SOME MAJOR MISCONCEPTIONS OF CERTAIN ACTIVITIES OF CONSTRUCTION PROJECT MANAGEMENT

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Synopsis

Although the art of project management had been practised for managing construction projects for over five decades, what it is all about is still not thoroughly understood by many practitioners or alleged practitioners. This paper attempts to identify some major misconceptions, how such misconceptions come about, and actions to be taken to correct them.

Introduction

1 In the course of providing project management service for a large building construction project undertaken by a government agency in Singapore, the newly appointed CEO of the agency, who replaced the one appointing me project manager for the project, instructed his deputy to terminate my service because, he contended that there was no necessity for having a project manager since an architect and clerks-of-works had already been hired. I was lucky that his deputy COE saved my job by explaining to his new boss in details the scope of the services I had rendered thus far and would be rendering.

2 When I was a real estate developer, I always asked candidates appearing for interview the following question when they applied for a post of project manager:

"What do you do exactly as the project manager for a construction project?" The answer given was inevitably as follows:

"I oversee, control and monitor the works of all professional consultants and contractors with the view to ensure that things to be done are done timely and according to agreed project implementation schedule and within approved budget."

3 I had been told that in Taiwan, if one intends to raise a loan from a bank to finance a construction project, one must first appoint a project manager licensed by the bank you will be dealing with.

4 In Malaysia, there were cases that a project manager's service commences only from the time the application for statutory approvals for a construction project is filed, and will terminate when such approvals have been secured.

5 Paragraphs 1, 2, 3 and 4 hereof demonstrate some major misconceptions of project management. It is my considered opinion that implementation of many construction projects fails because of the afore-quoted misconceptions of project management. What then is "**project management**" all about? There have been many definitions given in hundreds of books written on the subject. I quote hereunder the definition stated in paragraph 1.3.8 appearing on page 2 of "**British Standard - BS6079-** **1: 2000 Project Management – Part 1: Guide to Project Management**" (British Standard Institute), which reads as follows:

"The planning, monitoring and control of all aspects of a project and the motivation of all those involved in it to achieve the project objectives on time and to specified cost, quality and performance."

I favour this definition because, the phrase "the motivation of all those involved" constitute one of the keys to successful project management. This phrase is often ignored by many project managers solely due to their misconception of the art of project management

6 I also favour the definition stated in the third paragraph appearing on page 3 of "Code of Practice for Project management for Construction and Development – Second Edition" (The Chartered Institute of Building) as follows:

"The overall planning, coordination and control of a project from inception to completion aimed at meeting a Client's requirements in order to produce a functionally and financially viable project that will be completed on time within authorised cost and to the required quality standard."

It is unfortunate that due attention is not given by many project managers to the phrases: "from inception to completion" and "in order to produce a functionally and financially viable project" simply because, they really do not understand what project management is all about.

For the purpose of this discussion, implementation of a construction project is separated into eight (8) stages, namely: **Inception and Feasibility-study Stage**, **Strategic Planning Stage**, **Authorisation Stage**, **Pre-construction Stage**, **Construction Stage**, **Marketing Stage**, **Handing-over Stage**, and **Post-construction/Initial Operation Stage**. I shall attempt to identify in paragraphs that follow some of the major misconceptions of the scope of services of a project manager in every stage, their probable cause(s) and how to correct them.

Inception and Feasibility-study Stage

Some project owners plunge into implementing a construction project before 8 appointing a project manager to advise on project viability whilst believing that they are fully equipped with appropriate know-how to evaluate the technical and economic feasibilities of their projects. They fail to realise that construction projects nowadays could be very complicated technically, and project financing could be so sophisticated that expert knowledge and experiences need to be called for in order to carry out proper and thorough evaluation of project viability and to secure the most advantageous terms for project financing. Construction projects involve, more often than not, a large sum of money. Not thorough and improper evaluation of their technical and financial viability by unqualified (or pseudo) and inexperienced professionals could result in exposing a large sum of investment to great risk. Hence, a truly professional project manager should be brought into the project team to handle project viability studies prior to deciding on project implementation. I am, of course, referring to a project manager who is appropriately qualified, fully conversant and experienced in the art of project management in toto. The misconception of project owners stated above arises from their belief that project management entails technical and construction matters only and nothing else. It should be borne in mind that a thorough understanding and in-depth knowledge of objectives of a construction project is vital for all subsequent actions for full project implementation to be correct and successful. Hence, the project manager, who is the person fully responsible for planning, monitoring, controlling and coordinating such actions, should be in the project team so as to play an active role when making decision for project authorisation.

9 There is another misconception of some project owners in that the determination of objectives of a construction project is a matter to be dealt with only between the project owner and his professional consultants. Although the project owner may know what he wants for his project (hopefully so), he may not be knowledgeable enough to know the technical and financial consequences of every project requirement, and the most economical and expeditious ways and means to achieve it. His professional consultants may not be fully equipped with necessary knowledge to advise him in such respects. The rendering of such advice will therefore have to falls within the scope of comprehensive project management.

Strategic Planning Stage

10 The carrying out of proper and detailed strategic planning for the implementation of a construction project is far more important than the coordination, control and monitoring of design and construction works. In fact, without such strategic planning, it will be impossible to properly coordinate efforts for, to exercise proper control over and to systematically monitor project implementation. Improper or incomplete planning and failure in planning key and essential activities will have fast-fetching effects and unpleasant, uncalled-for, costly as well as difficult-to-manage consequences, and are often the causes of failure of project implementation e g, budget-overrun and timeschedule-overrun.

11 Some project managers of construction projects often do not realise that strategic planning not only entails scheduling of design and construction works, but also includes the preparation of a detailed technical design brief which documents expressly and without ambiguity all requirements (performance and otherwise) of the project so that professional consultants need not guess what the project owner wants. These project managers also neglect to provide project owners necessary assistance and advice on project cash-flow-planning, ways and means of project financing, criteria for selection and terms of reference of professional consultants and appropriate project procurement methods.

12 Furthermore, some project managers misunderstand that a "Works Breakdown Structure" [WBS] (which forms the starting-point-document and bases for strategic planning) for a construction project confines to construction works only. A WBS should also cover all design works, project owner's review and review by statutory authorities of designs proposals and contract documents and other pre-design and non-design-related works and activities. An experienced project manager will also assist the management of the project owner in the preparation of project proposal and business plan for submission to Board of Directors for consideration.

Authorisation Stage

13 Some project owners and project managers contend that actions pertaining to the securing of authorisation for full project implementation is a matter to be dealt with by the management of the project owner's organisation, and are beyond the terms of reference of the project manager of a construction project. This contention is, of course, incorrect if the project manager had taken part in conceiving the project and in assisting the preparation of (or in preparing) the board-paper for seeking project authorisation. I go further to suggest that the project manager should personally present the board-paper at the board-meeting so that he could ensure that everything said in his board-paper is fully understood and correctly interpreted, and could expound and defend any argument and rationale put forward by him in support of his recommendation for project implementation. By so doing, it will also prompt him to spare no efforts to ensure eventual success of implementation of the project he will be taking active part to promote.

Pre-construction Stage

14 Another major misconception is that project managers are not required to play any part in the selection, hiring and determining the terms of hiring of professional consultants and contractors. It cannot be denied that without the project manager playing an active and meaningful role in such matters, his "underlying authority" for regulating, directing and overseeing the works and behaviours of professional consultants and contractors could be somehow undermined and diminished.

It is often contended that project management entails only the coordination of 15 design works. Professional consultants should be left alone to decide on design approaches and inputs. This contention is, in my considered opinion, totally wrong. It should be recognised that, because of the keen competition in the market of rendering professional services and the fact that not every professional has the highest professional ethics, some professional consultants sometimes do allow commercial/economic consideration to over-ride professional/ethical consideration, especially when the time allocated to complete design works is short than what it should be, and professional fees agreed to be paid are barely sufficient to cover cost for providing proper service (which must include producing proper, economical and value-for-money designs). Under such circumstances, the project manager will have to shoulder the unenviable task of procuring that any design submitted for project owner's review/approval has been done according to best design approach and practices; that design inputs are not overly conservative, that due consideration in terms of economy of cost and time has been given when such design is prepared and that the final design is value-for-money. The project manager should also be required to take necessary steps to ensure that every design submitted for approval is in full compliance with the detailed technical design brief and fulfils all requirements of the project. To believe that professional consultants will automatically do the aforesaid may result in great disappointment and in costly or even unsalvageable disasters.

16 Many project managers also fail to realise that it is one of their principal tasks to procure that the design approved for construction should be appropriate to and "compatible" with the chosen method of project procurement (i e: the type and format of construction contracts to be awarded eventually). For example, the purpose of procuring a bridge-construction project by awarding a "Design-and-Build Contract" will be defeated if there is a conceptual design issued for tendering, and such conceptual design shows a definitive spacing of bridge-piers.

17 Many project managers fail further to realise the importance of correct and properly prepared "Front-end Documents" (comprising Articles of Agreement, General Conditions of Contract, Additional Conditions of Contract, Conditions of Tendering, Instructions to Tenderers, Employer's Requirements (applicable in the case of a "Designand-Build Contract"), Form of Tender, Addenda to Tender Documents, Invitation to Tender, Contract-award Letter, Preambles to Bills of Quantities, General and Technical Specifications and the like). They contend that such documents are of not much importance and are added to the Contract/Tender Documents in order to make them look bulky, impressive and formidable. Hence, "Front-end Documents" are left to professional consultants to prepare and decide whatever deemed appropriate to be included. They are also not thoroughly checked in order to ensure that they are all indeed appropriate and without errors. Such contention, if not corrected, could give rise to uncalled-for difficulties, havocs and unnecessary problems cropping up in the course of subsequent contract administration.

18 I have meet many project managers who boast about their ability (Probably alleged) in setting and getting their project teams to agree to unreasonably low budget, low fees for professional consultants and practically unachievable works-schedules. They, on the other hand, have the faintest idea of what fair budget, fair professional fees and achievable works-schedules should be, and of what constitutes quality works. The tactic they employ is by browbeating project team members to submission. They also have never heard of the equilateral triangle the three sides of which represent quality/cost/time, and "Good things never come cheap". Their misconception is that low project cost must means successful project management. They are ignorant of the concepts of: "Value for money", "One pays peanuts, one normally gets monkeys", employees "No produce good "Disgruntled seldom works". and contractor/professional consultant intends to subsidise a client".

Construction Stage

19 Pursuant to the spirit and specific provisions made in most commonly used General Conditions of Contract [GCOC] for construction contracts, project managers (who are normally deemed representatives or agents of project owners) have no say in respect of administration of contracts, except in the case of a "Design-and-Build Contract". However, It is often found that project managers interfere with contract administration and give instructions directly to contractors possibly because of their misconception that, being agents of the "paymasters" of contractors, they are entitled to say whatever they like and to act in any manner they choose. The probable reason for such actions could be their complete ignorance of provisions made in the GCOC of construction contracts they are involved in. This misconception of project management extends further to project owners employing clerks-of-works (who carry out day-to-day inspection of construction works) directly so that they "can put their eyes and ears" at site. However, the laws (in Singapore) specifically requires the "Qualified Person" of a construction project (the "Registered Architect" or "Professional Engineer" named in a construction contract) to be held responsible for anything work and happening at site and not the clerks-of-works. Because of such legal requirement, clerks-of-works should rightly be in the employ of the "Qualified Person" and reporting and being responsible directly to latter.

I have come across project managers who are "absolutely obedient servants" of project owners. In other words, they do whatever the latter require them to do. As "absolutely obedient servants", they do not dare to advise the latter what not to do, or to give advice on the consequences and impacts of doing what the latter want done. They subscribe to the concept of "**One should never do anything to displease one's boss**". They further fail to realise that one of the important but unpleasant tasks a project manager is sometimes required to perform is to advise the project owner not to do what he desires to do. "**What not to do**" includes changing decisions made earlier and already implemented, making frivolous changes to project requirements after awarding a contract and unnecessary feet-dragging in the decision-making process. Many project owners further contend that they have the absolute prerogative to do whatever they like without being required to face any cost-and time-consequences.

Marketing Stage

21 Some project managers choose to believe that they have no part to play in this stage of project implementation. Such belief cannot be more wrong no matter the completed facility is for investment or speculative purpose. It is so because of the following:

22.1 Arranging construction and fitting-out works of "Show-unit", gearing and regulating works-schedule to suit marketing strategies and regulating and controlling the carrying out of tenants'/purchasers' renovation, alteration or additional works are beyond the scope of the project.

22.2 Coordination and dovetailing of market demands with project requirements and objectives is in "no-man's land" as far as project team members are concerned.

I contend that the most qualified and appropriate person to perform the aforesaid functions is the project manager since he has been intimately involved in every stage of project implementation, is a position to speak and act for the project owner and has a direct line to all project team members.

Handing-over Stage

22 Most commonly used GCOC of construction contracts do include a provision stating to the effect that, after the contract administrator having certified completion (or substantial completion) of all works required to be carried out pursuant to the terms of the contract, the project owner shall be required to take over the completed facility. Thereafter, "Defects Liability Period"[DLP] (or "Maintenance Period") pursuant to the terms of the contract will start to run. It has been a traditional practice that outstanding minor works and making good of defective works could be carried out during the DLP. Since all major works have been completed, professional consultants' senior site inspection staffs would have disappeared from the site so as to save cost; and only junior staffs remain to work at site with minimum supervision. This could result in slow progress of remaining works. Not so diligent professional consultants may pay little (or no) attention to the carrying out of the remaining works possibly because of the fact that substantial proportion of their fees has be paid. In some cases, the project manager's service would have been terminated or he has discharged himself as it is alleged that there is nothing much left to be managed. Hence, the project owner would be left with the baby whereas he knows little about the ins and outs of things and probably is less qualified to perform the remaining tasks. The aforesaid is the result of the misconception of the scope of activities pertaining to project management. It is my considered opinion that, in this stage (as well as in the subsequent stage) of project implementation, the project manager's service is still very much needed because he is the person who knows the background of every defects to be attended to, and is supposed to have the ability to procure that all professional consultants will continue to perform their duties timely and diligently.

Post-construction/Initial Operation Stage

23 More often than not, project managers have already disappeared from the scene in this stage of project implementation because, he and the project owner are both of the contention that whatever action required to be taken in this stage is purely operational matter, and is outside the ambit of project management. Such contention is, in my considered opinion, erroneous. It could again arise from misconception of project management. You may recall I said earlier that a project manager is required to play an active role in conceiving his project by way of defining the project objectives, requirements and desired performance of the completed facility, and in undertaking strategic planning for overall project implementation. After having done so, he should still be around in this stage to verify that all project objectives and requirements he had defined indeed coincide with and fully respond to what the project owner's investment objectives, to answer for any shortfall discovered when the completed facility is put in gainful (or commercial) use and to advise on appropriate measures to be taken when the completed facility fails to perform as intended. In other words, he should make himself available on "judgement day" of the completed facility he helps to conceive and create. A diligent and conscientious project manager will also provide the project owner advice on training of operation and maintenance personnel of the completed facility and assistance to procure its smooth initial operation, maintenance and upkeep.

Conclusion

Misconceptions stated in the foregoing paragraphs are those I consider major. I wish I were given more time to identify and discuss those not quite major ones. Finally, I must emphasise that project management is **definitely not** about setting unreasonable cost- and time-target, developing and enforcing the compliance of non-workable and bureaucratic procedures and harsh rules, scolding and browbeating non-diligent or delinquent professional consultants and contractors and engrossing in playing computer games for project scheduling. It should be about skilful handling of human behaviours and human relationship, cultivating and motivating team-spirit and team-work amongst project team members, motivating and gearing them to do things in the way the project manager want them to, and advising and procuring the project owner to do the right things most of the times.

End of Paper