

Barriers for Better Integration Management: A Case of Construction Industry

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Abstract- Construction management deals with effective management of the project's schedule, cost, quality, time, safety, scope, and function. It is compatible with all project delivery methods. One of the valuable fields of construction management is Integration Management (IM). Integration represents the proper communication among different processes of project. Integration management is one significant fundamentals of project management that incorporates all the project aspects. IM projects ensures the effective collaboration among the project events. The construction industry despite being among the largest employment sources possesses a negative societal image because of non-existence employee friendly practices and denying the societal alarms in the development of projects. It has been observed that there is a lack in integration management and the literature also lacks in addressing this important issue. Therefore, this study attempts to highlight the key barriers in maintaining proper integration in construction projects. A quantitative research has been conducted followed by a qualitative research. This study will help in completing the construction projects successfully by managing and maintaining proper integration management practices.

Keywords: Construction Industry, Integration Management, Barriers

I. INTRODUCTION

Construction projects usually undergo various complex problems including conflicts among project team members such as clients and contractors [1] [2] as well as protest from outdoor parties such as exaggerated community [3] [4]. Integration management in the project and the organization framework has been established to decline objective conflict, achieve more well-organized resource allocation, develop mutual management effectiveness and come up with new standpoints for managerial practices, sustainable developments etc.

Integration denotes to the proper communication among different processes of a project. One of the significant fundamentals of project management is integration management, that incorporates all project aspects. Integration management of projects makes sure the effective collaboration among the project events. [5] indicates the integration as thoughtful procedure of establishing of the supremacy structure, that assures the more systematic management of main necessities of participants. [6] described the most significant component of systems engineering as the integration management.

Ten major areas of knowledge vital to project management and four supplementary zones in its extension of construction have been registered by Project Management Body of Knowledge Guide (PMBOK). The project integration management has been listed as the first area of knowledge among those areas of knowledge that comprises of amalgamation, coordination and unification of procedures of management of project [7].

Due to critical role of integration in management of projects, this study is focused about identification of barriers in maintaining the integration in projects of construction industry of Pakistan, which has not been previously inspected. To perform this task a detailed literature review will be carried out followed by unstructured interviews from professionals working in the field. The data received from literature review and unstructured interviews will be analyzed through comparison among different research papers and the experiences shared by working professionals. The study will help in identifying the barriers that affect the integration in construction and some possible measures which will be helpful in maintaining the integration in construction industry of Pakistan.

II. LITERATURE REVIEW

Project management institute (PMI) described 14 total areas which include: project integration, cost, time, quality, scope, human resource, communications, stakeholder, risk, financial, procurement, ecological, safety and claim management. Previous researches exposed the influence of specific zones of knowledge over performance. PMI suggested areas of knowledge have been utilized in various studies of research [7]. Several research studies put their focus over managing the risk [8], technology [9], innovation and management of integration.

[10] carried out a study over knowledge of managing the projects to construction personnel. He prepared a prototype in which he investigated the effects of different areas of knowledge in achieving the success of project and the relationship among those areas of knowledge. [11] inspected that outcome of project is directly influenced by efficient management of scope.

[12] studied practices of managing the safety effects over performance of projects in the industry of construction. [13] provoked that project performance is extremely affected by financial attributes. [14] research exposed that a robust connection is there between the success of ecological management of project and performance of business. [15] established that managing the claim usefulness is critical by means of fruitful project completion, that in return results in improved performance of project. [16] also specified that the most significant components of improved performance is successful handling of claims. Therefore, this study is focused on barriers which come in the way of integration in construction projects. The study will help in identifying those barriers and will also suggest the measures that will be helpful in maintaining the integration management in construction projects.

III. RESEARCH AIM

The aim of this research study is to identify the major barriers towards the adoption of integration management in construction industry of Pakistan. It has been observed that conflicts between construction players put a negative societal image due to non-existence employee friendly practices. This study will help in identifying and minimizing the conflicts and issues that affect the projects adversely.

IV. RESEARCH METHODOLOGY

To fulfill the aim of this research; the research papers of last 2 decades were cautiously studied to identify the major barriers towards adoption of integration management claimed different researchers. The purpose behind this literature review is to see the most repetitive barriers in the way of integration in construction projects.

V. DATA COLLECTION AND ANALYSIS

The research papers from last two decades have been reviewed very carefully to identify the most common barriers in the way integration in construction. The research papers were collected from the sources like Science Direct, Elsevier, Google Scholar to analyze the barriers for better integration in construction industry of Pakistan. The data collected from the past research papers was transferred to excel sheets and arranged in order to identify the most repetitive barriers in the way of integration in construction by different researchers. Besides this, unstructured interviews from different workers working in the construction industry were also conducted to know the actual position and condition of barriers involved in construction projects which are hindrance in the way of integration management in construction. The interviews supported the research to conclude the research outcomes and findings.

VI. RESULTS AND DISCUSSION

The results emphasis on the barriers for better integration management investigated by different researchers in different countries of the world.

Different kinds of barriers that affect the integration management

Figure 1 shows the different kinds of barriers that come in the way of integration in construction discussed in last two decades research in different parts of the world.

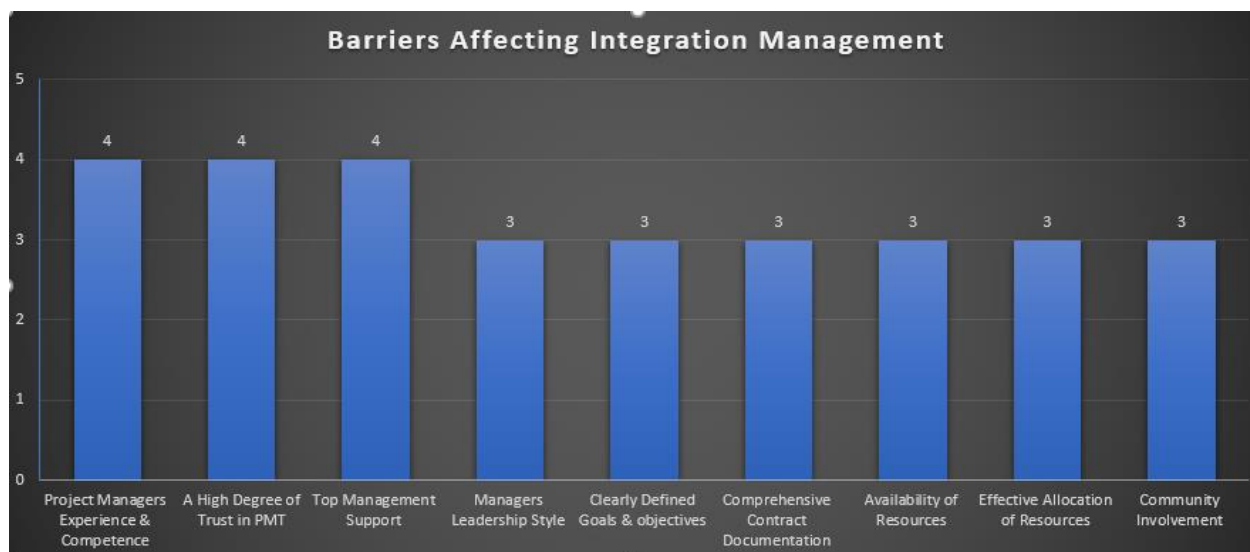


Fig.1 : Barriers affecting integration management

According to fig. 1 the research identified nine types of barriers that adversely affected the integration in construction projects which are; (1) Project managers experience and competence, (2) A high degree of trust in PMT, (3) Top management support,

(4) Project managers leadership style, (5) Clearly defined goals and objectives, (6) Comprehensive contract document, (7) Availability of resources, (8) Effective allocation of resources, (9) Community involvement. Therefore, it is suggested that project managers should focus on their work and take all the precautionary actions to avoid and minimize the barriers that come in the way integration in order to make the project successful in all means.

The research found that, success of construction projects depends highly on the project managers and their experiences and competence. It is necessary for the owners and client to hire the most experienced, qualified and competent person as the project manager. Besides this, few other factors like trust in project management team and top management support are also the important factors which shall be considered when going for a new project in order to make it the most successful.

The other factors or barriers which affected the integration were; bad leadership style of project manager, undefined goals and objectives, non-availability of resources, improper allocation of resources and not involving the community in the project came in the way of maintaining integration in construction projects. Therefore, it is the responsibility of the project managers to consider all these factors or barriers in an efficient way to complete the projects successfully.

Constructive relationships within project stakeholders, client's commitment to the needs of other stakeholders, economic and political stability were also seen as the major barriers in maintaining the integration in construction projects, which shall also be taken care of while planning for new or existing projects.

VII. CONCLUSION & RECOMMENDATION

The study highlighted the major and most common barriers that affected the integration in construction projects. To avoid these barriers, the project managers should take in all the necessary precautions before they convert into a dispute. Project managers experience and competence, a high degree of trust in project management team and top management support were the major barriers in maintaining the integration in construction projects. Project managers leadership style, undefined goals and objectives, not maintaining the contract documentation were also the major barriers followed by non-availability of resources, improper allocation of resources and not involving the community in the projects. Besides this, constructive relationships between project stakeholders, client's commitments to other stakeholders and economic and political instability were also considered as the major barriers towards the adoption of integration management in construction projects. In addition to these, it is recommended that;

- The project managers must hire the qualified, experienced, dedicated and goal-oriented team for the project.
- The care shall be given to the problems of the project management team and all the necessary actions shall be taken to resolve their concerns, so that the team can work effectively and efficiently.
- Goals and objectives should be very clearly defined, so that they should not create any misunderstandings and problems in later stages of the projects.
- All the project and contract documentations shall be properly handled and should be kept safe and easily available as and when required.
- The project managers must create a positive organizational culture and friendly work environment so that the goals are easily and effectively achieved.
- Effective and open sharing of knowledge shall be ensured by project managers in order to minimize the conflicts and issues during the project.
- Flexibility in project scope, the project manager should make the project scope flexible so that it is workable when unavoidable changes are incurred during the project.
- It should be ensured that there is no any social and political interference in the project.

It is expected that results of this research will be beneficial in reduction of barriers towards the adoption of integration management in construction projects and their successful completion.

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