Is Value Enough to Choose an Alliance?

Introduction

As alliance contracting has matured in Australasia, the criteria for choosing an alliance has also matured. 'Conventionally' those criteria have emerged as including:

- The project sponsor holds a significant part of the technical capability needed to deliver the project.
- Technical complexity.
- The project involves emerging or quickly changing technologies.
- A challenging project schedule.
- Unknown risks in respect of scope, cost and time, etc.
- The need for a high degree of flexibility in scope, sequence etc.
- A need to engineer a high level of innovation in the scope or the methods of delivery of the project.
- A high level of influence of external factors - community, politics, environmental outcomes etc.

Whilst alliancing has emerged as a preferred delivery model, particularly for governments and public sector agencies, where one or a number of these criteria characterise the risk profile of the project, many cynics and critics continue to challenge the validity of alliance contracting by questioning whether an alliance can, in truth, delivery value for money when compared to other price competitive models.

As the alliance contracting model matures and becomes more commercially rigorous, the alliancing community has become more confident about rebutting the criticisms in respect of value for money. Although, it seems, more research and empirical data is still required to silence the powerful critics, particularly in government treasuries across Australia.

If the cost and effort in establishing an alliance can be justified for a project, then an alliance can be demonstrated to deliver superior value for money.

Having said that, I do not suggest that the above criteria are less important or relevant. But I do suggest that an alliance can, in the right circumstances, be justified on the basis of value alone. If the cost and effort in establishing an alliance can be justified for a project, then an alliance can be demonstrated to deliver superior value for money.

But the value to which I refer is not the just empirical monetary value for the project sponsor. I suggest that it can, and should be, demonstrated that additional value is delivered to the project sponsor and all corporate commercial participants and that this will emerge as a dominant factor in project and program sponsors choosing alliance contracting.

Naturally, this involves a comparison with risk allocation models like design and construct (**D&C**). Given that D&C only emerged as a dominant form of delivery in the 1980's, it can hardly be called 'traditional' although it often is. Because D&C is the other dominant model in the major projects market place, I will generally restrict any comparison of the value delivered in alliances to that of the value delivered in a design and construct model.

The early contractor involvement (**ECI**) model borrows some of the advantages of alliancing and blends those advantages with D&C delivery to satisfy the proponents of 'cost certainty'. Therefore, for projects that cannot be justified for an alliance, on the basis of value, ECI may well emerge as the dominant alternative to an alliance in the major projects market.

Assumptions

For the purposes of this paper, I have made certain assumptions that underpin the discussion. Firstly, my comments relate to major, projects, particularly infrastructure projects.

In relation to alliancing, I have assumed:

- The project sponsor has properly analysed and valued both hard and soft scope.
- The project sponsor meaningfully participants in the alliance by the contribution of key skills in relation to both the project development phase and through the delivery phase.
- The commercial frame work appropriately aligns the commercial drivers of all alliance participants to drive behaviours that deliver outcomes for which the project sponsor has attached value.
- The delivery capacity in the market matches demand.

In relation to the D&C model, I have assumed the following:

- The project sponsor accepts a scope contingency of 5%-10% for scope definition error.
- The project sponsor's contract administration processes are competent and the administrators are competent.

- The delivery capacity in the market matches the demand.

Although I have tried to analyse the value question in a 'normalised' market, it is impossible not to consider the challenges and distortions caused by the current high level of demand and the stretched delivery capacity. In the current market, many project sponsors are choosing alliance contracting for largely pragmatic reasons that suppress or overwhelm what has become the 'conventional' criteria in choosing alliance contracting. Pragmatism is demanding that it is crucial to make a project attractive to the market and it is this pragmatism that often dominates the thinking in choosing an alliance contract.

Having said that, I think it can be demonstrated that this pragmatism can be justified on other grounds, namely value for money in respect to both hard value and soft value. By hard value I mean measurable value like cost and time. By soft value I mean things that are not so easily empirically measured like the inherent and legacy value for people working in collaborative team, the reputational value to the project sponsor where things like community engagement, traffic management and environment are critical.

The sources of value

I will seek to analyse value that can be extracted in the following areas:

- The commercial framework.
- The selection process.
- The price - the TOC.
- Delivery.
- Project legacy.

Value in the commercial framework

Project margin growth

In recent years the market has seen bid margins for constructors in the range of 8% to 14%. Over the past 12 - 24 months that range may have crept upwards, on average to 11%-15%.

At the same time the market has seen completed project margins of 15% to 22%, common to both alliance contracts and D&C contracts.

On the basis of the assumptions stated early in this paper, the difference is that, in an alliance, the delta between bid and outturn margins is the result of additional value created by the performance of the alliance and delivered to the project sponsor. That is demonstrable through the commercial framework; ie the only source of the additional return over the 'bid' margin [ie normal or Minimum Conditions of Satisfaction (MCOS)

profit in the commercial framework] is Gainshare. Gainshare should only be paid by a project sponsor for the delivery of additional value to the project sponsor.

However, it can be said that an alliance clearly delivers superior and typically improved value to the project sponsor than can be achieved in a D&C delivery model.

I don't think it can be said that any real demonstrable additional value is delivered to the sponsor in the case of margin growth in the D&C model. Certainly, the sponsor should expect less or no disputation but that is not always the case. But that can also be achieved by careful and appropriate contract drafting. But even with careful and appropriate contract drafting, if that difference between bid and outturn margins turns negative, no contract can guarantee the elimination of dispute where the contractor suffers commercial loss.

When the heat inevitably goes out of the market, the D&C model will continue to be championed by the opponents of alliance contracting creating circumstances where:

- Margins will be suppressed.
- Margin windfalls to the delivery side will reduce or disappear.
- Disputation in the D&C model will increase.

However, it can be said that an alliance clearly delivers superior and typically improved value to the project sponsor than can be achieved in a D&C delivery model.

On the painshare side, participants must now accept that value diminution through performance and/or outcomes less than MCOS performance is not necessarily symmetrical with the additional value of performance better than MCOS performance. If participants genuinely accept that the commercial framework must reflect an equitable share of the value to the project sponsor of the alliance's performance in areas nominated by the project sponsor, that is both good and bad performance and therefore increasing or diminishing value, then a non symmetrical gainshare/painshare regime is not 'unfair', 'imbalanced' or 'un-alliance' as is often alleged when a value-based gainshare regime is developed.

I suggest that it is incumbent on all participants in alliancing who see the inherent value of alliancing, to continue to research this value differential, which will conclusively demonstrate the superior value delivered by an alliance true to the assumptions stated earlier. Organisations like the Alliancing Association of Australasia (AAA) provide a fertile bed for the necessary collaborative research. This is not just a task for project sponsors. If the delivery side of the industry wants to see alliance contracting persist and thrive, it must contribute to the demonstration of superior additional value.

The TOC is bankable

It is often still a problem for government treasuries and others that the cost of a project is not known at the time the parties entered into an alliance agreement.

However, the persistent experience of alliancing is that most alliances will deliver an outturn result of +/- 5% against a value assured TOC. Even if the TOC does not compare favourably with budget expectations, it can be demonstrated that much more often than not the TOC is the real price for the project and that any underrun or overrun is the result of strong project management of project risks, opportunity and agreed contingencies. This should be analysed and demonstrated by the project close out report.

There is historical data from the NSW Department of Commerce (pre-introduction of C21) that cost overruns on D&C Contracts averaged 8-12% with time overruns of up to 20-30%. This growth does not take account of the additional costs of administration, managing tension and disputes or simply negotiating monthly progress and other claims.

In the current market, project sponsors of major infrastructure projects are increasingly prepared to invest in the development of a TOC. This is a significant investment, especially where the sponsor cannot be wholly certain the project will proceed. This is so even though the number of projects stopped on the delivery of the TOC report is very very small.

Once a project sponsor commits to the development of a TOC, and actively participates in and contributes to its development, experience demonstrates that the sponsor can then expect a very high level of confidence in the TOC being the "right number".

By comparison, the following table sets out the average cost escalation in infrastructure projects across the world, few, if any, being delivered by an alliance

	All regions		Europe		North America	
Project type	Number of projects	Average cost escalation (%)	Number of projects	Average cost escalation (%)	Number of projects	Average cost escalation (%)
Rail	58	44.7	23	34.2	19	40.8
Tunnels & Bridges	33	33.8	15	43.4	18	25.7
Road	167	20.4	143	22.4	24	8.4
All projects	258	27.6	181	25.7	61	23.6

Differences between actual and estimated costs in large public works transport projects

Source – Darrin Grimsey (PWC) "Are Public Private Partnerships value for money? Research into alternative ways of determining value for money and comparing different views" (March 2006)

The 'budget' problem

It has probably always been that case that project outturn cost rarely bears more than a tenuous nexus with the project sponsor's budget. This is demonstrated by the following researched data for more than 258 projects world wide with supporting data from the UK.

There are, of course, many reasons for this including:

- The final scope is thoroughly different to the budgeted scope.
- The competition within government for project funding.
- Budget by political statement; ie the minister, without seeking proper advice, publicly commits to a number which then becomes holy writ, despite the divergence from reality.
- The so called 'optimism bias; ie the inherent optimism we all bring to the planning process.

The table below sets out the differential between budgeted time and capital expenditure and the actual results on project time and budget.

Estimates of average 'optimism bias' for conventional public procurement in the UK, by type of projects – Business Case vs Out-turn

Project type	*Works Duration %*	*CAPEX %*
Standard Civil Engineering	***34***	***44***
Non-standard Civil Engineering	***15***	***66***
Standard Buildings	***4***	***24***
Non-standard Buildings	***39***	***51***
Equipment Development	***54***	***214***
All projects	***17***	***47***

Source – Mott MacDonald "Review of Large Public Procurements in the UK" for HM Treasury (2000) from Grimsey March 2006

I recently had the pleasure of hearing Charles McDonald of Thiess Pty Ltd discuss this topic. Charles suggested that, perhaps, government could improve the accuracy of its project budgeting by involving the delivery side of the market in the budgeting process which is increasingly moving to the 'gateway' model borrowed from the UK. Of course we must assume that government actually wants to know the realistic budget for a

project, although that may not always be the case. Charles' remarks stimulated some thinking on this topic. On the assumption that government does want to know the right likely price, I suggest that they may be a range of strategies to consider including:

- An alliance can be easily be required, as part of the project development report, to accurately track the variations to scope that have occurred between the scope on which the budget was developed [including the identification of errors and wrong assumptions within the budget] and the TOC scope. This would conclusively demonstrate why the budget differs, often spectacularly, from the actual cost. This, it seems to me, is an essential first step in defending the value of the TOC and must be in the interests of all alliance participants. This approach is one aspect of the Victorian DTF's Project Alliance Practitioner's Guidelines and has been recently implemented on a number of projects across Australia.

- The adoption of an industry consultative body who would review project budgets at various 'gateways' in the project approval process. There is an analogy in the mergers and takeover world - the Takeovers Panel. The consultative body would have to be broadly representative of the delivery industry involving designers, constructors and other industry professionals to avoid the taint of unfair advantage to any one player or other probity problems.

Value in the selection process

Although much of the value for money debate swirls around allegedly 'soft' TOCs, the accrual of value to both the sponsor and proponents in fact commences in the selection process.

For sponsors, its key project personnel meaningfully interact with the proponents' key delivery personnel. This should be contrasted with the selection processing in the D&C model where predominantly the sponsors procurement personnel (i.e. predominantly not the sponsors delivery personnel) interact predominantly with the tenderers' business development personnel, not their delivery personnel.

Clearly the alliance selection process adds value across the industry by the interaction in the selection process, even for unsuccessful proponents. The sponsor's team gets to meet many more people in the delivery side of the industry and gets to know them in a meaningful context.

Clearly the alliance selection process adds value across the industry by the interaction in the selection process, even for unsuccessful proponents

In the D&C model, there is no direct or helpful comparison. The interaction in the procurement stage of a D&C project is heavily characterised by the 'healthy' suspicion the sponsor's procurement personnel develop for the business development departments of tenderers.

The selection process in alliances is also increasingly characterised by more authenticity through exposing proponent teams to real project issues as a means of evaluating the proponent team's potential to achieve high performance.

This is to be contrasted with the almost obsessive concentration in D&C model selection on price and readiness to accept the sponsor's contractual terms. The only value accrued to either party in a D&C procurement model is a better understanding of how to play the game next time.

But I do not suggest that the value in the alliance selection process does not come at a cost. Whilst senior management in constructors and designers can control and limit their contribution to a D&C bid, they must commit a substantial amount of time both in preparation and participation in the selection process. Accordingly, I am not sure it can be said that the bid costs for industry for an alliance are less than the bid cost in the D&C model. It can be said that the bid costs in an alliance are very different costs and, because of the value accrued, can be more readily characterised as an investment rather than a cost. But again, the industry must invest in understanding the cost-value relationship. If the delivery side of the industry is truly committed to more alliancing, it should seek to demonstrate this value externally in the market place through AAA or other appropriate forums.

Certainly, for project sponsors, the bid costs in setting up an alliance are considerably more than those in the D&C model. An alliance takes many key delivery personnel out of production for substantial amounts of time. However I suggest that project sponsors can also readily characterise those costs as an investment in better future procurement processes and the dissemination of useful and valuable knowledge to those people.

The shared value in alliance selection processes should be apparent to all participants in the process and includes the following:

- The dilution of unhealthy suspicion across the buyer-seller divide.
- The enhanced connectivity of skills across the industry.
- The learning experience a properly designed selection process should be.
- The opportunity to have genuinely frank conversations.

If that sort of value does not accrue to your organisation and your people, tell the facilitator. They are always looking for ways to innovate within the alliance selection imperatives.

Value in delivery

The starting point here is ensuring the commercial framework is a properly balanced mechanism that aligns the commercial drivers of all participants and ensures only additional value to the project sponsor is rewarded through the Gainshare Regime. If the commercial framework does that, the committed performance of all those involved will deliver superior results.

Contrast the unavoidable tension in D&C delivery - the delivery side is devoted to reducing scope and increasing revenue where the buyer is attempting to maximise scope and minimise cost. That burns a lot of personal energy of all the project management personnel involved. None of that energy is focussed on delivering an outstanding project. It is entirely collateral to the job at hand, but it satisfies the competition zealots, few of whom, it seems, have ever had to actually deliver a project.

Cooperation and collaboration, properly applied, delivers outstanding results in science and medicine, why not in the construction and engineering business?

I am not suggesting that there is anything iniquitous about competition. Competition is clearly essential in driving better performance and innovation. Competition in the delivery process under an adversarial model very clearly delivers an 'average' result; ie the average of the influence each of the buyer and the seller has on the outcome for each of them. Competition, then is not the only way to deliver excellence. Cooperation and collaboration, properly applied, delivers outstanding results in science and medicine, why not in the construction and engineering business?

Unlike D&C delivery, the project sponsor must significantly contribute to the integrated alliance team. Its contribution must challenge the team's thinking and must vigilantly articulate the sponsors perspective and the value to the sponsor of the alliance's performance. That is the essence of healthy collaboration - differing views reconciled according to important behavioural and relationship principles, all established before the 'interest' and 'position' laden topics of scope, price, quality and time are dealt with by the team. This value, of course, flows from the selection process - a stream of 'soft' value that flows from the response to the request for proposal to long after the alliance ends.

It is clear to me that people respond much more positively to principles than they do rules. Principles are much more intrinsically developed and accepted and are moral and emotional. Rules are usually externally developed and intellectually accepted without any commitment to their 'rightness'. The real art of ensuring a legally viable agreement is providing that the parties are simply bound to resolve all problems by reference to the principles and commitments they have created collaboratively.

I will leave further commentary on the power of healthy, principled based relationships within teams to those more qualified to comment.

But I will suggest that, again, the participants in alliance contracting must examine and demonstrate the delta in personal productivity between alliance contracting and adversarial delivery. Project sponsors pay for the time spent by those people in both models. Assuming that all energy in an alliance is spent on the project objectives, individuals must be substantially more productive in a true sense; producing project outcomes. Compare that to a D&C project where a measurable amount of energy is spent on 'contract' issues - a further and, I suggest fertile area for research into the whole value matrix. To date we have assumed these differences because they are logically obvious to participants in and practitioners of alliance contracting. Given the

national economic focus on productivity, a proper empirical analysis of this obvious productivity difference must buttress the proposition that alliance contracting delivers superior value on all levels.

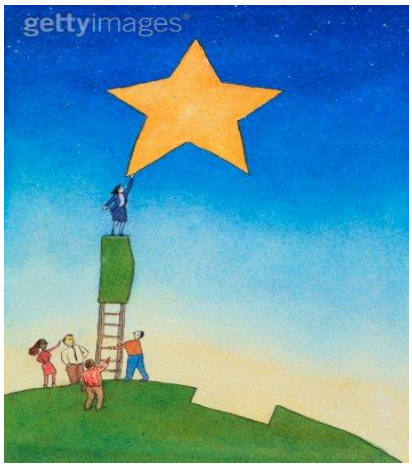
The value of the experience - the people dimension

The 'soft' value that accrues to each individual is another obvious, if anecdotal, characteristic of alliance contracting. As people continue to be difficult to source and commit the positive human resources aspect of alliance contracting must be seen as a powerful value factor in alliancing. There is, we are told - and if we are not told, only the seriously inattentive would miss - that we are experiencing a 'skill's' shortage. I do not claim any particular demographic expertise. I can, however read numbers and observe the society in which I live. I suggest that the problem is more serious than a 'skills' shortage. We are more likley experiencing a 'people' shortage because of aging baby boomers and the substantially reduced numbers in the ranks of generations following the baby boomers. If that is true, that constraint will persist for many years to come. If employers cannot give their people a satisfying work experience, those people will seek that out.

It is a common story that our Gen Xs and Gen Ys are not as fond of the 'delivery by war' method that has characterised the construction for the past few decades. Because of the people shortage, construction industry professionals, particularly engineers, have genuine and numerous opportunities outside the construction industry, for the first time in 30 years. As alliance contracting delivers a much more satisfying experience than hard dollar D&C for the individuals involved in alliance projects, then the value that accrues to the individual should, in itself, shape a preference for delivery by alliance contracting over delivery by war.

Conclusion

Many may question why a construction lawyer so staunchly promotes alliancing. After all, an alliance offers lawyers minimal opportunities but has as one of its core legal objective is to eliminate disputes. Why do I believe all this? Because all my experience, both as a contractor and subcontractor prior to life as a lawyer, as a construction litigator and an advisor on projects from inception to close loudly informs me that rarely do great things come of a tug-of-war that too often degenerates in to just war.



Nobody can seriously assert that the energy burned in the war contributes to better project results. That great tank of adversarial energy, that few of us really enjoy, can, and should, be applied to productive productivity and mutually beneficial results. And anyway, we do not have, and will likley not have for some time to come, enough people to resource the wars in which many of us engaged during the 1980's and early 1990's.

If the increasing number of alliance participants are truly committed to the longevity of the alliancing model, then all those supporters need to participate in researching and demonstrating the many sources of both hard and soft value the are generated by alliance contracting. In the face of external cynicism and a dynamically changing market, it is not enough for each of us to know that additional value is delivered both

to the project sponsor and the participants. Cynics will only ever be convinced by compelling evidence. This should not be a difficult next step for alliancing which has always been characterised by collegiate cooperation and collaboration. It should simply be a matter of focussing that collaboration on meaningful data capture and research to prove what you know is the case.

Jim Feehely
Partner | Construction & Major Projects

DLA Phillips Fox | 1 Eagle Street | Brisbane Q 4000
Phone +61 7 3246 4012 | Fax +61 7 3229 4077
Mobile: +61 419 720 687
jim.feehely@dlaphillipsfox.com
| http://www.dlaphillipsfox.com |