

Research for: Is a projects quality affected by the choice of procurement method used?

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Work Based Project

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1.0 - Introduction

In this research I will be looking into if the buildings quality is affected by the choice of tendering. I have begun my research into the different types of tendering with there advantages and disadvantages, I have also started to complete my primary and secondary research.

2.0 - Traditional Tendering

Traditional procurement is one of the most used method throughout the construction industry. This method is where the company will give potential contractors a packaged fill with information based on the project, it will included location information, the buildings drawings, time scale and any other relevant information. Once the company have compared the contractors costs, their company work quality and if they can complete the project within the time scale the company will then offer the contract to the best tender (*Building Wiki A, July 2021*).

The advantages to this procurement method is that the price will fixed at the start with a flexibility amount to take into account inflation of a projects materials and variations to the build. Variations are easily changed with in the project as they can check that the design still fits and costs don't exceed the funds available as this can all be checked with in the company and the information will only leave the companies premises if the variations are going to take place, but will be constantly discussed with the main contractor so they are up-to-date with he relevant information (*Research Gate, January 2017*).

Disadvantages to this tendering method is that the overall process can be one of the longest, due to the fact they have to complete the designs drawings before being able to send of the information to get different tenders back causing a delay in starting the build. The contractor won't also be able to improve the constructibility of the project as they will not have a say in the design, but changes can be made if necessary or wanted (*Building Wiki C, June 2021*).

3.0 - Design and Build Tendering

This method means that the contractor will be responsible for the design as well as the build, the client or company will give the contractor a design brief along with other information to do with the build. The contractor will create a design drawing based on the information from the brief, the drawing will be based on how the contractor thinks and takes the information (*JCT, 2021*).

The pros to design and build procurement method is that the contractor can improve the constructibility of the project due to their input into the build and design phases, another benefit of this method is that while the designs for the fittings is being finished and confirm they company would be able to start the build and site set up which can help reduce the overall project time (*Research Gate, January 2017*).

The cons to design and build could be the risk of lower quality as the contractor may just put the minimum into the drawing, this could be what it needs to fit the building regulations but to prevent this the client would have to give specific materials or level of quality they would like to achieve. When having the drawing created by someone else this could mean a loss of vision of what the client really wanted for their building, they may

have to pay more to the contractor to edit the design to fit their needs more (*Building Wiki B, December 2021*).

4.0 - Development of the Primary and Secondary Research

For my primary research I have completed a questionnaire that needs to be sent to the quantity surveyors in Persimmon Homes, the questionnaire consists on seven questions relating to the experience they have had and what method of tendering they and the company use the most (See appendices 11.1). Once I have received the completed questionnaires I will create graphs for certain questions answers and examine the results to see what qualified and experienced quantity surveyors think of each tendering method. I will then use this information to access what method of tendering is better from experienced and qualified people.

For my secondary research I have started looking at projects in the residential area with multiple houses being built on the site. I have also been trying to find reviews from people who have bought houses from the companies who were the developers on the sites, by doing this I can assess the quality of the build from customers and see if the building is up to the standard compared with the price they paid for their home. This information will help the research from the target audience view to see if the developers are meeting the needs and achieving the best quality for the customers.

My plans for the next steps will be to draw information from the questionnaires and continue to complete more secondary research into customers feedback to ensure I can get multiple views on the buildings quality.

5.0 - Primary Research

After sending out the questionnaires I have received four back, each of the people who have filled out the questionnaire has different experiences.

Questionnaire

Questions	Person 1	Person 2	Person 3	Person 4
How many projects have you worked on?	4	12	Approximately 10	3
What tendering method have you used previously on your projects?	Traditional	Design & Build	Traditional	Traditional
What is the estimated value of the projects you have worked on?	£10 million+	50k to £10 million	£100k to £16 million	£3 million to £30 million
Are your projects high end or basic specification?	Basic specification	Basic specification	Basic specification	Basic specification
What tendering method do you believe is best to achieve the highest quality?	Design & Build	Cost plus	Traditional	Design & Build or better assignment of contractors so its not the cheapest price wins
What do you think the biggest obstacle that affects the projects quality?	Personnel	Programme	Lack of communication between departments	Cost, cheapest wins
Does your company have a set method of tendering to use? If so, which method?	Traditional	Depends on the project	Traditional (cheapest wins)	Traditional or design & build

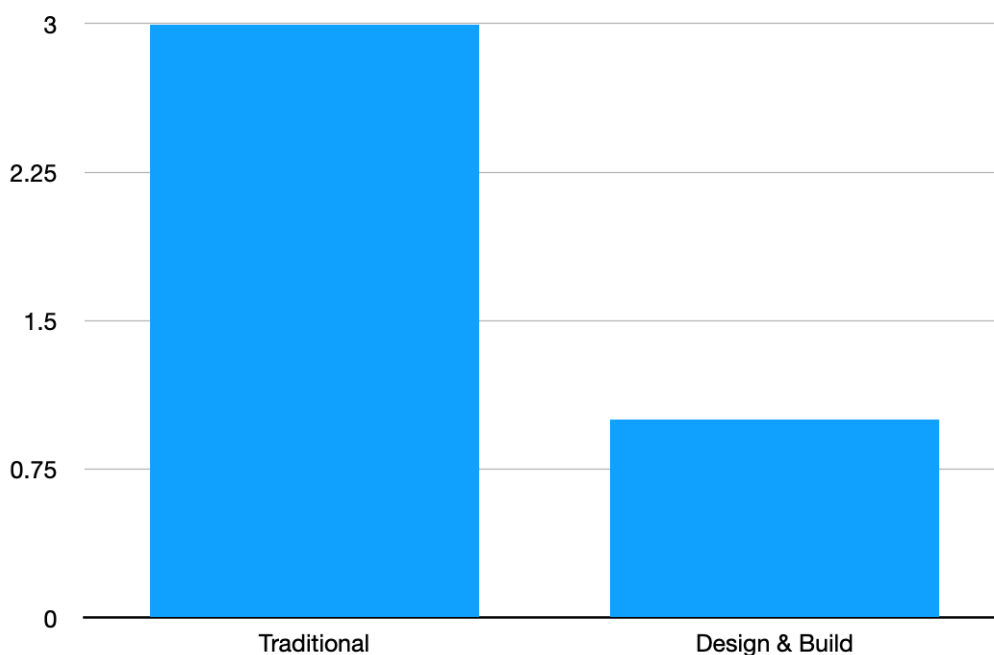
The experience from each person ranges from 3 to 12 jobs they have completed in the past and the estimated value of the project the person has worked on reflects their experience as a quantity surveyor.

Each individual gave a different reason for the projects quality being affected, person 4 did put that they believe the quality is decreased due to the traditional tendering method as it is the cheapest cost wins. The cheapest cost normally includes the most basic requirements needed in the properties and the cheapest materials they can source. Person 4 also thinks that in order to improve the quality of the build design & build should be the option of tendering method, or that there is more research undertaken into each contractor and they are then chosen off best quality and time frame not lowest cost. Person 1 also agree that design & build would be the best method for highest quality in the project, but in person 3 opinion they think that traditional procurement is best, as they believe lowest cost proves high quality. The other method states was cost plus pricing, this is where the client will pay for all direct costs, overhead costs and an agreed upon fee on top to accommodate the contractors profit. This method allows the client to get a cost that isn't "fluffed up", as the contractor will not have a need to cover the risk of having uncertainties or unexpected costs (*What Is a Cost-Plus Contract?, August 2020*).

Person 1 and 3 have the same opinion that personnel and lack of communication is the main issue with quality being affected. The lack of communication could be between the finance and the design team for example, as if the design team doesn't have an exact or estimate amount they have to be in or spend then they could have designed the drawing with the minimum requirements when the cost could allow for more higher specification items, which will increase the projects quality.

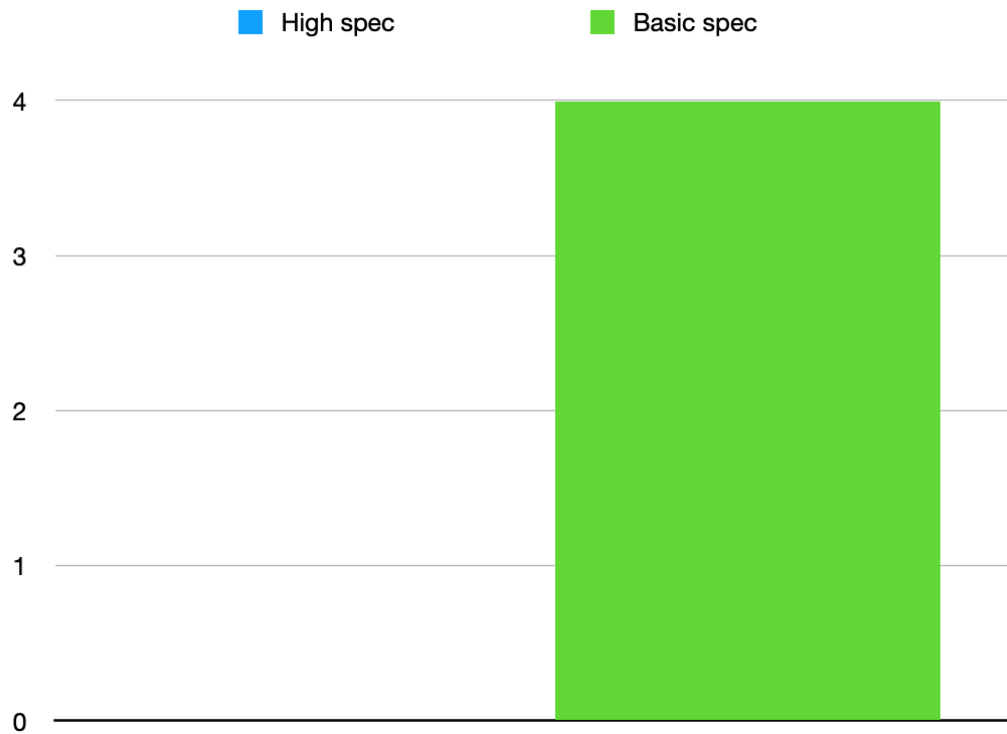
5.1 - Graph Analysis

Graph 1: What tendering method have you used previously on your projects?



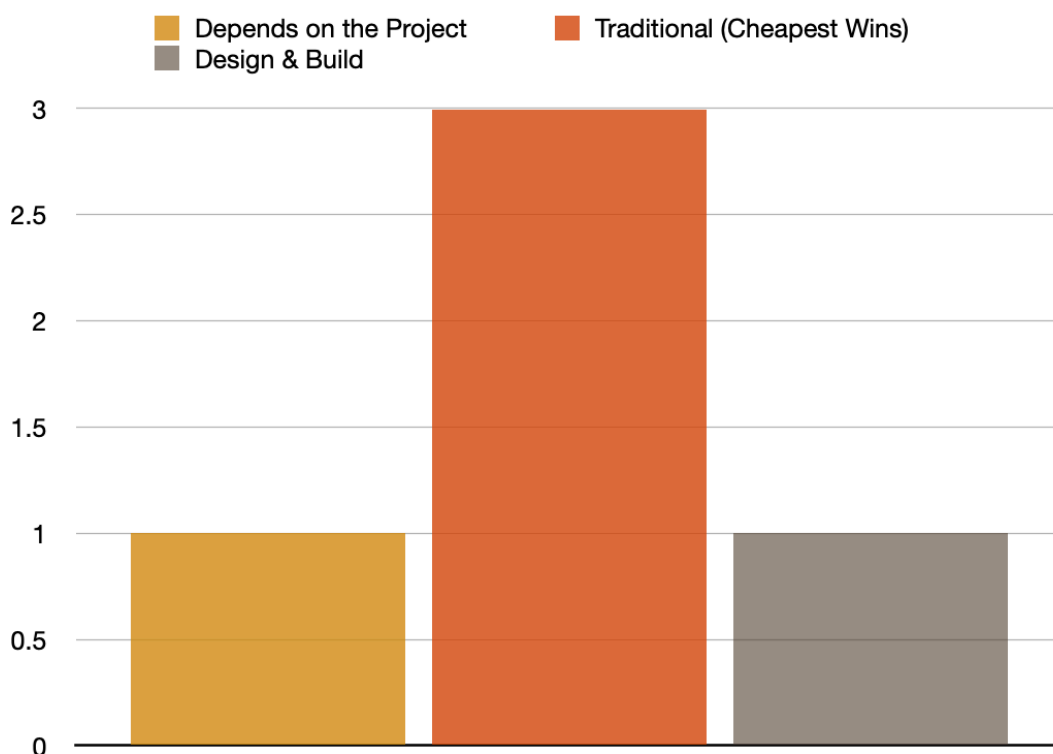
This shows that traditional tendering is the most popular method to use in Persimmon Homes projects, person 2 was the only one to state that they had used design and build recently.

Graph 2: Are your projects high end or basic specification?



Graph 2 shows that everyone works to a basic specification, none of the projects are considered to be high specification as they are producing large housing sites that don't require the extra high specification details.

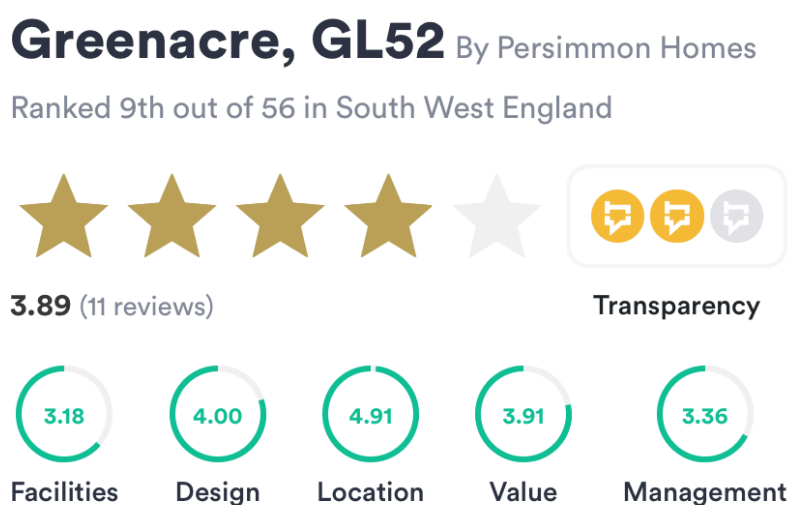
Graph 3: Does your company have a set method of tendering to use? If so, which method?



This graph shows that majority of people believe that Persimmon Homes has a set tendering method which is traditional, but one believes that it depends of the project you are undertaken. While person 4 believes that it is traditional tendering is the main tendering method sometimes design & build is used but not as often as traditional.

6.0 - Secondary Research

The following projects that have been research have all been done by the traditional procurement route. These are multiple reviews based on the quality level of the homes produced by Persimmon Homes, for the purpose of the research it benefitted looking at their previous projects as the questionnaires were filled out by the employees of that company.



(Figure 1, Greenacre, GL52, 2021)

One site based near Cheltenham has had many reviews by the home owners, the site project has received an overall of 4 stars. Looking at the results the value has an overall score of 3.91 out of 5, many of the reviews state how disappointed they are with the final outcome of the value. The reviews all have fixed questions for each person to fill out, one house owner says “A big negative is the finished quality” and “We would absolutely change the quality of interior. The doors are extremely flimsy and sound travels so easily through the thin walls.” This makes you think that the project was on a traditional build and they tried to cut down costs as much as possible, an example of the cost cutting could be bulk buying on doors to achieve more of a discount on cheap doors. Another home owner stated “Our site manager was brilliant when we had a wonky tap he fixed it straight away and was always present on our site asking questions making sure we was happy”, this one customer has an issue with the quality and was repaired straight away and left them feeling great with their purchase and leaving the quality review at a 5. Each of the reviews have been approved by the web page as a verified resident of this location (Greenacre, GL52, 2021).

In 2019 Persimmon Homes received multiple headlines in the BBC News about the safety of their homes, this was because many homes were missing the fire safety barriers, a part of a families new build collapses and how they lack minimum house standards. That

same year they were also seen on BBC's Watchdog tv program as many people had complained about the quality of their new build and how some of them were having major issues with the roof and external brick work.

The fire safety barriers are stated in the building regulations as a requirement to be placed in every home in the cavity walls and the roof space. Persimmon Homes sent over 1,000 letters to their home owners to state that they needed to complete a check on their house, this was because of the fire safety barriers being "either partially or not installed". This led to multiple home owners being concerned that the quality of the build isn't even "basic", the basic requirements should fit the building regulations as that is to protect people and have safe homes to live (*Persimmon missing fire safety barriers, March 2019*).

In Kent a family had a part of their home collapse, it was a new home built by Persimmon's developer Charles Church. Persimmon stated that they were completing work on homes adjacent to the property, it turns out that the slates on the buildings exterior wall had dropped off during the evening. As a part of the building collapsed other homes in the area have had investigations completed to ensure that all the properties are suitable, safe to live in and that the same incident won't happen again (*Persimmon Homes: part of new-build home collapses, August 2019*).

The chairman of Persimmon Homes completed a report on the home standards, he found that across the board there isn't a basic standard that they follow, the report was completed after there was a huge look into the safety of the new homes being built. The chairman believes that there is a need to complete a "Persimmon way of building", this will ensure that everyone follows the same procedures and everyone will have the same training to complete the work to the same standard no matter where you are in the UK. The chairman also found that "Persimmon had focused on policies around inspections immediately before and after the sale of a home" rather than focusing on the builds quality they just wanted to ensure they passed the checks to sell the property (*Persimmon lacks minimum house standards, December 2019*).

7.0 - Comparing of Research

The primary research has shown that most quantity surveyors based in Persimmon Homes believe that traditional (lowest cost) isn't the best procurement method, it doesn't ensure the correct research into the contractors to have the high quality level that some customers believe they do not have. Majority believe that design and build will ensure a better quality level outcome as the main focus isn't on getting the cheapest price for the project but rather making it fit the clients needs and wants, it also takes into more consideration of the contractors quality and work ethics. Also the primary research showed that the quantity surveyors don't believe the quality levels falling are due to the procurement method chosen but the poor communication and lack of team work between departments.

The secondary research confirms the lack of communication being one of the biggest issue between the quality level, as on some projects Persimmon Homes completed basic building requirements have been left out. From the complaints it showed that Persimmon came back saying communication errors between departments had caused confusion, as well as not enough stock to even complete the buildings correctly when they were in the construction phase.

From both sides of the research the first biggest issue that lets quality suffer is communication within the industry. The next one is based on the traditional procurement route of lack of research into the companies background, while most agreed that is extensive research is completed then the traditional method can work but the focus is too much driven on the cheapest company. Even though getting a cheaper cost is ideal to increase the company's profit margin, lack of quality will decrease the companies reputation many that clients won't want to work with them based of this one piece of information. Reputation is one of the biggest factors with getting extra work as well as trust but this will come hand in hand with the reputation, but this will be highly affect by past projects quality and work.

8.0 - Conclusion

After comparing the information I have discovered that, the most popular type of procurement is traditional but many other quantity surveyors believe that design and build would be the better option just based on the quality level, as lowest cost doesn't always ensure best quality products for the build. Many believe that traditional also is better as it always allows the design of the building to be just the way the company/client wants it, as with the design and build assumptions will be made into the drawings and may not be what the client wants to have which will mean that not all needs/wants will be met. With the design and build it is possible for the client to change the design but will postpone the start date of the construction and will make the price fluctuate but many clients will find it worth it to fit what they want.

Overall from the research conducted, I believe that the best procurement method depends on the purpose or the usage of the building. As cheap and low quality buildings will fit the traditional route better which could be a hospital due to the fact they aren't high specification just the equipment inside is, while project at a high quality level may require the design and build method but work with the company to create the drawing to fit the needs and reduce time changing the design to fit the requirements more. The quality of the traditional method can be improved as many of the quantity surveyors believe that the information being gather on the company, like their reputation and work quality is more in-depth and better research this would take more time but can improve the final quality of the building at the end.

9.0 - Reflection

Throughout the research I believe that I have had a limited view from the industry side, as basing the research just on four quantity surveyors opinions is a very limited view with not many sides and experiences of different projects where they would have used other procurement methods. As well as limits on views, just gathering the information from quantity surveyors based in persimmon homes which has a main focus of housing developments, this would prevent the type of procurement used. The procurement is affected as the company will already have basic designs for their homes the build, they will copy the houses and build in different location this means there is no need for the use of other design options like design and build will have. It would have benefitted the research if I could have got information from multiple different companies, as the experience would have been wider as well as different project types. Having different companies would have had different projects involved and also increased the chances of them not having a set procurement method, as Persimmon's quantity surveyors stated that they have a set method of traditional procurement. I could have expand the primary

research by completing door to door questions with sites built by Persimmon, this would have allowed me to question the home owners and tailor the questions to fit my research better than just talking their word from web pages online. Completing this extra part of primary research during this time may have been considered inappropriate, as at the time of completing the primary there were still many Covid-19 restrictions in place and turning up at peoples houses would have invaded their privacy and made them feel uncomfortable due to the current situation.

The research went very well in the secondary research as just focusing on a company helped focus the information I was searching for online to discover articles that will help try and answer my question of the quality being affected by the procurement choice. The internet had a wide range of information, as there are websites dedicated to housing estates reviews as well as housing companies. They also approved that the people making the reviews have actually bought a house which increases the reliability for the review. It was also easy to discover past issues due to Persimmon Homes being in many different television series, picking this company was the best option as there was a large variation of secondary research and due to knowing people within the company, it allowed easy access to information within the company as well as opinions from current working staff.

Overall the investigation went well but had many areas that could have been improved on, if I was to complete the research again it would now be a lot easier to get more primary research as the restrictions with Covid-19 have finished allowing access into more place like work buildings where I could have also done interviews with quantity surveyors. I would have also expanded it to look at more procurement methods rather than just two types, weighing up the positives and negatives of them and experienced surveyors from multiple different companies to get a range of skills and project types. Even though I have learnt a lot from completing the research I do believe that I didn't come to a conclusion on what procurement method is consider the best when compared with quality as each of the two methods holds different benefits depending on the buildings use.

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11.0 - Appendices

11.1 - Primary Research Questionnaire

Research Proposal Questionnaire

1. How many projects have you worked on?
2. What tendering method have you used previously on your projects?
3. What is the estimated value of the projects you have worked on? Please list.
4. Are your projects high end or basic specification?
5. What tendering method do you believe is best to achieve the highest quality?
6. What do you think the biggest obstacle that affects the projects quality?
7. Does your company have a set method of tendering to use? If so, which method?

11.2 - Four Filled Out Questionnaires

Person 1

Research Proposal Questionnaire

1. How many projects have you worked on?
4
2. What tendering method have you used previously on your projects?
Traditional
3. What is the estimated value of the projects you have worked on? Please list.
£10 million +
4. Are your projects high end or basic specification?
Basic specification
5. What tendering method do you believe is best to achieve the highest quality?
Design + build -
6. What do you think the biggest obstacle that affects the projects quality?
Personnel -
7. Does your company have a set method of tendering to use? If so, which method?
Traditional procurement

Person 2

Research Proposal Questionnaire

1. How many projects have you worked on?
12 No projects
2. What tendering method have you used previously on your projects?
Lump sum all risk
Design & Build
3. What is the estimated value of the projects you have worked on? Please list.
50k to 10 million.
4. Are your projects high end or basic specification?
basic specification
5. What tendering method do you believe is best to achieve the highest quality?
Cost plus contracts
6. What do you think the biggest obstacle that affects the projects quality?
Programme.
7. Does your company have a set method of tendering to use? If so, which method?
No it all depends on the project.

Person 3

Research Proposal Questionnaire

- How many projects have you worked on?
Approx. 10
- What tendering method have you used previously on your projects?
Traditional
- What is the estimated value of the projects you have worked on? Please list.
3m - £16m + Telecom = £100,000 - £1m
- Are your projects high end or basic specification?
Basic
- What tendering method do you believe is best to achieve the highest quality?
Traditional
- What do you think the biggest obstacle that affects the projects quality?
Lack of communication between departments. Also, groundworks.
- Does your company have a set method of tendering to use? If so, which method?
Traditional (Cheapest wins)

Person 4

Research Proposal Questionnaire

- How many projects have you worked on?
3
- What tendering method have you used previously on your projects?
Traditional method.
- What is the estimated value of the projects you have worked on? Please list.
- £3.8 million.
- £19 million.
- £30 million.
- Are your projects high end or basic specification?
Basic spec.
- What tendering method do you believe is best to achieve the highest quality?
~~Traditional~~ Design & build.
However, a better assessment of contractors would help not awarding 'cheapest'.
- What do you think the biggest obstacle that affects the projects quality?
Cost! Cheapest contractor wins.
- Does your company have a set method of tendering to use? If so, which method?
Traditional mainly used.
Rarely design & build.