Staying competitive in a down market through digital transformation:

Case study on how Lundin is becoming more efficient through 3D in operation

Per Ivar Nerseth, Senior Advisor AVEVA

www.aveva.com

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Part I – Digital Transformation

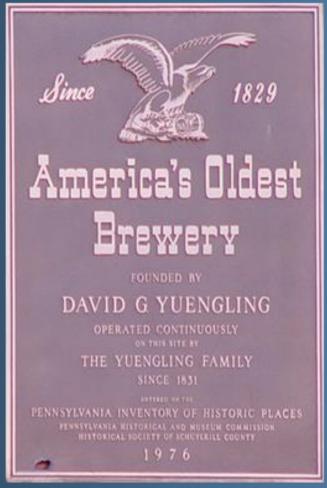
Part II - Lundin Norway

Where is the industry moving?

Key success factors

AVEVA's Digital Asset Strategy

Lundin Case Study

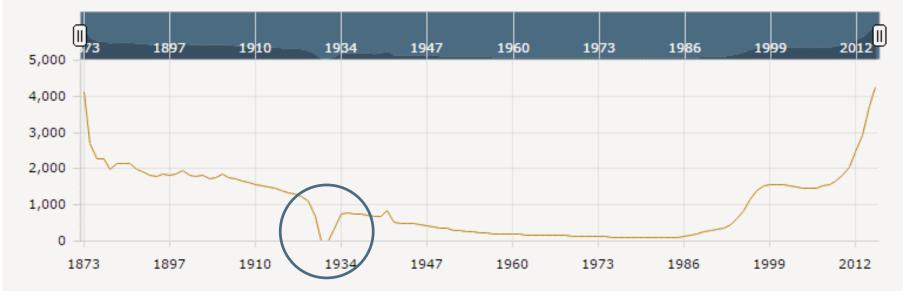


WIKIMEDIA Commons

NUMBER OF BREWERIES

Historical U.S. Brewery Count

number of breweries from 1873 to present day.

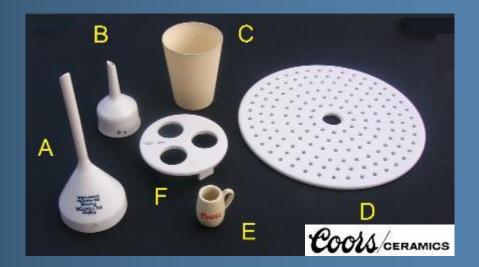


Source: Brewers Association, USA

Their secret?



Images courtesy: WIKIMEDIA Commons





What were their characteristics?

- Resilience
- Innovation
- Agility
- Adaptability

Not new Technology In itself



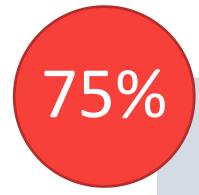
But:MindsetCompany Culture

Digital Transformation in Oil and Gas

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What's ahead?

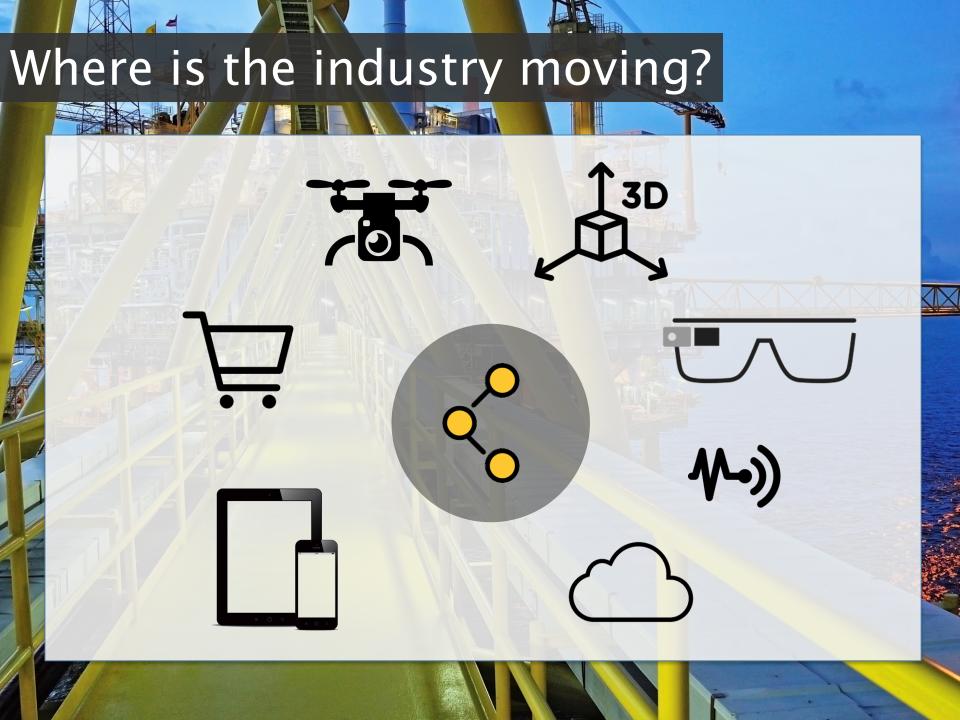




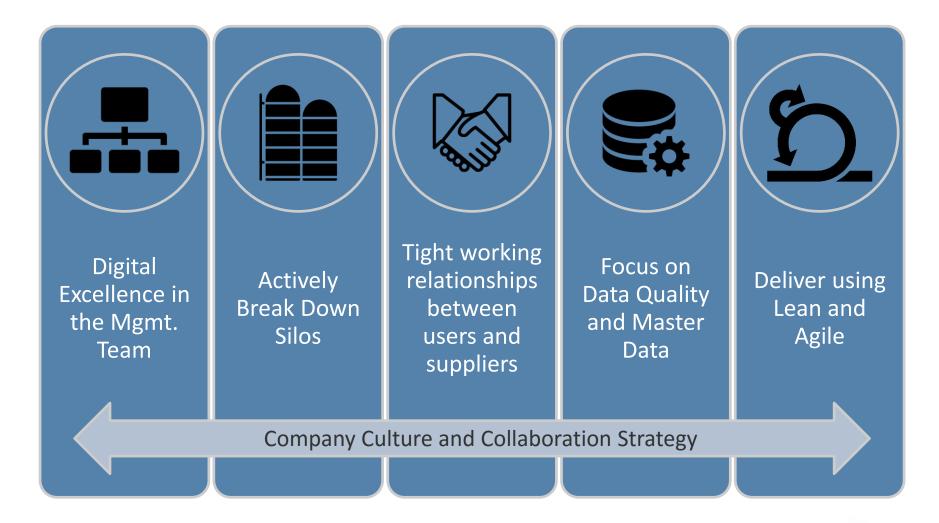
Gartner predicts that by 2020, **75%** of businesses will be digital, but only **30%** of those efforts will be successful.



Researchers at Oxford University believe that **47%** of jobs across all industries could be automated over the next two decades



Digital Transformation - Key success factors



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So what does Digital mean?

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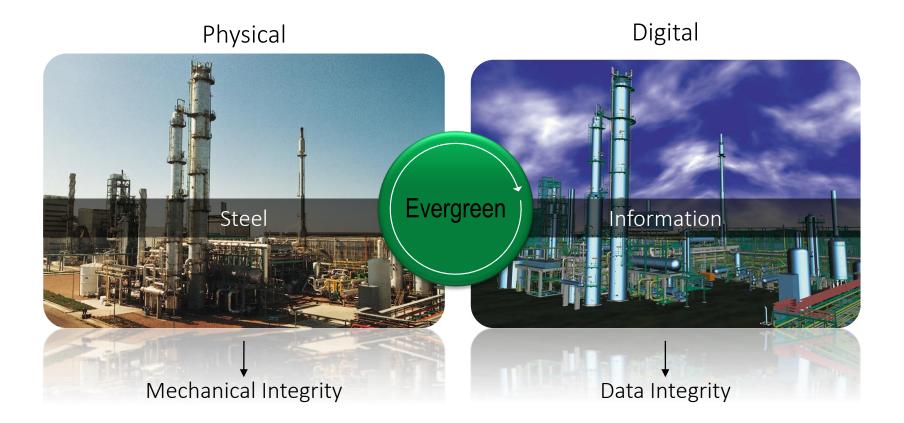
One Core philosophy...

For every Physical Asset...

There should exist a Digital Asset

A tale of two assets





One unique tag...





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...exists as a record in many systems

AVEVA











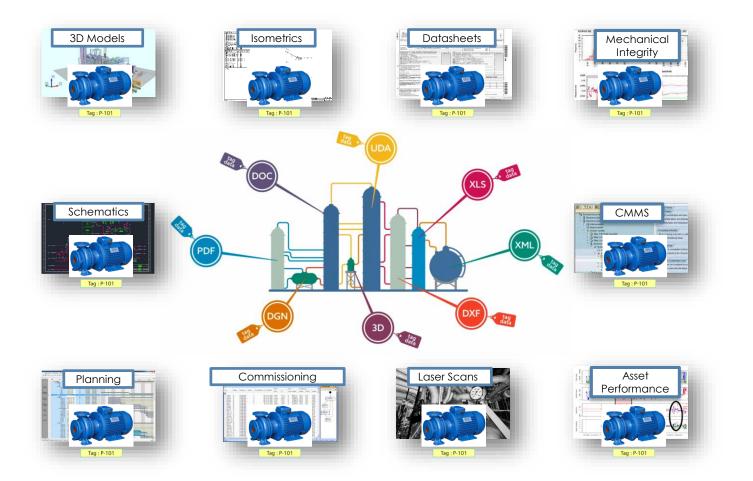






In the Digital Asset all data and documents are linked together





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So what areas gives Oil and Gas Owner Operators the biggest benefits and savings?



Improve personnel safety and optimize processes using wireless real-time mobile solutions Improving return to service time using visual information portals and collaboration solutions

> Efficiency gains through optimized modification dataflow

> > (\cdot)

Improving ratio of planned maintenance versus corrective maintenance through a optimized continuous improvement feedback loop

Efficiency gains through improving non-strategic equipment purchasing process Improving onshore planning using visual collaboration and decision support solutions

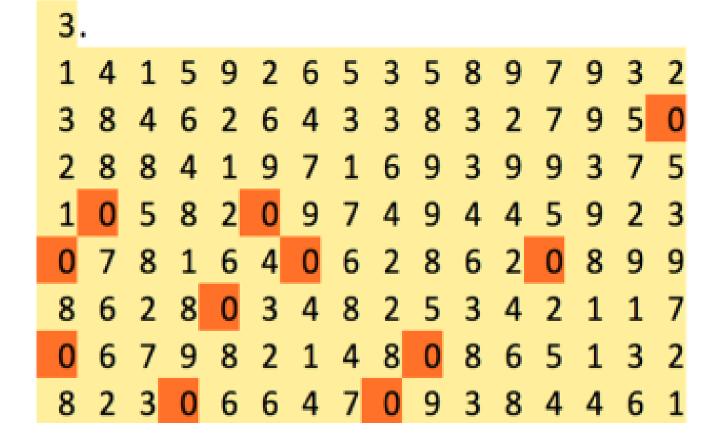
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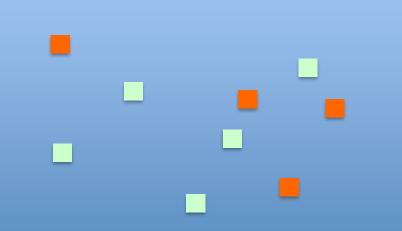
World's most powerful Supercomputer

Optimised for Visualisation and Spatial Recognition Tapping into our "Visual Super-computer"

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Our brain processes visuals

times faster than text

Our brain processes visuals 60,000 times faster than text



New Brain Research: Physical movement makes a significant difference when it comes to understanding and learning.

> Copyright: Audrey van der Meer and Ruud van der Weel, University of Science & Technology (NTNU).

Why is this relevant?















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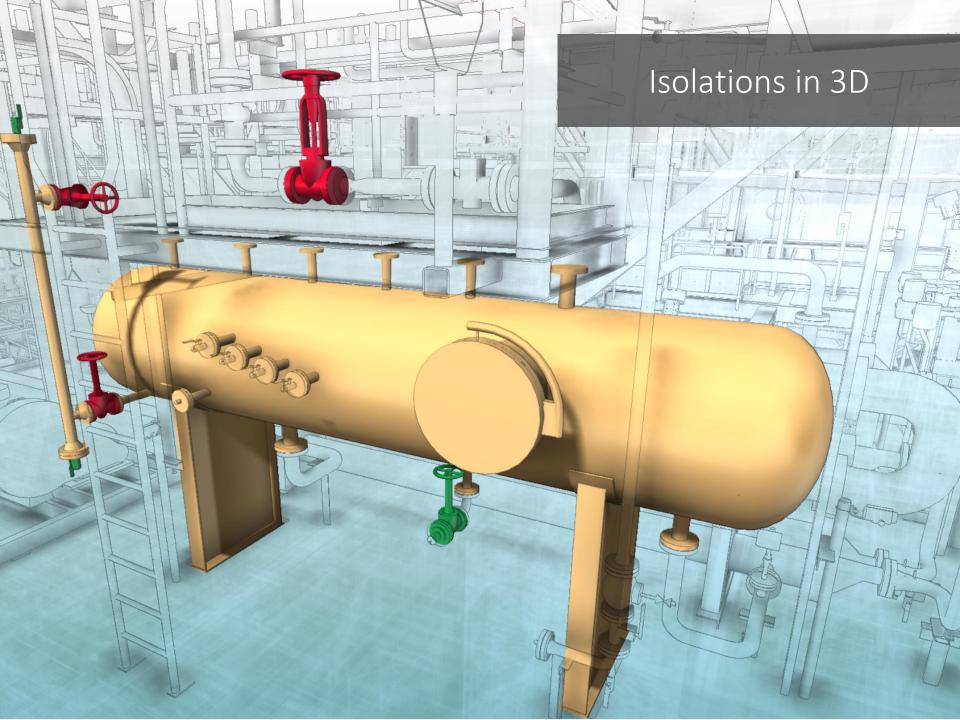
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Lundin Norway

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Offshore Operation

Control of Work PM Programs Work Planning Inspections Condition based maintenance Modifications Corrective maintenance Technical Information Offshore Logistics

EPCI Contractors

Engineering and Construction Modifications Procurement Logistics

LUNDIN NORWAY's Integrated Solution

Onshore Base/ Warehouse

*

Pack / Unpack Shipment, Manifest Stock Inventory Goods Receipt Logistics

Supplier

3-party warehousing Web order Onshore Operation

Planning Onshore Operation Centre Procurement and Contracts

Lundin Video

Our Mission is to unlock the power of our customer's Digital Assets

Thank You!