



Key Performance Indicators for Facility Managers in a Lean Environment

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Lean Maintenance = Radical Change

- New processes must begin with radical change

“Continuous improvement is exactly the right idea if you are already the world leader in everything you do. It is a terrible idea if you are lagging. It is probably a disastrous idea if you are far behind the world standard. I believe that we have made a major mistake of our advocacy of continuous improvement...we need rapid, quantum leap improvement.”

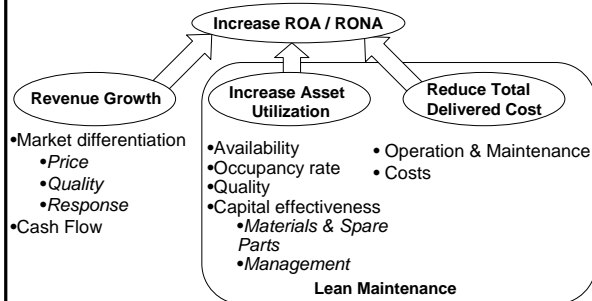
-Paul O'Neil, Former Chairman of Alcoa

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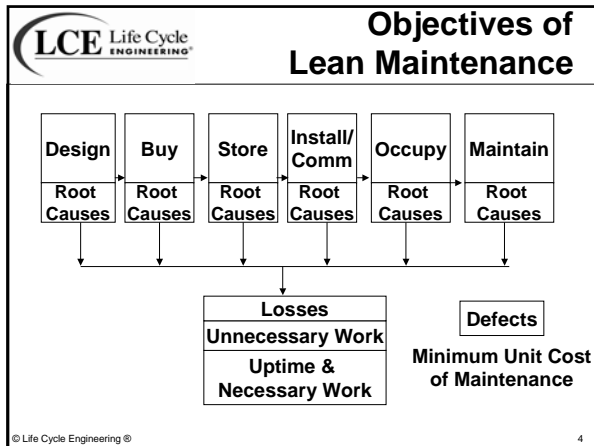


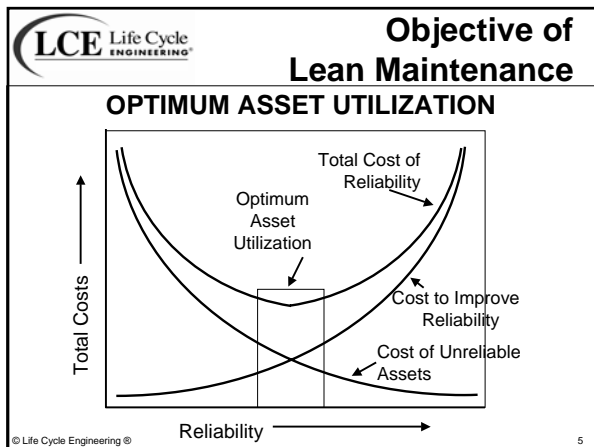
Core Lean Business Aspects

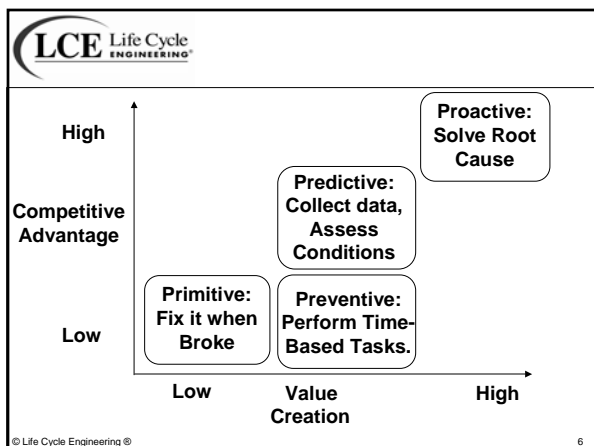


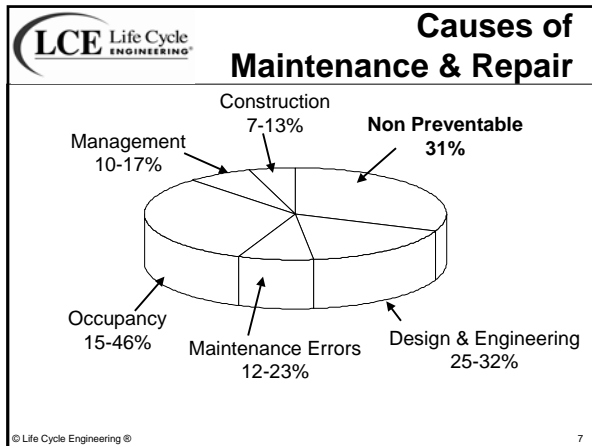
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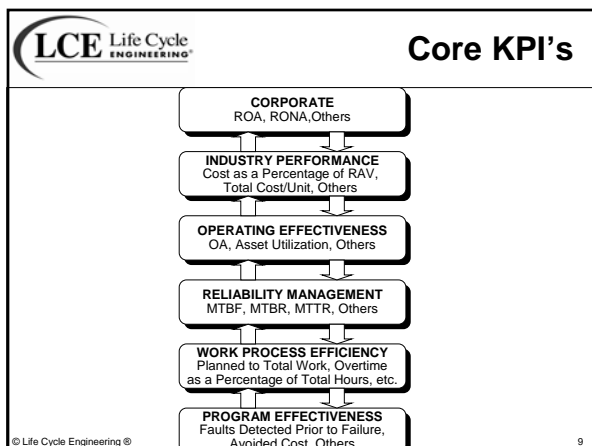


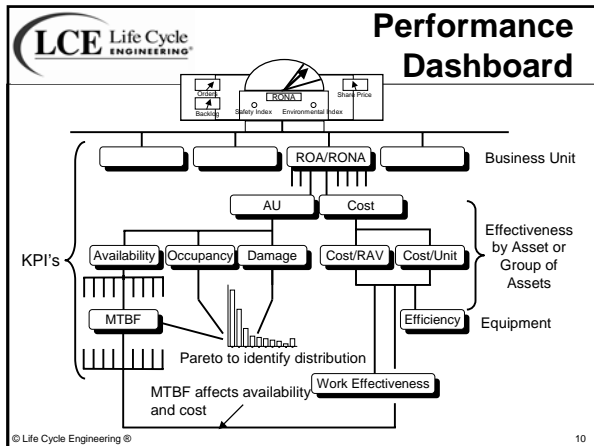


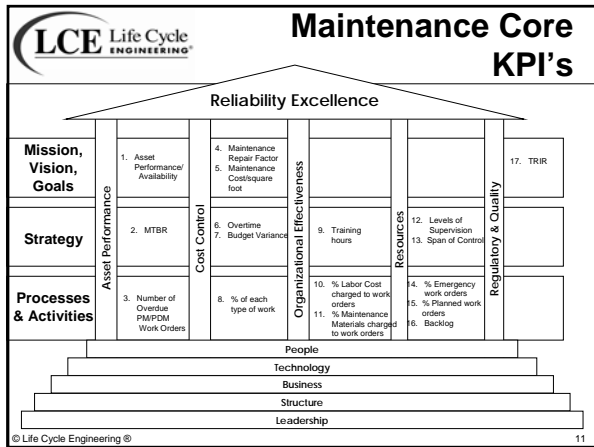


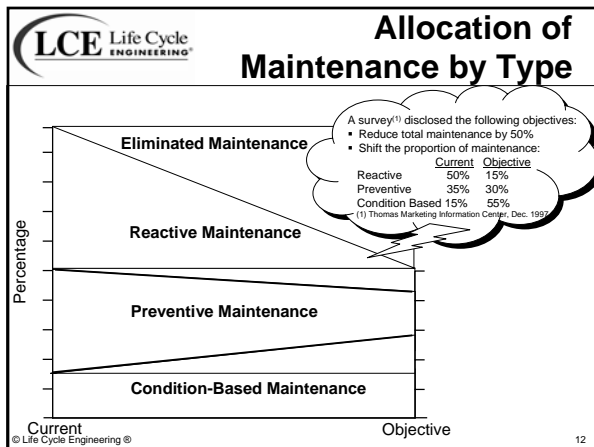


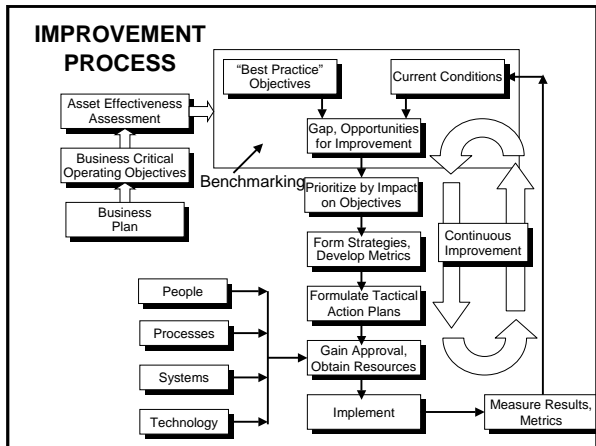
- LCE Life Cycle ENGINEERING** **Preventable Work**
- Almost 70% of all maintenance work does not need to happen and can be eliminated “in a perfect world” and in consideration of the entire life cycle
 - Estimates associated with this are broken down as follows:
 - Design/Engineering 25-32%
 - Construction 7-13%
 - Damage (Occupancy) 15-46%
 - Maintenance Error 12-23%
 - Management Strategy 10-17%
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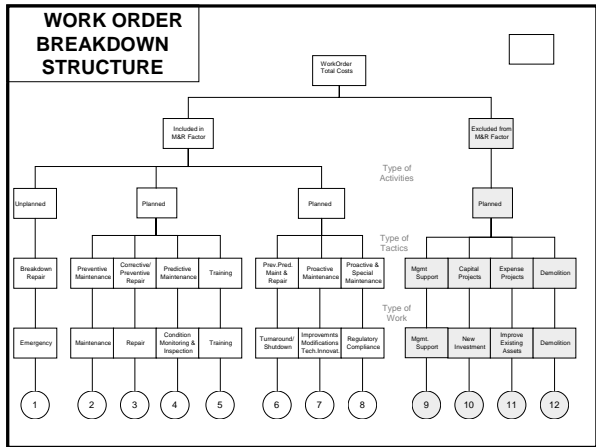


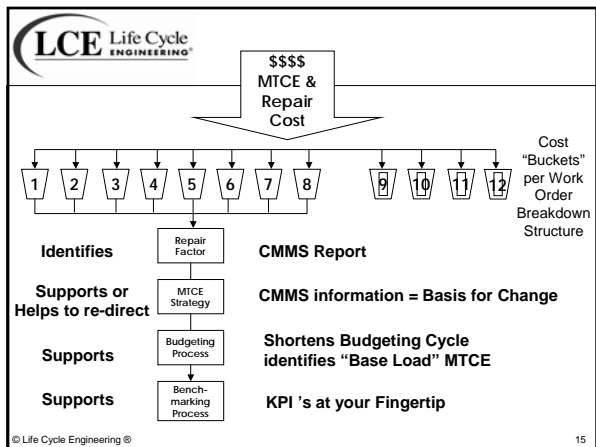














QUESTIONS??

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