

- **Pros:** With resources mapped out, you know exactly who is available for what part of the project, and collaboration on tasks is made easier.
- **Cons:** Because additional time buffers are built into each stage of the plan, Critical Path doesn't work very well for small-scale projects with a quick turnaround.

Option# 3: Use Six Sigma.

Originally developed by Motorola, Six Sigma is a project management framework designed to be driven by data. At its heart, it aims to improve quality across a project by reducing defects and bugs. The name refers to the fact that a "Six Sigma" rating indicates that a product is 99.99966% error-free. It is another methodology requiring certification.

- **Pros:** Six Sigma doesn't just take into account one aspect of the process - it looks at everything, and will often suggest improvements before defects even appear.
- **Cons:** Being a data-driven quality-assurance system, Six Sigma can be extremely rigid, which some teams find limit their creativity.

DECISION MATRIX

| Alternative Courses of Action | Efficiency (Time) | Cost Wise | Effectivity | Quality Improvement | Total |
|--|-------------------|-----------|-------------|---------------------|-------|
| Retain the short term outlook schedule | 3 | 3 | 1 | 1 | 8 |
| Critical Chain / Path | 1 | 2 | 1 | 2 | 6 |
| Six Sigma Methodology | 2 | 1 | 3 | 3 | 9 |

VII. RECOMMENDATION

I recommend Option # 3 which was to use the Six Sigma methodology to solve the problem regarding declining manufacturing productivity and quality of the company.

VIII. IMPLEMENTATION

| Task | Duration | Lead Person | Requirements |
|---|--------------|-----------------|--|
| Suggest the need to implement Six Sigma and its benefits. Allow the top management to decide whether to approve the proposal. | 1 to 2 weeks | Project Manager | Discuss the need to implement Six Sigma to the top management and include in the discussion about its corresponding impact on the company. Let them assess the pros and cons of Six Sigma. |