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ASSESSING THE ROLE OF QUALITY MANAGEMENT IN IMPROVING CONSTRUCTION INDUSTRY STANDARDS

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ABSTRACT

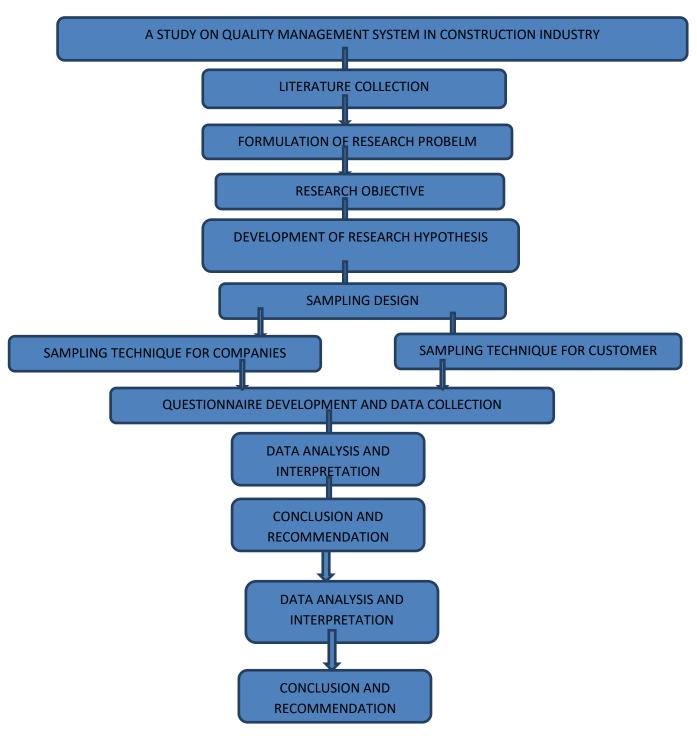
After agriculture sector, construction sector is *second largest sector*. As it is big sector, so there is tough competition. Due to more competition and many firms are in market and as these building projects are complex, clients also used to increase their demands and also at a very cheap rate. This further lead to making compromise in quality of supply that must be avoided. It is basic factor for success of construction projects. Quality used in construction projects, could also be regarded as satisfaction for project participants. In many industries quality management system has been successfully adopted. It is also becoming most important part of construction these days. In this thesis, we will study about quality management system for small contractors. For any type of work in any project, contractor is the only person who is responsible for quality of project. After asking several questions from the contractors, this study is carried out. Data collected from several questions were being analysed by *Relative Importance Index (RII) method*. On the basis of RII the *mean and median* were deliberated and ranked for each factor that on which project is done. The result calculated from the factors obtained is the highest rank is review on system undertaken by top management at pre-defined interval was *maximum* and adequate provision of appropriate resources for performance of work.

I. INTRODUCTION

- To achieve development venture, quality is the key factor. Quality to achieve task and for development ventures, can be looked as to fulfill the desires of undertaking members. India's development business is battling with quality problems from a long time. Much money is spent on framework and other improvement ventures every year. But at last results for quality is not satisfying the required principles, defects occurs. Thus extra conjecture is required to evacuate deformities and support work. A development venture in its life experiences adverse stages. The principle period of task can be illustrated as: theoretical exhibit, achievability insist, plan, acquisition, development, recognition, activity and brace.
- Quality of development ventures is coupled with relevant quality guidance in undertaking life cycle of
 every one's period. Outline and development are the two the censorious period of undertaking life cycle
 which had impact on quality result of development extends essentially.
- In a NEDO (National Economic Development Office), London study goes to enhance technique used for quality control in building works and it was brought to light that "outline" and "poor workmanship in the development procedure" joined to frame over 90% of the aggregate let-down instance. This paper accordingly, centers itself around the quality administration in the enactment period of development ventures. The point of this paper is to highlight the importance of quality administration in the accomplishment period of development ventures.

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II. METHODOLOGY



The thesis is helped a lot through various poll studies at construction site and also by testing uses of Total Quality Management in development industry. The concept of research is use of TQM by Sub-Contractor.

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The main aim of thesis is to provide knowledge about TQM. A aspire would be made to reflect on the usage; difficulty peeked by small contractual laborer in building out venture and in HR. This would be helpful to little contractual laborer as well as to business visionary who planned their work or business in blooming.

III. SCOPE OF STUDY

This study offers to determine the accuracy and implementation of QMS in the progress of business and expansion of an "assessment approach" of evolution forms for consumer loyalty and continuous change. The main idea of this inspecting venture would be to identify "what" procedures can be evaluated and "how" to compute them.

To acknowledge the above target, writing trail, surveys and meetings would be availed. The tools used as a part of the approximation would be one or a few of the "Apparatuses of Total Quality, for example, control & run graphs, conditions and final result charts, flowcharts, check sheets, Pareto outlines, and histograms. For closer development industry, this project has the ability of showing plus points of making use of TQM in their alliance. This would be absolute in reflecting that quality change ventures can be estimated.

IV. CONCLUSION

- On whole, I want to summarize that most prominent factor in any construction task or project is the quality management system.
- Surveys executed on small level construction projects helped us to find the count of quality assessment
 in small contracts and that they practice appropriate objectives and authority for the management of the
 quality.
- The conveying methods and instruments primarily play an important part in the quality management with proper transmission instruments like telephones and waki taki for the reporting demands.
- Appropriate attestation for the required instruments of construction projects, the count of employees and the equipments should be found in the survey.
- The bona fide management of the quality evaluating labs, apparatus testing labs for the requirement of the checking of material and attestation is prime need for quality management. The furnishing of the resource management at the location of construct is necessarily found in the whole survey. The appraisal of the subcontractor and the experimentation and examination of the subcontractors is seen to be principal at the site and is required to be implemented effectively for the demand of the total quality management.

REFERENCES

- 1. AnupW S, Arun Kumar H and SNA Saqhi (2015), Study of Quality Management System in Construction, International Research Journal of Engineering and Technology (IRJET) Volume: 02 Issue: 02
- 2. D.Ashok kumar (2014), Study of Quality Management in Construction Industry, International Journal of Innovative Research in Science, Engineering and TechnologyVolume 3, Special Issue 1
- 3. David Arditi and H Murat Gunaydin (1997), Total quality management in the construction process International Journal of Project Management Vol. 15, No. 4, pp. 235-243, 1997 Pergamon
- 4. G.S.Jegan and Dr.P.S.Kothai (2017), A Study on Quality Management System and Customer Satisfaction IN Construction Companies with a Special Reference to Coimbatore IJETSR ISSN 2394 3386
- 5. Gulin Idil Sonmezturk Bolatana, Sitki Gozlub, Lutfihak Alpkanc, Selim Zaimd, (2016) The impact of technology transfer performance on total quality management and quality performanceProcedia Social and Behavioral Sciences 235 (2016) 746 755 Elsevier
- 6. James L. Burati, Michael F. Matthews and Satyanarayana N. Kalidindi (1991) QUALITY MANAGEMENT IN CONSTRUCTION INDUSTRY J. Constr. Eng. Manage., 1991, 117(2): 341-359 ASCE
- 7. Jumah M.Th. Al-Dulaimy, Faithy Alkhazraji, Rami H. ALHadeethi and Jamal O. Sameer (2015), Evaluation of Total Quality Management Implementation as Engineering Practices in Jordanian Construction Projects IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE)
- 8. Kriengsak Panuwatwanich, Thanh Tung Nguyen (2017), Influence of Total Quality Management on Performance of Vietnamese Construction Firms Procedia Engineering 182 (2017) 548 555 Elsevier
- 9. Low Sui Pheng and Jasmine Ann Teo (2004) Implementing Total Quality Management in Construction Firms ASCE 10.1061/~ASCE!0742-597X~2004!20:1~8!

ISSN: 1674-8190

- 10. Mehran Mazari, Soheil Nazarian (2017), Mechanistic approach for construction quality management of compacted geomaterials Transportation Geotechnics 13 (2017) 92–102 Elsevier
- 11. P.L.T. Hoonakker, Todd Loushine and Pascale Carayon (2004), the Relationship between Safety and Quality Management in Construction. Research Gate
- 12. Richard Reed, David J. Lemak, Neal P. Mero (2000), Total quality management and sustainable competitive advantage Journal of Quality Management 5 (2000) Pargamon
- 13. Sergey Lukichev & Marina Romanovich (2016), The quality management system as a key factor for sustainable development of the construction companies Science Direct Procedia Engineering 165 (2016) 1717 1721
- 14. Shreyas Gowda C H, Ramesh Nayaka, Sachidananda Murthy S, Shashi Kumar B N (2015) Total Quality Management in Construction International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056
- 15. Suganthi P, Sornalakshmi R ,Srinivasan N.P, Nivethitha M, Priyavadhana (2017) A study of factors affecting total quality management in construction projects SSRG International Journal of civil engineering ICRTCETM
- 16. Theo C. Haupt, MCIOB, Mais Daniel E. Whiteman (2015) Implementing Total Quality Management on Construction Sites ASCE.