

EFFECTIVENESS OF PROJECT DEBRIEFING PROCEDURES : A CASE STUDY OF THE KZN REGION OF SOUTH AFRICA.

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ABSTRACT

Purpose of this paper - The last major phase of a construction project's life cycle is the closeout. This is the stage where formal completion of all contractual obligations is confirmed, and documentary requirements are fulfilled. The literature suggests that at this point, successes as well as problems on the project should be identified through a group review exercise. The 'lessons learned' process is said to be a valuable closure mechanism for project team members, regardless of the project's success. This feedback can then be applied during the briefing and planning stages of future projects. However, in practice it is suggested that this is seldom done, problems previously encountered therefore often re-occur. This paper investigates the extent and nature of project debriefing procedures occurring in the KwaZulu-Natal region of South Africa, and compares current practices with international 'best practice'.

Methodology/Scope – International best practice relating to debriefing processes is determined through a detailed literature review. A two-part survey of 25 local consultant firms and a further 36 individual consultants was used as the basis for establishing current local practice.

Findings – It was found that local practice is very similar to that described in international literature and that the shortcomings described therein are similarly apparent in the local study. A reasoned argument is presented, indicating that local construction professionals do not undertake debriefing effectively during the closeout stage of projects.

Value – The study of international 'best practice' as it relates to the linkages between project closeout and preliminary briefing of other projects provides useful insights for possible adoption by local practitioners. Further, it is suggested that the implementation of improved practices will enhance the performance of design consultants, and lead to a consequential improvement in meeting client satisfaction levels.

Keywords: briefing, close out, debriefing.

1 INTRODUCTION

An adequate understanding of client requirements can facilitate the level of trade-offs required with other project requirements which are usually more difficult to alter than client requirements (Kamara *et al.*, 2002). If clients are experiencing problems providing timely and appropriate information for the construction process, then it is incumbent upon those more knowledgeable in the construction industry to identify what help they need and to provide tailored assistance so that they can act more effectively in the process. This forms the basis of client representation. In order to achieve this, all client types need the greatest assistance in defining requirements and producing their building.

Unless specific attention is paid by the professional team to ‘lessons learnt’ from previous projects, project objectives may not be achievable, and as a result, problems often re-occur in these later construction projects. This paper aims to highlight the link between the briefing process and the closeout stage (as shown in Figure 1) and the role of effective debriefing during the closeout phase in improving the briefing process.

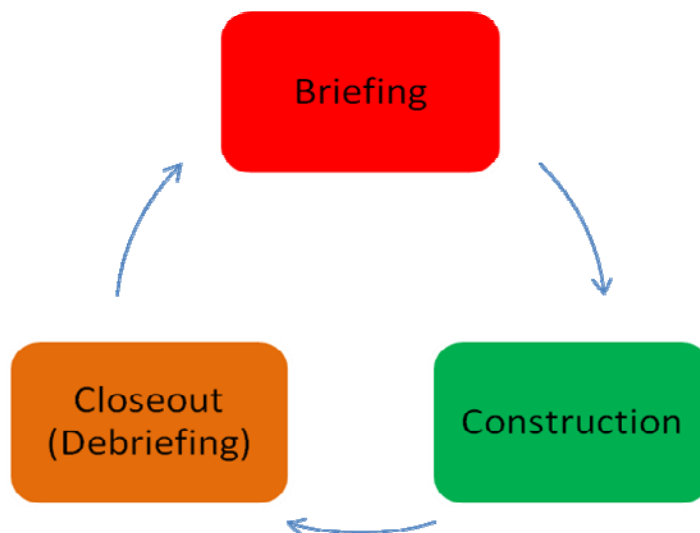


Figure 1 The continuous link between briefing and the closeout stage

The case study describes current practice amongst local built environment professionals and compares the findings with ‘best practice’ as described in the literature. An effective briefing process contributes to the attainment of client objectives with respect to time, cost and quality for construction projects (Bowen *et al.*, 2000). One of the problems experienced with briefing is that on project completion, professionals tend to forget the problems experienced rather than learn from them (Barrett and Stanley, 1999). This

comes as a result of the project team not paying enough attention to the activities of the closeout stage, during which a lessons-learned session should be held (Kartam, 1996).

2 METHODOLOGY

The selected research approach enabled the authors to collect rich data for understanding the two stages of construction, namely the briefing process and closeout stage; and to investigate whether construction professionals were conducting debriefing according to suggested 'good practice'. A literature review was used to accomplish two of the three objectives of the research. The first of these is constructing a solid background of the briefing process and identifying its limitations. The second objective is to understand the closeout phase of the project and debriefing. To achieve the last objective, a survey questionnaire and semi-structured interviews were used to investigate the processes related to debriefing, and the use of feedback by KwaZulu Natal construction professionals in current practice.

The professionals targeted were architects, quantity surveyors and project managers. It was established from membership lists of the professional organizations representing these disciplines that a potential population of 402 "construction professionals" was resident in the KwaZulu-Natal region. This was based on 175 architectural and 79 quantity surveying firms / offices, together with 148 registered project managers. A sample of 30 architects, 35 quantity surveyors and 35 project managers from assorted firms were then established as the 'primary' sample population for the study.

Arising from a pilot study, a decision was made to conduct structured interviews with practitioners with at least 10 years relevant professional experience. Of the 40 practitioners that fell within this sample, representatives of 25 firms agreed to be interviewed. Of these, 10 were representing firms of quantity surveyors, 8 architectural practices, and 7 project management consultancies.

In addition, questionnaires, adopting the same questions as were covered in the structured interview process were distributed to the remaining 60 professionals comprising the 'primary' sample population.

3 THE BRIEFING PROCESS

Construction briefing can be defined as the process running throughout the construction project, by which means the client's requirements are progressively captured and translated into effect (Barrett and Stanley, 1999). The briefing process is generally accepted to be divided into two major stages i.e. strategic and project briefing. The strategic brief sets out the broad scope and purpose of the project and its key parameters including the overall budget and programme. It should provide an output specification which explains in clear terms what is expected of the project. The project brief converts

the strategic brief into construction terms, puts initial sizes and quantities to the elements and gives them an outline budget. It should be maintained in a format which allows alteration and updating (Hamilton, 1997). For the purposes of this research, no distinction was made between strategic and project briefing.

Designers speak different languages to the users of the building, yet they must understand the business language of their clients to allow for meaningful communication of needs. In this scenario, briefing can be seen as a communication of instructions about intentions and objectives of the parties. This is considered to be one of the most important stages in the life of a project (Salisbury, 1990; Kamara *et al.*, 2002; O'Reilly, 1987). According to Luck *et al.*, (2001), within recent years it has been considered that briefing is ongoing throughout the early stages of a project rather than a checklist or a document produced at a single point in time. The current trend is to look upon the briefing process as an integrated part of the entire construction and management process and not just as part of an early stage of the project (Ryd, 2004).

Good briefing relies on the client giving clear instructions based on a sound decision-making process. A client must regularly and systematically ensure that the relevant options are being evaluated and there are sufficient resources of the right kind assigned for briefing throughout the project (Hamilton, 1997). Even if the consultants have worked on many similar buildings before, they may well overlook a critical piece of information if it is not drawn to their attention. It is, therefore, up to the client to reveal as much information as possible.

Bowen *et al.* (2000) suggest that an effective client briefing process contributes to the attainment of client objectives with respect to time, cost and quality for construction projects. According to Hardcastle and Tookey (1998), if best practice is to be achieved, there are a number of things that it should agree with regarding the briefing process. First, they suggest that the brief should be clear in order to reduce the number of possible interpretations and improve project controllability. Second, there should be an early interface between design, costing and client elements of the project in order to reduce risks associated with those elements. Third, the briefing and construction processes should be very closely integrated – moving towards the concept of concurrent design and construction in which all of the requisite expertise is included from the outset of the project. Finally, clients want and expect a high level of involvement in the design phase of construction projects but at the same time each client is different. Hardcastle and Tookey (1998) concluded by saying, that the brief and therefore the overall project is best served from having as few links as possible in the supply chain of the design and construction process.

Contrary to this, are ideas by Barrett and Stanley (1999) which suggest that there is no simple “cookbook” solution to good briefing. They say that thus far briefing best practice advice appears to have had little influence and that parties involved would rather follow practices from their own past experience. This stems from the danger that exists in the construction industry whereby professionals seem to think they have experience.

However, in reality it seems that experience can act as a barrier to the acceptance of good practice proposals.

Furthermore, they suggested that that much of the best advice provided is based on a purely rational perspective of the construction process. This advice amounts to suggesting that if people were not involved in the briefing process everything would run smoothly. However, people are involved and this is the reality that efforts at better briefing must accept and deal with. Based on this, a conclusion reached by Barrett and Stanley (1999) was to put the emphasis not on how to do good briefing *per se* but rather to see the way forward to achieving progressively better briefing.

4 THE CLOSEOUT PHASE

The last major phase of a construction project's life cycle is the closeout. Projects are considered completed or "closed out" after the client receives and approves all reports as required by the terms and conditions of the award, and notifies the contractor of its acceptance and closure of the project (Othman and Abouzeid, 2007). A project must take into account both administrative and contractual matters in its closure (Heerkens, 2001). Administrative closure details all activities, interactions and related roles and responsibilities of the consultants and other stakeholders involved in executing the administrative closure of the project. Contractual closure includes all activities and interactions needed to settle and close contract agreements established for the project, as well as defining those activities supporting the formal administrative closure of the project.

Reaching project closeout is an important goal which the professional team has from the early stages of the project. According to Heerkens (2001), criteria for completion should be established at the beginning of the project. The project completion criteria focuses on those elements that give reasonable assurance that the project took into account the initial deliverables, the client and the sponsor approval. The closeout stage is also important for documenting the completion of the project and to prevent the project from moving beyond its original scope and budget. The closeout stage of the project should be given as much or more project management attention as any other stage. More than any other project stage, the closeout stage requires a diverse set of technical, organisational and leadership skills.

Othman and Abuzeid (2007) mention that as the project nears its closure, the team members may lose interest in the project. Team members scramble to complete the last few tasks, which may not have been included in the original plan. As some of the team members complete their tasks, loss of team functionality may occur and loss of interest in administration and documentation tasks may also occur. Attention may, at this point, be diverted as the team members' transition into new projects or other work. In these circumstances, the project manager, therefore, has the difficult task of fighting against the team's loss of interest in the project.

It is unlikely that such a situation would arise where stakeholders are associated in a 'partnering' arrangement, which is fundamentally dependant upon mutual long-term benefits for the entire team. Under these conditions, the fragmentation of the team at project conclusion, which is the primary reason for the change of focus amongst participants does not occur.

5 DEBRIEFING WITHIN THE CLOSEOUT STAGE

In addition to communicating the closure of a project in writing, it is also advisable to have a mechanism for group review. This process provides official closure to a project. It also provides a forum for team-member recognition and offers an opportunity to discuss ways to improve future processes and procedures. In order to achieve effective debriefing, it is suggested that a 'lessons learned' session should be conducted (Othman and Abouzeid, 2007; Heerkens, 2001; Kartam, 1996). Furthermore, successes as well as problems on the project must be identified and recommendations made on how these successes can be adapted and problems avoided in future endeavours.

5.1 The 'Lessons Learned' process

The lessons learned process is said to be a valuable closure mechanism for the project team members, regardless of the project's success. It is most productive when it is being oriented towards identifying problems encountered by the project team, and suggesting ways to avoid similar problems in future. Below are some of the questions which the project team may ask and answer amongst themselves and these can vary from one project to another:

- Were the success factors achieved?
- Did the project reach its goals and objectives?
- Was the project completed on time and budget?
- Was communication clear, concise and timely throughout the project?
- Does the client view the project in a positive manner?
- Was the project well managed?

Kartam (1996) suggests that there should be a focus on a balance of positive and negative experiences and not just failures and incidents.

5.2 The role of effective debriefing in future projects

Barrett and Stanley (1999) state that on project completion professionals tend to forget problems, rather than learn from them. This then creates a problem during the briefing and planning stages of future projects as construction professionals are unable to bring any lessons learned from previous projects to prevent similar problems from re-occurring. Kartam (1996) states that in practice expert knowledge and lessons learned in the closeout stage of a project are not effectively incorporated into the design and construction phases of subsequent projects.

After the lessons learned report has been submitted, it may then be archived with the rest of the project documents. This historic project information is an important source of

information to help improve future projects. According to Kartam (1996), the main function of debriefing is to prevent mistakes from being repeated and to ensure that innovations are promoted in future projects. The feedback obtained is not only useful in the design stages of projects but can also influence the construction phase of the project with respect to duration, efficiency and contractor profit. Kelly *et al* (1992), state that the concept brief is one of the most critical factors in determining a client's satisfaction with a building project.

6 SURVEY RESULTS

The analysis that follows reflects the total sample without differentiation between the various professional groups. It also briefly answers some of the questions from the survey document that was used for both interviews and questionnaires in an attempt to summarize the results of the survey.

Occurrence of formal project closure meetings

Do you have formal project closure meetings during the last stage (closeout stage) of projects?

This question (which required a rating response) sought to determine how frequently professionals were having formal project closure meetings. Results ranging from 'never' to 'always' are given in Figure 1. The expectation was that it would be reasonable to assume that project team members always hold formal project closure meetings. However, the main concern arising from these results is the low priority accorded to such meetings, bearing in mind that it is during these meetings that project closure can be discussed and professionals can give feedback on any issues concerning the project.

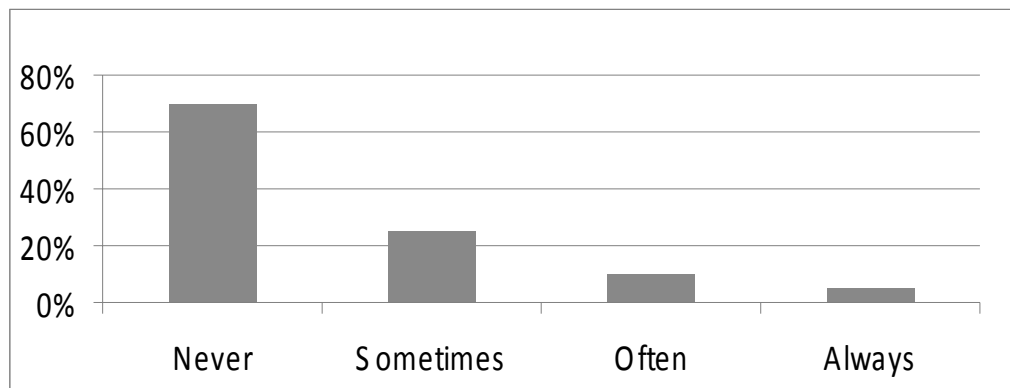


Figure 2: Frequency of formal project closure meetings

Necessity of these meetings.

Do you think these meetings are necessary? What are your reasons?

55% of the respondents were of the opinion that these meetings are necessary. These were mainly architects and project managers. The 45% that thought that such meetings were not important, mainly comprised quantity surveyors.

The assenting 55% of respondents reasoned that it was a contractual obligation to hold these meetings and they believed it was for the client's best interest. They were also of the opinion that such meetings allowed for the formal discharge of the consultants' responsibilities and provided finality on all issues arising from the project. The remaining 45%, who thought project closure meetings were not important, reasoned that there were too many "one-off" projects. They stressed that all projects are unique and each one had different problems and challenges. Within the local construction environment, the professional team also changes from project to project, making it unnecessary to hold such meetings, as they would be working with a different team on their next projects.

Occurrence of formal lessons learned /debriefing sessions

During these meetings, do you have a formal lessons learned/debriefing session? If yes, are problems as well as successes encountered discussed? If not, is there another way for the participants to provide feedback?

Respondents who previously revealed that they did have lessons learned/debriefing sessions were asked if they always, often, sometimes or never discuss problems as well as successes during these sessions. The overall response was that there was often a discussion of both the problems and the successes of a project but more so the successes. For those who had earlier responded that they did not conduct lessons learnt sessions, an alternative was then given to determine if they had any other way of providing feedback and sharing their experiences on a particular project. Respondents often have other ways of providing feedback. This is done during internal meetings in their various organisations. A general discussion of problems (and not a formal debriefing session *per se*) was also another way respondents used to provide feedback.

Knowledge acquired from the debriefing sessions.

Do you learn something new from such sessions? If not, why is that?

When asked if they did learn something from the debriefing sessions, the general response was that professionals generally do learn from such sessions. However, they felt that by this time they have lost interest in the project, and are wanting to move on to their next one, hence their learning is minimal. There was also a strong feeling amongst professionals that the sessions were usually not effective enough. Another point raised was that each project usually requires one of each of the various professionals making up the project team. If the lessons to be learned are in an area they do not specialize in, then they do not learn anything.

The effect of successful debriefing on future projects.

If you do learn from the debriefing session, do you then use this knowledge during the planning stages of future projects? If so, how do you use this knowledge? If not, what are the reasons? Would you say feedback gained from previous projects helps prevent the re-occurrence of problems in future projects? Do you think this is an effective way to decrease problems often experienced with construction projects?

Respondents felt strongly that they used knowledge acquired at debriefing during the design and planning stages of future projects. This was generally based on the notion of "learning from mistakes". The client and other consultants are then also advised on

successes of past experiences and warned of the dangers and problems associated with certain decisions. Debriefing was, to an extent, an effective way of decreasing problems often experienced with construction projects. It was further suggested that the more experienced practitioners had a duty to play in passing on what they had learnt during their years of practice. Respondents felt that they looked at each project as new and unique and expected different challenges from each and, therefore, did not see how information from a totally different project could be useful in a new one that is of its own different nature.

CONCLUSION

Although much has been said on the potential role of effective debriefing/lessons learned process in improving the construction briefing process, the majority of work in this area has been academic in nature. Construction professionals have not fully adopted the use of this process (Kartam, 1996). Barrett and Stanley (1999) list 20 problem areas related to the briefing process. This study, focused on one of these, which indicates that on project completion, professionals tend to forget problems, rather than learn from them.

A common, although unsubstantiated belief that this process is not of great importance, is widespread amongst participants in the construction industry. There is, however, a great potential in effective debriefing to improve the briefing and hence the construction process, these can then also be used to improve future projects and achieve better client satisfaction. This survey has indicated that local construction professionals do not conduct debriefing effectively. This has a potentially negative effect on the development of concept development briefs for future projects with which they are involved.

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