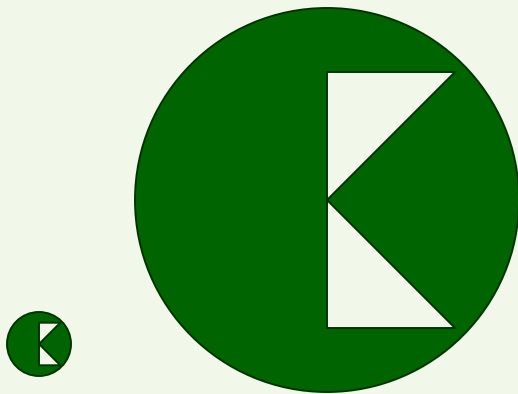


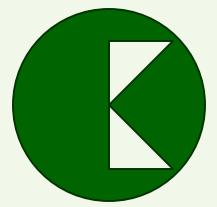
# Implementation of a **Paper Loss Reduction Program**



## **QUALITY APPROACH**

### **Formation of a Problem Solving Group**

- Propose solutions
- Determine necessary investments
- Calculate investment returns
- Put solutions in place
- Gain approval of management



## PROBLEM

- Manufacturing of paper for magazine printing
- Lost paper: 15%  
(Each 1% represents \$1,000,000 annual loss)

## GOAL

- Reduce paper loss to 12.5%

## FACT FINDING / ANALYSIS OF CAUSES

- Formation of a work group
  - 5 employees leave current responsibilities and are completely devoted to this for 8 weeks

## ADDITIONAL SUPPORT

- A support group of 4 people
- A sub-committee of 4 people
- 110 employees of the target sector



### Study to assess the distribution of loss:

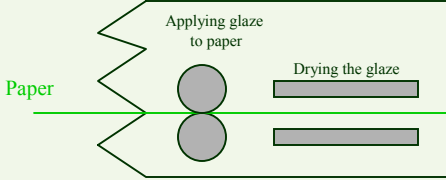
Unusable paper from coater blade problems	55.0%
Quality problems incurred in the course of production	14.4%
Paper loss when starting up coating equipment	11.8%
Loss attributed to change of paper grade	7.5%
Loss attributed to paper stuck to ends of rolls	5.1%
Loss attributed to paper tearing during glossing	5.1%
Sampling	1.1%

## ACTION PLAN

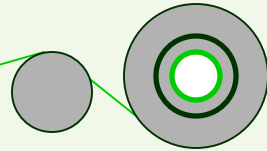
- Study the analysis of paper loss
- Brain-storming session open to all employees of the targeted sector and other areas
- 26 ideas emerged--15 projects used in the first stage



### Coating of Paper



### Rolling of Paper



### Paper Loss

When starting the coating process or during adjustment period

### Paper Loss

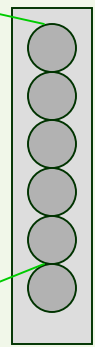
In Course of Production

### Paper Loss

When stopping supercalender

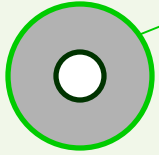


### Supercalender (gives lustre to paper)



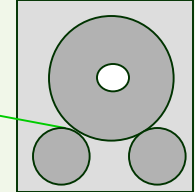
### Paper Loss

When starting supercalender



### Winder

(cuts paper to desired size for printing)



### Paper Loss

At the end of reel



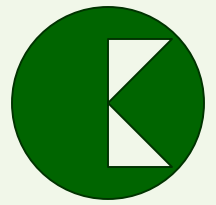
### Ideas Submitted by Employees

1	Optimize starting and stopping of calender 4	Jean Guy Beaudoin
2	Identify funds and capital	Danny Head
3	Addition of re-reeling 50% of coated paper	Raymond Landry
4	Optimize shipping/loading of different paper grades	Danny Head
5	Audit of work methods	Raymond Landry
6	Reduce funds spent on coating and coating machines	Daniel Dumont
7	Increase the size/diameter of rolls	Daniel Dumont
8	Automatic re-alignment system	Danny Head
9	Information on switch board	Jean Guy Beaudoin
10	Follow through process/system	Pierre Robert
11	Automate start-up of coating machines	Pierre Robert
12	Annual cleaning of equipment	Pierre Robert
13	Monitoring work posts	Pierre Robert
14	Maintenance of slitters with sandblasting	Daniel Head
15	Make a splice within 14" on the winder	Daniel Dumont
16	General maintenance	Raymond Landry
17	Improvement of supercalender	Jean Guy Beaudoin
18	Management of refiners	Daniel Dumont
19	Improvement of winders	Jean Guy beaudoin
20	Improvement of coating blade	Daniel Dumont
21	Reduce sampling	Jean guy Beaudoin
22	Maintenance and cleaning of blades	Danny Head
23	Change identification of good paper quality when accelerating	Jean Guy Beaudoin
24	Wash/rinse ends of support rolls	Pierre Robert
25	Stop sampling on supercalender 4	Daniel Dumont
26	Optimize starting/stopping of calender 2	Jean Guy Beaudoin

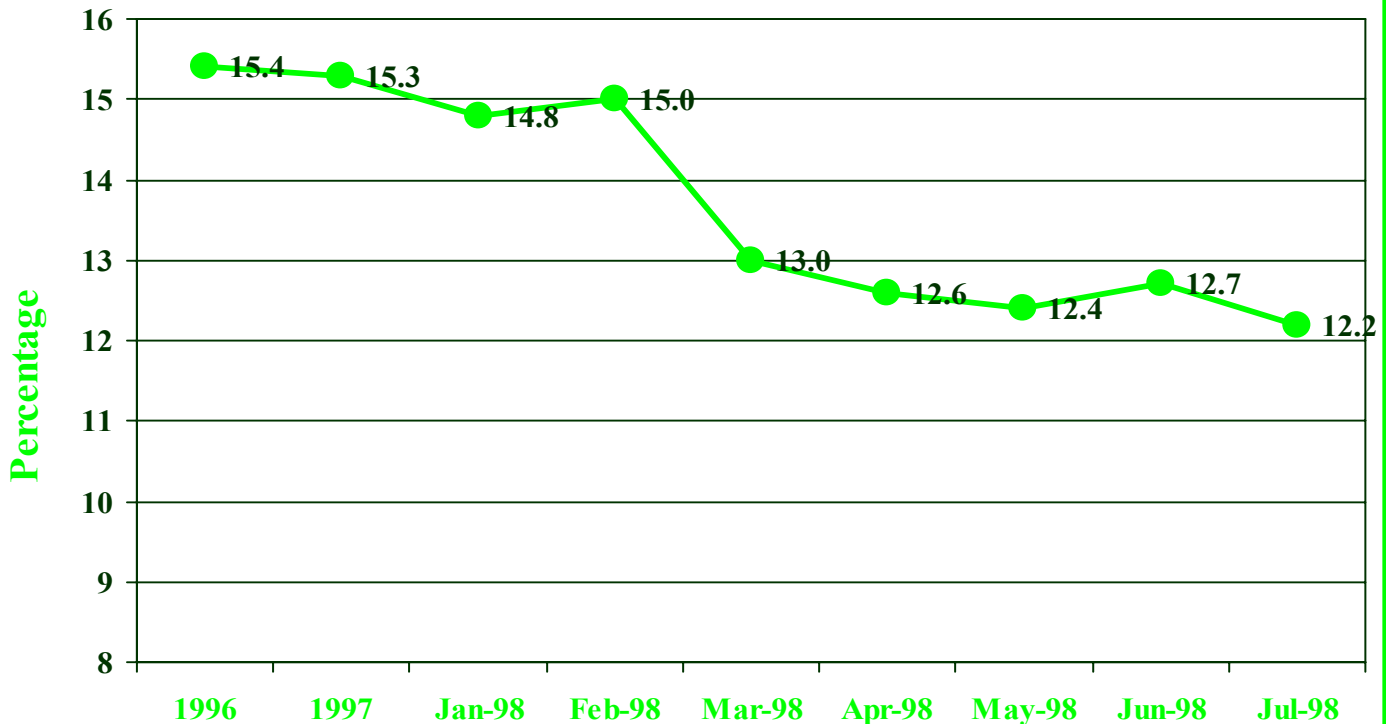
### Involvement of management to ensure:

- Application of solutions
- Follow-through
- Review of processes

# RESULTS



## Statistics on Paper Loss



- January 1998: Formation of work groups
- July 31, 1998: Majority of projects in place
- July 31, 1998: Actual paper loss--12.2%
- Anticipating a reduction to 11% by December, 1998

**Involvement of all employees in the decision making process is the key to success for a winning enterprise.**