

How to improve paper mills' industrial sites?

The paper industry faces continually increasing pressure to be competitive

Paper groups' margins are being squeezed, requiring an annual improvement of the equivalent of 3 to 4 EBITDA points to remain profitable:

From cycle to cycle, we see a downward trend in the price of paper of 2 to 3% per year.

At the same time, costs are increasing due to:

- Labour cost inflation,
- Increased investment to meet environmental and safety standards,
- Rising client expectations regarding customer service,
- Caused by market deregulation price rises in electrical and thermal energy.

In addressing this situation the paper industry cannot rely on new investments:

Production over capacity in mature markets is frequently 20% or more;

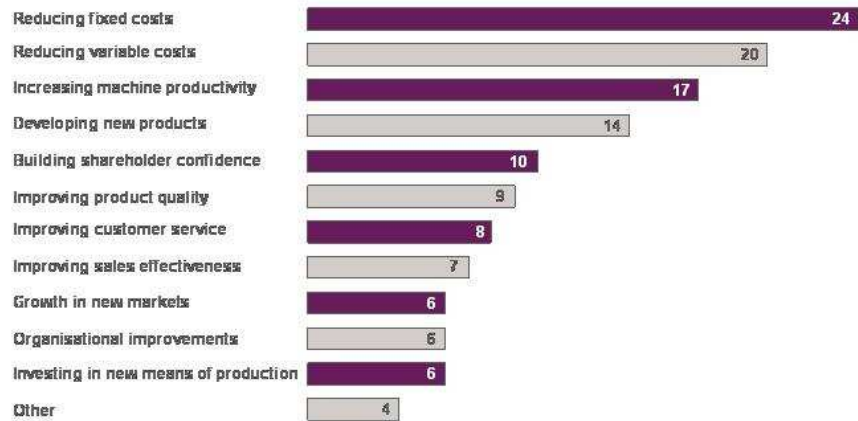
Investment is being prioritized for growing markets in Asia;

To win limited investment from shareholders, who are concerned about return on capital, mills belonging to the same group compete against each other.

A survey conducted by Hemeria with 40 paper industry leaders confirms 4 main focus areas:

1. Reducing fixed costs through organisational streamlining and purchasing optimisation to reach a level that is sustainable during periods of reduced activity.
2. Controlling variable costs by introducing control systems for manufacturing processes and consumption per ton produced;
3. Improving machine productivity and Overall Equipment Effectiveness (OEE) by systematically examining the causes of "good" paper loss;
4. Developing new products that meet growing customer demands and profitability criteria.

What are your company's 3 priorities? (number of replies)



To remain competitive, business leaders in the paper industry must fundamentally change mill working practices, in particular:

1 - Instil a culture of strict industrial procedures, until now under-exploited due to a reliance on investment:

- Using feedback and valuing operators' knowledge remains the exception rather than the rule;
- Tools for measuring operational and financial performance are often "inadequate";
- Procedures and techniques which provide the necessary focus for long-term projects are frequently lacking.

2 - Integrate into the mills' everyday operations a sense that power has permanently shifted in favour of the customer:

- Awareness of customer expectations remains limited in production;
- Making quality control concessions to sustain performance in the short-term means loss of customers in the medium term;
- Finishing doesn't fulfil the role it could;
- Too little attention and too few resources are given to organising mill responsiveness and improving the service rate.

3 - Reinforce actions designed to halt skill erosion and compensate for:

- The loss of expertise gained over time due to the increasingly top-heavy age pyramid;
- Skills outsourced to suppliers, particularly paper machine manufacturers.

What can be learned from the projects undertaken by Hemeria for the paper industry?

The success of industrial performance improvement programmes depends on introducing strong management systems, often overlooked in favour of technical solutions:

A methodical, rigorous approach enables a wide array of operations to be both coordinated and successfully completed by drawing on teams' experience, particularly through:

- Monitoring of performance (production meetings and passing instructions between shifts);
- Common tools and methods;
- Setting goals and quickly addressing difficult issues;

Performance indicators and monitoring procedures pinpoint and prioritise areas where work needs to be done, drive teams and make it possible to deal with slippages;

Stepping up front-line management and reinforcing control provides the extra attention and initiative necessary to avoid slippages;

Furthering the partnership between technical departments and production optimizes overall performance (servicing, quality, product development and technical design department).

Achieving swift results means finding the right balance between short and medium-term actions:

More often than not, purchasing and overall company organization offer potential areas for improvement, which would bring swift results but which are frequently neglected;

In the medium term, the greatest potential lies in improving machine productivity in conjunction with a concerted effort to boost sales;

Controlling variable costs and material wastage requires daily effort over a longer period.

An approach which offers significant gains in performance

By way of example, Hemeria helped one of its paper industry clients to implement a competitiveness enhancement project. The aim was to triple its EBIT, absorb cost slippages for the next 3 years and strengthen management methods at all levels of the company.

Hemeria particularly focused on three work streams:

1. Re-engineering company organisation and tightening up specific departments;
2. Optimising purchasing costs, including maintenance;
3. Instilling work methods to improve one of the machine's OEE:
 - Implementation of OEE performance indicators, fixing objectives and implementing daily tracking of priority areas:
 - Machine slow down,
 - Reducing the frequency and duration of tool change-over and paper breaks,
 - Reducing format-based losses,
 - Reducing the breakdown rate;
 - Close monitoring the day to day running of the machine:
 - Increased presence of front-line management at the machine,
 - Management skills of the day shift,
 - Daily production review and passing instructions between shifts;
 - Instilling continual improvement methods facilitated by the machine operating team:
 - Campaign reviews and analysis of causes of OEE losses with the machine operators,
 - Introduction of visual management.

After one year, the achieved savings were more than 5% of the cost structure, thereby covering the cost of the program well before it had come to term.

In addition to this cost reduction, the paper machine OEE increased by 5 points during the program's first four months.

Furthermore, management practice progressed towards new levels of method, rigour and monitoring, necessary conditions for sustaining the program's gains over the long-term. To quote one of the project's main partners *"Hemeria's methods and tools provide a high degree of structure. The consultants bring with them the necessary energy, working alongside our teams to attain and sustain improvements in business performance."*