Collaborative Principles for Better Supply Chain Practice in Managing Projects

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Prompt - Reflect on the following conference delegate question and feedback your thoughts at the end of presentation

Cyclical behaviour shift is a given and an absolute certainty in many sectors *(e.g. the offshore renewables and upstream oil & gas sectors).*

Q.
Are long term hard commercial risk sharing collaboration arrangements and new technology solutions being adopted by:

a) All large multi national client organisations and small to medium sized organisations ?
b) mainly by the small to medium sized organisations ?
c) mainly by the larger multi national organisations ?
d) Very few at all ?

Content

Insights:

The rationale for collaborative business practices across supply chains

- Why collaboration can be the jewel in the crown for organisations managing projects in the private, public and 3rd sectors.

Collaborative arrangements:

- Industry context, sector dynamics & behavioural reflections.
- Different supply chain perspectives, drivers & interdependencies.

Raising the game - the CRAFT 8 Stage Life Cycle Model and ISO 44001:

- The evolution and emergence of a new global standard for collaborative working in managing projects.

Content

EPC
PROJECT MANAGEMENT

Insights:

Risk and pricing considerations

- Collaborative *versus* traditional contracting arrangements in managing projects.

Light house examples of collaborative success

- Pan-industry supply chain collaboration: Examples of collaborative solutions developed by the energy industry for the industry.

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Why Collaborate?

- "Collaboration" is a term used glibly by many without being truly understood and many view it with scepticism and guardedness.
- Collaboration is an ethos. It is the process of shared decision-making in which all the parties with a stake in a process constructively explore and develop a joint strategy for action
- Creating an ethos of collaboration is based on the premise that the collaborative process results in a win - win situation based on mutual trust where everyone involved can gain
- Considering whether to embrace a more collaborative contracting model or project management model requires a comparative reflection on the way things are currently done versus where they could be through greater collaboration

3 questions worth asking are:

- **Where is the organization now?**
- **Where does it want to be?**
- **How is it going to get there?**

The collaborative journey is as simple and as complex as that !

Collaborative arrangements

Sector dynamics, Behavioural reflections
Different supply chain perspectives,
drivers & interdependencies.

Breadth and reach of the energy sector supply chain (Offshore renewables & Oil & Gas)

- Organisational network supporting renewable developers and O&G Operators with a primary objective to create and supply energy to meet demand.

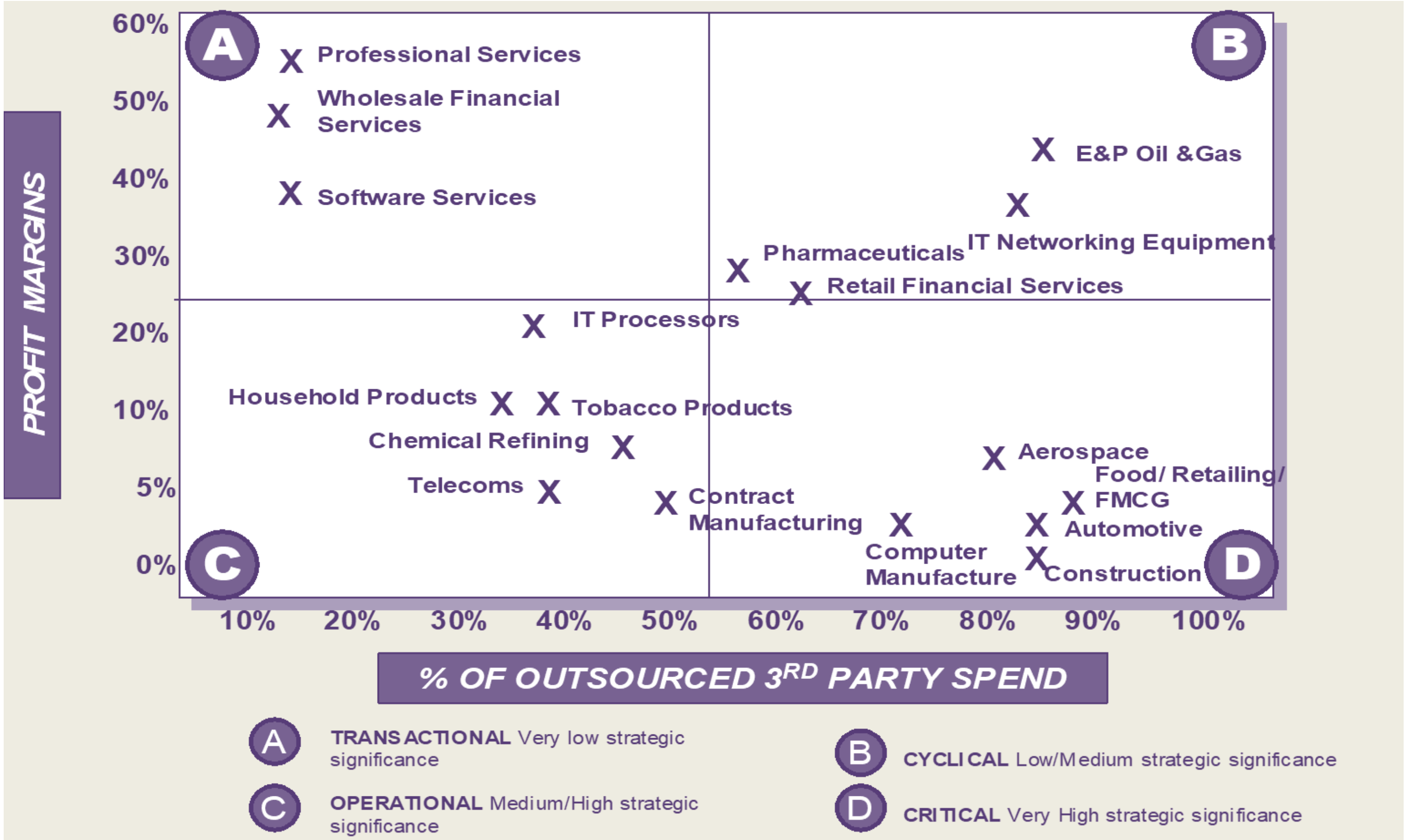
- Activities cover - Design, Build, Transportation & Installation, Operational & Decommissioning phases.

- Vast organisational range - onshore and offshore suppliers, service providers, consultants and specialist advisers through to the end user clients within operators.

- Significant broader economic business flows to other non-core organisations necessary to support the sector.

Sector dynamics - behavioural reflections (comparing sectors)

Oil price volatility & Cyclical 'behaviour shift' towards Commercial SCM Value management in Energy Sector



Consequences of the *Cyclical* role of PSCM in Oil & Gas / Energy Sectors

What we have witnessed time and time again with oil & gas price fluctuations

- ***Greater focus on outsourced 3rd Pty resource / spend when client revenue falls & cost reduction is paramount (In O&G typically 80% is outsourced on 3rd pty spend)***

- ***Greater focus on short-term cost reduction targets rather than long-term value for money*** **considerations**

- ***Continuous crisis management*** **with limited collaborative planning of innovation and adaptation within the supply chain**

- ***Lack of continuous Value management competence development*** **within the business**

Behavioural shift

Wild-West **=** the use of short-term, commercially adversarial cost down sourcing techniques, with no thought for the future of partners, or the sustainability of the supply chain technically or economically

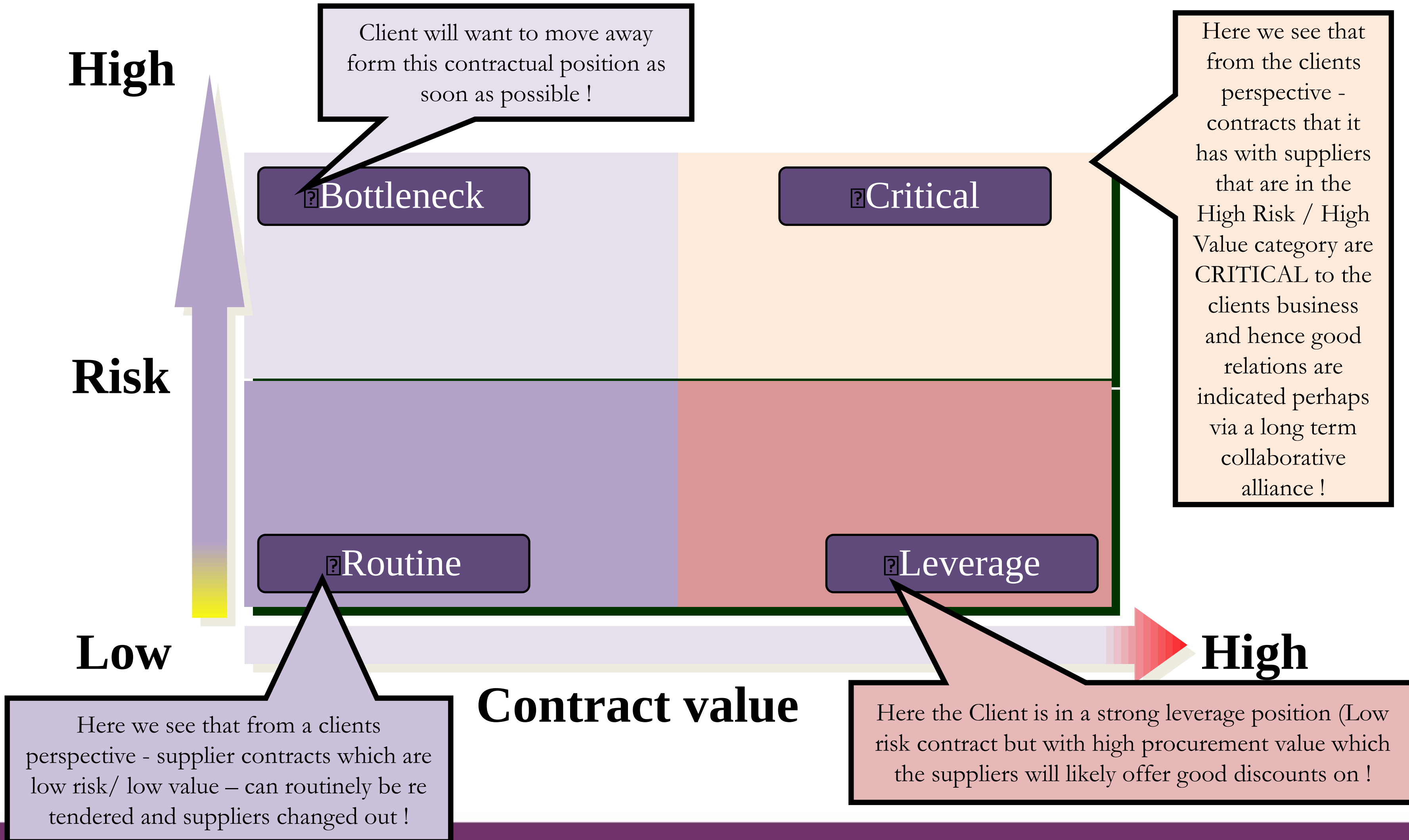
Versus

Collaborative innovation **=** the use of advanced value management techniques, to *encourage technical & economic sustainability within the supply chain*, and to *understand long, medium and short-term value for money trade-offs in sourcing decisions*.

THERE IS MUCH THAT THE EMERGING RENEWABLES SECTOR CAN LEARN FROM OIL & GAS !!!

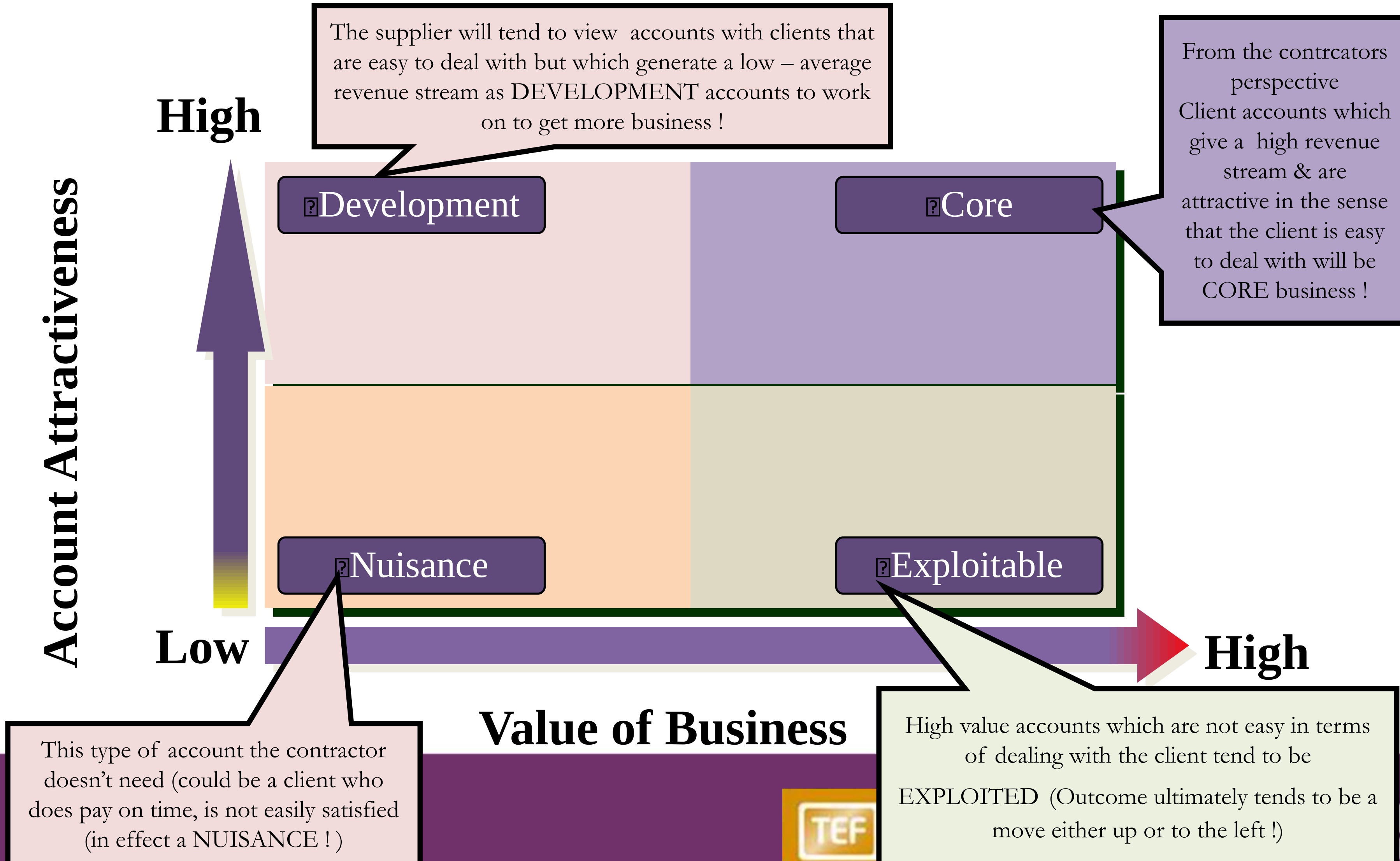
Matrix - Looking down the Supply Chain

(from the perspective of the client)



Matrix - Looking up the Supply Chain

(from the perspective of the contractor)



Prioritisation of Client / Customer BASE

(Perspective of the contractor)

Company	Value (£)	Quotes	Attractiveness to Supplier						Total
			Profitability	Opportunities	Receptive to innovation	Competition	Payment	Kudos	
Company (1)	560,668	1	4	4	4	5	5	4	**26**
Company (2)	2,733,772	8	4	3	4	4	3	3	**21**
Company (3)	1,055,889	20	3	3	4	4	3	3	**20**
Company (4)	496,819	1	3	4	3	5	3	2	**20**
Company (5)	459,653	2	4	4	4	3	2	2	**19**
Company (6)	422,836	4	3	3	3	5	3	2	**19**
Company (7)	956,347	1	4	2	4	3	3	2	**18**
Company (8)	469,158	1	3	3	3	4	3	2	**18**
Company (9)	355,890	22	3	4	4	2	2	2	**17**
Company (10)	246,484	2	3	3	4	1	3	2	**16**
Company (11)	167,524	12	4	3	4	1	2	1	**15**
Company (12)	4,061,639	6	2	4	4	2	1	1	**14**
Company (13)	225,012	1	2	3	3	1	2	2	**13**
Company (14)	391,454	1	3	2	2	1	2	1	**11**
Company (15)	210,926	1	2	2	1	1	2	1	**9**

Note : Client prioritisation in terms of attractiveness to the Contractor isn't just linked to the monetary size of the order or contract value ! (Other factors feature - such as the effort involved in winning the work, how profitable is it ? Is there follow on opportunities ? Is the client receptive to new ideas ? Is it a nice market or is there too much competition ? Does the client pay invoices on time ? Is there Kudos in working with a particular client ? (ie PR associated with blue chip clients)

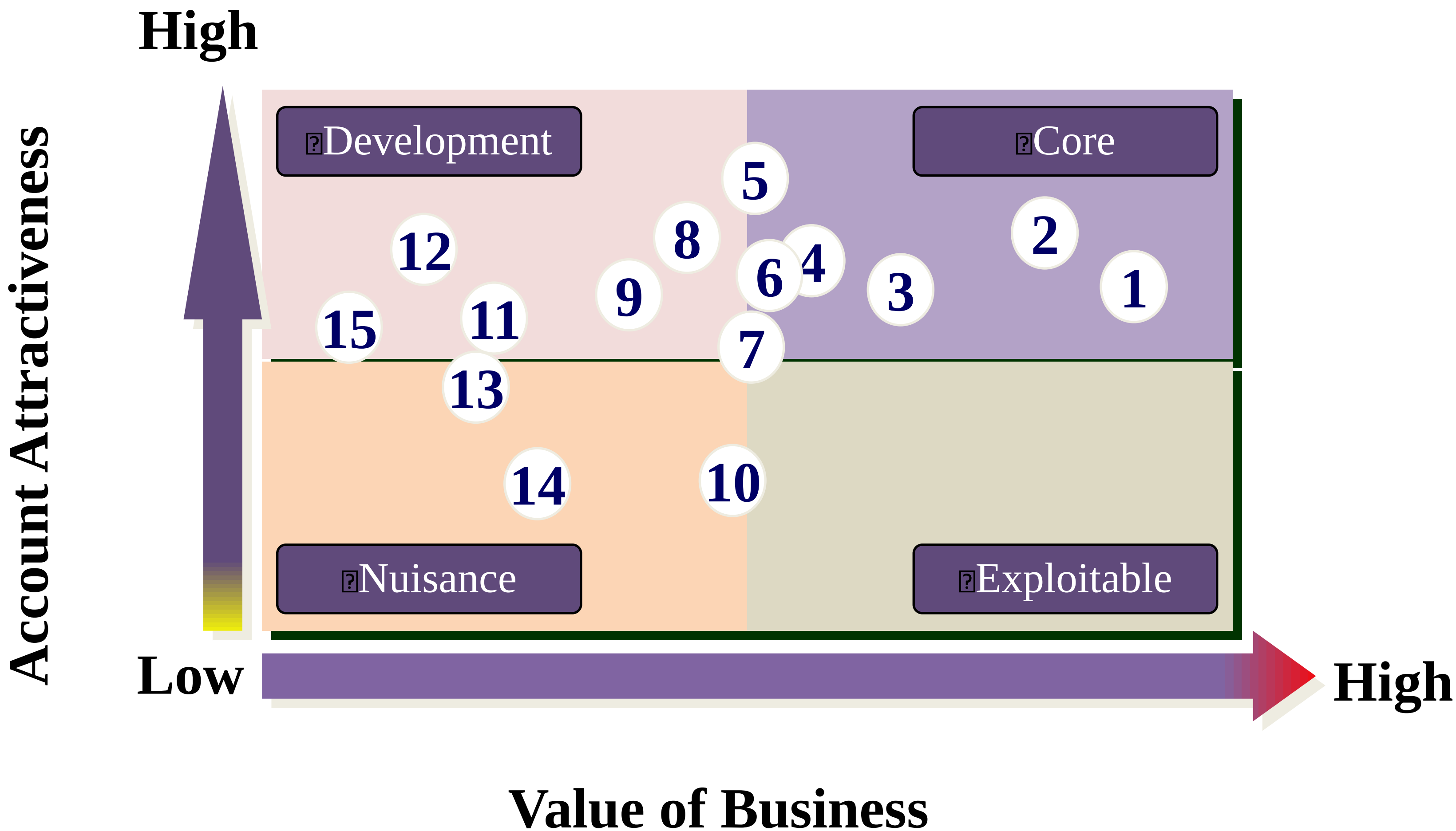
But where do these clients in the previous slide fit into the Matrix (Looking up the Supply Chain) ?

It can be seen in the next slide that the "Total client attractiveness" scores have to be taken into account when placing them into the categories of :

- **Develop**
- **Core**
- **Nuisance &**
- **Exploitable**

From the Contractors perspective this is a useful PSCM tool to prioritise its CLIENT BASE

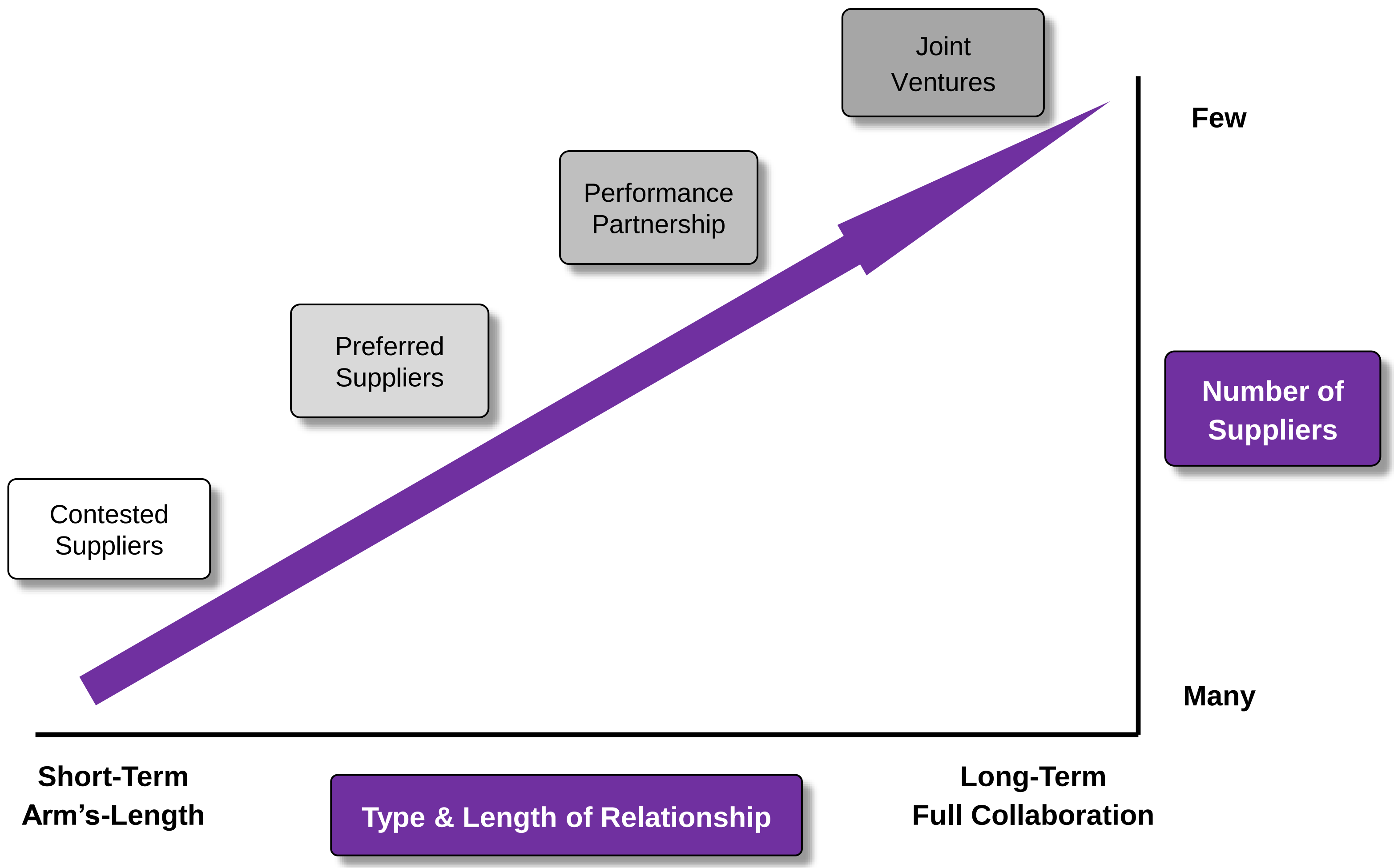
Client Attractiveness
(from the perspective of the contractor)



Constant Re-Bidding or Collaboration

What Are the Alternatives?

- There are **<u>a Number of Alternative Ways for Clients to Work with Suppliers</u>**:



Constant Re-Bidding or Collaboration
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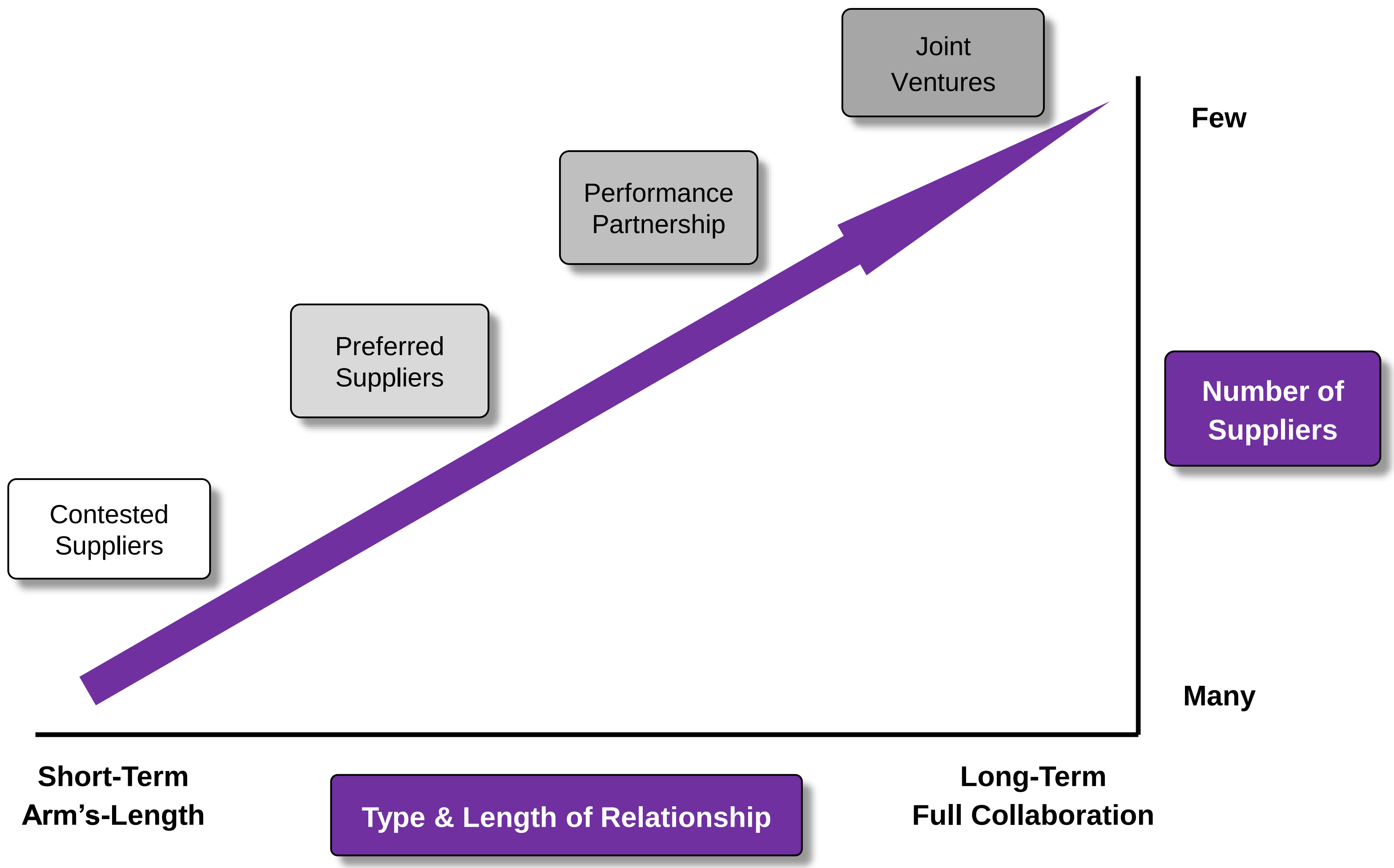
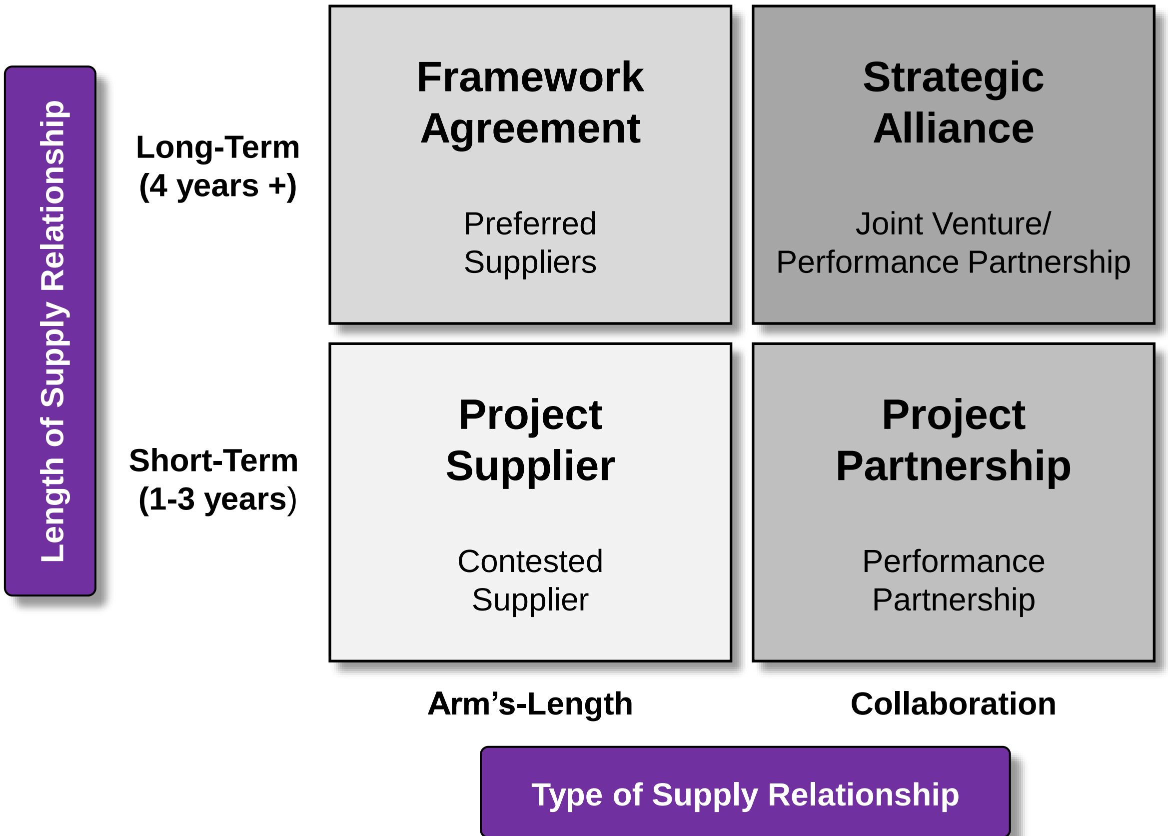


Constant Re-Bidding or Collaboration

What Are the Alternatives?

- **A ‘Framework Agreement’ is not ‘Collaboration’**



- Understand the differences between **Arm’s-Length** and **Collaborative Relationships**.

The emergence of a new Global Standard for collaborative relationships (ISO 44001)

The CRAFT (8 stage life cycle model)

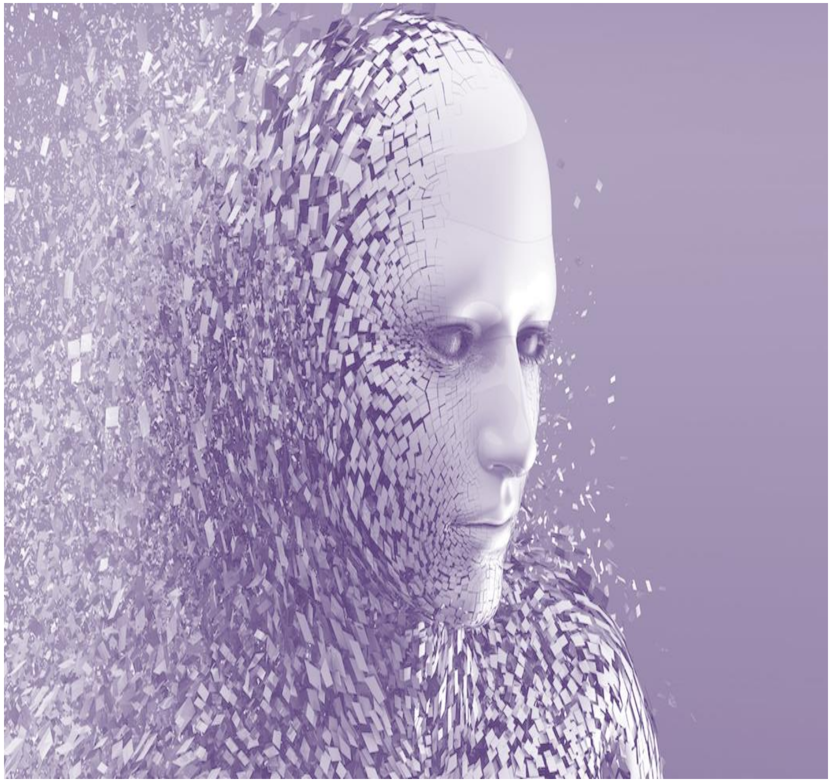
Collaboration across organisations & projects

EPC PROJECT MANAGEMENT

Globalisation and the onset of the 4th industrial revolution (Digitalisation & AI)

- The need for organizations to work together in a more integrated fashion has perhaps never been more critical than in today's fast-pace global economic environment.

- The impact of technological advancements, digitalisation and AI coupled with faster, slicker communications and greater transparency of business markets is the catalyst for change.



The challenge of starting collaborative relationships (ISO 44001)

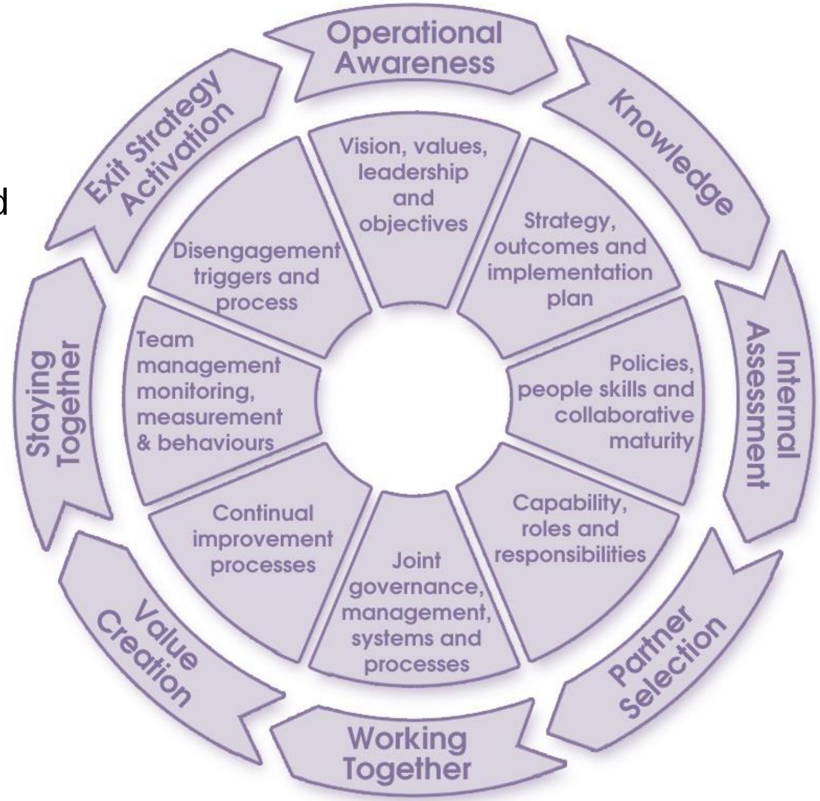
- Many organizations and regions have found it a struggle to start collaboration and relationship programmes.
- Until now there has been a lack of suitable available frameworks within which to develop creative collaborative ideas.
- The emergence of a new global standard for collaborative working in the shape of ISO 44001 and the efforts of the Institute for Collaborative Working (ICW) is welcome news.
- There is a growing trend towards long term models such as project joint ventures, consortia groupings, partnerships, alliances either between organisations or even regionally across borders.
- Such contract or business models can be highly complex and encompass a high degree of interdependency where successful outcomes depend on the ability of organisations or regions to embrace joined up collaborative thinking and work in an integrated fashion. The risk and vulnerability of such are very much linked to whether effective relationship have been built

Global Standard for collaborative relationships (ISO 44001)

- ‘ISO 44001’ is a global collaborative business relationships standard which represents a new generation of International standard with a focus on behaviours, organisational culture and management processes providing a common platform to underpin sustainable business relationships and harness the benefits of collaborative working.

- The standard is essentially a sector neutral framework that encourages best practice for collaborative and partnering programmes.

- ISO 44001 was launched in early 2017, however the journey to its creation emanated from CRAFT (the 8 stage Life cycle model) developed by Midas Projects Limited in conjunction with the Institute for Collaborative Working.



The CRAFT (8 stage life cycle model)

The CRAFT (8 stage life cycle model)
(incorporated within ISO 44001)

OPERATIONAL AWARENESS

- For many larger organisations the cascading of management systems will be influenced by the impact of divisional and industry sectors.

KNOWLEDGE

- Creating effective collaboration requires strategies that are focused on the business objectives and recognises the risks associated with greater integration including knowledge management and business continuity, underpinned by an exit strategy to identify key concerns.

INTERNAL ASSESSMENT

- Understanding the strength and weaknesses of our own organisations is critical if collaboration is to be successful. This includes processes, skills and experience compatible with the desired outcomes.

PARTNER SELECTION

- Finding the right partner is critical but frequently is based on assumptions or long standing traditional relationships that can simply migrate. It is important to understand the profile you are looking for and how you will evaluate their capability to collaborate.

WORKING TOGETHER

- Establishing Joint governance for collaborative programmes and integrating this with effective contracting arrangements requires careful attention taking into consideration the joint objectives and those of the individual partners.

VALUE CREATION

- The key to maintaining a strong relationship is to ensure that it remains current and drives innovation to bring additional value to the partners through joint continual improvement programmes.

STAYING TOGETHER

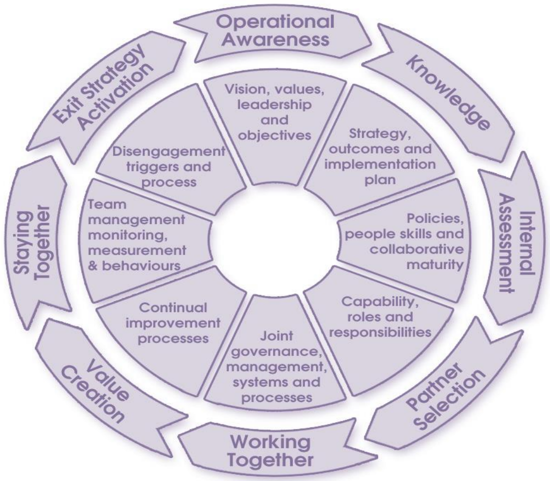
- Joint management is crucial if relationships are to mature and support people and the business environment. Effective performance and behaviours should be monitored along with issues and disputes which will be inevitable but can strengthen relationships if handled effectively.

EXIT STRATEGY ACTIVATION

- Maintaining a joint exit strategy is important to keep the partners focused. At the same time having clear rules for disengagement will frequently improve engagement throughout the life of the relationship.

The evolution of ISO 44001
(a blended framework solution)

The ISO High level structure of management systems



The CRAFT (8 stage life cycle model)

A blended solution

The new international standard ISO 44001 evolved as a result of blending of the CRAFT 8 stage Life cycle with the existing harmonised High level general structure for ISO management standards. The HLS was structured for individual organisations, whilst the CRAFT 8 stage model embraced third party relationships.

ISO 4001 - a collaborative framework to enlighten joined up collaborative thinking

ISO 44001 dosed not enforce a single, rigid approach; rather, it has more of a focus on providing a framework that can complement existing approaches where these are already in place. This is a sensible, pragmatic route to take because many organizations will be reluctant to ‘throw the baby out with the bath water’ in terms of changing existing processes and procedures simply for change sake! Indeed, this may not be possible anyway due to proven governance structures already embedded within organizations.

Risk and pricing considerations

Collaborative versus traditional
contracting arrangements in managing projects.

Factors influencing successful project contract management

- **COST**
  - **Completion of a specified project scope within budget.**
- **TIME**
  - Completion of a specified project scope on time.
- **QUALITY**
  - Completion of a specified project scope to the appropriate level of quality.
- **HSE**
  - Completion of a specified project scope safely and with regard to minimising environmental impact.

Uncertainty & Risk

Project complexity leads to

Increased Uncertainty over Project completion & final out-turn cost & higher risk to Client !

…… but what is risk ? Risk can be defined as the …..

"Chance or possibility of loss or bad consequence"

Possible loss & transference of risk

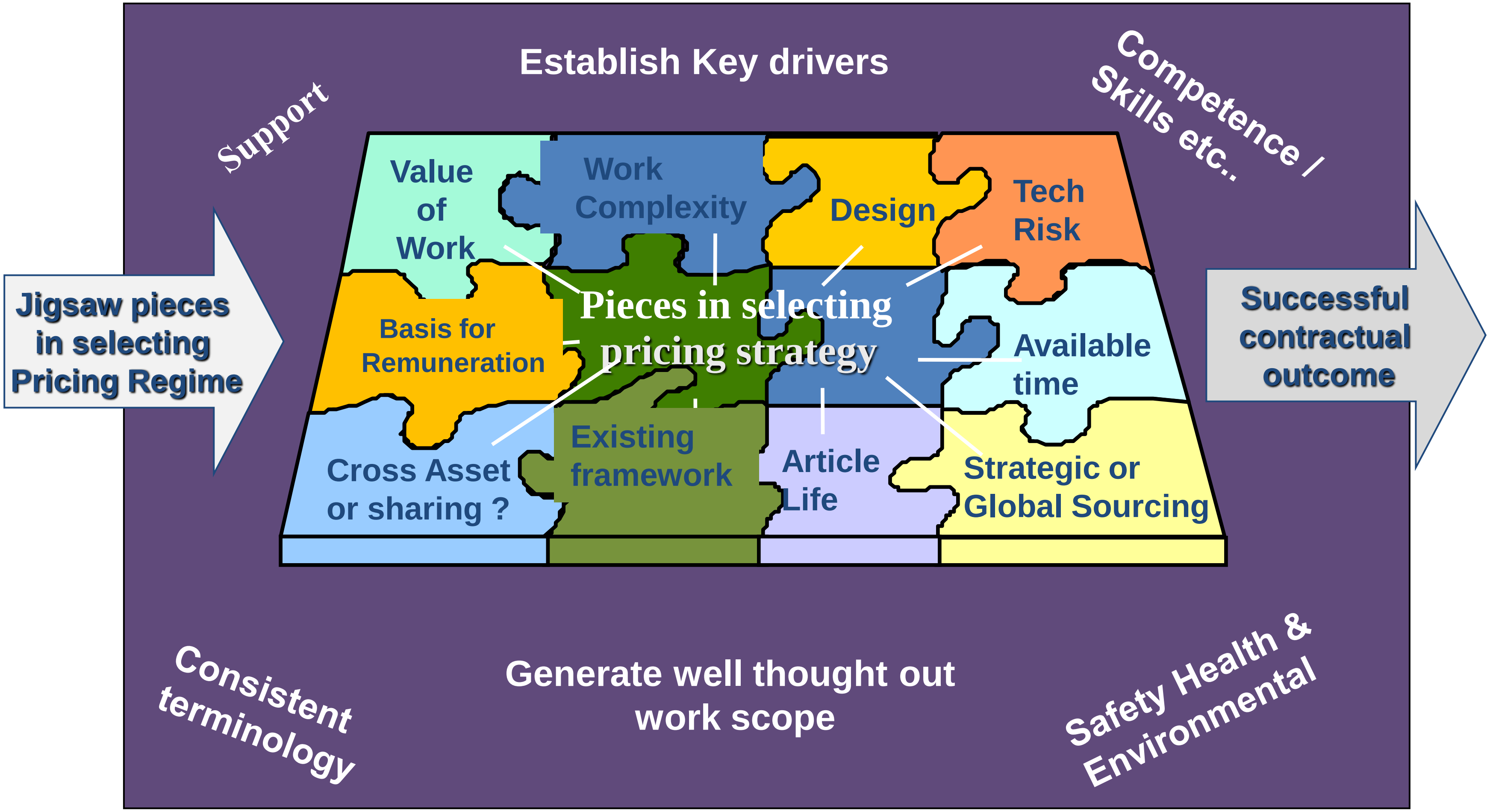
The possibility of loss

- Could be the prospect of cost exceeding the estimate upon which the viability of the Project was based

To guard against this potential pitfall

- At outset the Client typically seeks to remove or reduce the uncertainty by contracting with other(s) to undertake the work, thereby transferring risk to the Contractors involved

Considerations before choice of contract pricing strategy.



Limitation of Risk associated with Remuneration Regimes

Project scopes can be conducted under auspices of different pricing regimes:

Lump sum

Where Client requires Contractor to perform a defined project work scope for an all inclusive fixed price Lump sum.

Reimbursable

Where Client reimburses the full net cost incurred by Contractor plus an agreed amount to cover overhead & profit (ie net cost plus fixed fee, net cost plus %, net cost plus hourly rate).

Schedule of Composite Rates (Unit Rates)

This is a measured rate form of remuneration where pre-agreed composite rates apply for specific personnel and / or equipment

Day-rates

Where Client requires Contractor to offer daily rates for various categories of labour and / or specialist equipment.

Limitation of Risk associated with Remuneration Regimes

Hybrid regimes

Management Fee

Where the Client requires the Contractor to offer a fixed management fee (either Lump sum or monthly) for managing agreed aspects of the work, including all interfaces with personnel, sub-contractors and other nominated contractors of Client, plus performance monitoring & reporting.

Incentivised / Risk Reward schemes

Where Client & Contractor enter into a mechanism which involves a degree of "Risk-Sharing" in terms of the costs which are incurred / absorbed by both parties and the level of remuneration to be paid to Contractor. Typically such schemes are linked to achieving pre-agreed performance levels within exacting timescales.

Lump Sum contracting

ADVANTAGES TO CLIENT

- *Highest level of risk assumed by Contractor*
- *Greater incentive on Contractor to perform*
- *As uncertainties reduced - tends to lead to a lower cost*
- *Higher risk assumed by Contractor means that he is more likely to employ best resources*
- *Evaluation of tenders is generally easiest (can compare "like with like")*
- *Generally easier to administer, especially for large complex works contracts*
- *ability to forecast cashflow*

RISKS TO CLIENT

- *Low opportunity to influence Contractor performance*
- *Cost - more important than programme to Contractor ?*
- *Possibility of Contractor "Cutting Corners" on quality*
- *Complex design requires longer Contract durations & higher indirect costs*
- *Failure to control change by Client may result in claims*
- *Not suited for multiple Workscopes*
- *Requires significant effort up-front to agree a specification ;*
- *Scope must be well defined to be effective.*

Reimbursable contracting

ADVANTAGES TO CLIENT

- ***Allows client to make early selection of Contractor***
- ***Reduces the need for claims as client pays for costs to Contractor automatically***
- ***Client can influence Contractor performance***

RISKS TO CLIENT

- **Client retains majority of risk**
- **Client pays for inefficiency of Contractor**
- **Final out-turn cost is uncertain**
- **Less incentive on Contractor to offer best resources**
- **Difficult to assess tenders *(may not be "like with like")***

Schedule of Composite / Unit Rate contracting

ADVANTAGES TO CLIENT

- ***Contractor risk is same as for Lump sum***
- ***Work may be conducted without a well defined scope***
- ***The quantity of work, within limits, may vary without changes in pricing or admin***
- ***Composite / Unit rate estimate of final cost offers more certainty & accuracy than reimbursable***
- ***Higher risk assumed means that Contractor is more likely to employ best resources***
- ***Greater certainty in comparing tender proposals***
- ***Provides a good basis for estimating costs of alternatives***

RISKS TO CLIENT

- ***Low opportunity to influence Contractor performance** (ie little incentive for contractor to keep costs to a minimum as profit is increased by simply expending more hours);*
- ***Cost - more important than programme to Contractor ?***
- ***Possibility of Contractor "Cutting Corners" on quality***
- ***Failure to control change by Client may result in claims***
- ***Final out - turn cost is dependant on measured quantities (May exceed estimate). Hence close monitoring required***
- ***The level of profit being earned is usually unknown & can't be adjusted to improve performance;***
- ***Require higher Client admin.***

Incentivised / Risk Reward Schemes

ADVANTAGES TO CLIENT

- *Contractor cost & profit levels are known i.e. not buried in a single overall cost factor*
- *Contractor has clear incentives to reduce the cost of work if the contract is Incentivised properly*
- *Client and Contractor can have more influence the level of performance due to setting of benchmarks*
- *Incentivisation is a flexible arrangement that lends itself to Contractor self motivation and innovation*
- *More responsibility can be passed to the Contractor.*

RISKS TO CLIENT

- *Considerable effort may be required for adequate contract-wide financial management*
- *The scope of work must be well defined when setting benchmarks*
- *Complex arrangements can be difficult and time consuming to administer*
- *Can require a certain element of judgement in measuring performance against benchmarks, which can lead to client / contractor friction*
- *Relating contractor goals (especially financial) to clients asset specific goals*
- *Difficult to track costs in real time*
- *Inappropriate benchmarks selected*

Dayrate contracting

The advantages & risks to the Client of the "Dayrate" regime are similar to the reimbursable regime, albeit that the "Day-rate" element & related working parameters will probably have been quantified & agreed in advance.

Understanding Contractor Risk

Understanding risk assumed by the Contractor is important because if losses do occur then there will be direct or indirect consequences for the Client,

- Errors in pricing
- Escalation of labour rates & insurance premium costs
- Sub-contractor failing to perform
- Unable to meet performance targets
- Underestimate of compliance with QA, QC & HSE parameters
- Material supply & price
- Plant & Equipment breakdown / maintenance / Renewal
- Misunderstanding of contract responsibility
- Fluctuations in interest rates/Currency exchange etc
- Changes in Employment legislation
- Sanctions restricting ability to source materials and goods international (eg Russia / Ukraine conflict
- Security of performance mechanisms
- Weather conditions
- Wasteage & Theft
- Ability to retain the necessary level & quality of resource during Periods of competition.

‘Light-house’ examples of collaborative success

Pan-industry supply chain collaboration: An exemplar case study of solutions developed by the energy industry for the industry.

Exemplars of sector collaboration

To streamline and drive waste & inefficiency out of the Supply Chain but also promote sustainability

SC CoP

Offshore Energies UK OEUK (Single voice industry lobbying)

Model ITTs

Model Parent Company Guarantees

VERIFY (HSE assurance)

Achilles / FPAL supplier prequalification & Performance management database

IMHH Agreements

Contractor trade associations (Renewable Energy UK, OCA, EIC, EEEGR, NOF Energy, Decom-North-Sea)

STEP Change for Safety

Flight-share

OPITO Skills academy

Vantage POB Offshore POB dynamic monitoring system

Heli-met (Shared weather information tool)

Master Deed (Asset Transfer simplification)

LOGIC suit of model contracts

Net Zero Technology Centre

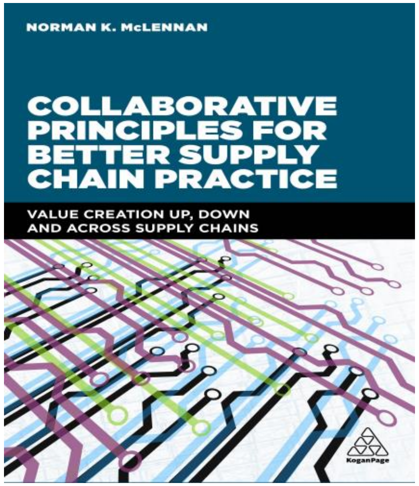
CONCLUSION
Fostering Collaboration

Fostering the ideology of collaboration is to be encouraged if all stakeholders are to achieve optimal results.

Hopefully this presentation will act as a trigger to create discussion, reflection and debate regarding how collaboration might make a difference in terms of creating value.

Daring to be different and having the courage to challenge organizational thinking that is still based on traditional solutions offers the potential for significant value creation and gain for all parties involved, particularly if contemporary collaborative models are embraced.

If you want to gain a more detailed insight into *‘Collaborative Principles for Value Creation’* consider picking up a copy of my book which is available online by Kogan Page Publishers and on Amazon.



With the need to adopt new practices and new ways of thinking companies are looking to collaborate across supply chains to become more sustainable, efficient and economical. *Collaborative Principles for Better Supply Chain Practice* looks at behavioural and commercial collaborative business principles and their application by means of case studies which showcase collaboration success across the private, public and 3rd sectors.

Collaborative Principles for Better Supply Chain Practice covers different perspectives: the client looking down the supply chain, the suppliers looking up the supply chain and the inter-dependencies of organizations horizontally across the supply chain. This book explores operational and project-type environments in different industry sectors to think differently about your supply chain and optimize your processes to achieve supply chain excellence.

About the author:
Norman McLennan is a cross-industry leader in the area of supply chain management and business improvement. He is a visiting professor with the Robert Gordon University, Aberdeen. His professional industry experience spans over 30 years split between the oil and gas/energy, engineering and traditional construction sectors working in the UK, Europe and internationally with extensive supply chain management and commercial project management experience.

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Questions & Discussion

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