SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35.

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

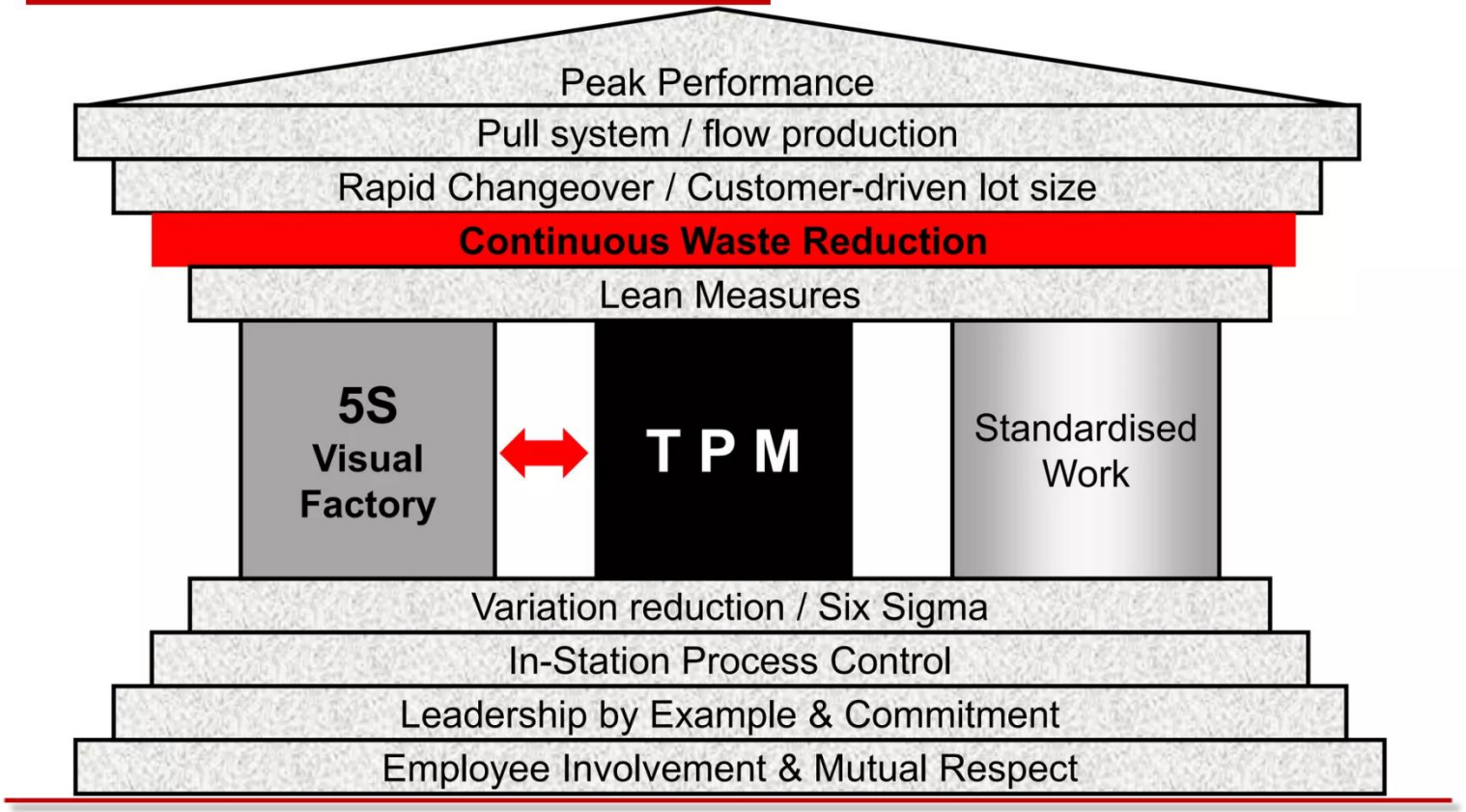
DEPARTMENT OF AUTOMOBILE ENGINEERING

COURSE NAME : 19AUZ405 – LEAN MANUFACTURING

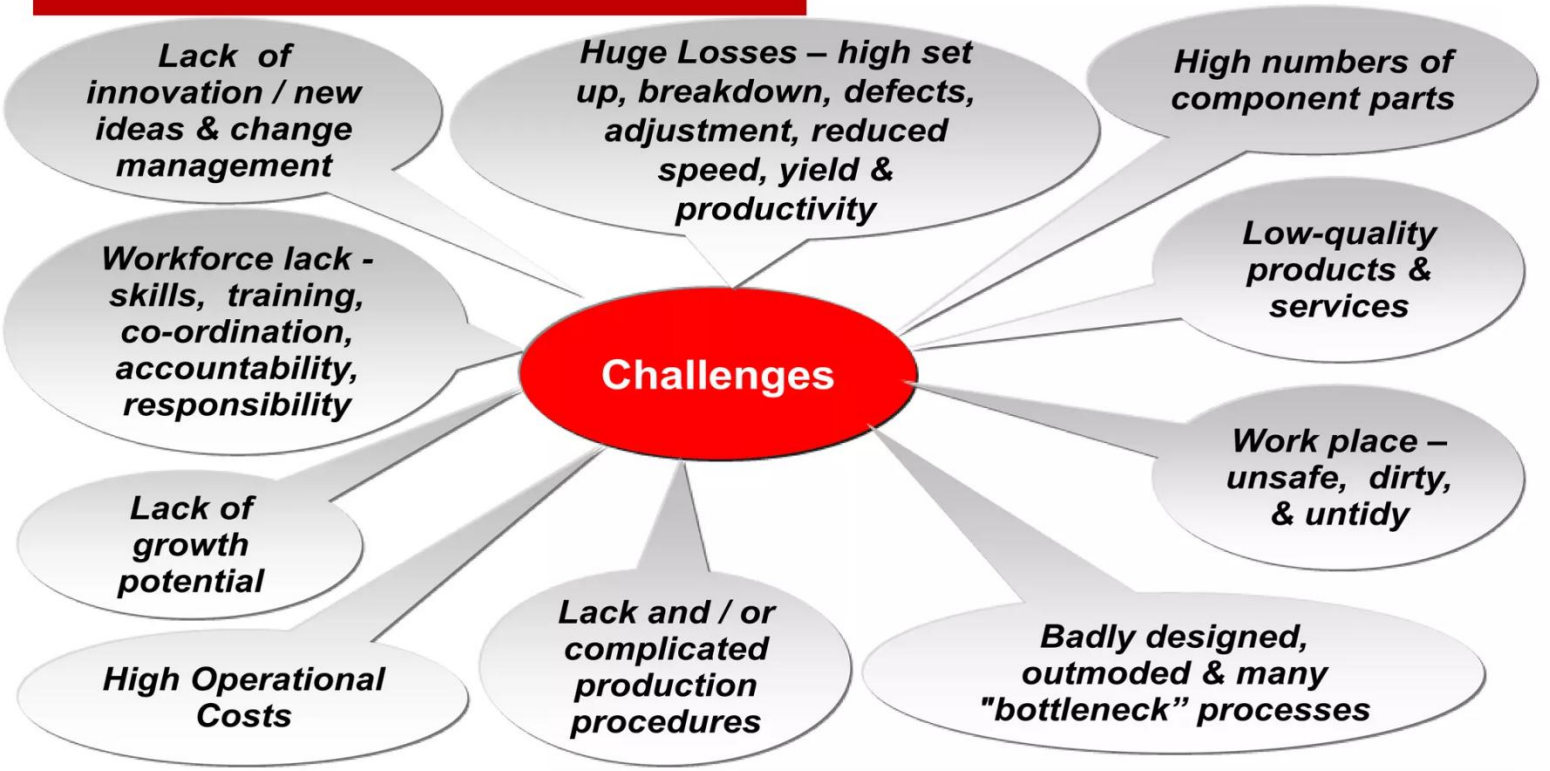
IV YEAR / VII SEMESTER

Topic – Implementation of TPM

Lean System


Peak Performance
Pull system / flow production
Rapid Changeover / Customer-driven lot size
Continuous Waste Reduction
Lean Measures
5S
Visual
Factory
T P M
Standardised
Work
Variation reduction / Six Sigma
In-Station Process Control
Leadership by Example & Commitment
Employee Involvement & Mutual Respect

Current Challenges



TPM

Total

All encompassing by maintenance and production individuals working together

- All employees are involved
- Aim - to eliminate all accidents, defects and breakdowns

Productive

Production goods and services that meet or exceed customers' expectations

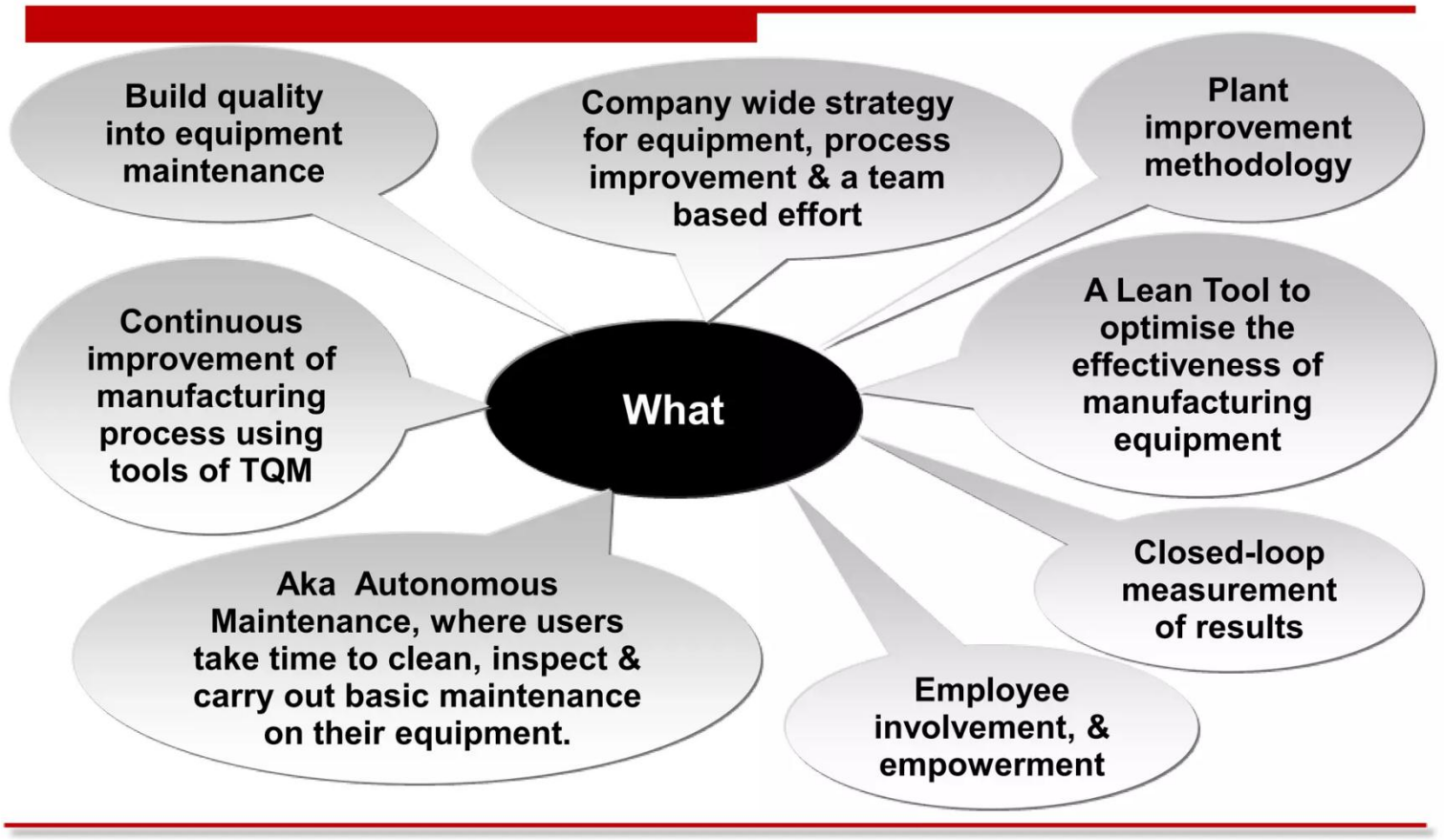
- Actions are performed while production goes on
- Production challenges are minimised

Maintenance

Keeping equipment and plant in as good as or better than the original conditions at all times

- Keep in good condition
- Repair, clean, lubricate

TPM - What


Build quality into equipment maintenance
Company wide strategy for equipment, process improvement & a team based effort
Plant improvement methodology
Continuous improvement of manufacturing process using tools of TQM
What
A Lean Tool to optimise the effectiveness of manufacturing equipment
Aka Autonomous Maintenance, where users take time to clean, inspect & carry out basic maintenance on their equipment.
Closed-loop measurement of results
Employee involvement, & empowerment

TPM - Why

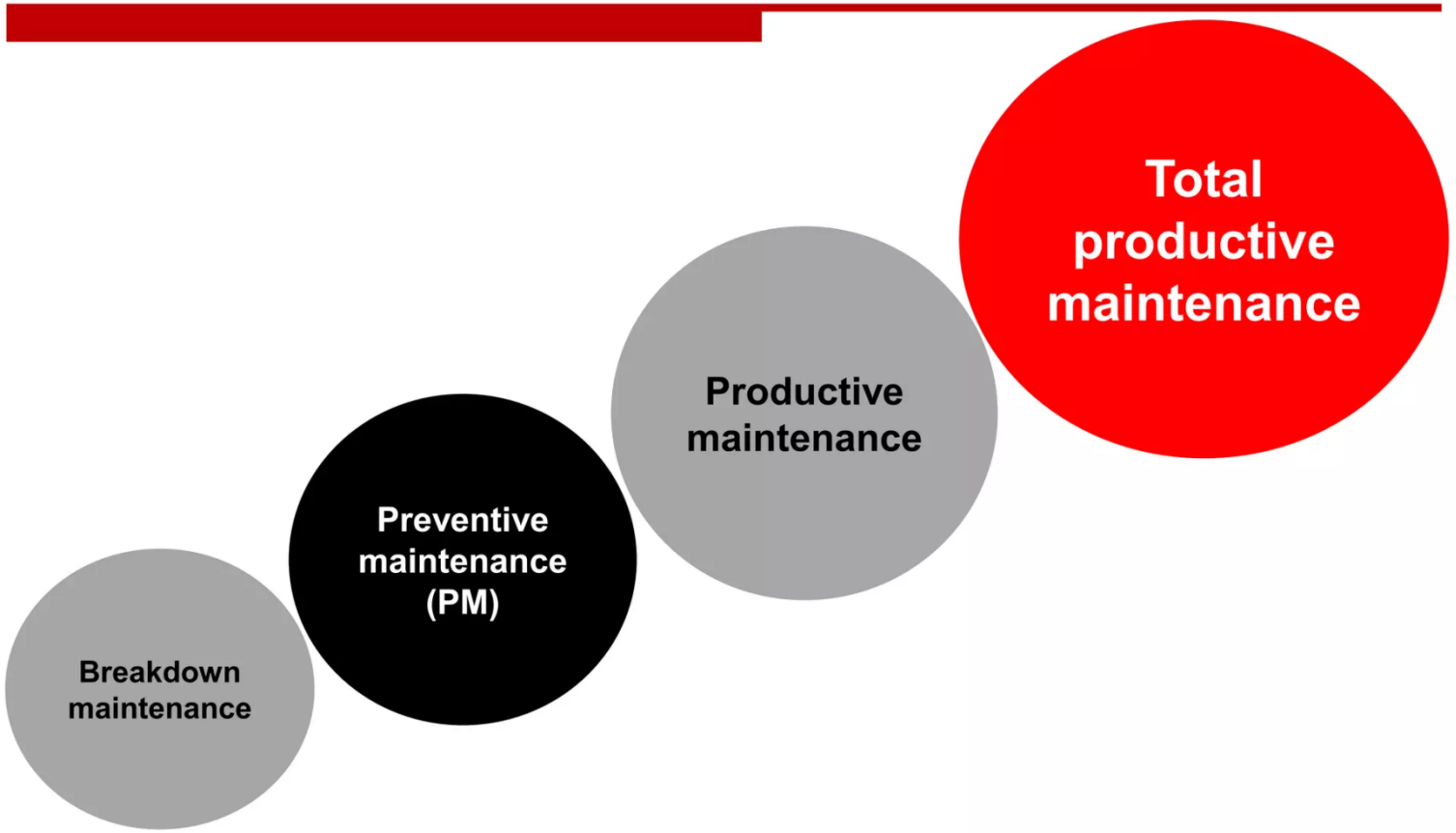
Organisation

- Higher Overall Equipment Effectiveness
- Less “firefighting” to repair machines
- Lower operating costs
- Better able to meet commitments to customers
- Improved ability to compete in the world marketplace

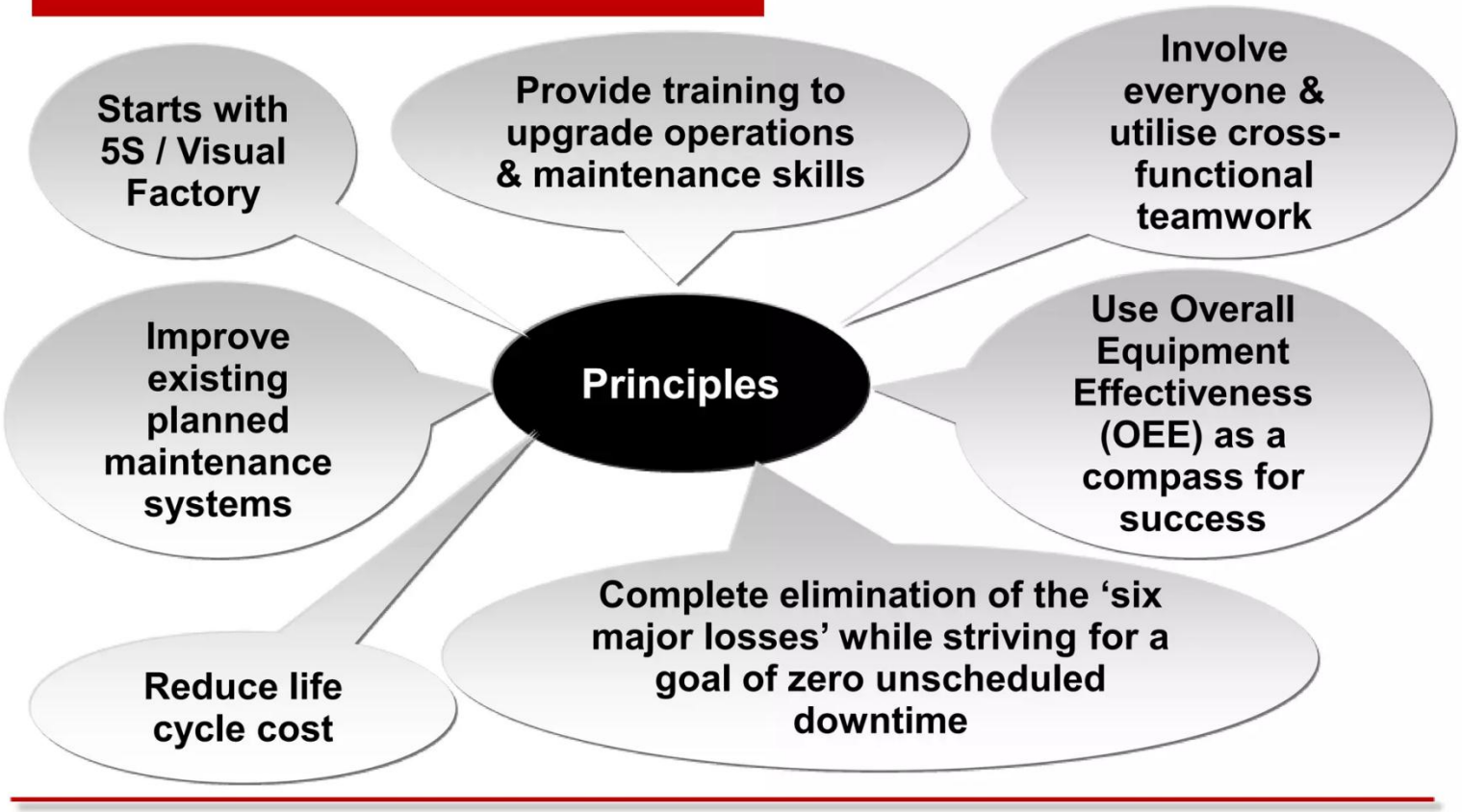
Employees

- **Less pressure on maintenance for urgent repairs & on production to recover from breakdown losses**
- **Better cooperation between maintenance, production, and other departments**
- **Reduced chance of accidents**
- **Higher job satisfaction & improved job security**

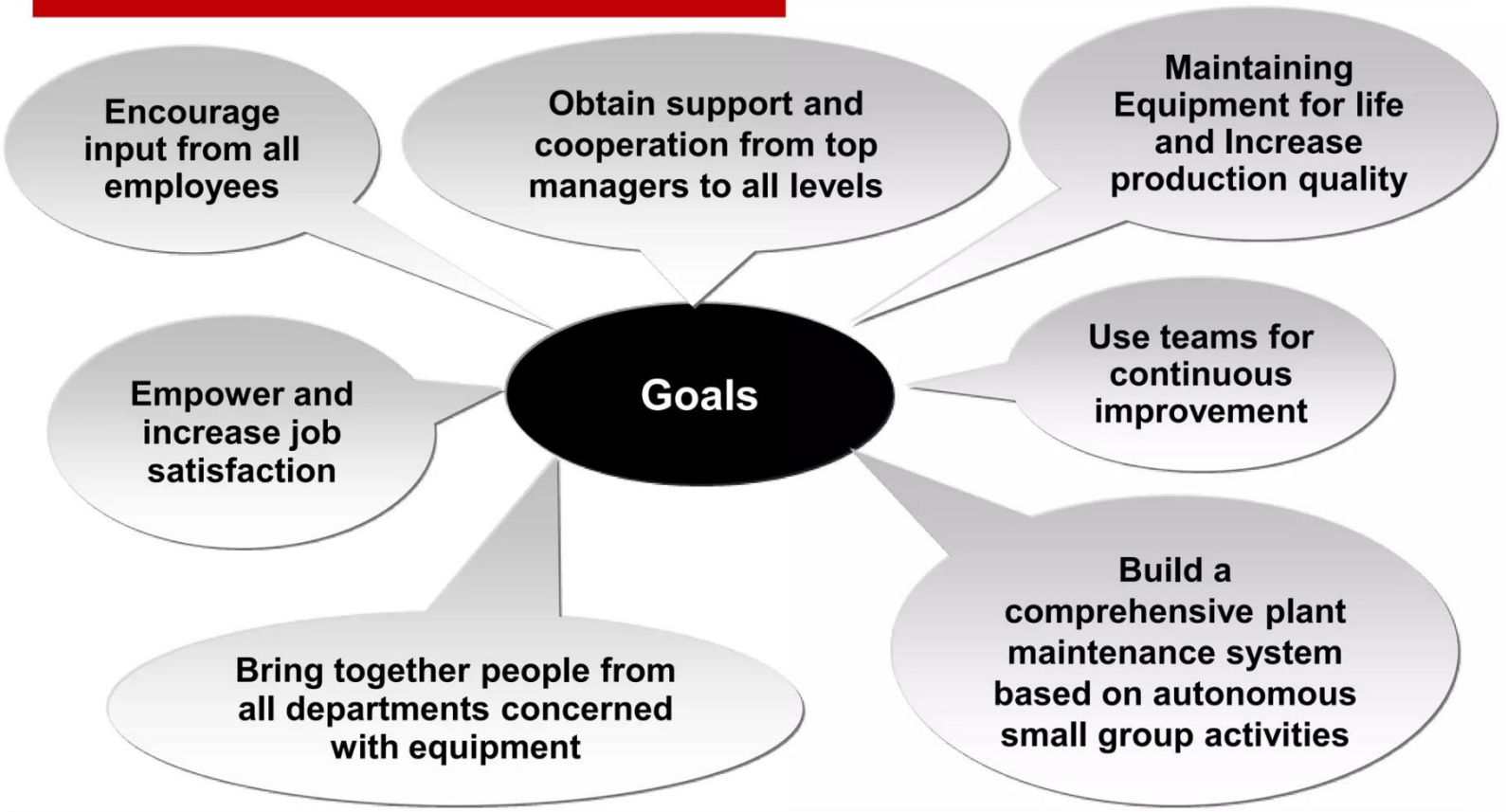
TPM - Evolution



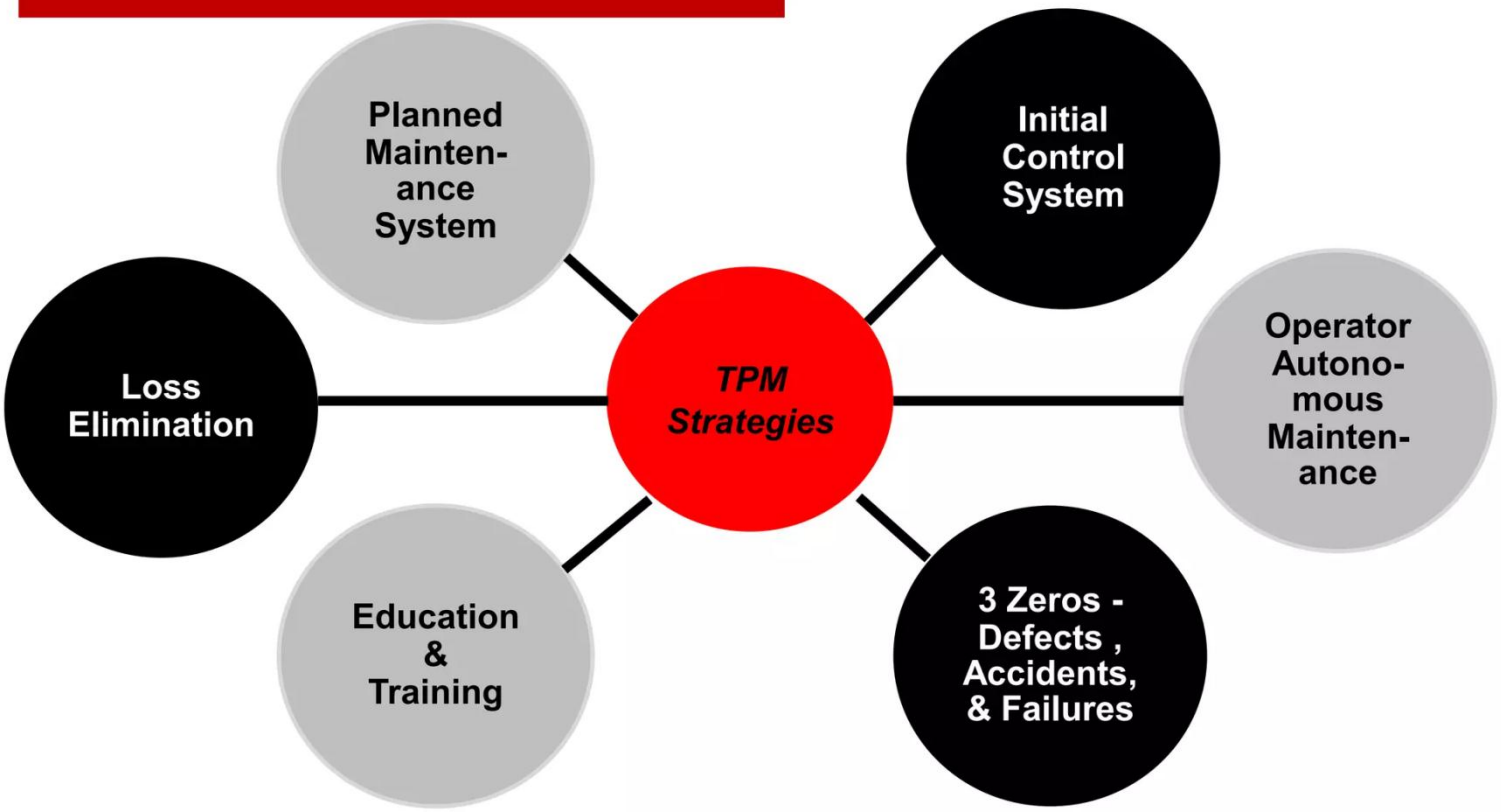
TPM - Principles



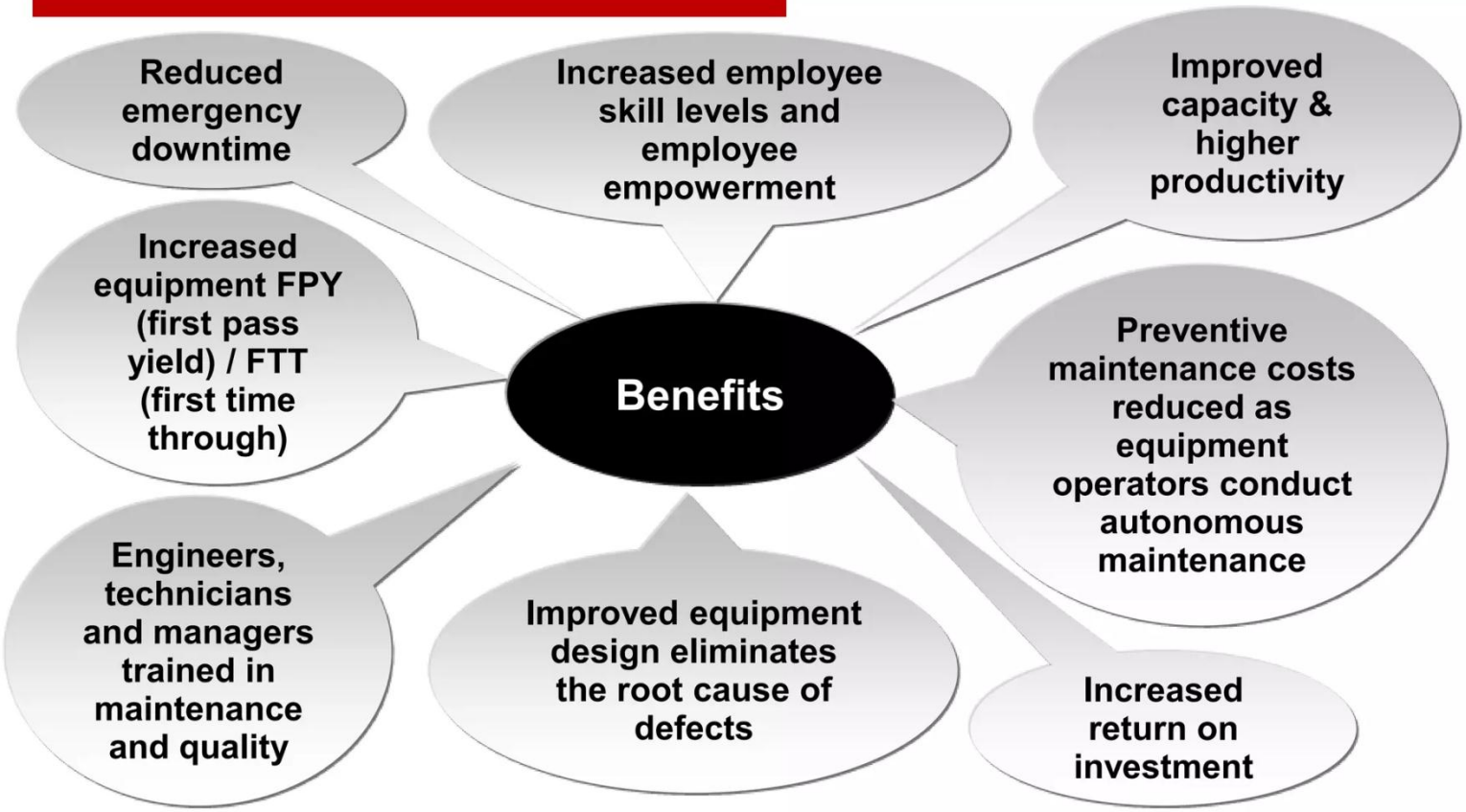
TPM – Goals


Encourage input from all employees
Obtain support and cooperation from top managers to all levels
Maintaining Equipment for life and Increase production quality
Empower and increase job satisfaction
Goals
Use teams for continuous improvement
Bring together people from all departments concerned with equipment
Build a comprehensive plant maintenance system based on autonomous small group activities

TPM - Strategies



TPM - Benefits



TPM – Measures

Short Term

- Establish an autonomous maintenance program for “x” machines
- Increase OEE by “y”% within for individual work centers

Long Term

- **Reach a plant OEE of 85% within 3 years (world class is considered 85% +)**

Thank You !