

PIMA Manufacturing Reliability Specialist Group Research Study - 2003

PIMA ANNUAL CONFERENCE

New York City July 1, 2003



VISION and MISSION

- ...create a paper industry culture focused on performance of assets that demonstrate leadership.
- Raise awareness of asset management issues throughout all levels of the paper industry and provide education and tools for professionals that advance leadership skills.

Why do a research study?

TAPPI Journal, Aug 02 - “P&P industry has not created value for its investors over the last 10 years.”

AMR Research, *Alert on Manufacturing*, Oct. 2000 - “...asset management implementations have left billions of dollars of asset optimization benefits on the table.”

BCG 1998 - “improving fixed assets productivity is the is the most powerful mechanism to improve shareholder return.”

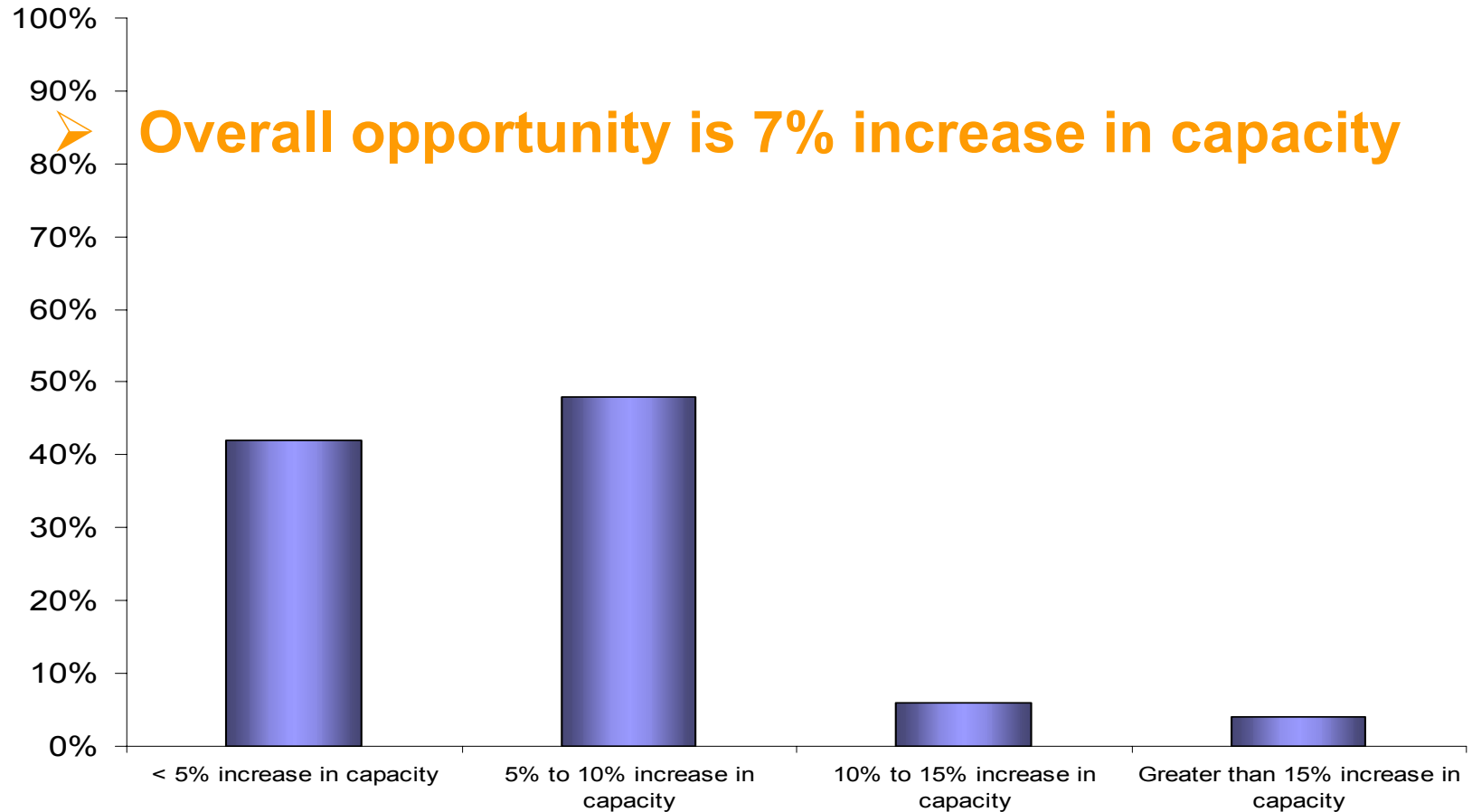


Research Study Objective:

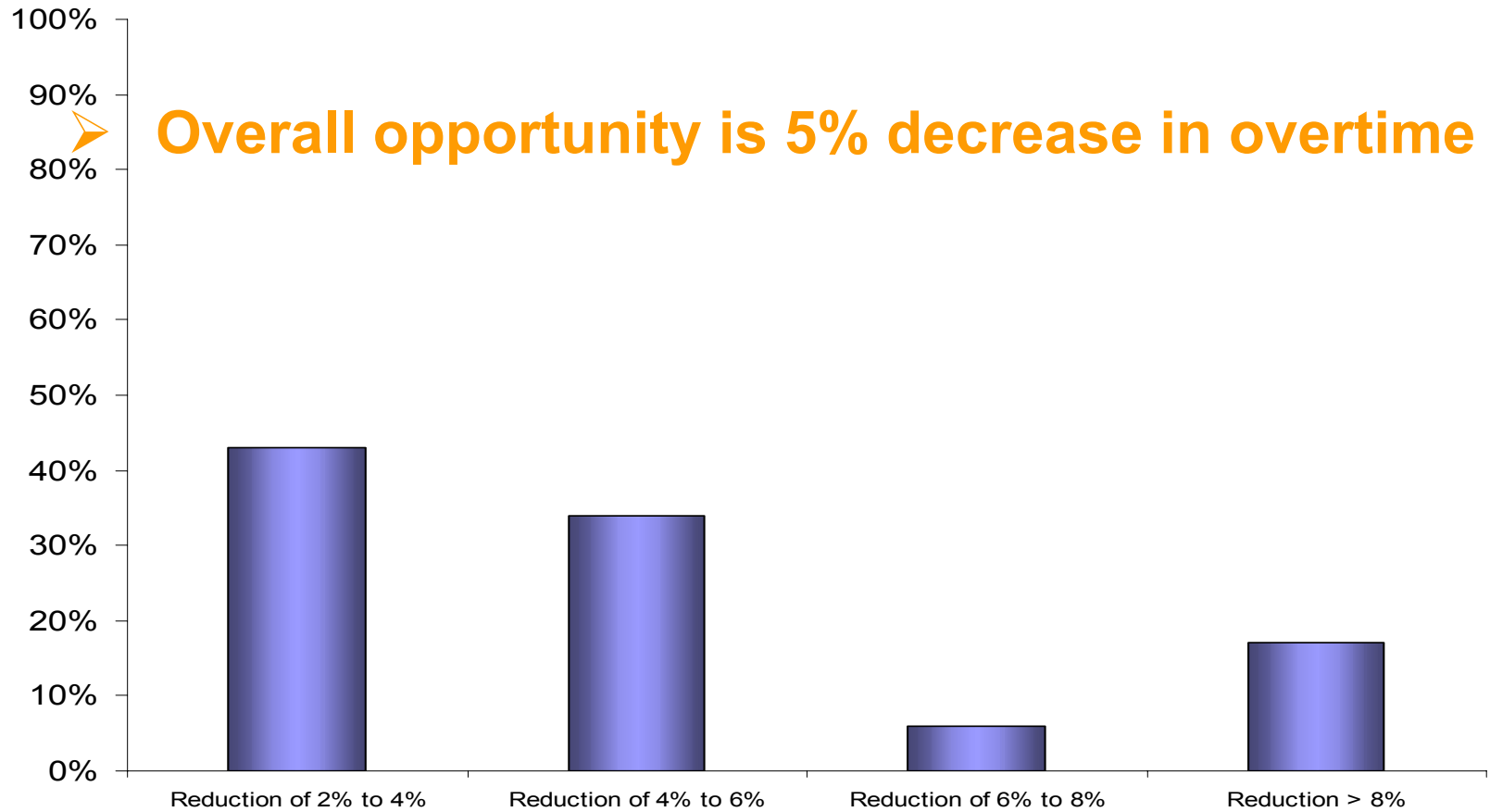
- ❖ To measurement the Pulp & Paper Industry culture with regards to manufacturing reliability.
- 02 study - strategic focus... why and what if?,
- 03 study - tactical focus... how?
- Conducted study in the first quarter of 2003
- Use 12 multiple choice questions
- Include all paper industry segments
- Target audience - mill management



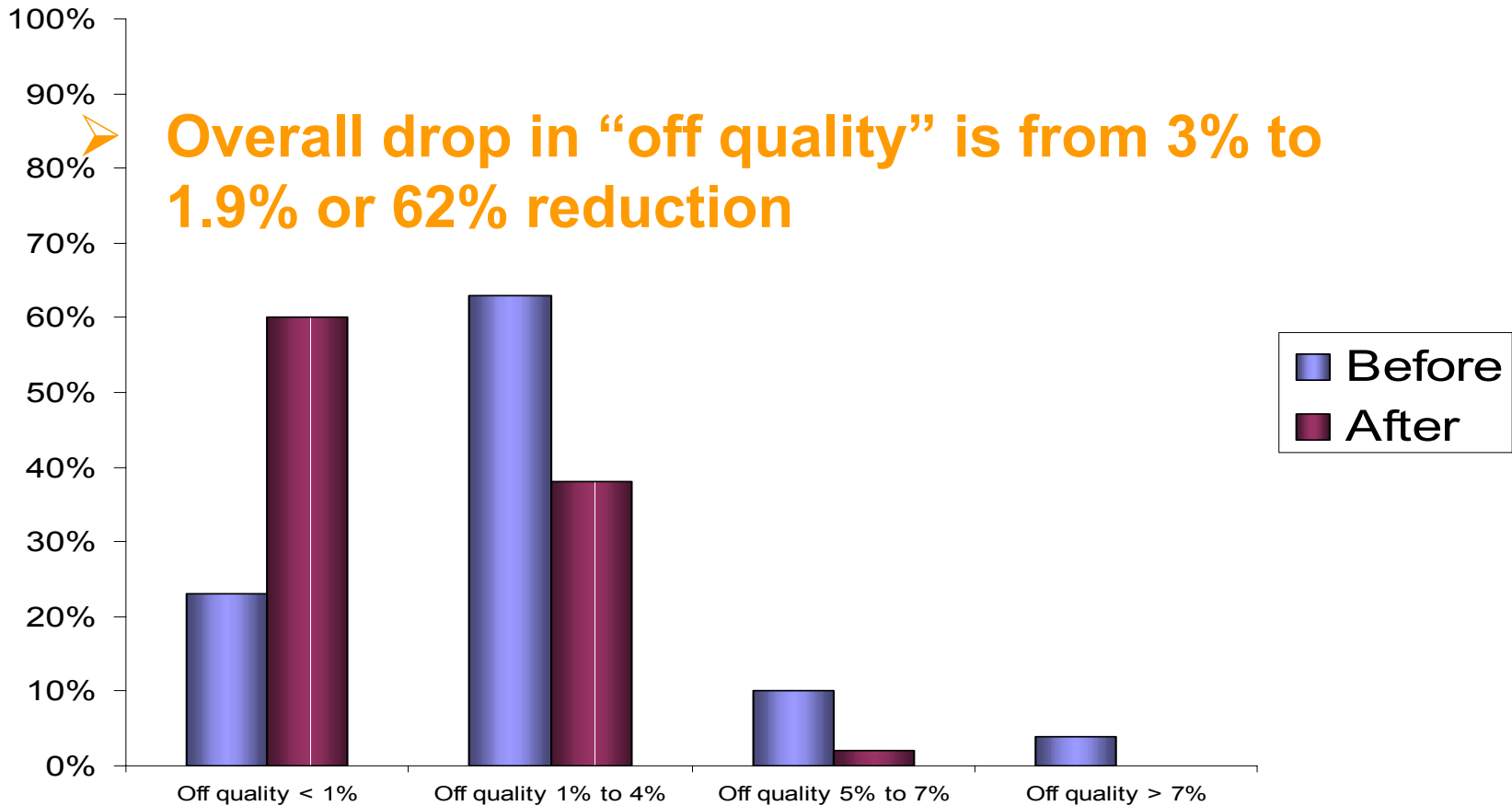
What was learned from 2002 study?



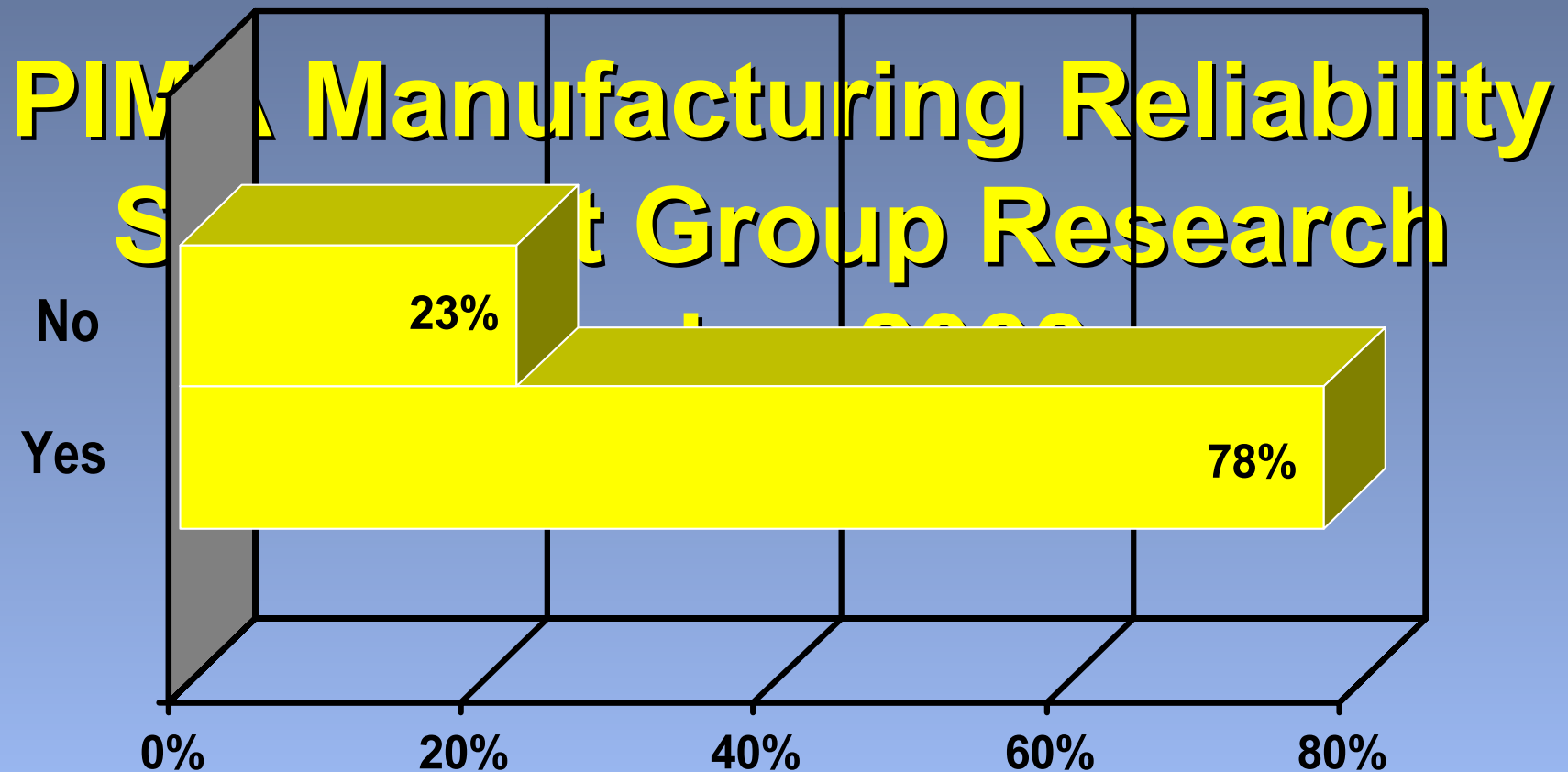
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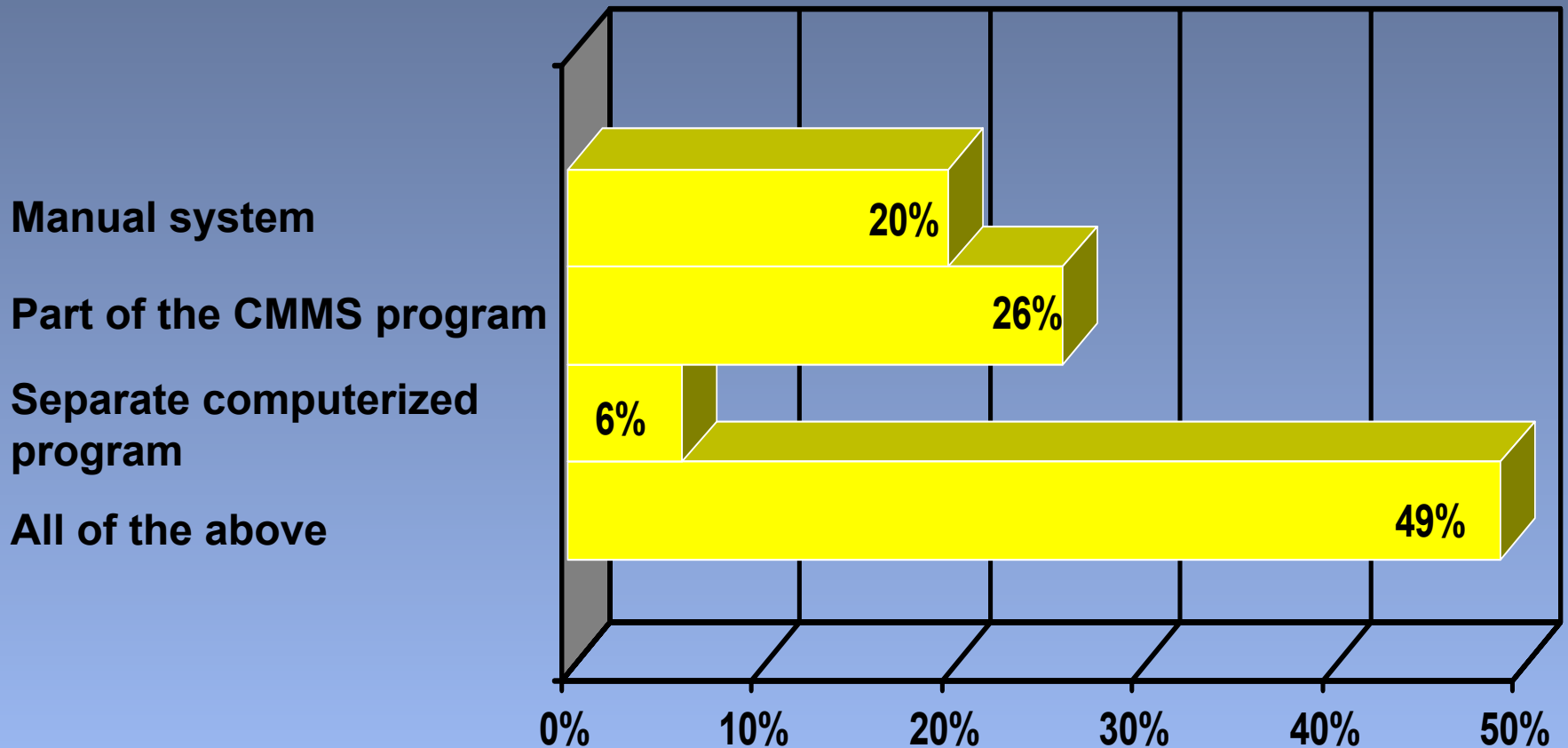
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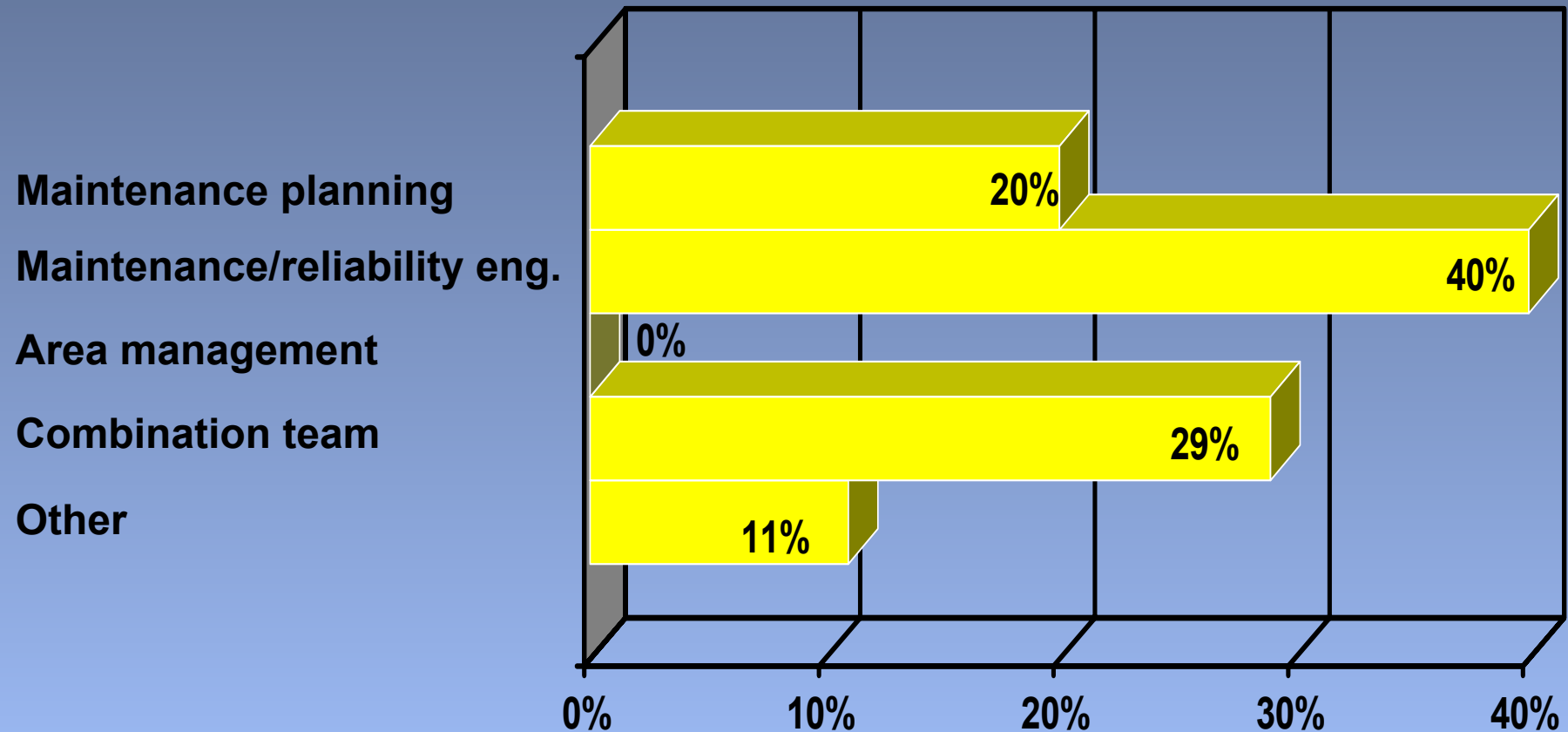
1. Is there a formal reliability improvement program in place at your mill?



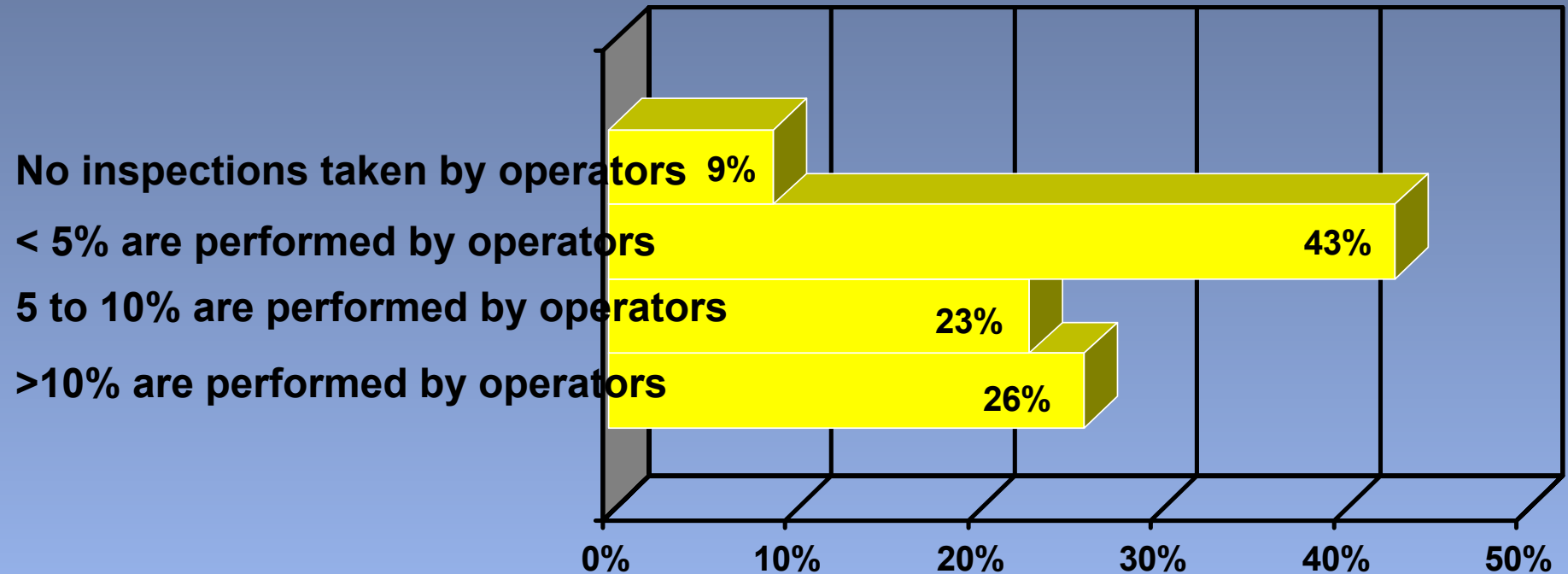
2. How is your reliability program administered?



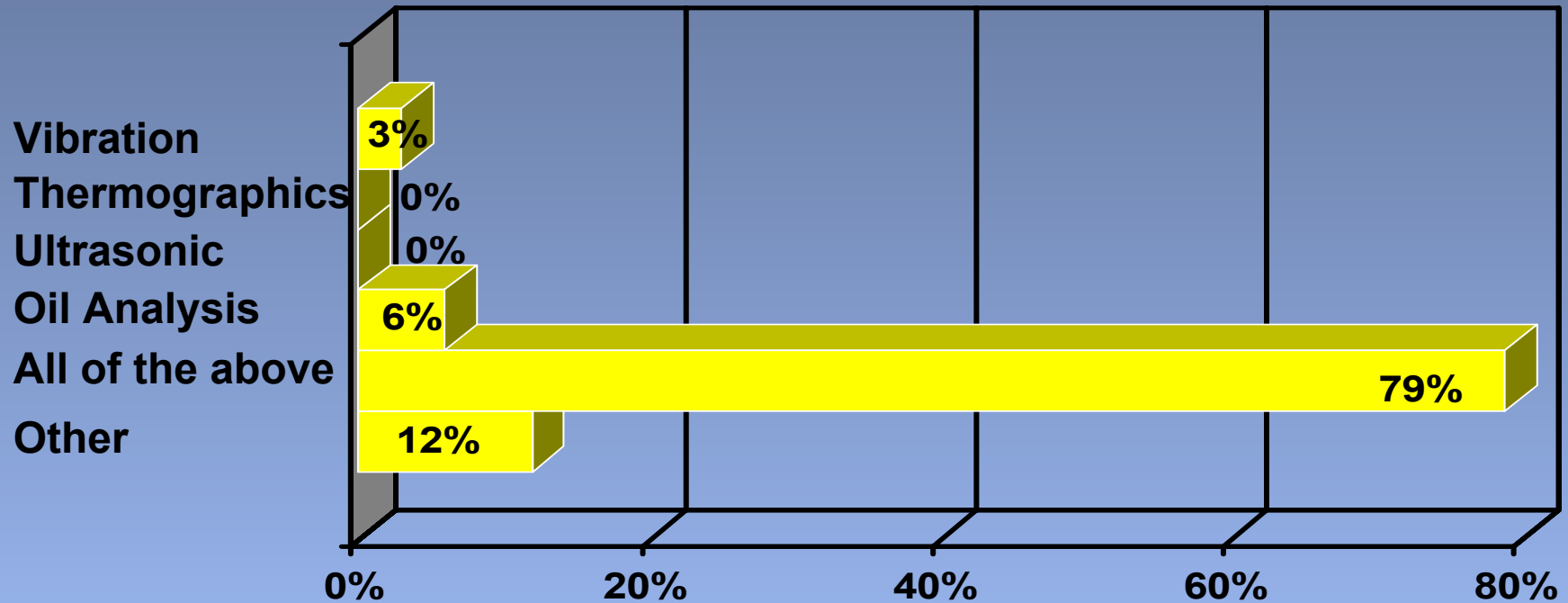
3. Who is responsible for administering the reliability program?



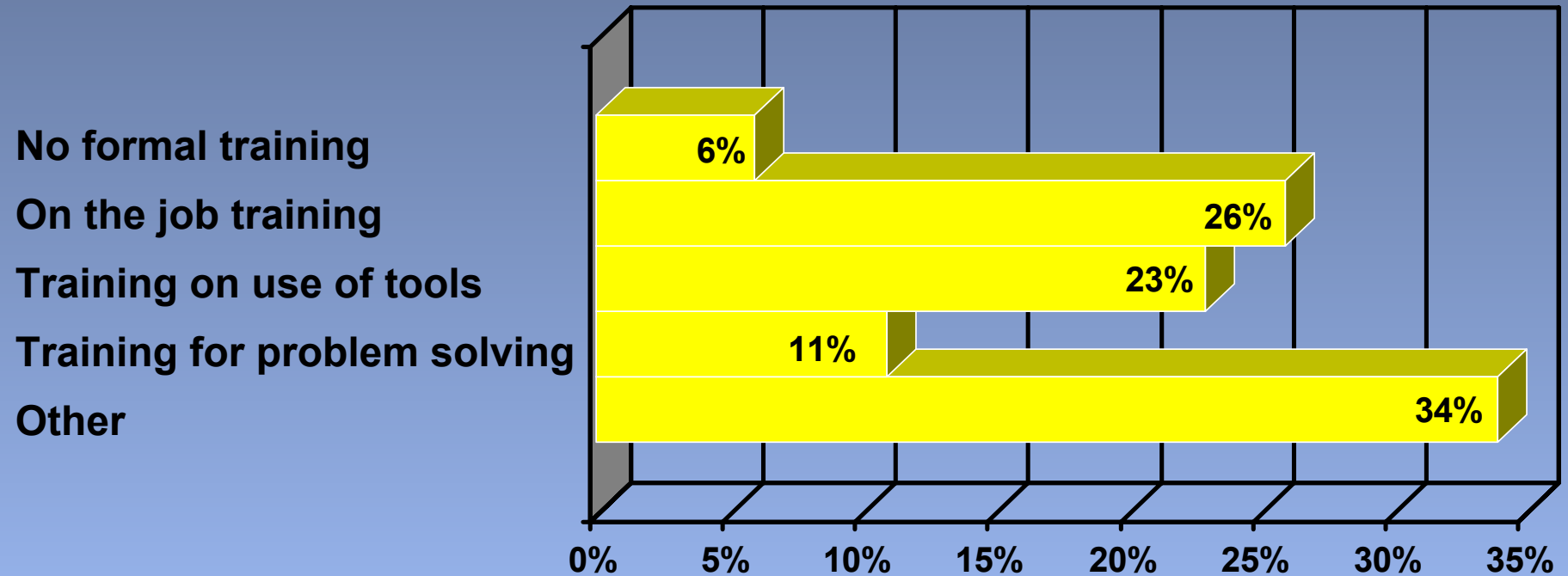
4. What percent of reliability inspections/tasks are performed by operations?



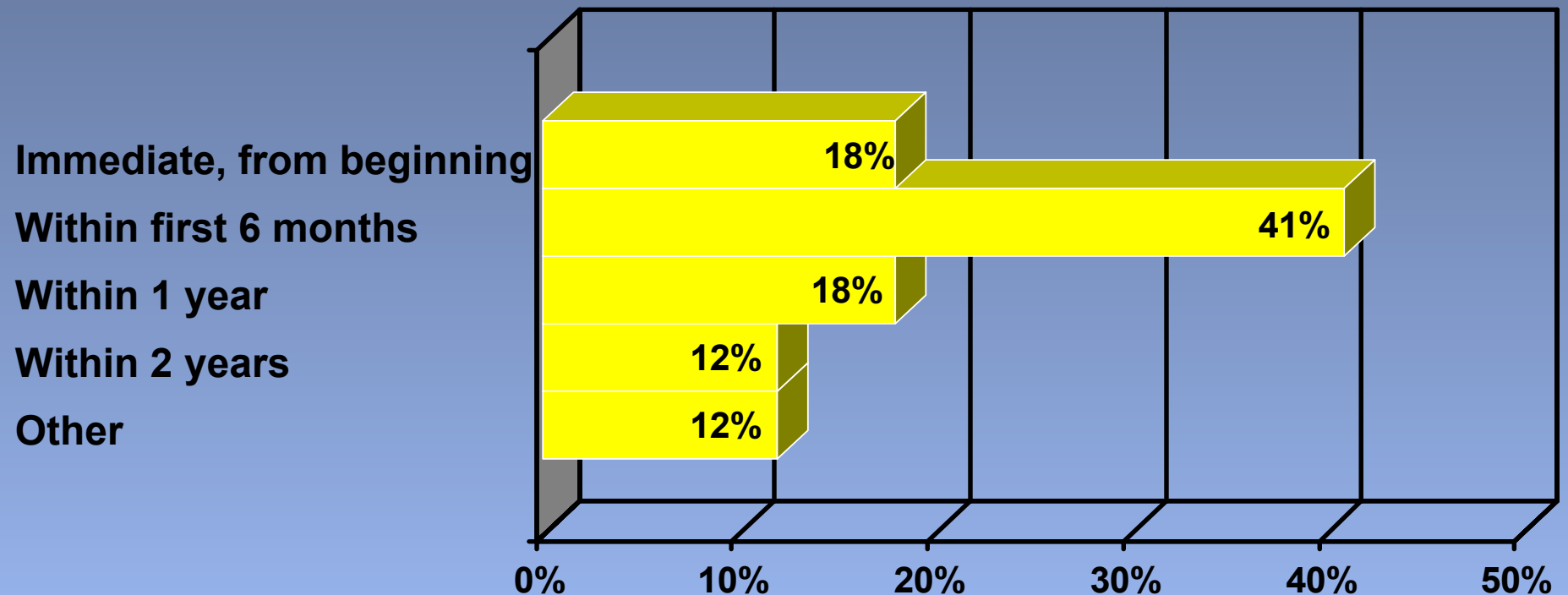
5. What diagnostic tools are used as part of the reliability program?



6. How are the inspectors/technicians trained?

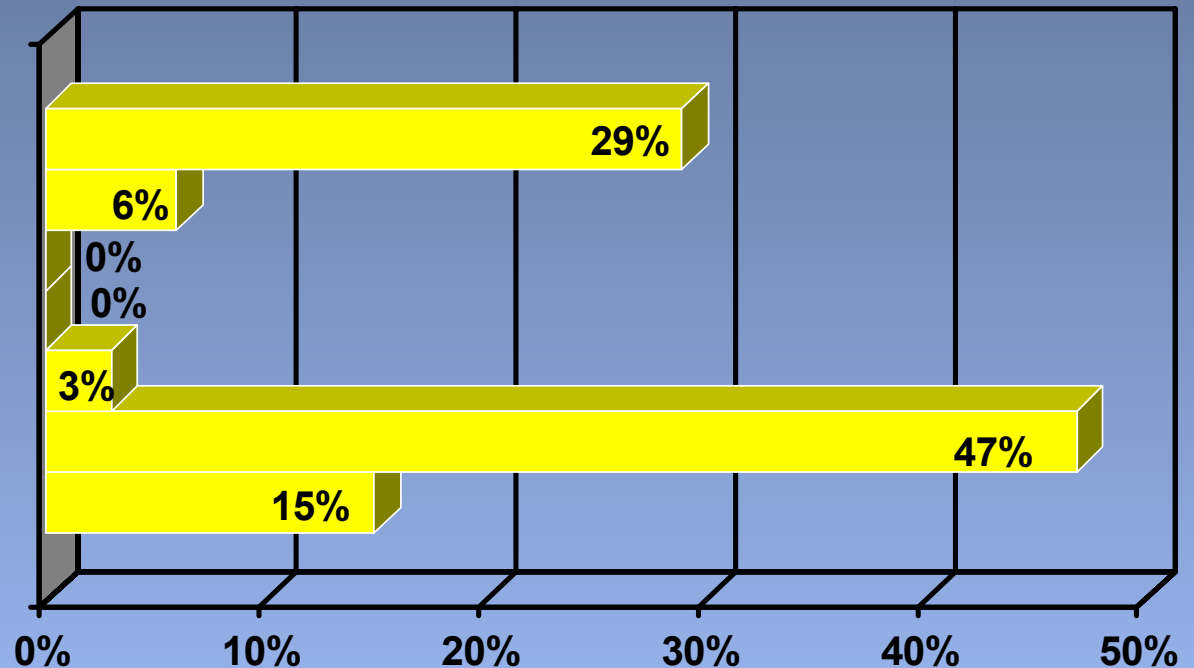


7. What was the time frame for identified improvements?

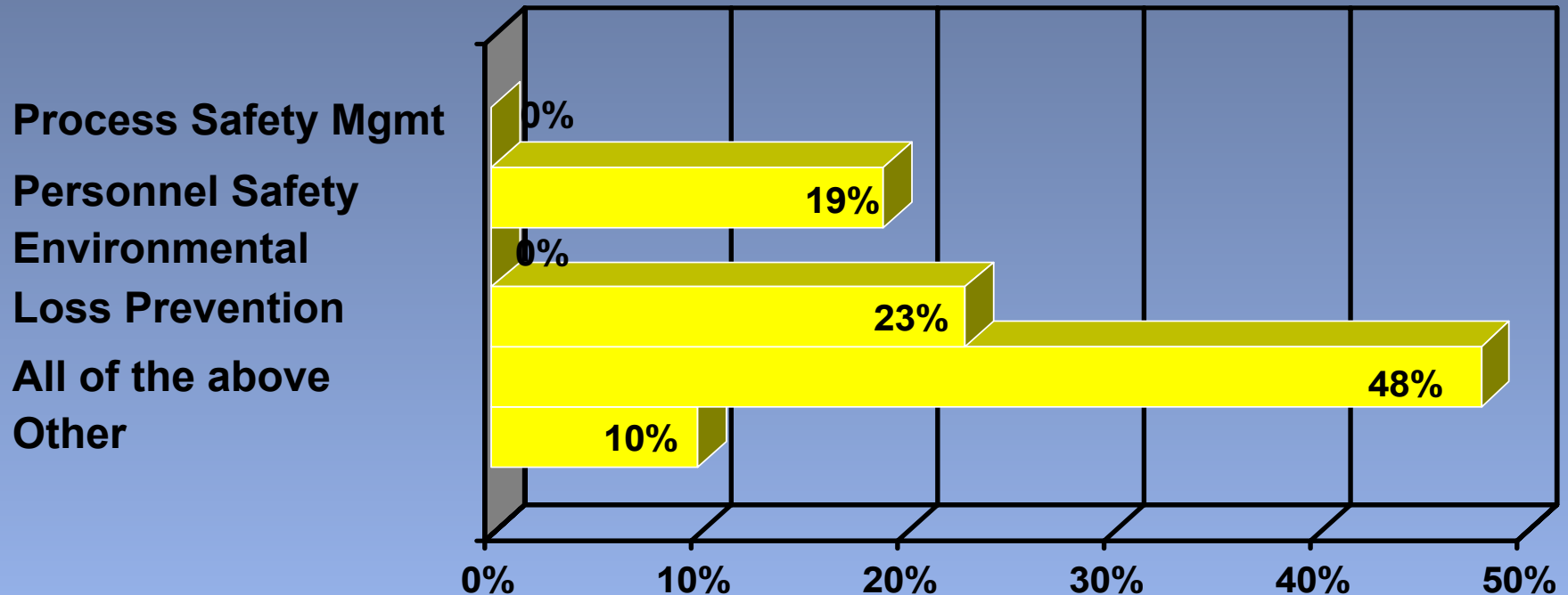


8. How has improved reliability affected the operation?

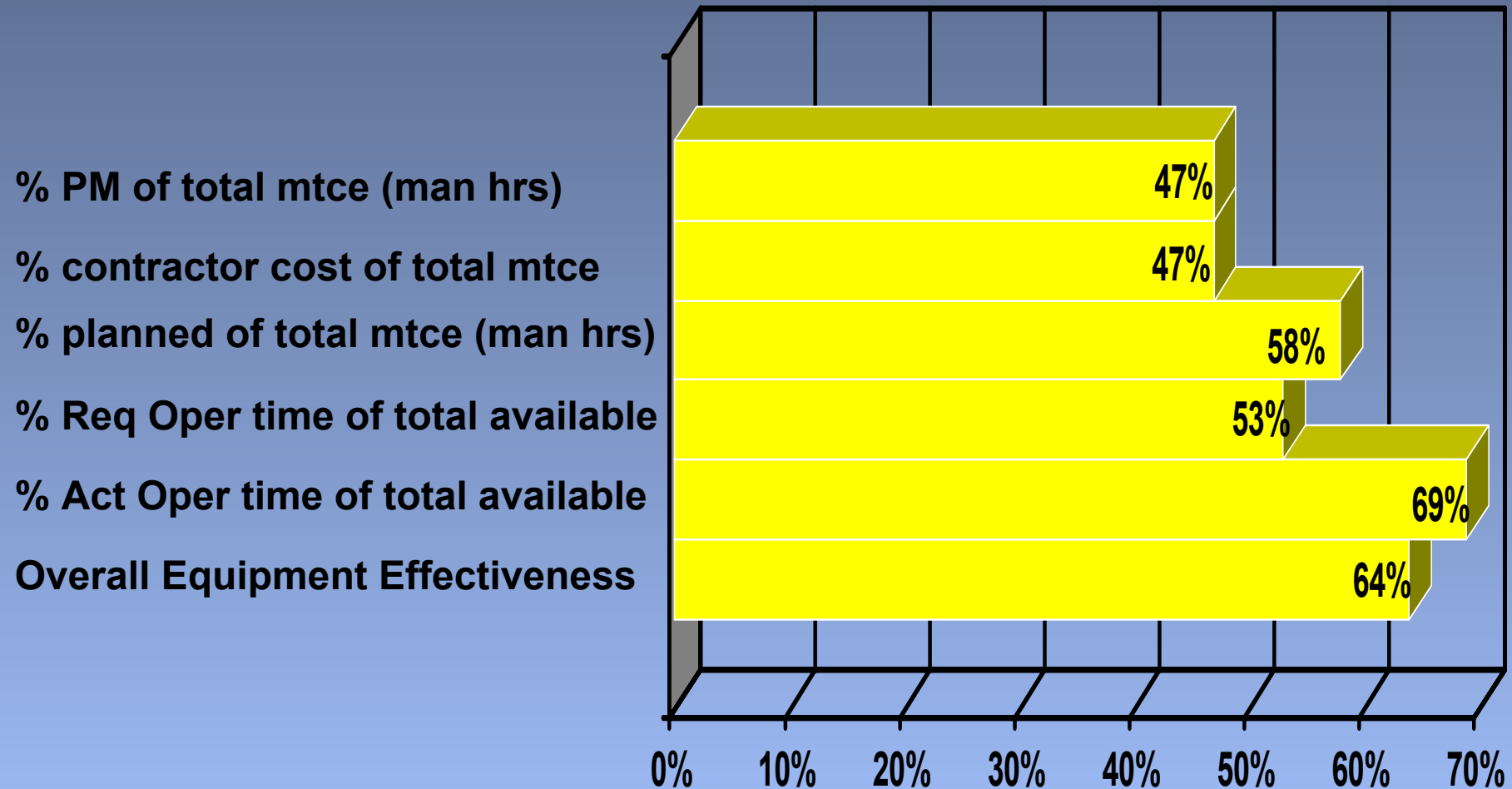
Equipment availability
Operating costs decrease
Operating costs increase
Product quality
Safety
All of the above
Other



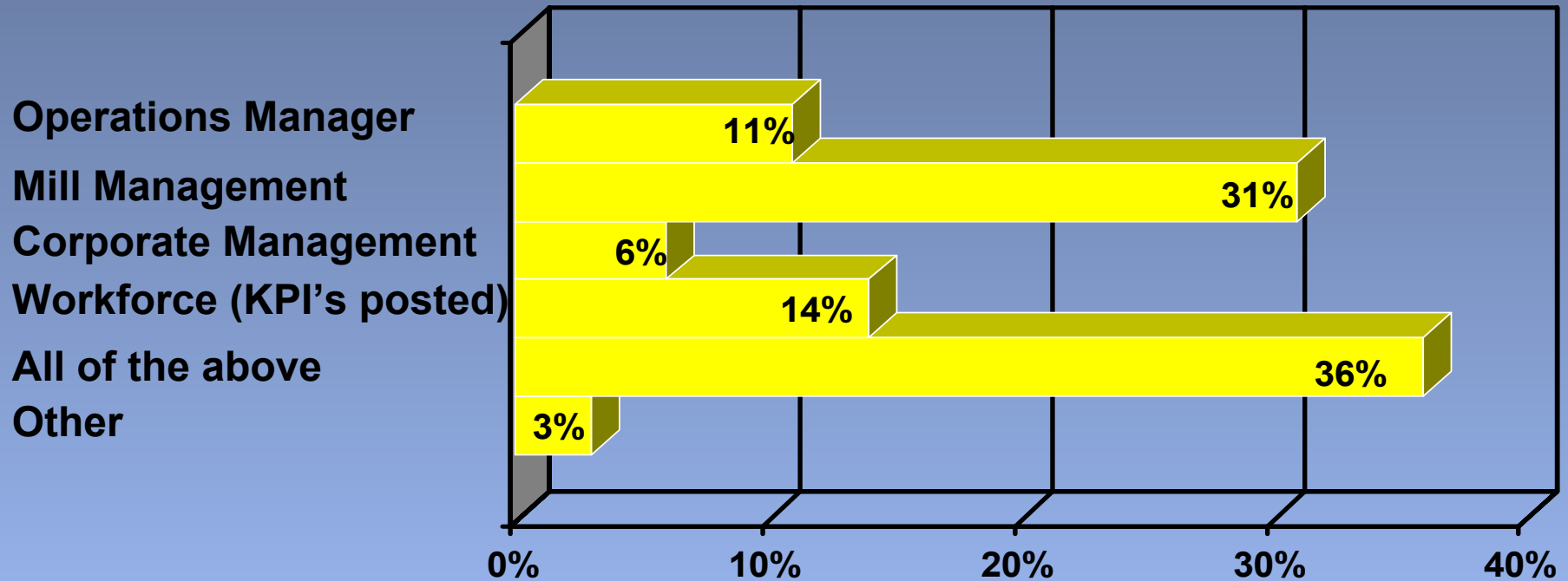
9. Which of the following issues are included in the mill's reliability improvement program?



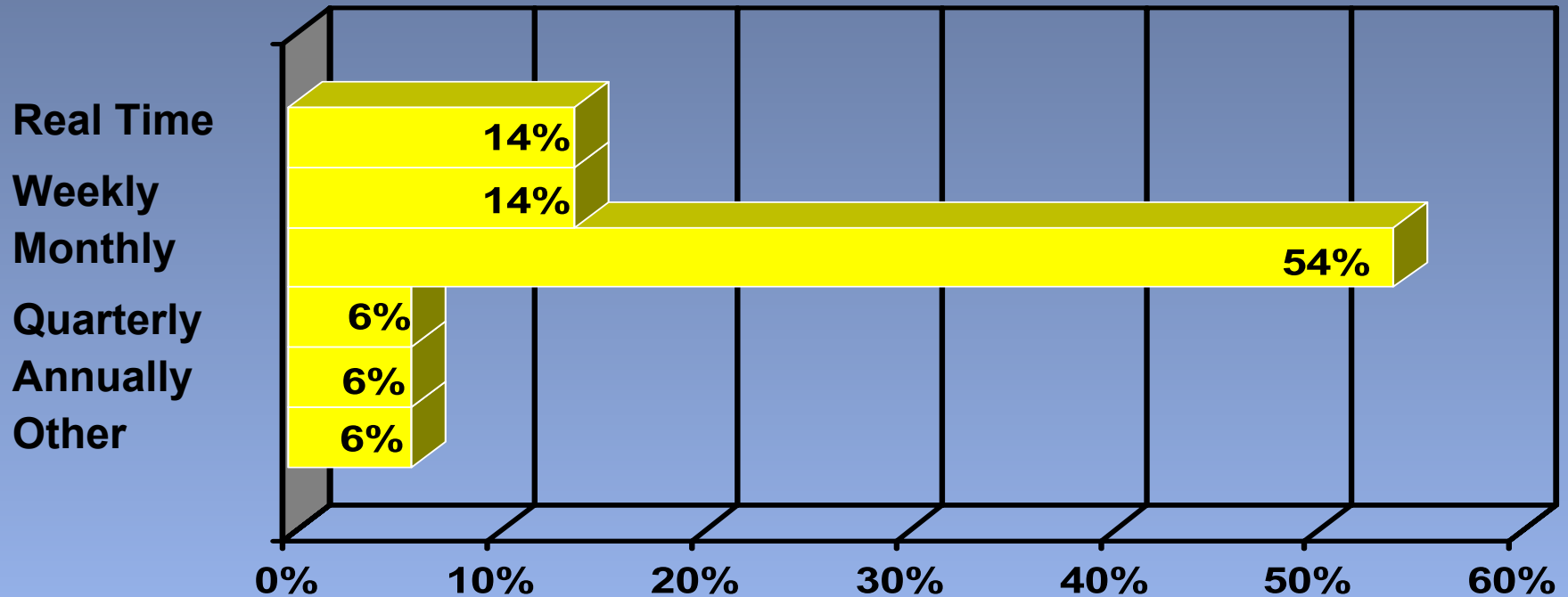
10. Which of the indices (Key Performance Indicators) below do you use? “Sample”



11. Who receives KPI reports?



12. How often are these reports distributed?



SUMMARY

- Incremental capacity increases, reduced cost (overtime) and improved product quality were achieved through improved reliability
- Identified improvements occurred within 6 months and beyond
- Reliability is seen as a “team sport” and managed by computerized program and or CMMS
- A variety of diagnostic tools are used as part of the reliability program
- Communication is essential



SUMMARY

PIMA 2001 Annual Conference, Baltimore, MD, Bob Taylor, IP

Is it easier to add 1 million dollars of profit to the bottom line by increased reliability or by increasing net profit through increased sales?

-“Reliability impact everything (safety, quality, environment and cost) increased maintenance”

-“through increased sales? compelling business opportunity. Poor Process Reliability cost the P&P Industry billions \$ every year.”

