INTEGRATION MANAGEMENT: A REPORT ON THE CONSTRUCTION PROJECTS

Salwa Iqbal¹, Sheikh Kashif Raffat², Muhammad Sarim² and Abdul Basit Shaikh²

¹COMSAT Institute of Information Technology (Virtual Campus), Pakistan ²Department of Computer Science, Federal Urdu University of Arts, Sciences and Technology, Karachi, Pakistan Contact: kashifraffat@fuuast.edu.pk

ABSTRACT- Successful construction projects and its P's entirely related i.e. people, process, product are dependent on management's ability to amalgamate different beads and informative pockets of knowledge into one thread. Because just like a strong stem, on which many things are naturally integrated and grown up with all of its parts in making it tree. Similarly, integration of any project is backbone of management. This integration concept was built due to some limitations occur during the project life cycle in past observations, like time delay in building construction, equipment and machinery failure complains, over costing, customer not meet their requirements and so on. These limitations put bad impact on project success. This literature is enlightened on the improvement factors of construction project's performance by prevail over those limitations. Integrated management provides knowledge skill out of nine areas and also some observations, which can cause failure and disability of famous constructed projects.

Keywords: Integration Management, Project Success Factors and Limitation, Construction Project

INTRODUCTION:

According to 2013 Global construction survey of U.S internationally has picked up a weak vein of the construction projects, which causes hangover in previous booms. Economic attacking virus, power and energy failure factors lack of new advanced and technical transportation, unskilled stakeholders etc. are the breaks of any project [1].

Project manager practitioners and all related management is dedicated towards their work also increase their performance with their past experience and now in upcoming era they are concentrating and focus on the new and inferential factors and strategies that would help more progress towards goal achievements. According to our survey on many literatures there are many processes and actions that are integrated in such a way to improve the performance of project some how we just throwing some rays of light on them with the examples.

Integration of construction project:

Integration management in construction projects involves assembling of infrastructure or building [2]. In this task many stakeholder are involved like Project manger, design manager, architect, political parties and so on. All they have a major role and responsibilities towards the particular projects.

Like in chemical bonding all atoms are well integrate to produce a successive substance. Integration management is the most important knowledge area, which provide platform for processes, and activities that integrate, coordinate the various elements of project management in one chain. Just like that a strong and victorious construction project coordination and integration of the various elements are necessary for project's success [3].

As we know Integration management is circulate through out the life cycle of project management from initial to closure and most significantly in planning phase [4]. So, the project's intention either become insolvent or become prosper is 80% compraises on planning. Dynamically construction industry based projects are comprises on budgets, development processes and increasing uncertainties

in technology. These projects very difficult and team faces complex challenges and changes. For improving the effectiveness of any construction project is gain by study and experience of project success and failure. One major objective of this literature is to understand and explain critical success and delays factors by different area. While some issues related with government funding and capital markets movements that are beyond the management control, for the future engineering and construction leaders can take steps themselves.

Extra following recommendations such as person move into sometimes-unfamiliar areas, it is crucial to have sufficient skills and segment knowledge about the people who will relate with project later. Enhance management of megaprojects, as US executive notes: "We must have the right people in the right location to participate in mega-projects that result from new opportunities. We will have to acquire companies that already have the people and experience in key markets."

Create a true risk management culture. In a sector that has grown rapidly through mergers and acquisitions, standardization has been an vital goal that contributes to project and risk management.

Improvement factors of a project:

Major problem that we saw in many construction project paradigm is to miscommunication as well as individuals or group are not well integrated. So many researchers state, "Rather operating as a separate and distinct parts is quite rubbish instead working on any kind of project as a team". Though our new advance management strategies proved that interface coordination process of managing is a key to reach the goal [5].

This coordination is heavily keep worth between the team members who tend to develop a strong bound and attachment for the project, feel like a functional "home", because more qualitative time required from them individually.

Customer is a main stakeholder of a project. Project is based on the requirements of customer so at every stage of project's progress he/she must know about everything and alert during the execution of a project if any changes required making. Further more he must be satisfied with the work project. Because of the pivotal role of a customer satisfaction process is a cornerstone for achieving objectives. One of the major issues, which is relate with construction project is time. Customer always complain about the project are not finished on time. As a captain of a ship, project manager has to play a responsible role for managing the project, bringing it on time and within the estimated cost will defiantly enhance the performance of project.

Other factors like quality and environmental management are appropriately manage the vagueness of the quality performance in construction projects [6].

Highly effected and new technological automatic materials and equipments (spare parts and machines) are main resources that will help to improve the quality of project in a very short time period and persons who are associated with those equipment must be capable to operate them technical and management knowledge is necessary for enhancing obviously.

When extra time required drawing to a close a construction project away from its original (planned) duration it usually produce a big loss in project by overrunning time, cost, disputes, arbitration, litigation and abandonment. So, identifying cause of delays and avoidance of it makes enhancement [7].

Project of Demolishing San Francisco's Bridge Safely:

This bridge was damaged at in 1989 due to earthquake LOMA PRIETA and had to safely demolish. This project is very complicated because at both end residential and commercial area situated and underground utilities of gas, water, and sewer lines were constructed already. In this case detailed project planning had to give surety of 100% project's success by the following such plans like; maintenance plan for the equipment as well as worker safety plan during using highly machines, a dust control plan, work hour plan, noise monitoring and load determinations etc. were strategic planning and continuous communication with company and others concerned with segment being demolished [8].

Disaster naturally in project planning in Iceland:

Naturally affected by the hazard's area of Island nation is Iceland not only volcano affected country but also snow avalanche, landslides like disasters are common there. Rebuilding projects are based on contingency planning because after immediate disaster construction has been started. Stakeholders in this project involve local Government, Insurance bodies, Iceland catastrophe insurance, Funds and contract repair organization. In the past theses bodies have not been coordinate and well integrated so after any disaster time delay was increased as well as political issues in which documented phase gone to be stuck. Therefore many enhancements has been made in this project like documentation is compulsory in respond planning, type of disaster is identified, project manager appointment process, consult financing bodies for charge at appropriate time [8]. The knowledge management in the whole scenario is the key factor that is not negligible [9].

Kala Bagh Dam and Iran-Pak gas pipeline:

After independence of Pakistan, the government and establishment realize the importance of water reservoirs for economic progress, as Pakistan is an agricultural country and must have the sufficient water reservoirs. For this purpose government of Pakistan made a committee and in early 50's they proposed Mangla, Tarbela, and Kala bagh as three largest reservoirs in Pakistan. But unfortunately Kala bagh is pending due to weak and failure integration management system.

The integration and interaction of stakeholders and their roles is the key of any project for its successful completion. The major stakeholders of KBD

- 1. People of provinces (Punjab, KPK, and Sindh)
- 2. Politicians (national and local)
- 3. Authorities and expert (national)
- 4. International parties (WB, UNDP)

Although in Nov 29, 2012 Lahore High Court ordered to federal government to build KBD as soon as possible, but no one want to take this responsibility. Federal government must establish the link between local politics and development project so, the more important projects (KBD) that our country really need to control flood and load-shading problems will got win-win situations [10].

Pak-Iran gas pipeline project is also very interesting project over debate where all political parties of world best country's playing dark role to hanging this project from the Pakistan side rather then Iran because it has to completed their work .USA and India are two breakers that are halting this project due to personal political problems. If this project would be successful then impact on the economy of Pakistan is incredibly increased and plenty of gas will help in many areas of it. These are twos examples related with Pakistan construction project in which lack of communication, internal or external relationship between stakeholders are clearly seen.

In both cases project's planning has been completed but later phases are absent over and above integration management is significantly necessary for improvement.

CONCLUSION:

However, it is our belief that productivity in construction and project completeness are the key elements for the success of any construction projects and company. It can be achieve by improving the eminence of life of those who will use and built the project of course people, valuable resource of any environment. Completing of projects on time with quality and estimated costing that reflect customer resources. All in all enhancements in effective construction project surly help to accomplish the project objective, they should not be neglected.

REFERENCES:

- 1. Global Construction Survey, "Ready for the next big wave?", *KPMG International* (2013)
- 2. Enshassi A., Arain F. and Al-Raee S., "Causes of Variation Orders in Construction Projects in the Gaza Strip", *J. of Civil Engineer. and Management*, **16(4)**, 540–551 (2010)

- 3. Luís M. A. D., "Integrated Management Systems in Construction Projects (IMSINCONS)", *Int. Social Sec. Assoc.—Construction Section, Tech. University of Lisbon*, (2004)
- 4. Ismail A., Abd A. M., Chik Z. and Zain M. F. M., "Performance Assessment Modeling for the Integrated Management System in Construction Projects", *Euro. J. of Sci. Res.*, **29(2)**, (2009)
- 5. Shi H. and Li W., "A Web-Based Integrated System for Construction Project Cost Prediction, Advancing Computing, Communication", *Control and Manag. Lec. Notes in Elec. Engin.*, **56**, 31-38 (2010)
- 6. Shiau Y. C., Wang M. T., Tsai T. P. and Wang W. C., "Developing a Construction Integrated Management System", *ISARC 2002, Washington D.C., USA*, 23–25 (2002)
- 7. Salleh R., "Critical Success Factors of Project Management for Brunei Construction Projects: Improving Project Performance", Thesis of PhD, School of urban development, Faculty of built environment and engineering, Queens land University of technology, (2009)
- 8. Meredith J. R. and Mantel Jr S. J., "Project management: A Managerial Approach", *Fifth ed., John Wiley & Sons*, (2003)
- 9. Shafiq F. and Ahsan K., "Knowledge Management for Disaster Scenario: An Exploratory Study", *Res. J. Recent Sci.*, **2(10)**, 61-66 (2013)
- **10.** Awan S. A., "How can public participation in the Pakistan EIA system be improved?", *Master thesis in the Institute of Development and planning at Aalborg University Denmark*, (2006)