



# Return of the Integrator

Edward Moore

CEO

ResoLex



# This session

- Changing market drivers leading to integration
- Why “return” of the integrator?
- Role of the integrator
- Skills of an integrator
- World Café workshop

# Market Drivers — PCB Today

- **50% of all construction projects worldwide will include modular content by 2022, driven by the growing global skills shortage**
- **In 2019 more construction companies than ever before will start trying out integrated business software — for the very first time. New entrants: China, Korea... and Amazon?**
- **Digital asset life cycle management, integrating both BIM *and* ERP, will emerge as a future need-to-have**

# Market Drivers

**From Transactions to Enterprises**

**A new approach to delivering high performing infrastructure**

Infrastructure Client Group  
March 2017

Project 13

	Simple Collaboration	Integrated functions and relationships	High performing enterprise
Governance	<ul style="list-style-type: none"> <li>Definition of value agreed by the owner.</li> <li>Long-term relationships with suppliers accepted.</li> <li>Performance targets and reporting agreed.</li> </ul>	<ul style="list-style-type: none"> <li>Value shapes investment programme.</li> <li>Regular reports on supplier performance.</li> <li>Performance reporting integrated with production.</li> </ul>	<ul style="list-style-type: none"> <li>Value at the centre of asset management.</li> <li>Suppliers influencing investment decisions.</li> <li>Performance reporting integrated with asset management.</li> </ul>
Organisation	<ul style="list-style-type: none"> <li>Supply chain strategy in place.</li> <li>Traditional contracts with financial incentives.</li> <li>Core team co-located with common systems.</li> </ul>	<ul style="list-style-type: none"> <li>Key suppliers procured through frameworks.</li> <li>Cost reimbursable contracts with incentives.</li> <li>Single integrated project organisation.</li> </ul>	<ul style="list-style-type: none"> <li>Suppliers working together in clusters.</li> <li>Suppliers' rewards depend on performance.</li> <li>Best candidates for key roles in the integrated organisation..</li> </ul>
Integration	<ul style="list-style-type: none"> <li>Integration defined and integrator in place.</li> <li>Integrated planning and management.</li> <li>Good practice in health, safety and wellbeing (HSW).</li> </ul>	<ul style="list-style-type: none"> <li>Integrated business processes and systems.</li> <li>Production system in place.</li> <li>HSW defines good practice for the construction industry.</li> </ul>	<ul style="list-style-type: none"> <li>Fully integrated programme team with key suppliers contributing.</li> <li>Real-time digitally enabled production systems.</li> <li>HSW defines good practice for UK industry.</li> </ul>
Capable owner	<ul style="list-style-type: none"> <li>Owner's champion appointed.</li> <li>Owner's functions aligned with delivery team.</li> <li>Plan in place to develop Owner capabilities</li> </ul>	<ul style="list-style-type: none"> <li>Owner functions integrated with delivery team.</li> <li>Key capabilities in place.</li> <li>Development and succession plans in place.</li> </ul>	<ul style="list-style-type: none"> <li>Owner and suppliers working together to develop investment strategy and next generation improvement plans.</li> </ul>
Digital transformation	<ul style="list-style-type: none"> <li>Digital Strategy in place</li> <li>Level 2 BIM in use across the programme.</li> <li>Plan for digital delivery in place.</li> <li>Plan for smart infrastructure in place.</li> <li>Value of information recognised</li> </ul>	<ul style="list-style-type: none"> <li>Suppliers of digital services/ technologies appointed.</li> <li>Consultants' and contractors' business models adapted to the digital environment.</li> <li>Plan for adoption of Level 3 BIM.</li> <li>Information being managed as a resource across the whole 'data estate'</li> </ul>	<ul style="list-style-type: none"> <li>Suppliers of digital services/ technologies at the core of the programme team.</li> <li>Digital production platform in place.</li> <li>Asset management integrated with delivery.</li> <li>Integrated through-life approach to information in place</li> </ul>

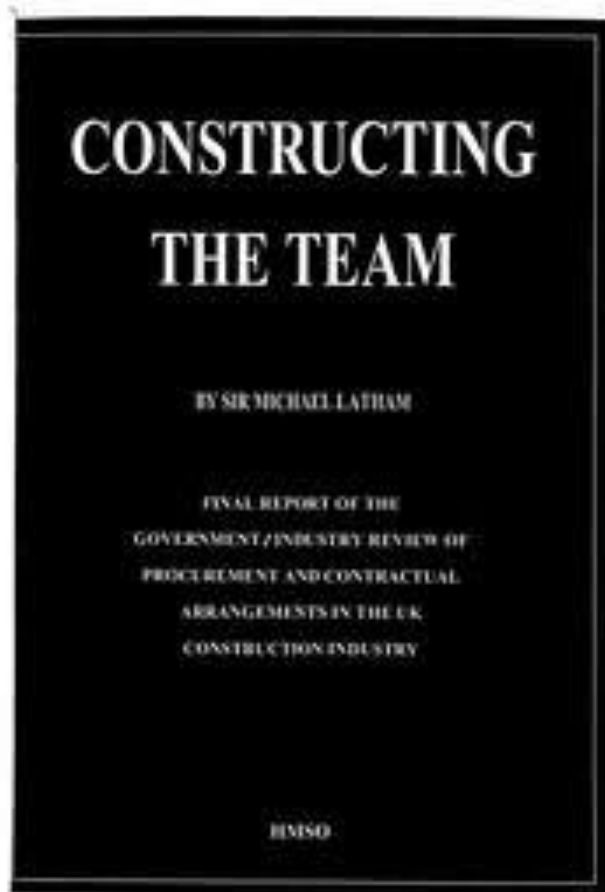
# Delivery Integration Partners

Highways England chief executive, Jim O’Sullivan said: “Routes to Market represents a fundamental change in the way we deliver road projects.”

“It will be performance rather than price-based, focusing on building the right projects with the best outcomes for road users and the communities we serve.”

“It demands a major step up in our supply chain to embrace innovation and team work and in their ability to deliver value.”

# Why “Return” of the integrator?



# Key Shifts

---

Outcomes rather than output

---

Team solution ownership

---

Inward investment over short term profit

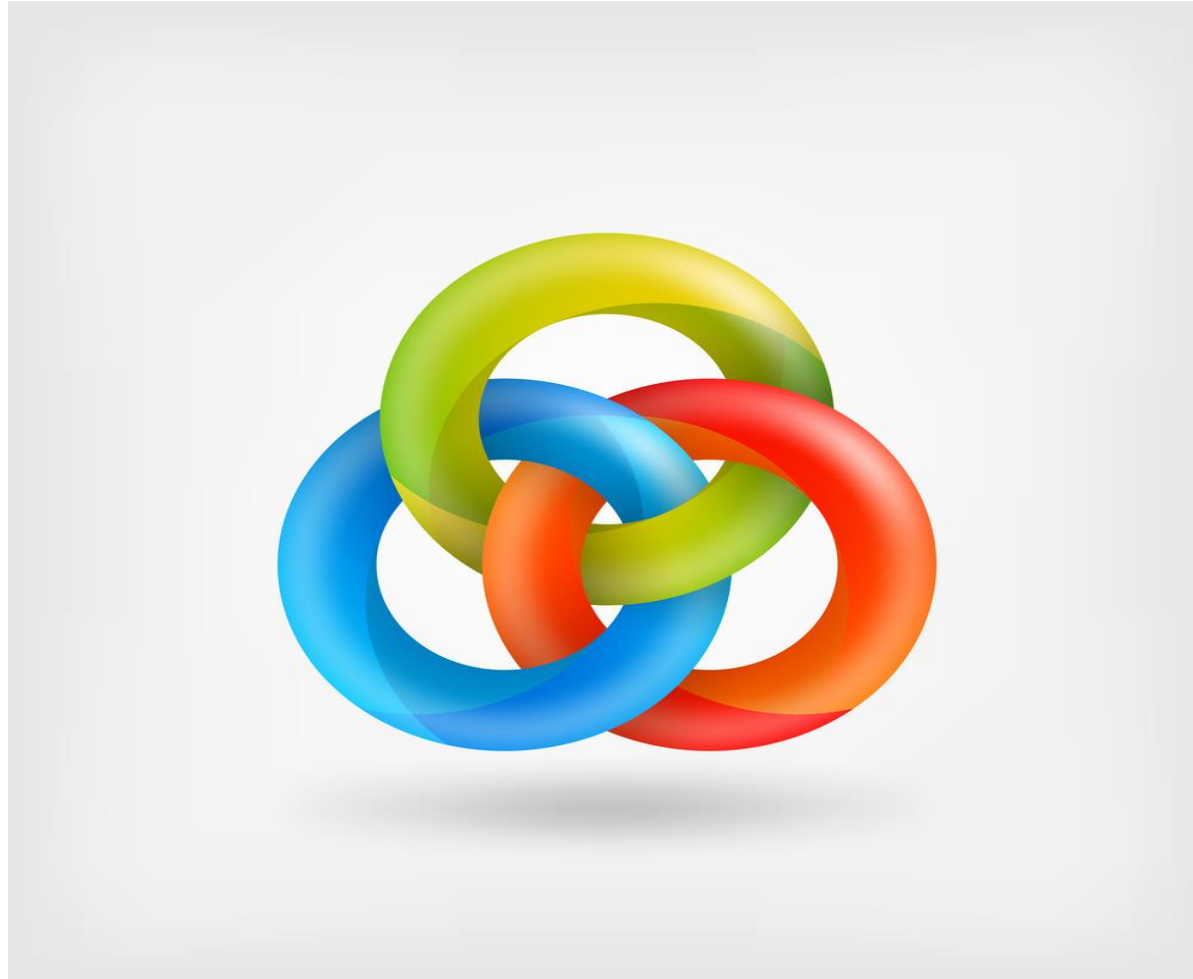
---

Integration of owner in to delivery team

---

Peer to peer relationship with client

# Role of the Integrator





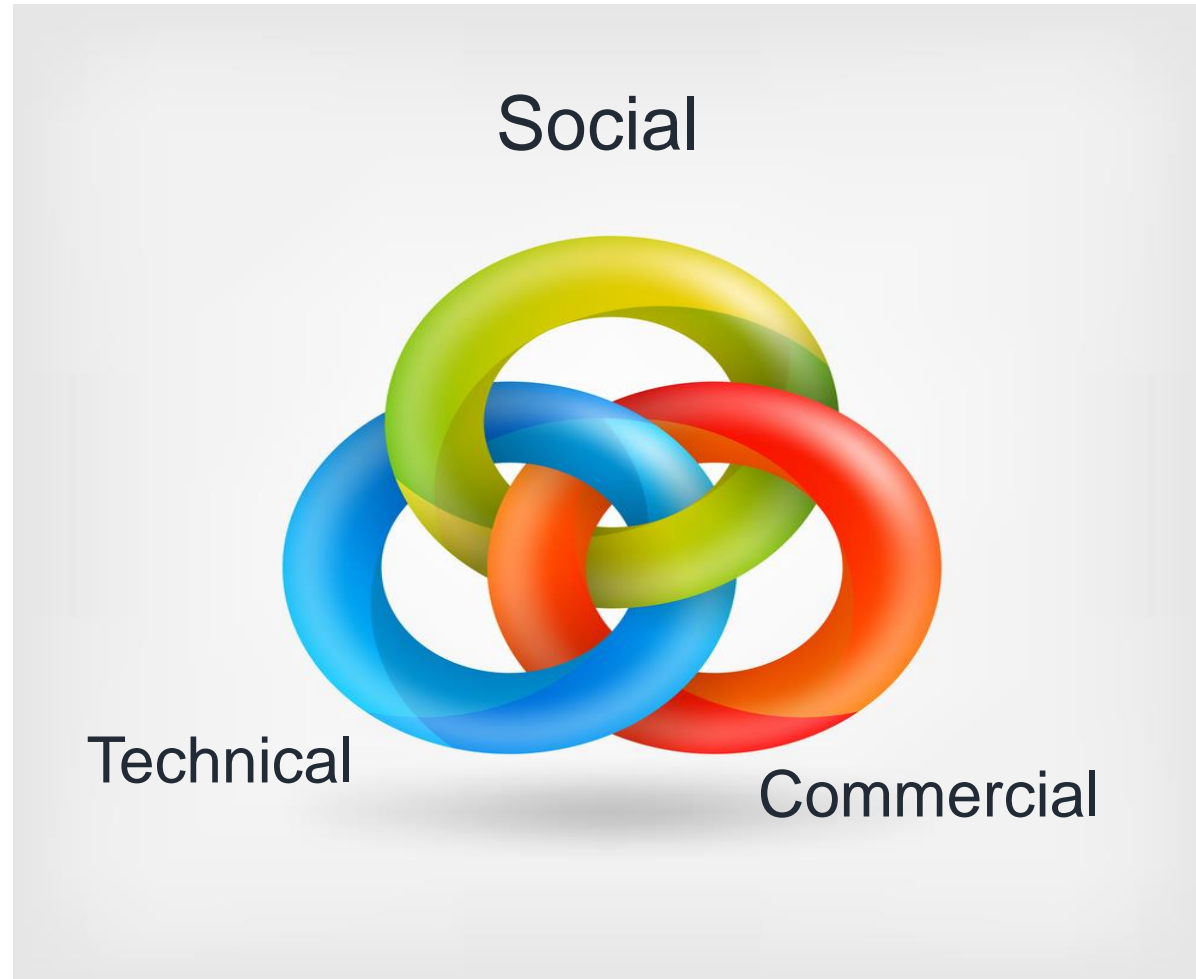
# Role of the Integrator



# Role of the Integrator



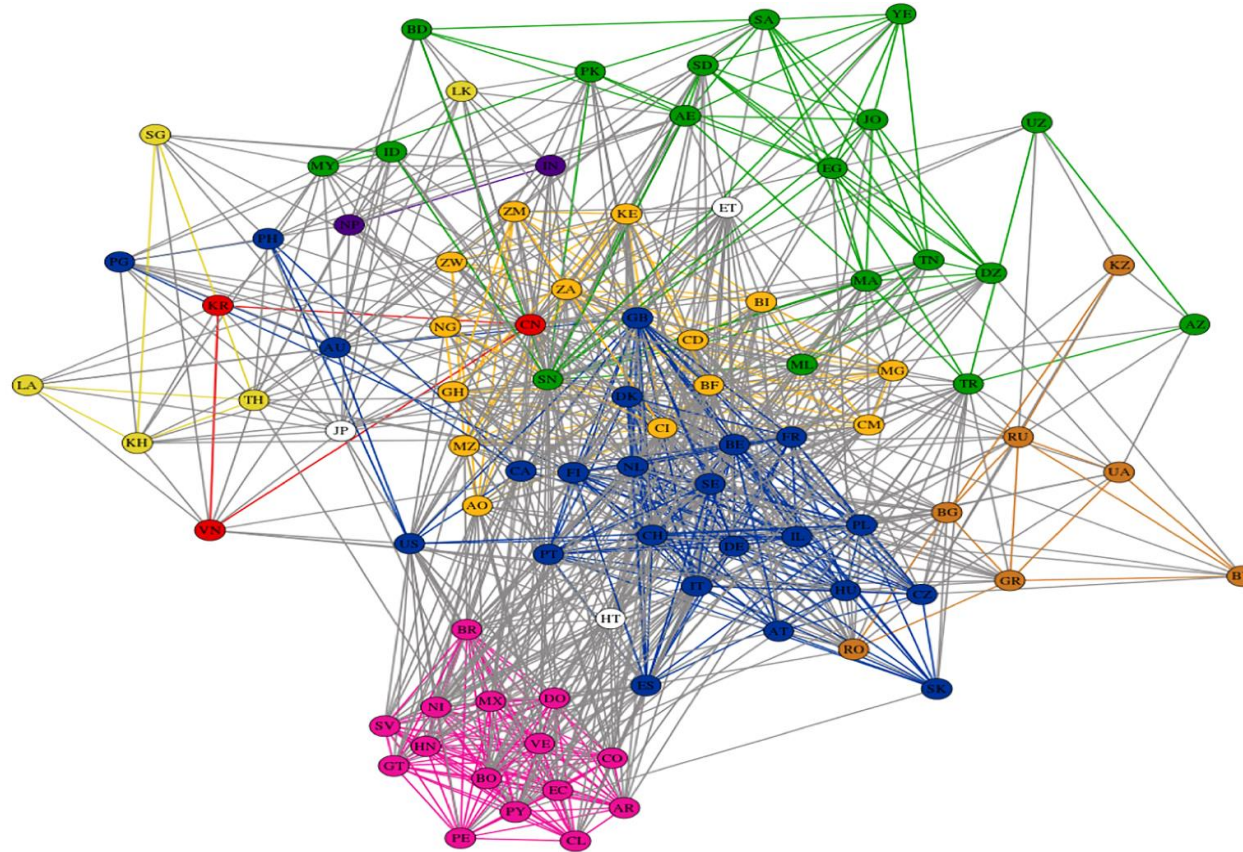
# Role of the Integrator



# Project Relationships

$$R = [N \times (N - 1) / 2]$$

# Project Relationships



# Project Relationships

No. of people	No. of relationships
2	1
10	45
50	1,225
100	4,950
500	124,750

# Role of the Integrator

---

Being a communicating bridge between strategy planning and tactical execution

---

Bring together processes, practices, methods, knowledge, and people from all over the extended team

---

Work through community, knowledge, and continuous improvement activities to enable a systemic and holistic view

---

Ensuring that the various elements of the portfolio are properly coordinated and consistently delivered

# Role of the Integrator

- Leadership
- Alignment
- Engagement
- Resilience
- Innovation



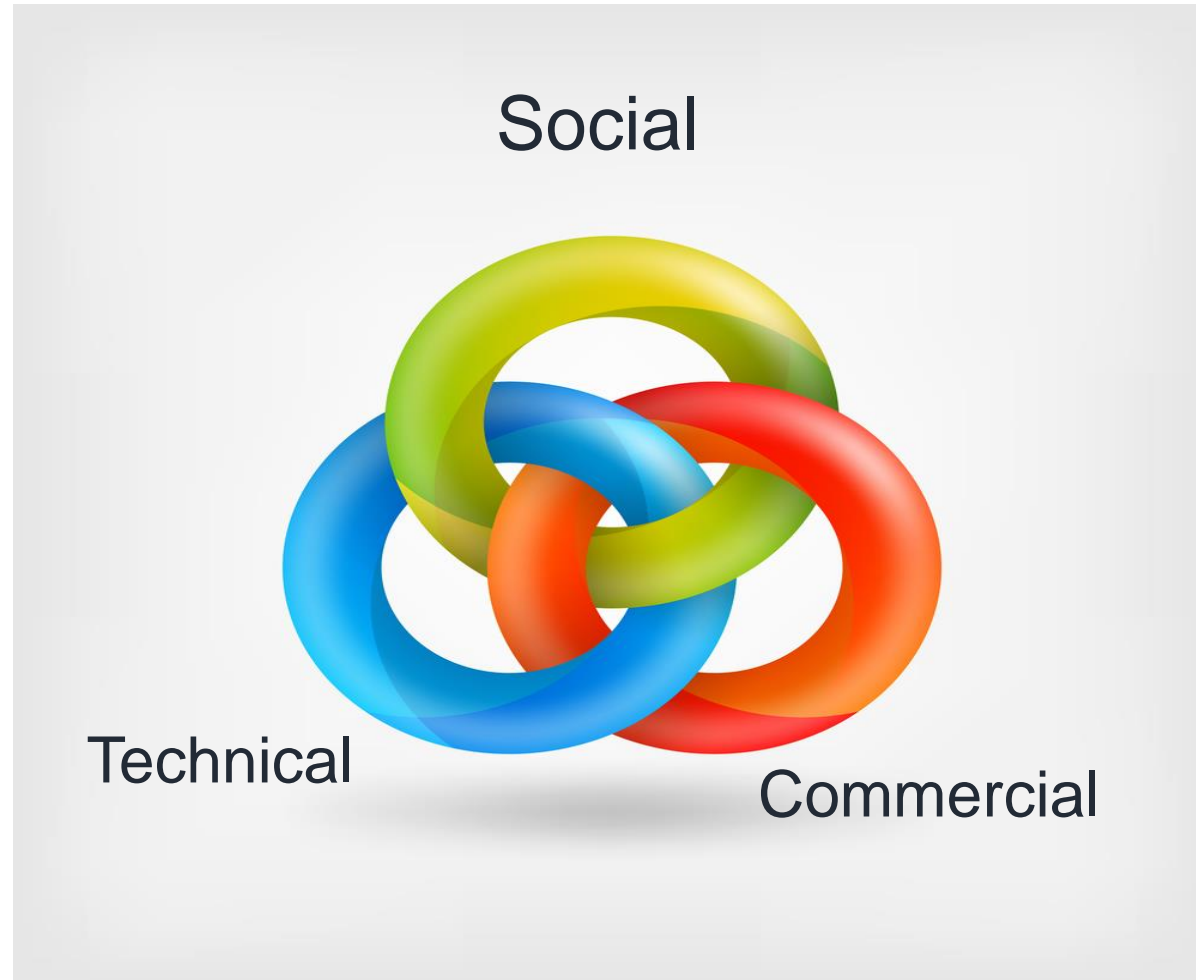
# Alignment



# Role of the Integrator

- Leadership
- Alignment
- Engagement
- Resilience
- Innovation

# Skills of an Integrator





# Fundamental change

# World Café Workshop

- Tables
  - Leadership
  - Alignment
  - Engagement
  - Resilience
  - Innovation
  - Technology enablers
- 30 second feedback on the most important learning