

**Major Practical Assignment**

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| **SUBJECT** | Project Operations Management | |
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| **MARKS** |  |  |

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# Answer 1

Before the commencement of the project, the project manager should have sign a research task force that would collect the customers’ and project owners’ requirements, in order to ensure satisfaction. This would enable the project management to understand, evaluate, define and manage customers’ expectations. Afterwards, the project manager should have defined a control and evaluation strategy, which would have served as a guide during the construction of the houses. These plan would have served as the bases to the other project task such as, recruitment and management of human capital, procurement of quality materials and machinery, and the allocation of finances and resources. After the completion of each phase the project manager should have inspected that all was in accordance, so the team moved to the next task. These would have ensured prevention over inspection. The inspection would also allow the project to be fit for use at the very first time it was completed.

# Answer 2

**Cost-benefit analysis**: With this tool, the team would have understood the expenses of managing and doing rework on the project.

**Cost of quality**: the team could have used this technique to identify possible defects on its operations and the cost required to perform Quality Planning, Quality Assurance, Quality Control and internal failure cost, in order to avoid failure. Some of this cost may include: training cost, testing cost and equipment.

**Control Chart**: would have been used as a planning tool, to find out whether the project is feasible or not.in case the project was deemed feasible, the tool would help to determine the limits of the project.

**Benchmarking**: this technique would open the vision of the project team to think outside the box, by comparing and reviewing the materials and methods used in other previous constructions.

**Design of experiments**: this technique would have helped to determine which combination of construction material would produce the most desirable characteristics at a reasonable cost

**Statistical sampling**: would allow the team to test a representative number of houses in each phase of construction.

**Flowcharting**: this tool could be used to determine the order at which the construction task should have being performed.

The use of **Proprietary quality management methodologies** such as the Six sigma would have allow them to identify defects in the first built houses, therefore, leaving room to improvements.

# Answer 3

Cost of conformance could be applied by spending money and resources on the prevention of quality issues rather than for fixing them. The cost of conformance in they project could include; training, equipment, sufficient time, sufficient time, enough research and benchmarking, testing, and quality control and audits (Sebastian, 2021).

Cost of non-conformance could be applied by spending money on the reduction of risk, fix of failures and corrective measures. Some of the cost of non-conformance to be applied in this project could be inspection and rework. The rework may lead the company to offer assurance and warranty in case the product produce is deemed to be not fit for use (Hattenrath, 2022).

# Reference

Sebastian, S. (2021, February 8). *Cost of Quality (COQ) – Cost of Conformance vs. Cost of Non-Conformance*. Project-Management.Info. https://project-management.info/cost-of-quality-coq/

Hattenrath, H. (2022). *Factors, Metrics and Tips on Quality Management for the Non Conformance Report Process*. ProjectManagement.Com. https://www.projectmanagement.com/blog-post/65700/Factors--Metrics-and-Tips-on-Quality-Management-for-the-Non-Conformance-Report-Process