

The benefits of Quantity surveying services early in the life of a project

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1 . Introduction

The construction disciplines have long recognized that the early stages in the development of a project are crucial to its success. The reason is that the inception or pre-design stage, a number of significant decisions is made that will influence the characteristics of the project. It is during these early stages where most of the crucial decisions that affect the economy, efficiency, timing, functional content, appearance and most important of all, the real value of the project. Proper considerations to those decisions are essential to the success of a project. Therefore, in order for a project owner to maximize benefits and minimize risks, it is extremely important to develop a management strategy, judge the feasibility of a business, and analyze the risks in a project at the very early stage of a project.

In practice, although the construction industry has comprehensive information about final design and construction processes, still needs a concise guideline about earlier project stages.

This paper examines necessary matters at these early stages of a project, analyze and shed light on a capacity of quantity surveyors to provide professional services to meet the potential needs of a client and assist in the property management of a project.

2. Requirements of the clients at the early stages

The project initiation stage determines the nature and scope of the development. If this stage is not performed well, it is unlikely that the project will be successful in meeting the business's needs. The key project controls needed here are an understanding of the business environment and making sure that all necessary controls are incorporated into the project. Any deficiencies should be reported and a recommendation should be made to fix them.

According to the RIBA Plan of Work which explains a model procedure dealing with some basic steps in clients' decision making for a project, the term of "early stages" refers to the Stage A (Inception) and the Stage B (Feasibility), and the works and decisions to be made at these early stages are as follows:- .

Inception stage

- 1) To prepare general outline of requirements and plan future action
- 2) To set up client organization for briefing and to consider requirements

Feasibility stage

- 1) To provide the client with an appraisal and recommendation in order that he may determine the form in which the project is to proceed, ensuring that it is feasible, functionally, technically and financially.
- 2) To carry out studies of user requirements, site conditions, planning, design, cost, etc., as necessary to reach decisions
- 3) To coordinate clients' representatives, architects, engineers and as according to nature of project.

Once the crucial decision to build has been made, then the process of briefing for the project begins and project inception commences. In order to improve the process of project inception, the project team needs to look more closely at the nature of the problem the procurement of a building will solve. Using a problem-solving approach to guide the activities in this stage may be more useful. In general terms, a problem is a question in need of solution.

The followings are basic requirements which are identified by the clients at the inception stage:-

- | | |
|-------------------------|--|
| 1) What must be done | Criteria (Project goal) |
| 2) Who is participating | Participants (People, Roles, etc.) |
| 3) How to be done | Activities (Plans, Checklist, Processes, etc.) |

During these early stages of a project, the clients should clarify and solve the following problem and questions:-

- 1) Inception Stage
 - The project strategy
 - The briefs for client
- 2) Feasibility Stage
 - Is the project necessary?
 - What are the options available - new build or conversion?
 - Is the project viable, technically and financially?
 - Undertake market research if appropriate (e.g. shopping center)
 - Assess location, planning restraints, grants available, environmental aspects

- Available infrastructure, lifespan, politics - company and government, future tenant agreements (if applicable)

3) Funding

- Examine the equity capital; how much is required and from where, from whom, at what cost, for how long, and what risk factor?
- Are there emergency reserves?
- Are there any available grants?
- Assess the budget and cash flow requirements

4) Planning

- Government approval-local and central.
- Site investigation
- Land acquisition.

5) Programming

- Establish time-scale

6) Risk Management

- Minimize the potential risks

3. QS contribution to the early stages of a project

A greater level of management and professional skills undertaken in a pro-active manner are required at the inception stage of the project. Early involvement and a direct relationship with the project Client are critical keys that enhance the value of QS services. The following points would encompass the essential services offered upstream in any project:-

- At very early stage of the project where there are many project uncertainties the client will be looking very carefully for the provision of early cost advice, risk analysis and market forecasting in order to assess the viability of a project.
- This is especially the case when clients are not equipped or conversant with feasibility studies and the factors that need to be addressed. In this case it is important to provide financial viability advice as a part of the project consulting services. This would include the provision of construction costs, price forecasting, and advice on suitable procurement.

1) Early cost advice on the viability of a project

Investment for construction costs are scrutinized more closely by the client and with greater skill and accuracy as projects have become larger, more complex and more expensive and therefore clients have become more exacting in their requirements and making their decision. Clients require early cost advice, particularly prior to site acquisition and a commitment to build. Minimum cost has become a critical requirement for most clients in the provision of building investment scheme.

In helping to define clients' requirements in financial terms, a Quantity Surveyor is exerting considerable influence on the purchase and eventual design of a building. This requires not only knowledge of construction technology and construction costs, but also knowledge of the property market and an ability to participate and visualize clients' detailed requirements. Therefore, cost estimation as well as cost planning is a truly professional services that requiring the exercise of a high level of expert discretion and judgment in conditions of considerable uncertainty.

QS should be able to deliver pro-active cost control to give clients total confidence over all areas of expenditure at early stages of a project by providing early, reliable and accurate definition of the cost.

2) Suggest alternative solution by the earlier involvement.

Clients approach the construction industry when they recognize a solution to their building would be required in the near future. Clients may be looking for the various idea and solutions from consultants. There might be space and accommodation problem, but it is not always as it looks. Quantity Surveyor can have great opportunity to offer and suggest alternative solution by the earlier involvement. This requires a commitment to client objectives as well as the integrity of professionalism.

The decisions made during the strategic or early design stages of a project are the critical in project costing. For example, approximately 80% of the costs-related decisions, both capital and operational are made within the first 2% (early design stages) of the capital expenditure of a major project. Additionally, the lifecycle costing is the key in planning a project.

In actual practice, it has often seen that the consultants spend very little time for generating alternative project options, often presenting decision-makers with only a few poorly differentiated alternatives borrowed ad-hoc from other projects.

3) Make a strategic support to the clients' decision-making process

Decisions made at early stage of a project are seen as critical factors that must be taken into account if a project is to be delivered on time, to budget and to the desired quality.

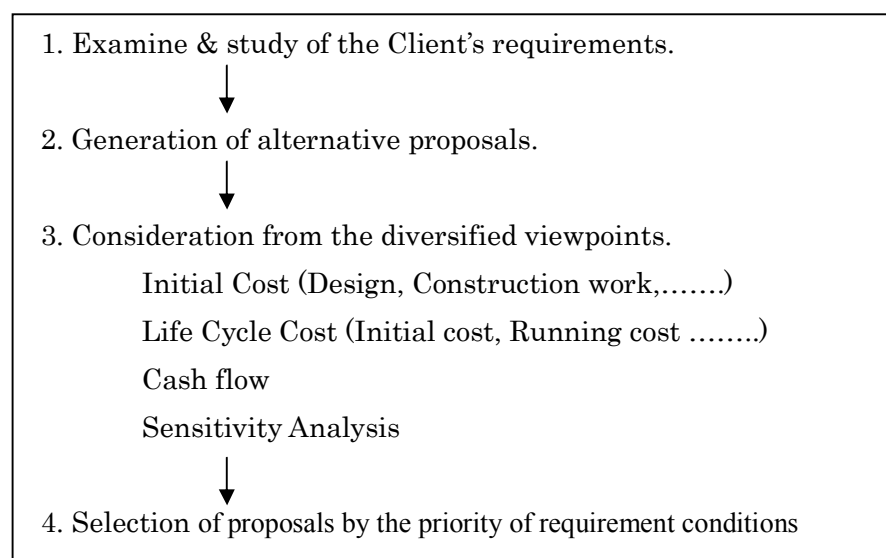
During the decision making at early stages, QS should place high priority on:

- Understanding the project priorities and business objectives;
- Providing advice which assists clients to gain competitive advantages, and
- Being client orientated rather than being focused too much on the details of the project to the detriment of the broader issues and objectives

Whilst many clients focus on cost savings, they are only a part of the complex project equation. The less tangible factors such as aesthetics, complementary interacting functions and positive unintended consequences of the development that contributes to the quality, value and effectiveness of a project are equally, if not more, important. The potential of these early stages, particularly the strategic, is substantial when compared to decision-making later in the process when the effect of change is often marginal.

So, in theory, QS should be aiming to devote more time and apply more rigors to decision-making process during the formative stages of a project. However, in practice, some obstacles have to be faced. The cultures within the construction industry and of many clients often create a climate of expediency. The consequence of this is a tendency to rush the early stage of projects and to eliminate or diminish the benefits that more time and care could bring. Unfortunately, this short-term thinking does not always lead to a soundly based strategy to guide a well thought out project solution.

Decision making process at an early stage of a project



4. The QS Professional management skill

As the professional who deal with our clients' cost, we always have to remind ourselves that our mission is to deliver "Value for Money (VFM)" to our clients. The greater VFM we produce, the greater customer satisfaction. To enhance VFM as well as to get customer satisfaction, we may have to value the project, risk and advise clients how to manage it.

Following three services in the early stage of a project are important to consider:-

1) Adding value services

In QS services, customers are looking for accountability, cost saving on the budget without sacrificing building quality, saving their trouble and personal time etc. And it is certain that they always expect the added-value services.

The followings are more specific area for adding value of QS services.-

- Value added to the clients' core business
- Identify the proper balance between project cost and its value, in order to maximize clients' benefit
- Investment appraisal and life cycle costing
- More quantitative assessment services, such as analysis of building quality, functions, environmental impact etc.

2) Risk mitigation services

Mitigation of risk is also the essential element of VFM.

This risk management services involve the followings:-

- Anticipating problems and assessing their impact to contribute to clients' decision are very valuable to clients.
- To identify and evaluating alternative course of action and considering how these may affect the balance between construction cost and likely value to the clients' investment can contribute much to clients satisfaction.
- Given uncertainties over clients' requirements, design, future cost, price movement and economy in general.

3) Procurement advice services

Also, QS is able to prepare number of procurement methods suit to the environment where the project is in, and QS advises clients the optimum way considering their business strategy. There is a need for more and better procurement services as the

increase of procurement methods, as clients want to match methods to their criteria in combination which one suits the best to their requirement.

5. QS contribution to the Property Management

Here are some concrete example of asset and facilities strategies services provided at the inception of the project:-

- QS is able to advise the client on specific asset and facilities strategies services, such as how to improve the value of asset and portfolios, provide the benefit of reduction of capital costs and operating costs, encourage asset flexibility, improve the risk and business continuity, etc. to the client.
QS is also able to assist in managing Corporate Real Estate (CRE), as they can contribute to the client's core business by improving real estate strategy and operations.
- QS has the capacity to respond to the abovementioned needs and support the client from financial perspective on a construction project. However, at this moment, technology, experiences, and techniques, to meet the needs of the top management at inception stage of a project have not been sufficiently developed. Therefore, QS should be able to demonstrate and to extend his management skills at the earliest stage of a project in the following property management business.

1) Asset & facilities strategies services

The key project success factors for advising on specific asset and facilities strategies services at inception stage are:-

- Improve the value of asset life and portfolio by providing viable strategy
- Benefit of reduction of capital and operation costs
- Encourage asset flexibility to accommodate change in business needs
- Improve the risk mitigation & business continuity
- More efficient use of assets, improved business processes and development of a robust business case
- Alignment of capital and Life Cycle costs to income generating sources
- Assist in identifying the costs, risk and returns

2) Corporate real estate management services

Assist in managing CRE service are:-

- Improve the real estate strategy and operations
- Maximize the contribution to the client's core business
- Ensure the comprehensive brief and scope of work is established through the outline and full business case stages
- Early agreement of a value management strategy to ensure value for money targets are achieved
- Using benchmarking tools, where the asset rank in terms of best practice among industry

In responding to the above requirements of the property management at early stages of a project, QS should be able to equip the strong capability and services knowledge to advise on tailored property and facilities technical solutions.

6. Conclusion

As the business environment in construction industry is changing drastically, the social demand to QS and clients' requirements are getting wide-ranging and not as simple as before. To fulfill a role appropriate to the needs of the times, it is essential to take this phase of change as the strategic opportunity and to enhance our professional role in the area of early stage of a project to expand our business domain. Making use of our professional experience and we play our role pro-actively. It is worth aiming the upstream of a project and developing a financial field.

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