgent, sometimes we had to bypass the document control system to expedite action.”

“The project is complete and it came in 10% over budget. Six months later we are still wrangling over how this should be shared.”

Culture

Despite the enlightened intentions of the senior management to work together collaboratively underlying, traditional cultural attitudes still had an impact.

- **Two cultures** - a partnership approach at the higher levels and a more traditional ‘engineering’ attitude at the lower levels

“The management teams have bought into the culture change but it has not been communicated down effectively.”

“There is definitely a difference between the managers and the lower levels. In the latter the perception is you're there to serve them and you do what they tell you to do. You are not a partner.”

“I believe at certain levels there is a genuine appreciation of the desire to develop the relationship but this doesn't necessarily permeate throughout the whole of the project team.”

- **Traditional working level practices** - shut out collaborative working and undermined project control

“We process standard contracting documents regardless of who the client is, without face to face contact. This creates a 'conveyor belt' rather than a 'relational' attitude.”

“Old-fashioned confrontational attitudes still exist.”

“There is still an element of the designer being a sub-contractor rather than a true partnership.”

“The intranet document system works well up to the site document controller. However site-staff like to have a piece of paper in their hand!”

“Everyone had full access to the information held electronically except the site people. They would start building from any drawings that were available so we blinkered them to stop accidents from happening.”

Conclusion

Notwithstanding statements of intent to work collaboratively this ten year old relationship continued to exhibit traditional working practices and attitudes that undermined performance. Furthermore in a misguided attempt to foster a closer relationship, project governance was relaxed which resulted in cost overruns and acrimony. A lack of integrated relationship management was the real source of these problems.

Civil Engineer/Technology Supplier 2003 - 2008

Background

This was a 6 Year civil engineering project between a Major Civil Engineering Design Company and a Global Civil Engineering Company who had worked together previously on many multi-million £ construction projects. It was one of 200+ projects within a £bn national infrastructure project that was finally completed over a year late, nevertheless it was hailed as a great success. We were commissioned to carry out this research in order to:

- benchmark the relationship performance
- enable the teams to understand and improve the relationship
- influence key stakeholders for internal and external publicity purposes
- build collaborative capability in preparation for future joint contract bids

Relationship Management

- **Other than at the team level the partners were not collaborating**

“Each company treated the project as a ‘black box’ as a result the project manager does not appear to have the freedom or responsibility to make all of the decisions.”

“Lack of identifiable central control and formal procedures results in: blurring of responsibilities, uncoordinated actions, less effective embedding of lessons learned, failure to spread best practice, dependence on a few key individuals and confusing lines of communication.”

“Design specification management including approval, costing and change control is subjective resulting in disputes over contract amendment, inefficient procurement, poor work planning and project delays.”

“The technical queries system is still very informal and there is no common documentation system so things are not recorded for a long time. If a member of staff moves the audit trail is lost.”

“There is an e-mail culture within the project where anyone can talk to anyone. This brings the problem of validity and the need to balance confusion with flexibility.”

“My concern is we are missing the opportunity to bring our 2 companies closer as well as the team members to bring long lasting benefit for the future.”

Governance

- **Client-driven focus on project quality and time deliverables**

“The re-imburement of the cost system can be open to abuse however in this project a sense of fair play engenders an atmosphere of honesty and trust.”

“We say when things are wrong and give warnings on targets. They are willing to re-programme and encourage feedback.”

“If our partners fall down I want to know why, however if it’s a genuine problem we will make every effort to help them resolve it including asking the client for extra money.”

“Everyone is trying to do their best and the spirit is excellent but there are no formal performance measures.”

- **Project Teamwork**

“We all get on together really well. There are lots of social events, open days, golf, Chinese and drink nights that everyone attends. Charity competitions encourage team building.”

“We share information about any problems that we encounter as we go along, even with our competitors in the team.”

“Closer ties in understanding the supply chain process of our suppliers, requires far more work to satisfy the working relationship of the holistic team approach.”

“Because we sit together in the same office we can solve problems immediately. This is a win-win relationship and I would like to see us working together like this on future projects.”

Culture

“All engineers want to finish the job and get the lights turned on; getting them to complete the paperwork is difficult.”

Conclusion

Despite the fact that cost-plus as a procurement approach had been discredited some years previously, it was adopted by the client in this case. It instilled a culture with reduced emphasis on the contractual principles commonly observed in construction projects and promoted a behavioural focus. In doing this the client shouldered all of the risk and required all to work together in a trusting, open book way to negate it. As a result governance was relaxed and focus concentrated on completing the project on time and to quality, effectively closing the door to cost innovation. This policy was aligned with a traditional attitude where the performance expectation was low.

“80-85% of our project deliverables are completed on time. This compares favourably with 60% in the general construction industry. Our innovative approach is working very well. “

Construction Partners 2017 - 2018

Background

This research looked at two multi-million £ relationships in national infrastructure projects. One of these had been on-going for 10 years through the design and development phase and the other was in the formative stage of a 9 year construction project. The aims of the assessment were to:

- demonstrate collaborative capability in order to bid for the next contract
- build collaborative capability at the start of the project

Relationship Management

- **Business clarity misgivings**

- **Business objectives not defined**

“We are currently agreeing the terms of the delivery phase work package. We have an opportunity to review the business and commercial objectives of our parent organisations to ensure each organisation’s needs are met and the level of delivery risk is reduced.”

- **Sharing of gains and rewards not clear**

“There is strong intent to co-operate in a more closely collaborative way, which still needs hard work to drive out the benefits.”

- **Strategic context and commercial agreement not understood**

“With regard to this contract I have insufficient knowledge of the contractual arrangements to incentivise each other or its effectiveness under the current contract with our client.”

- **Project Team Management**

- **Loss of team continuity between bid and construction phases**

“We are working together on a number of projects and tenders. How the businesses interact at that level I do not know.”

- **Partner companies’ strategic direction and governance not established at the outset**

- **Project objectives overshadow company objectives**

- **Team not functioning jointly**

- **Project management failing to encompass all players**

“We as lead contractor are exposed to client-facing issues for the quality and timeliness of deliverables for which we rely on our partner and this leads to tensions because we are having to quality check them all.”

“Our project team has not understood how to manage and influence the ‘reach back’ into our parent organisations.”

“Our company has lengthy governance processes that can impact timeliness of decisions.”

“Our team depends on a diverse range of disciplines owned within our parent organisations so it can be harder for us to influence resource availability and standards of performance.”

“Due to the way the design disciplines are organised, it is important that they feed back to the project manager regularly and consistently. The disciplines are not as open as they could be and tend to exist in their own silo.”

- **Performance**

- **Concern over measures to drive performance and raise time, cost and quality standards**

- **Incentives to drive continuous improvement and innovation are not well defined**

“As the relationship on the project has been in place for many years there may be an element of complacency, and this can sometimes hamper challenging or seeking improvements.”

- **Slow development of processes and procedures for working together**

“There is friction especially towards information requirements and sharing. This is frustrating the joint ability to solve problems and establish high performance routine operations. “

- **Team working**

- **High levels of confidence in each other due to efforts by new and existing members of the combined project team**

“All my dealings have been collaborative and acting as a single project team.”

“The teams working together on a daily basis are performing and interacting well.”

“My experience of our relationship through delivery of the preliminary design and the project initiation has been overwhelmingly positive.”

“We have developed a highly cohesive team over the period of time that we have worked together. We have achieved very high levels of mutual trust and there is a strong sense of respect and appreciation between us.”

Conclusion

Neither of these relationships started out by developing a joint operating model and in consequence there was no foundation for enterprise relationship management. For example as the partners transitioned from one project phase to the next, a new team had to start all over again re-defining objectives, operating practices and procedures and, communications. Without a clear plan for the relationship there was no foundation for

organisational learning where experience is turned into knowledge and collaborative, continuous improvement results.



For Further information contact:

Telephone: +44 1 908 561892

Email: sales@sccindex.com

Website: <https://sccindex.com/>