

# JK Paper Approach To Its Cost Competitiveness

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## ABSTRACT

Cost competitiveness is a continuous Improvement process which works as sequel to value addition at each stage of processing in any manufacturing unit. Additionally, cost & quality go hand in hand. Both are complementary and in today's scenario, quality at lowest cost is order of the day. JKPM as a leader of quality products like JK Copier, JK Excel Bond, JK Bond, JK Cote etc has never lost sight of cost and it has been our constant endeavor to optimize cost in each operation.

Though, Cost Compression / optimization is being practiced on a regular basis, thought was given in the year 2000 after which the process of cost compression was institutionalized. This paper describes how in JKPM, cost compression measures took off in a more scientific way and on a sustained basis, its modalities and benefits accrued. It also touches upon how source of the major losses were identified and efforts made for their reduction. Best of technology, best of machines & a whole lot of things can be had at a price, but, optimization of cost and efficiency is truly in-house which JKPM has successfully established.

### Introduction:

J.K.Paper Limited, since beginning of its conception is standing as a manufacturer of Quality Products. About two decades back, with the Globalization of Indian Economy, all the industries suddenly realized the importance of cost competitiveness. Like other industries, paper industry also took a step back and paved way for this seemingly invincible environment which compelled to cut cost. However, the ever creative J.K.Paper did not loose time to bounce back and since then, it started practicing Cost Reduction as part of its routine activity and made it as one of the Key Performance Indicator. Any manufacturing process can be considered as process of value addition along the supply chain.

### Cost Reduction Activities at JKPM:

The cost Compression Initiatives / Cost reduction initiatives carried out by JKPL in a systematic manner since 1996 by forming a small group of 4 -5 members consisting young energetic MCS and the team is given the responsibility as well as authorities for carrying out cost compression job in a defined way for reaching to a few Implementable low risk ideas for Top Management approval & subsequent implementation.

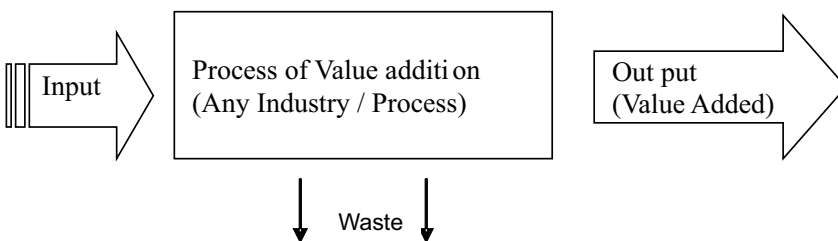
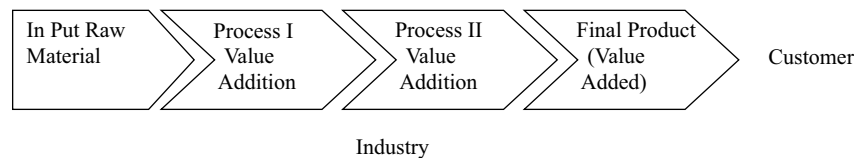
In the year 2000, JKPM gave a thought to its cost compression activity to make it more scientific & institutionalise in a sustained basis. For this, the company has separated a group of Intelligent experienced MCS with a leader for different areas of operation for studying the areas cost & efficiency to locate

potential sub processes having losses / lower efficiency as given under:

- Pulp Through Put & Recovery Throughput.
- Paper Throughput.
- Paper Cost
- Pulp Cost
- Energy Cost
- Packaging & Logistic cost.

The teams are trained up with the help of external faculty for carrying out the exercises explained below.

- Understand cost base
- Identify KPIs
- Set savings targets
- Generate Ideas through Brain Storming (Brainstorming involves posing concrete questions and orchestrating the process for answering those questions)
- Prioritise the Ideas on basis of technical feasibility, Implementability & savings.
- Evaluate Ideas of prioritised ideas on Risk Involved, Return on Investment, Capital Investment, Benefits (Qualitative & Quantitative) & any other applicable aspect( Ex- legal requirement, Safety etc)).
- Syndicate Ideas Evaluated Ideas in the form of a well designed Format having all details of Idea, investment, saving & Risk along with additional information if any.
- Sign off for implementation
- Plan projects
- Forecast KPIs
- Name idea and task owners
- **Implement the Ideas through Idea owners.**



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The result of two such waves were:

Teams Formed = 12 nos.

Ideas Generated = More Than 500

Implementable Ideas = 174 ( fully evaluated & approved for implementation)

Ideas Implemented = 135 nos.

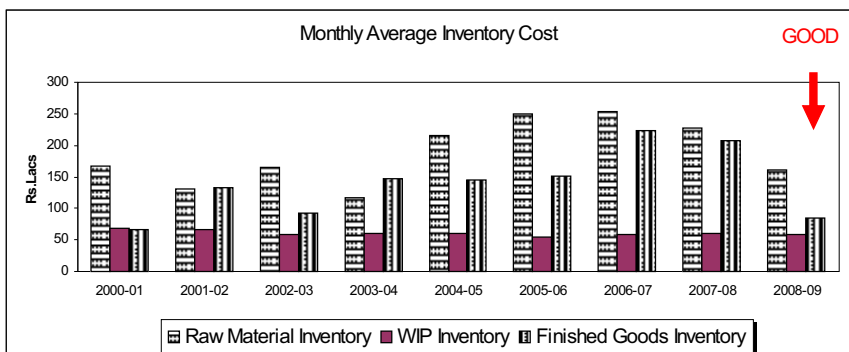
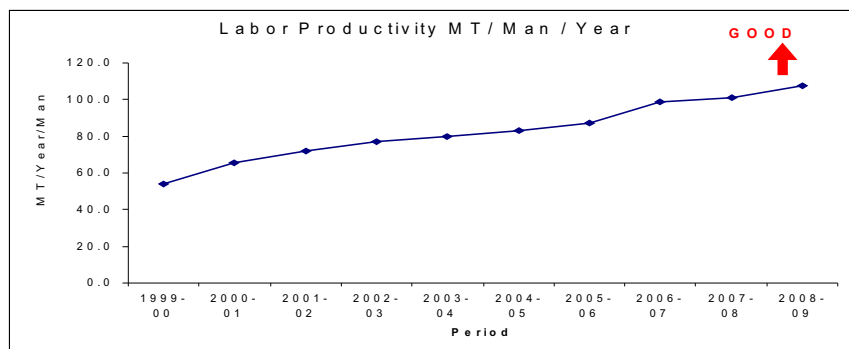
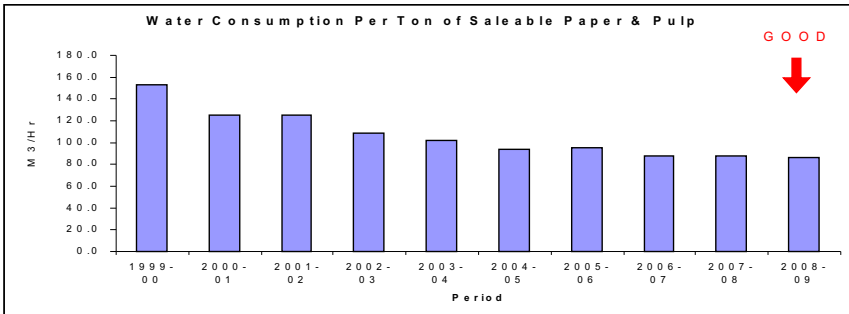
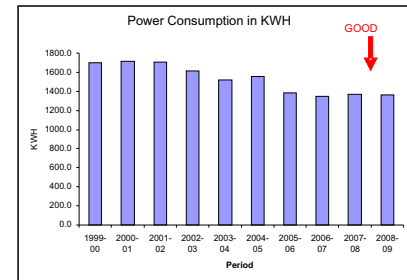
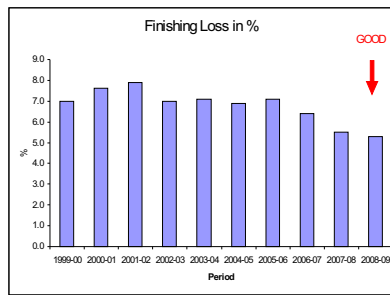
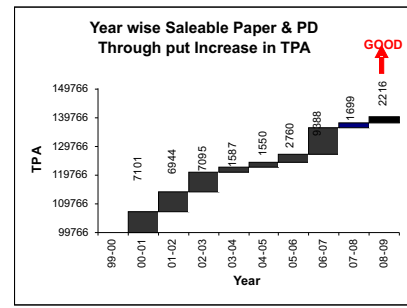
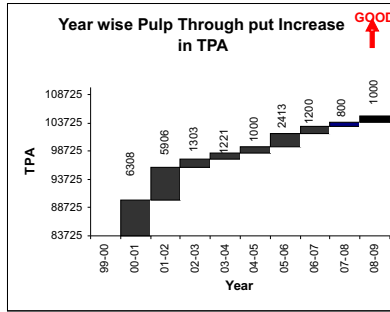
Savings projected = Rs.3275 Lacs/Annum

The team is dispersed after completion of one cycle after 4 months to their respective work areas and monitoring of the implementation of ideas & their benefits (An idea is monitored for at least 2 years for benefits) is carried out by a Cost Compression cell. The cell maintains only data against each cost reduction activity. The performance is reviewed by three tier review process with clearly defined review calendar as given under.

- Weekly reviews by respective department heads
- Fortnightly joint review by program leader & Unit Head at works with active follow up of "star" ideas.
- Monthly reviews with Head at Head Office.

New team is formed every new cycle each year involving new MCS there by involving most of the people in the process. This helps the management to increase cost consciousness of their MCS and also to locate specific talents of each of the team member has. The team members also get motivated, energised with new & detailed learnings from the whole process about various analytical techniques, process it self, Literatures etc. The complete process is done in house and with an objective of strengthening the skills w.r.t. cost reduction activities as well as to speed up the cost reduction process, JKPL is arranging some external consultancy hiring in a gap of 4- 5 years. The basic approaches followed for cost reduction in various areas are as under:

- I. Energy Audit.
- II. Adoption of cost effective new technology.
- III. Use of cheaper substitute.
- IV. Competition among suppliers.
- V. Import substitution.
- VI. Life cycle Management.
- VII. Bench Marking & Target setting.
- VIII. Reverse Auction.
- IX. Standardization.
- X. Bottleneck Analysis.



## XI. Break Down Analysis & Availability.

### **Results:**

This helped JKPM to achieve its continuous improved performance as indicated by the following trends.

We observed high inventory cost for last few years. On analysis, we could find that the high inventory cost is due to high Raw Material inventory cost as we were maintaining Raw Material inventory for more than 66 days.

The reason for maintaining such a higher inventory of Raw Material as well as all advantages & disadvantages in maintaining such high inventory listed out. The major disadvantages with Raw Material are as under:

High Carpet Loss

High Yield loss.

Higher cost of Raw Material

Higher Logistic Cost.

Low availability of Raw Material.

Higher pulping cost as well as bleaching cost.

High Inventory cost.

To resolve the issue, we approached the above problem in following manner.

1. Team is formed and experiments carried out in Yard by making a stack and consuming the same after 4 months storage.
2. Based on team findings, experiment carried out under controlled laboratory condition on similar raw materials to confirm findings.

3. Literatures scanned to cross check the lab findings as well as yard experiment findings.
4. Simultaneously, evaluating various raw materials species wise, identified most trouble some raw materials in our mix.
5. After confirming material loss on storage and identifying most critical species, present raw material procurement system relooked & reviewed.
6. Following Strategies made after Brain Storming, idea generation, Idea evaluation.
  - Inventory to be reduced by 50%.
  - Stacking & Storage of Raw materials to be minimized.
  - Maximum storage period for material which is giving highest material loss on storage is one month & FIFO to follow to consume the material.
  - Maximum storage period for material which is giving a medium material loss on storage is three months & FIFO to follow to consume the material.
  - No raw material to be unloaded on floor. Instead all the materials are to be unloaded on platforms & dallas from which, material can be fed to chipper directly with the help of grabber with minimum loss.
  - Maximum material to be consumed directly to avoid storage loss, multiple handling loss, to increase loading etc.

The immediate results of the idea after implementation could be seen as given under.

- Raw Material Handling cost / Logistic cost reduced by Rs70/-Ton of raw material.
- Raw Material cost reduced by Rs.150 /- per Ton of AD raw material.
- Raw Material Inventory reduced from average 66 days stock to average 36 days stock (22 days 45 days).
- Operation of Pulp Mill is much stable yielding a pulp with stable quality.
- Visible reduction of carpet loss. (actual can be assessed after 6 months)

Thus JKPM is maintaining its cost competitiveness by making Cost Reduction on a Continuous Improvement basis with out any addition of major new technology or capacities involving higher capital investments.

### **Conclusion:**

Addition of capacity and adoption of new technologies to increase volume & there by to reduce cost of manufacturing is possible only with huge capital investment. But with out any major investment, optimization of efficiency of process, equipment & plant is possible with implementing cost reduction measures on a continuous basis.