Delivering Major Projects: Alliance vs. Design & Construct

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What is a delivery model?

- NZTA defines a delivery model as; ‘The form of the relationship between the purchaser and the supplier(s) to purchase the outputs required to deliver an activity.’ (NZTA, 2009)

- Simply, this statement defines the client as the ‘purchaser’ and the company and/or companies delivering the project as the ‘supplier(s).

- It mentions the need for a relationship to be formed, and this is what constitutes the delivery model.
Projects

There are many types of delivery model that can be used to procure major projects, but the two most commonly used in recent major projects in New Zealand are:

- Alliance
- Design & Construct

The positives and negatives for each method will be discussed and compared.
Construction Process

STEP 1: Verification of need

STEP 2: Assessment of options

STEP 3: If construction phase required

Develop Procurement Strategy

STEP 4: Implement Procurement Strategy

STEP 5: Project Delivery

STEP 6: Post Project Review

Outputs

- Statement of Business Need
  - Priorities, objectives, stakeholders & constraints

- Business Case
  - Encompassing all business requirements

- Strategic Brief
  - In Client’s Terminology

- Selection of the Team

- Delivery of the Business Solution
  - By focused Team and Client
Design & Construct

Client

$ - Cost & Profit

Principal Contractor

$ - Cost

$ - Cost

Subcontractors

Designer

Clients Representative

Information

Information & Claims
The client gives a basic outline of the project, allowing the principal contractor to control all aspects of the project.

Main public image will be of the principal contractor, with a smaller amount of recognition for the client and designer.

Main chunk of profit will fall to principal contractor, and there is often scope for variations.

For the client, all risk and responsibility has been handed over to the principal contractor.

A set budget is agreed upon at award of contract, and so this will allow forward planning.
All risk for project delivery falls to the principal contractor; cost, programme, and design

Any overrun to the tendered completion date is at the contractors risk

Design problems picked up after the tender stage are at the contractors cost as designers take no responsibility for changes after this stage

For the client, this model is hard to manage as they use a clients representative to provide feedback – no direct interface

Lack of interface can potentially cause problems between the client and the contractor
Pain-share & Gain-share

Client

Designers

Contractors

Subcontractors

Secondary Designers
Alliance: Positives

- Flexibility allows adaptation to design or programme to happen with fewer delays and more efficiency – results in projects finishing early and under budget

- Risk is shared and so innovation can take place more easily

- A shared gain incentive results in higher productivities and alliance loyalty (AAA, 2010)

- Allows for a quick start as all parties are involved in each stage (AAA, 2010)

- Client is involved in all aspects of project – easy to manage

- Lower risk item for contractor can result in competitive
Alliance: Negatives

- ‘Pain-share’ portion of contract is taken on at risk to all parties involved
- Any additional cost that incurs during the project is footed by all parties equally
- Due to the number of partners that are involved in an alliance based contract, there needs to be careful management to avoid conflicts
- For the client, there is a negative side to the risk item mentioned in the positives, which is that the risk item is now shared amongst the alliance partners, meaning the client takes some risk
Recent Major Projects

Two major projects completed over the last few years have been constructed using one of these two more popular construction delivery models;

- Northern Gateway Toll Road – Alliance contract. Completed 6 months early and under budget.


Notice a similarity?
Conclusions

Two recent major projects using each of the construction models have both been completed 6 months early and under budget.

Does that show that both models are equal? There is no simple answer and comes down to the type of project.

If any contractor had a choice, there would be some that chose alliance and some that chose design & construct depending on their personal preferences.

The client, generally NZTA for major projects, has the final say on the type of delivery model and uses the NZTA procurement manual to make their choice.

It is a balancing act, as there will always be someone preferring a different model. The majority of major projects completed recently have finished early and under budget.
References

Alliancing Association of Australasia (AAA) (2010), *ABC of Alliance Contracting*. Australia: Alain Mignot

New Zealand Transport Association (NZTA) (2009), *Procurement Manual (Amended in March 2011)*. New Zealand: NZTA