



Exploring the idea of ‘costing collaboratively’ in the UK construction industry

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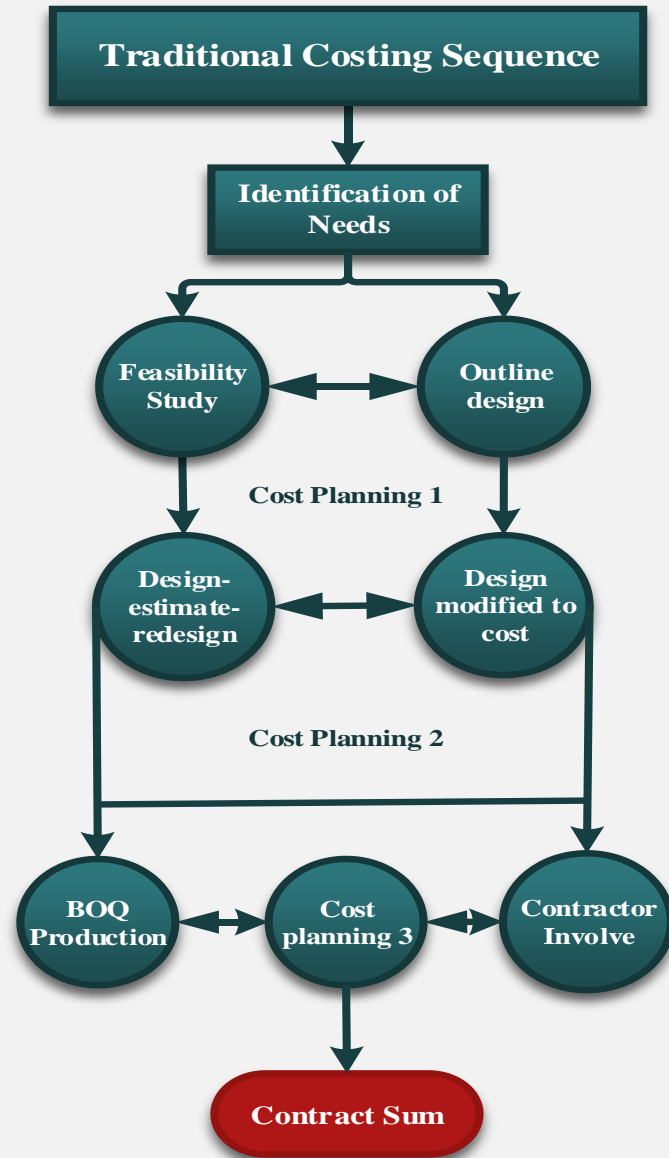
The UK Construction Industry Challenge

- Lack of collaboration among stakeholder
- Traditional procurement approach persist
- Commercial behaviours
- Survivalist mentality

Current costing practices

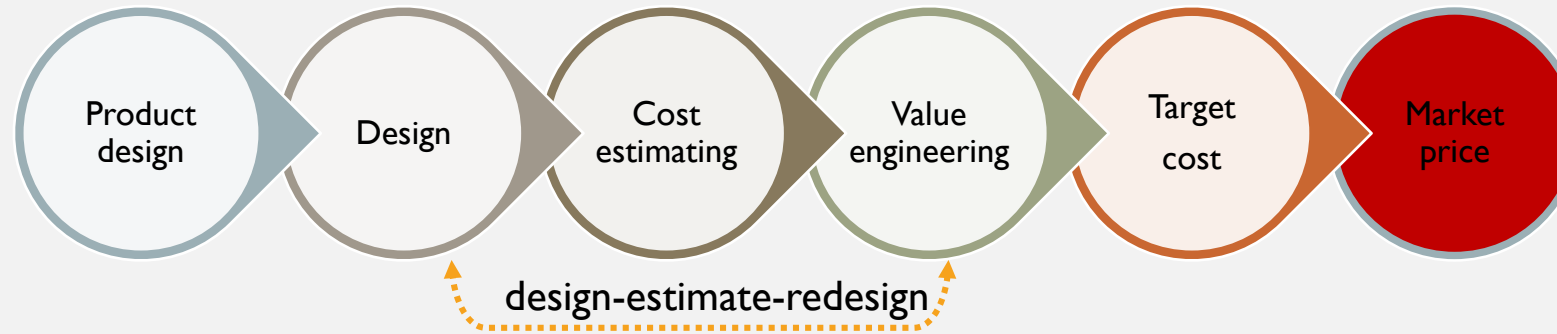
- Decisions are made in silos.
- Communication and feedback is poor.
- Data mostly taken from previous projects.
- Still driven by RIBA plan of work in the UK, which support competitive tendering.
- Costing and design are fragmented - separated from production.

Sequence & disciplines involved



- Cost planning 1: architect & QSs
- Cost planning 2 with TC: architect/QSs/service engineers
- Cost planning 3: + contractor

Setting target cost



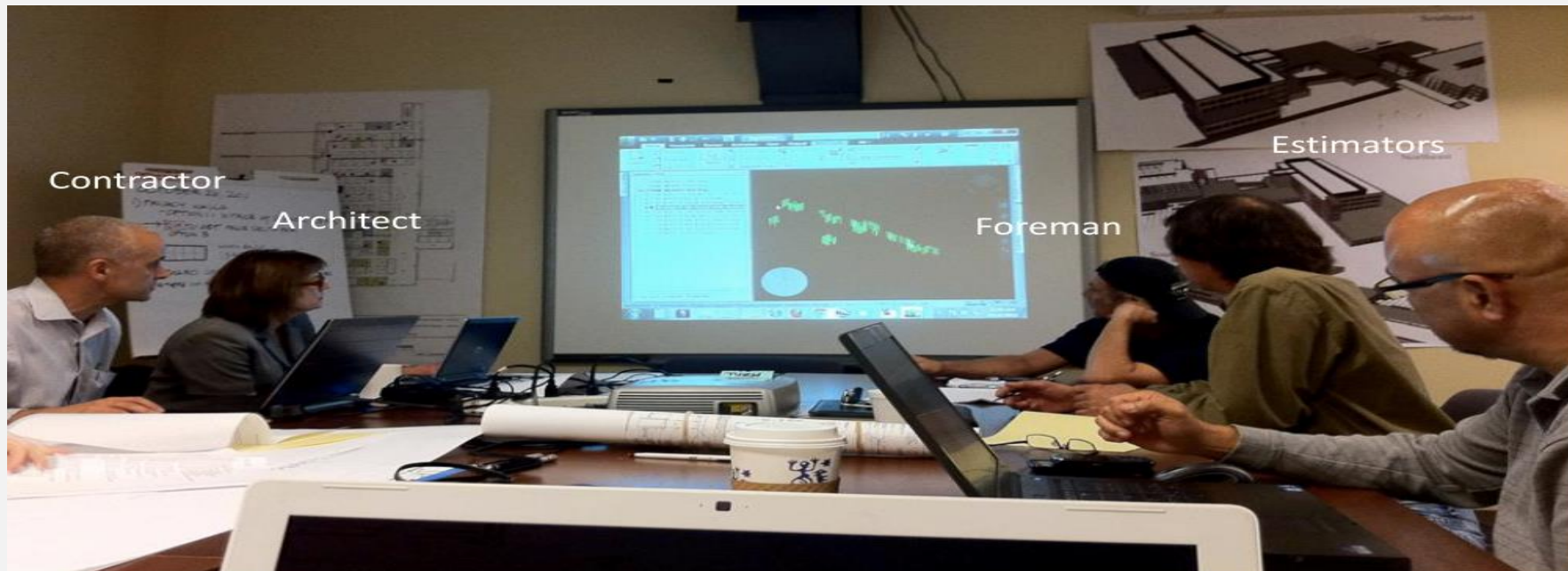
The focus is on the product design? Working toward price

Scholars are arguing that integrating experts early would shift the customary approach to support collaboration.

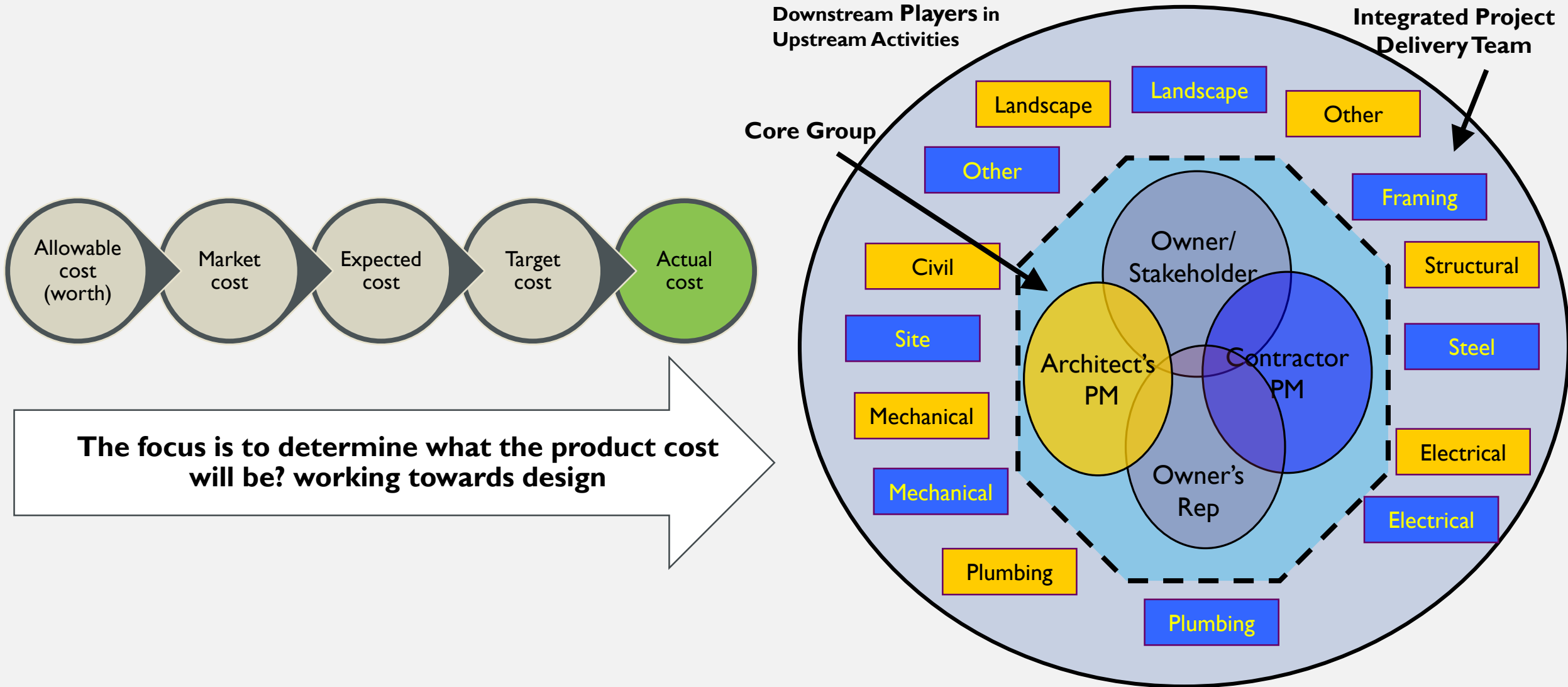
(Jung et al, 2012; Ballard & Pennanen, 2013; Love et al, 2017; Shalpegin et al, 2018).

Why 'Costing Collaboratively'

- Moving away from commercial 'secrecy'
- Financial transparency
- Integrate right players to support financial commitments
- To have a clear understanding of actual cost and value – to eliminate waste
- To improve the mentality of 'project first thinking'!



TVD – a good example!



Over the shoulder costing (collaborative)

Approach - case study

Project Attributes	Case study 1	Case study 2	Case study 3
Nature of projects	Infrastructural	Infrastructural	Infrastructural
Location of projects	UK	UK	UK
Nature of works	Design & construction of water recycling treatment plants	Construction of water recycling treatment plants and sewage works	Upgrade of highway to smart motorway btw J19 & 16
Types of clients	Public	Public	Public
Mode of partners selection	Alliance, framework	JV, framework	JV, framework
Proposed duration	60 months	60 months	24 months
Procurement arrangement	Centralised procurement system	D & B	D & B
Contract sum	£1.2 billion	£200 million	£120 million
Phase examined	Costing	Costing	Costing

Results

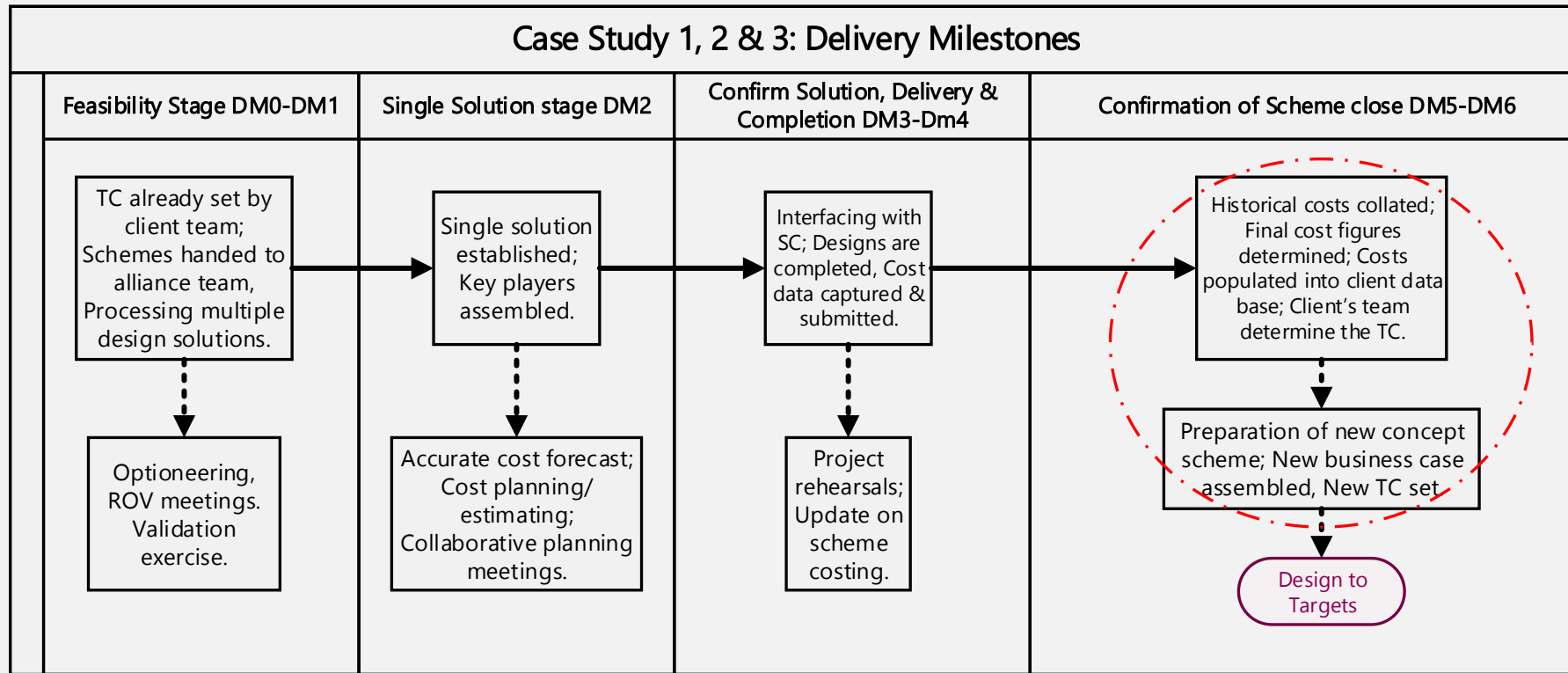
perceptions of CC

Themes	Attributes 1	Attributes 2
<i>Target Costing</i>	Open dialogue Cost certainty Open book estimating	Transparency in costing & design process Cost negotiations
<i>Integrated Value Engineering</i>	Well-informed discussions during costing; Shared understanding	Value creation Cost visibility
<i>Optioneering Process</i>	All-inclusive validation study Risk/reward sharing	Open conversations Reliable cost planning & estimation

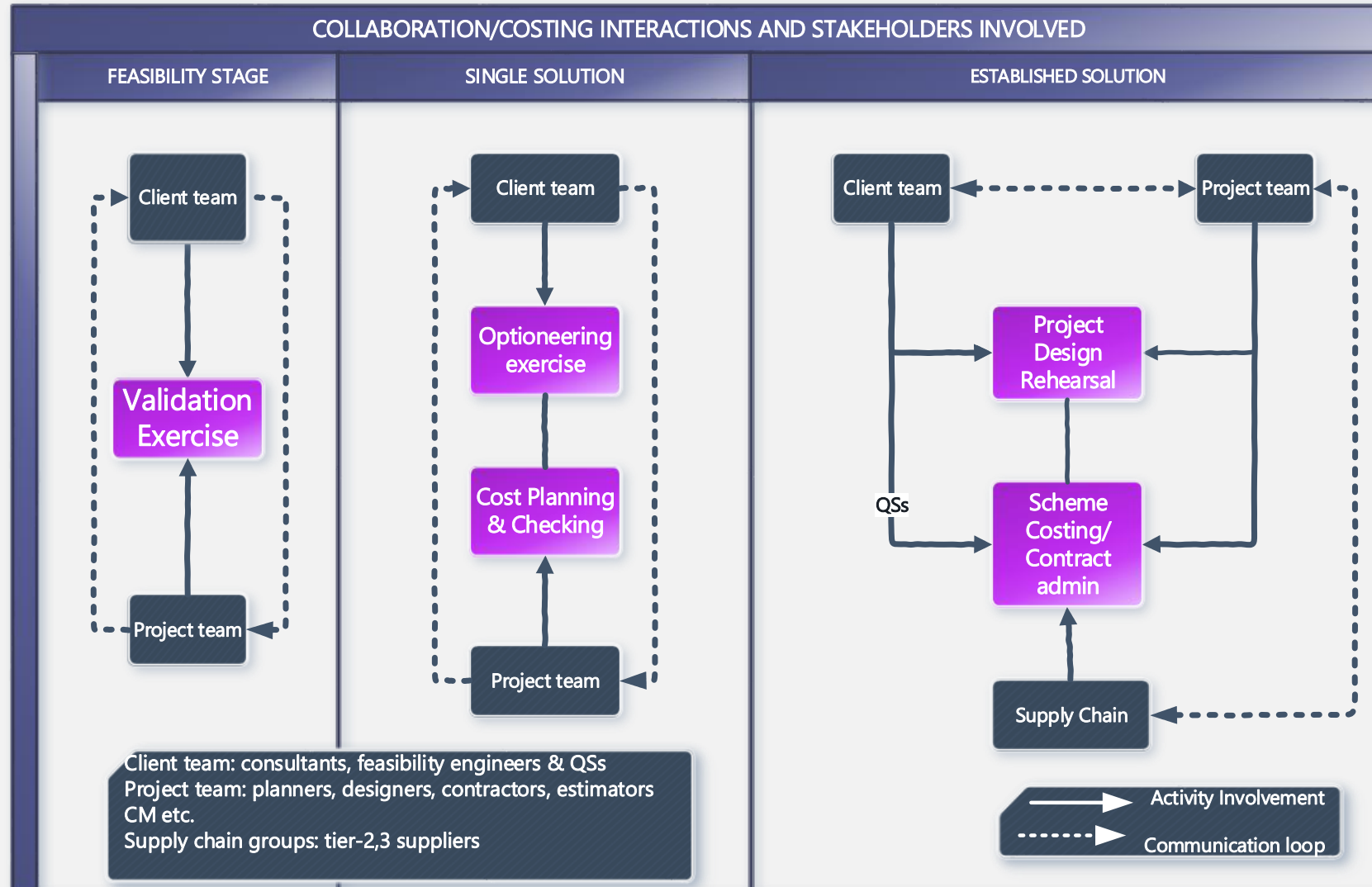
Definition of CC

Accordingly, CC is define as an approach that engage stakeholders (upstream and downstream) around wider scheme budgets creating a sense of ownership, driving positive behaviours to achieve desired cost outcomes. This integration encompass players i.e., designers, constructors, quantity surveyors (QSs), supply chain and the client all working together to achieve common goal with shared accountability...

Current practice



Level of interaction



Conclusion

- The depth of cross-functional integration is superficial, as commercial & SCGs are not overtly involve - limit options for innovation, continuous improvement & value enhancement.
- Collaboration is substituted with negotiation.
- BIM concept is partially applied, set-based design, CBA and relational contracting are non existence.
- ‘Institutional’ factors (i.e.; TCE, prevailing construction model & consultancy drivers) continue to derail collaboration with undue influence in commercial practices.
- The approach appears to be progressing – yet it is still driven by price, and value is not properly understood especially among commercial and SCGs.
- Indeed, CC has the potential to improve CW;
 - but need stakeholders to have sense of ownership
 - start from a position of sustainability, and
 - transparency to eliminate transactional characteristics in practice.

Thank you 😊 for listening, I'm
happy to take questions