

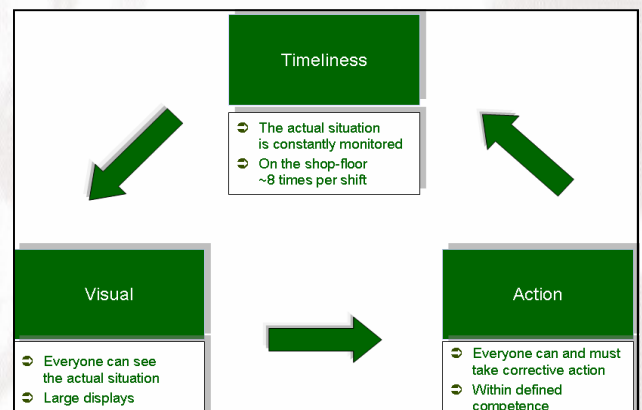
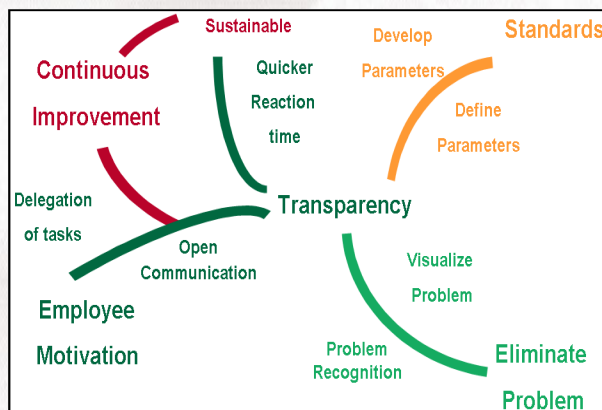
eLPMS – Management Summary

What is LPMS?

- LPMS stands for **Lean Performance Management System**
- LPMS continuously monitors operational performance
- LPMS identifies in real-time, deviations to plan and enables supervisors and operators to react proactively and quickly
- LPMS identifies critical processes and highlights operational or support problems
- LPMS monitors the status of corrective actions
- LPMS creates a basis for process standardization and enables the continuous reduction of muda

Benefits of LPMS

- Targets and actual results are visible directly at the workplace
- Communication between operators and management is simplified and more constructive
- Qualitative and quantitative consequences of problems are better understood
- Corrective actions can be clearly prioritized
- Improvements are quickly achieved and made visible throughout the organization
- Employee motivation is significantly increased
- Sustainability is guaranteed by continuous performance monitoring



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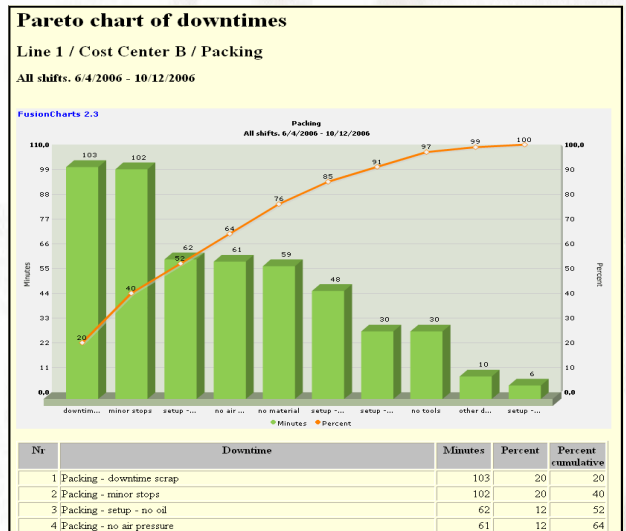
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Additional benefits with electronic eLPMS

- Automatic calculation of plan data per time slot for each production line, machine etc. based customer demand, working patterns, set-up times, etc
- Drastic reduction of manual effort and errors at data entry
- Direct data input via interactive "Smart Boards"
- Automatic tracking of corrective action status
- Automatic calculation and graphical display of performance indicators such as OEE, productivity etc
- Analysis of historical data to identify persistent problems and evaluate the effectiveness of corrective actions.
- Simple and fast report generation
- Global access to information via web-based monitor
- Interfaces to existing ERP systems

Which benefits can be achieved?

- Significant improvements in OEE
 - Down time reduction
 - Set-up time reduction
 - Scrap and rework reduction
- Productivity improvement
- Increased motivation
- Improved management of corrective actions



name	begin	end	product	# workers	setup	setup time plan	setup time real	good items plan	good items real	scrap	Downtime	Comments
6:00 AM	6:05	Product A	2				25	25				
6:25 AM	6:35	Product B	2	setup for B	20	20						
6:45 AM	7:00	Product B	2				150	150				
7:00 AM	7:30	Product B	2				600	600				
7:30 AM	7:50	Product B	2				600	500		10		
7:50 AM	8:05	Product B	2									
8:05 AM	8:15	Product C	2	setup for C	30	45						
8:15 AM	8:30	Product C	2				6000	3000		30		
8:30 AM	8:45	Product C	2				6000	3000	3000	30		
8:45 AM	9:00	Product C	2				6000	3000	3000	30		
9:00 AM	9:20	Product C	2				6000	3000				
Morning shift												
Target time: 480												
Real time: 490												
2:30 PM	2:35	Product C	2				4000	3000				
2:35 PM	2:50	Product D	2	setup for D	40	40						
2:50 PM	3:00	Product D	2				40000	40000				
3:00 PM	3:30	Product D	2				40000	40000				
3:30 PM	3:50	Product D	2				40000	40000		5		
3:50 PM	4:00	Product D	2				40000	40000				
4:00 PM	4:15	Product D	2				40000	40000				
4:15 PM	4:25	Product E	2	setup for E	50	60						
4:25 PM	4:30	Product E	2				75	75		10		
4:30 PM	4:40	Product E	2				300	300				
4:40 PM	4:50	Product E	2				300	300				
4:50 PM	5:00	Product E	2				300	300				
Afternoon shift												
Target time: 480												
Real time: 490												
11:00 AM	11:05	Product A	2	setup for A	15	15						
11:05 AM	11:20	Product A	2				125	125				

The biggest losses in efficiency are usually caused by numerous short interruptions that are not explicitly identified in weekly or monthly reports.

How do we support you?

We support:

- Analysis of production processes
- Introduction of manual LPMS
- Analysis of eLPMS requirements
- Technical realization of customized eLPMS
- Implementation of eLPMS