

Maintenance journey

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Carlsberg Danmark A/S
Efnms Maintenance expert 2004




Thank you

Thanks to Euro Maintenance Award Jury and DDV who has recommended Carlsberg.










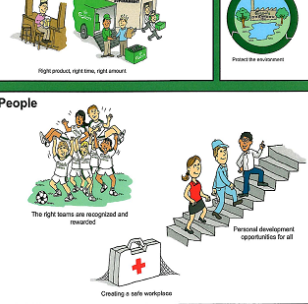



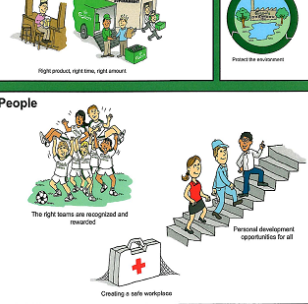












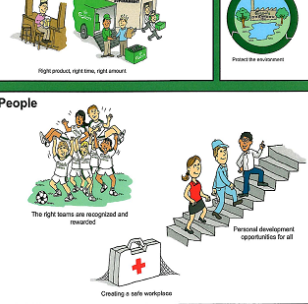
Not one mans work – but teamwork between employees in maintenance and production, and all involved from Carlsberg staff.

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2012

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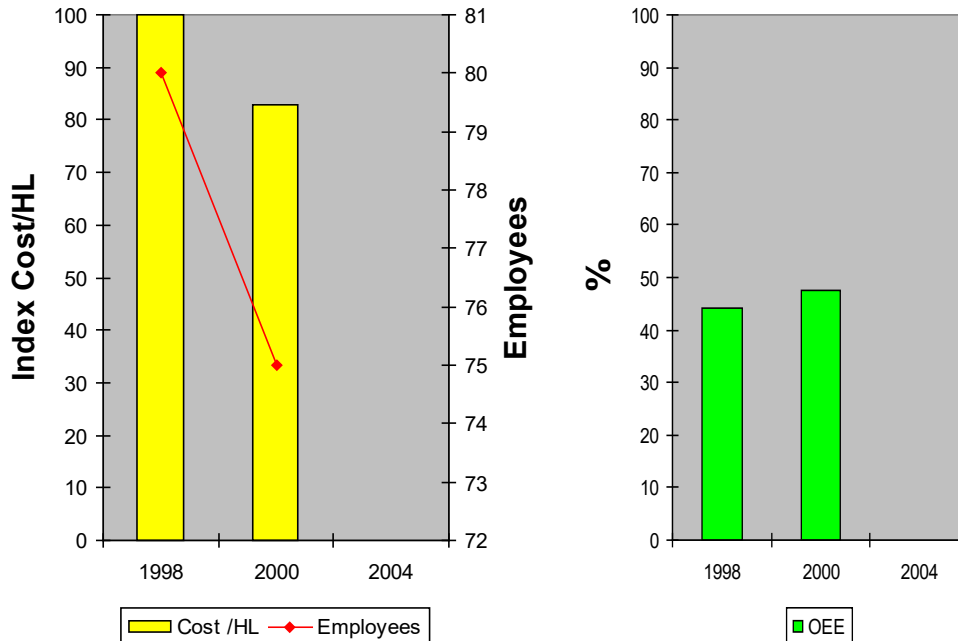
 Kasper Madsen

<p>  Wlodo Sobota  Anders Kokholm  Roland Bunker  David Burgess  Zeljko Urosevic  Kimmo Jaaskelainen </p>	<div style="border: 2px solid green; padding: 5px;"> <table border="1"> <tr> <th style="text-align: left;">Service</th> <th style="text-align: left;">Quality</th> <th style="text-align: left;">Costs</th> </tr> <tr> <td>  Provide what is needed Continuously improve products and processes Right product, right time, right amount </td> <td>  Continuously engage customers and partners Right tool time Reduce the environment Agree on the right ingredients and materials </td> <td>  Minimize investments Attitude of zero waste Increase utilization The budget is considered as a goal by 50% year on year </td> </tr> <tr> <th colspan="3" style="text-align: left;">People</th> </tr> <tr> <td colspan="3">  The right teams are recognized and rewarded Personal development opportunities for all Creating a safe workplace </td> </tr> </table> </div>	Service	Quality	Costs	 Provide what is needed Continuously improve products and processes Right product, right time, right amount	 Continuously engage customers and partners Right tool time Reduce the environment Agree on the right ingredients and materials	 Minimize investments Attitude of zero waste Increase utilization The budget is considered as a goal by 50% year on year	People			 The right teams are recognized and rewarded Personal development opportunities for all Creating a safe workplace			<p>  Nick Webb  Peter Nilsson  Jan Breinholt  Michael Jakko  Carsten Ibsen  Bernhart Gjetten Bernard  Ivona Jarzebska  Frank Breitenstein  Ivah Galovic </p>
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People														
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The Journey 1995-2012

1995-2000

- Maintenance was based on large working teams 24/7 workingdays unnecessary maintenance was carried out
- We risked creating problems where none existed



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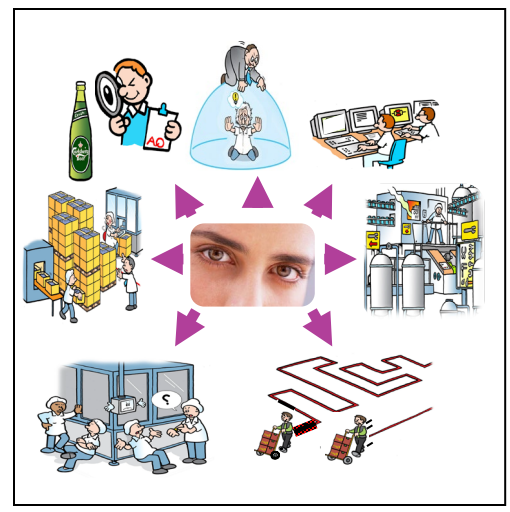
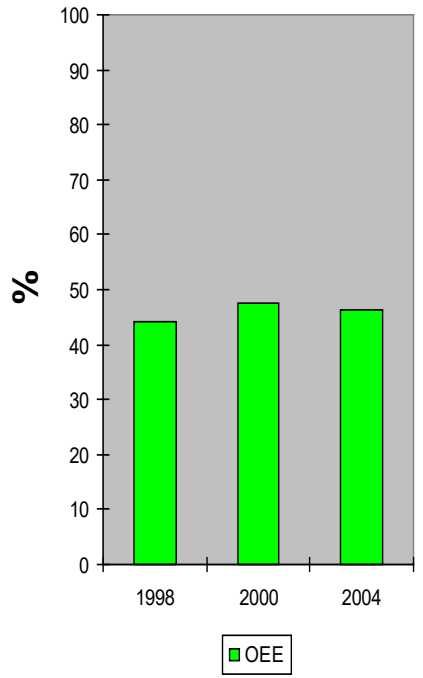
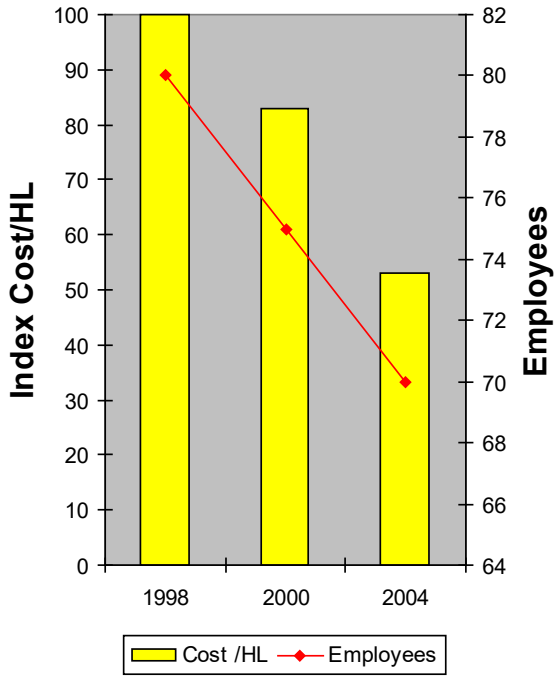
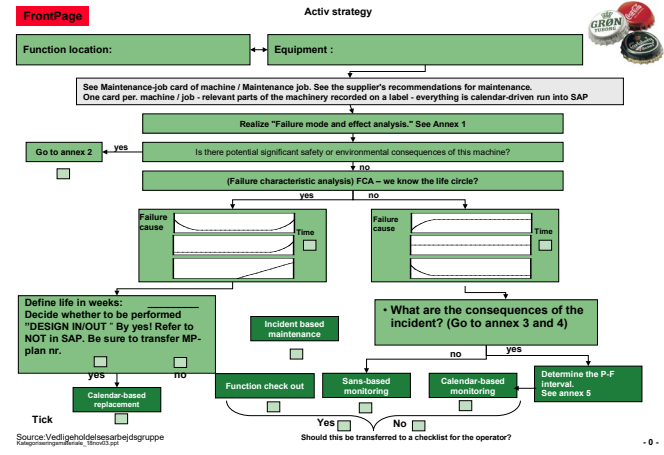
2012

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The Journey 1998-2012

2000-2004

- Active strategy for each task dropped from 7000 to 3000
- Sense-based maintenance – Activities
- TPM in some areas



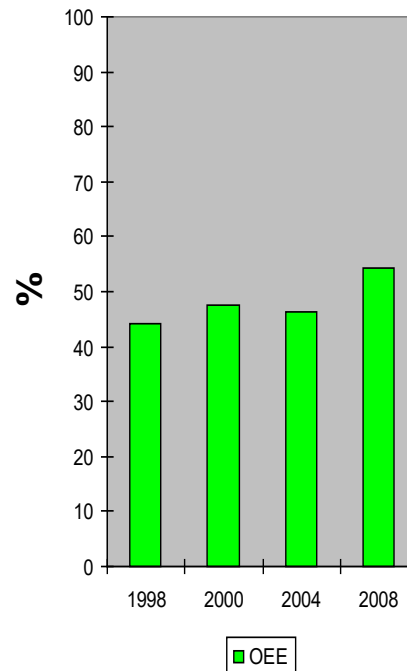
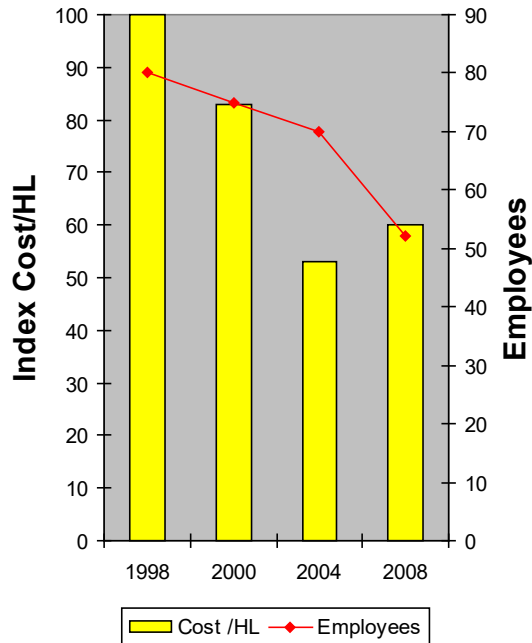
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The Journey 1998-2012

2004-2008

- Bumpy journey
- Start training operators to maintain the machines they worked with
- Workload on operators raised
- Training from maintenance technicians to production employees
- New skills required for operators and technicians



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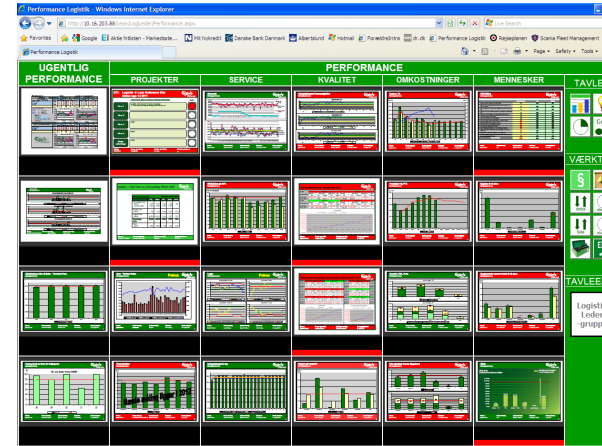
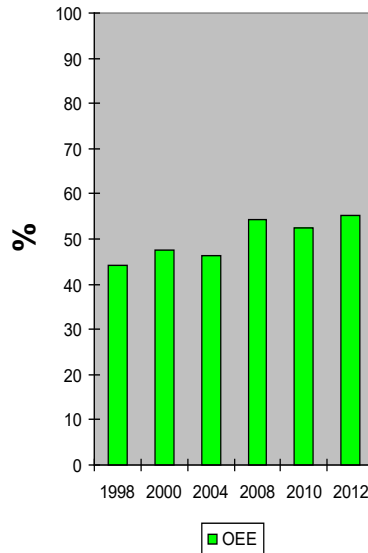
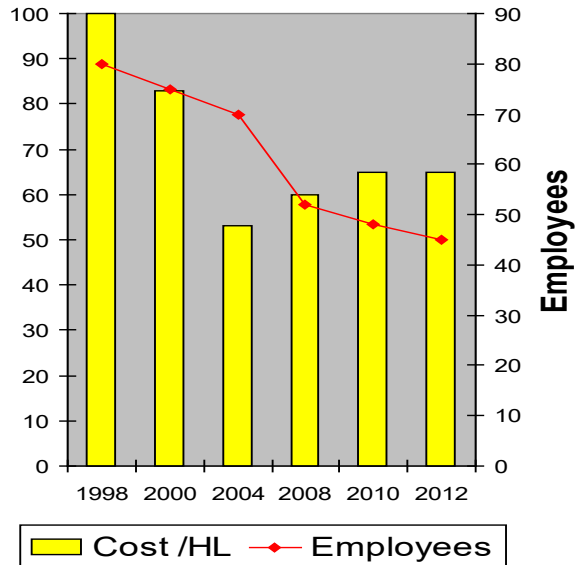
2012

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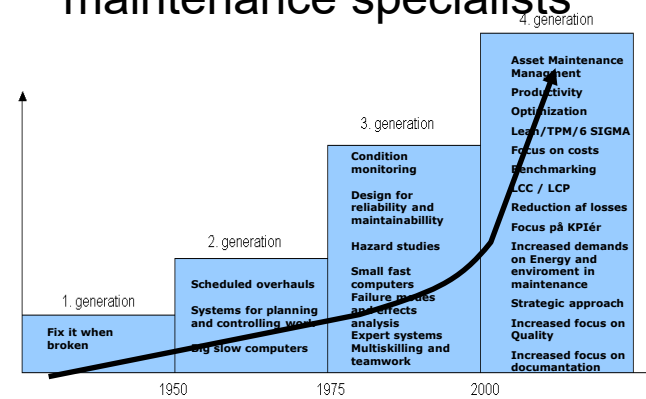
The Journey 1998-2012

2008-2012

- LEAN => no silo thinking
- KPI board
- Blue/White colours
- New role for maintenance specialists
- Training
- Change of mindset



Demands towards maintenance specialists



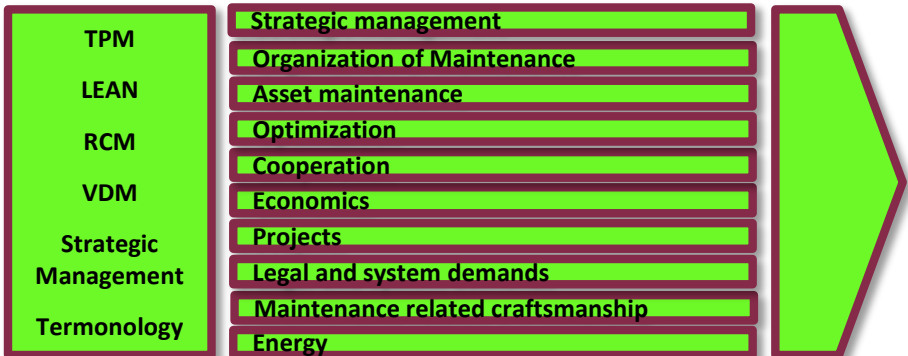
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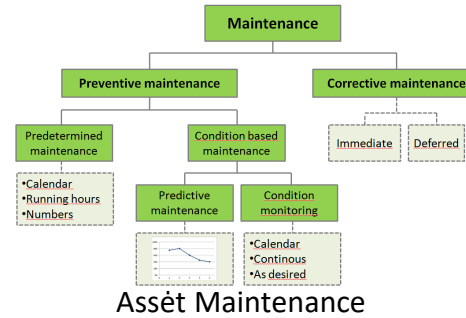
Next step

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- Economic overview and responsibility for maintenance processes.
- Cooperation processes e.g. (Education and development of technical operators)
- Project management
- Strategic maintenance
- Legal and system demands
- Energy
- Strategic management
- Organization of Maintenance
- Equipment maintenance strategy
- Optimization



Legal and system demands



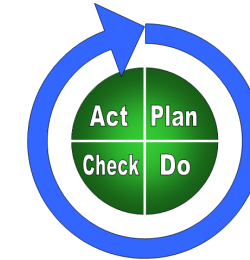
Organization of maintenance



Cash-flow.



Strategy (Plan)



Optimization



Overall view in problem solving -LCC / LCP



•Project management

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Thank you for listening



That calls for a Carlsberg™