



Staying competitive in a down market
through digital transformation:

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

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Topics



Part I – Digital Transformation

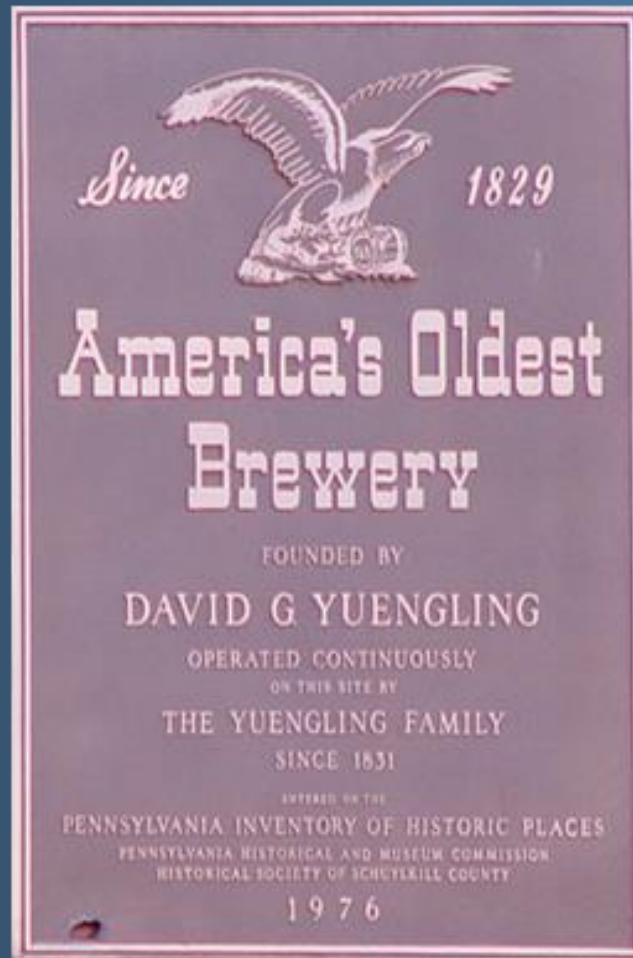
Where is the industry moving?

Key success factors

AVEVA's Digital Asset Strategy

Part II – Lundin Norway

Lundin Case Study

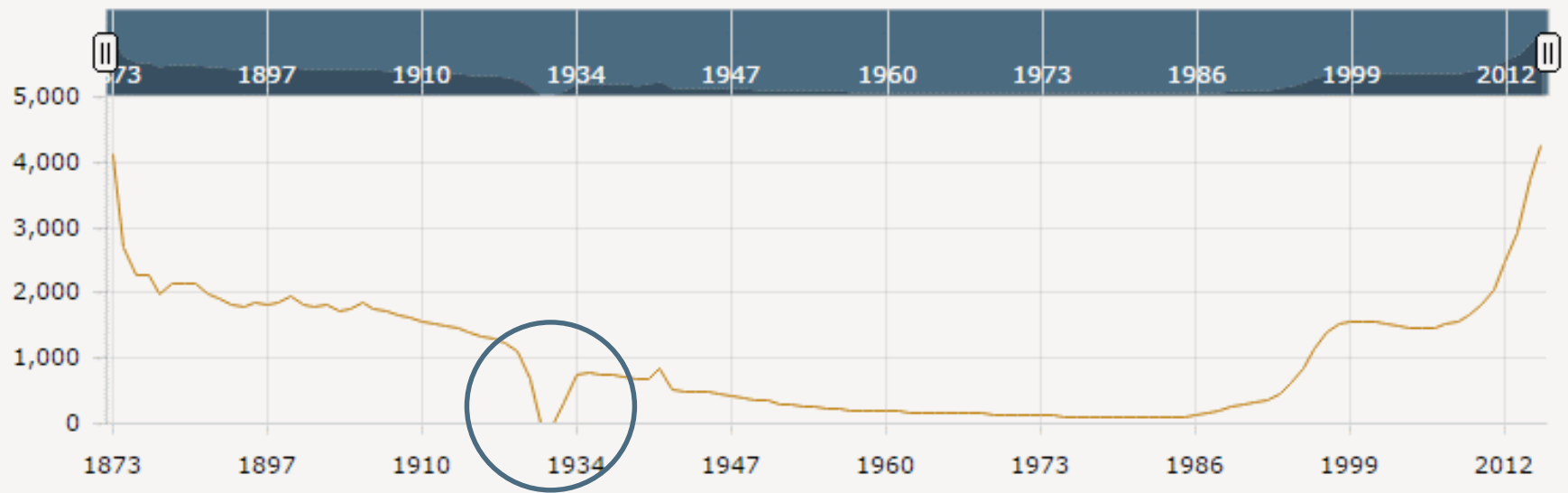


WIKIMEDIA Commons

NUMBER OF BREWERIES

Historical U.S. Brewery Count

number of breweries from 1873 to present day.

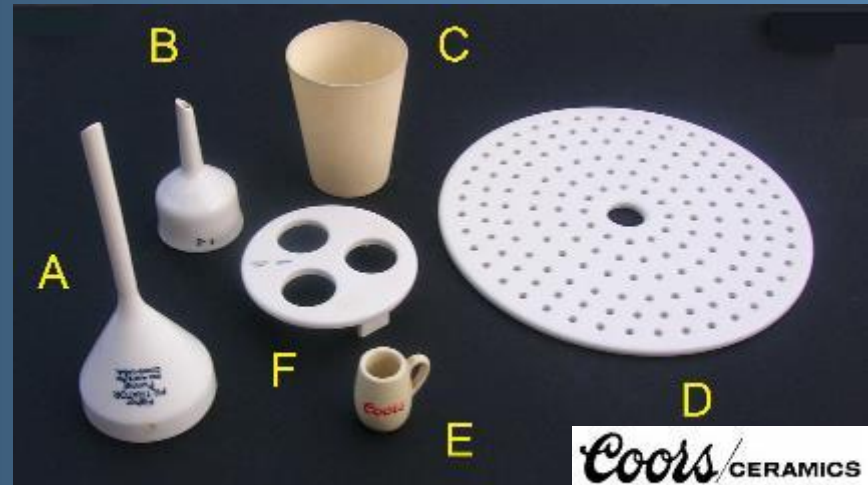


Source: Brewers Association, USA

Their secret?



Images courtesy: WIKIMEDIA Commons



What were their characteristics?

- Resilience
- Innovation
- Agility
- Adaptability

Not new

Technology

In itself



But:

- Mindset
- Company Culture



Digital Transformation in Oil and Gas

What's ahead?



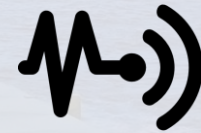
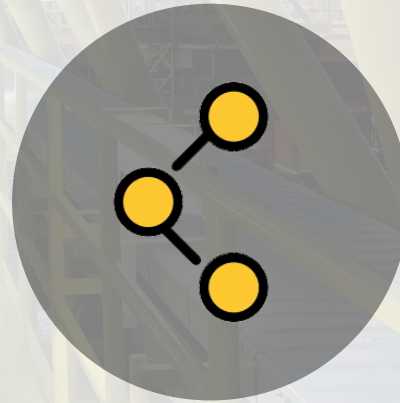
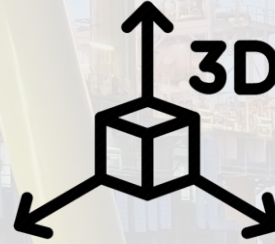
75%

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

47%

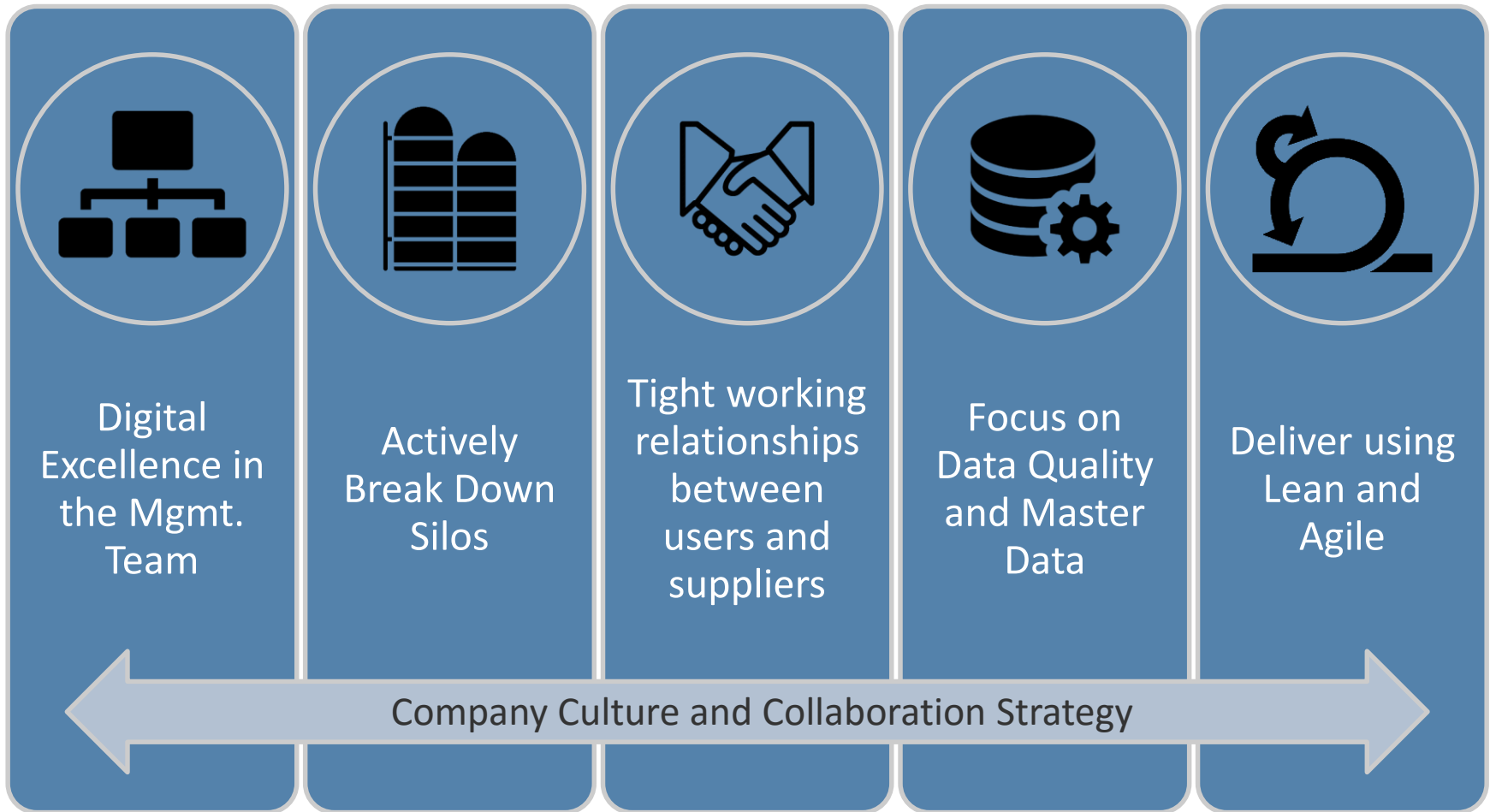
Researchers at Oxford University believe that **47%** of jobs across all industries could be automated over the next two decades

Where is the industry moving?



Digital Transformation

- Key success factors



sure glad
the hole
isn't at our
end





So what does Digital mean?



DIGITAL ASSET



**One Core
philosophy...**

For every
Physical Asset...



There should exist a
Digital Asset



A tale of two assets



Physical

Digital



↓
Mechanical Integrity

↓
Data Integrity

One unique tag...

AVEVA™



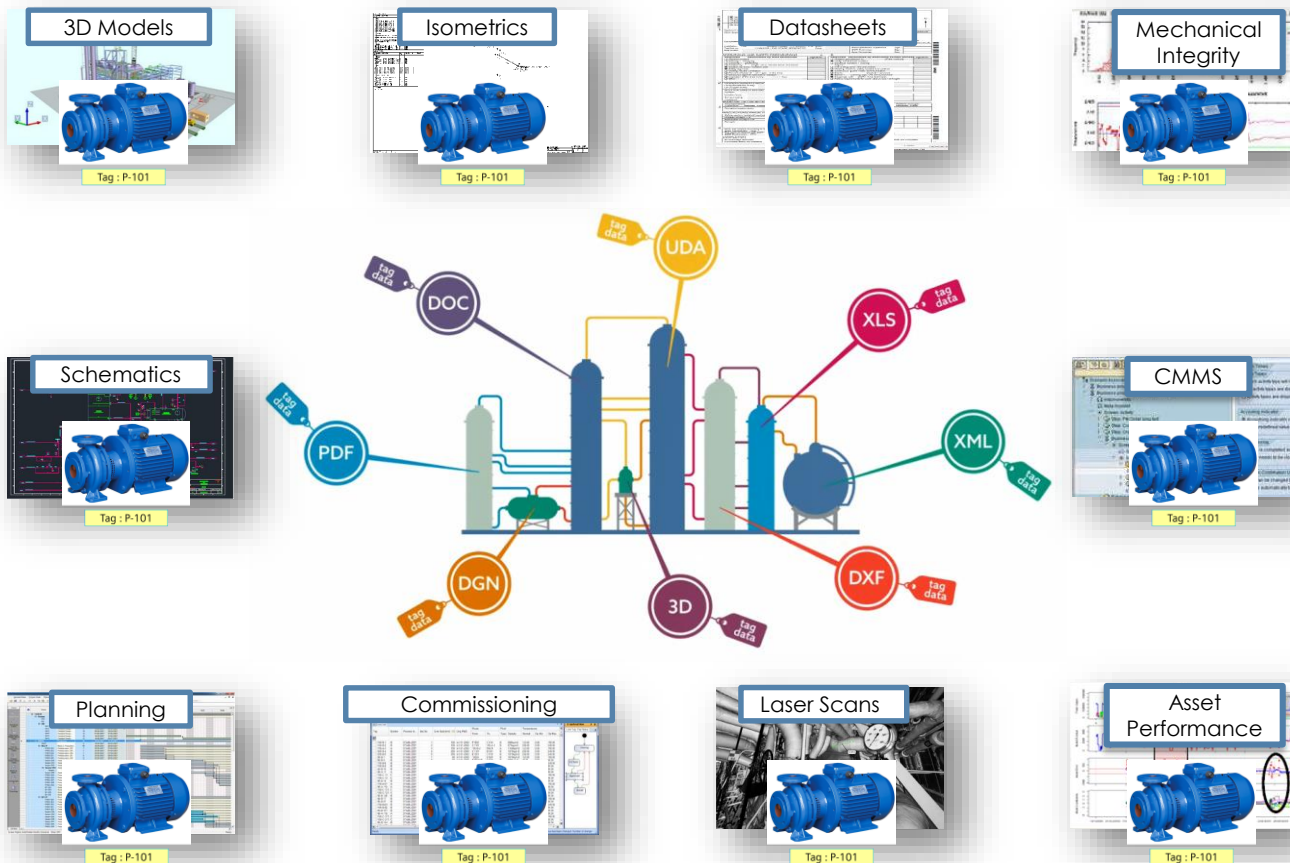
Tag : P-101

...exists as a record in many systems



In the Digital Asset all data and documents are linked together

AVEVA™





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

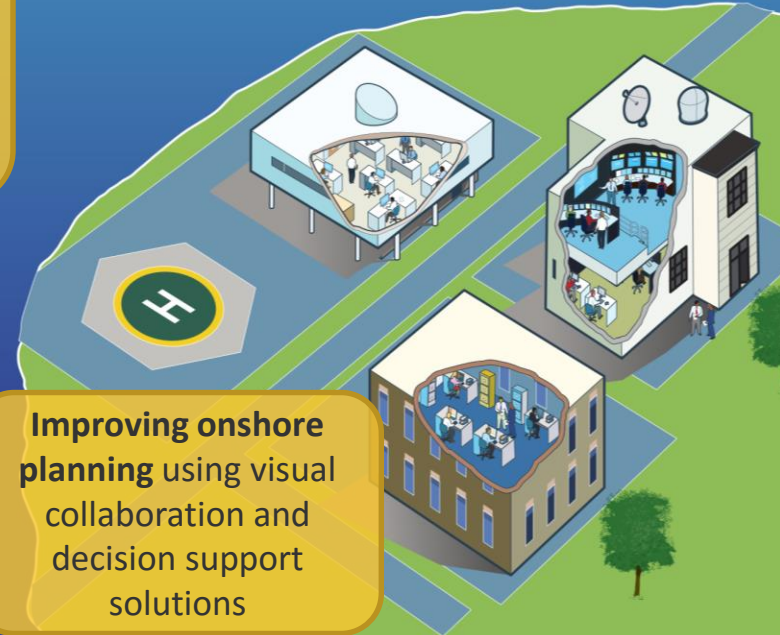


Efficiency gains through optimized modification dataflow

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



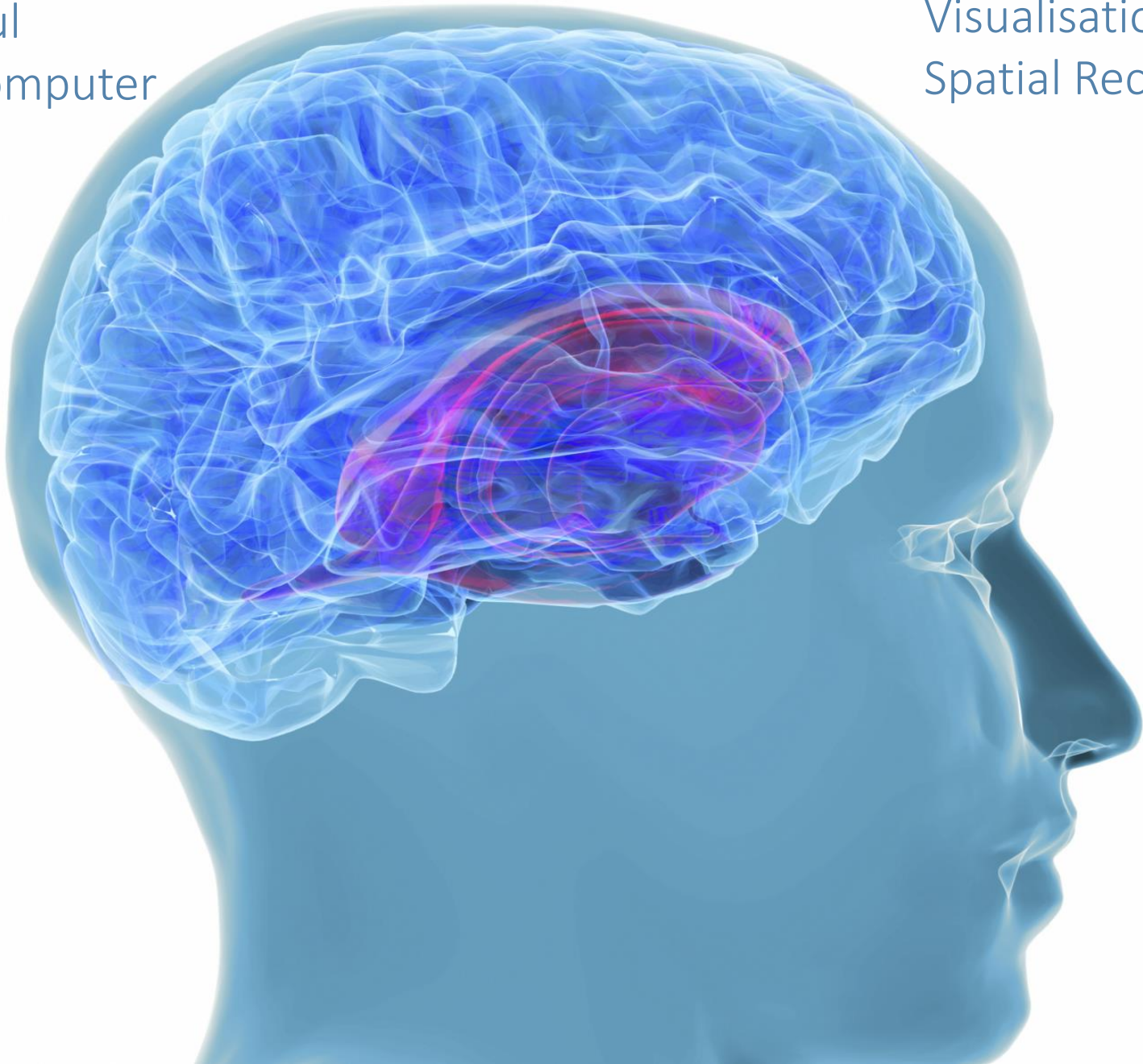
Efficiency gains through improving non-strategic equipment purchasing process

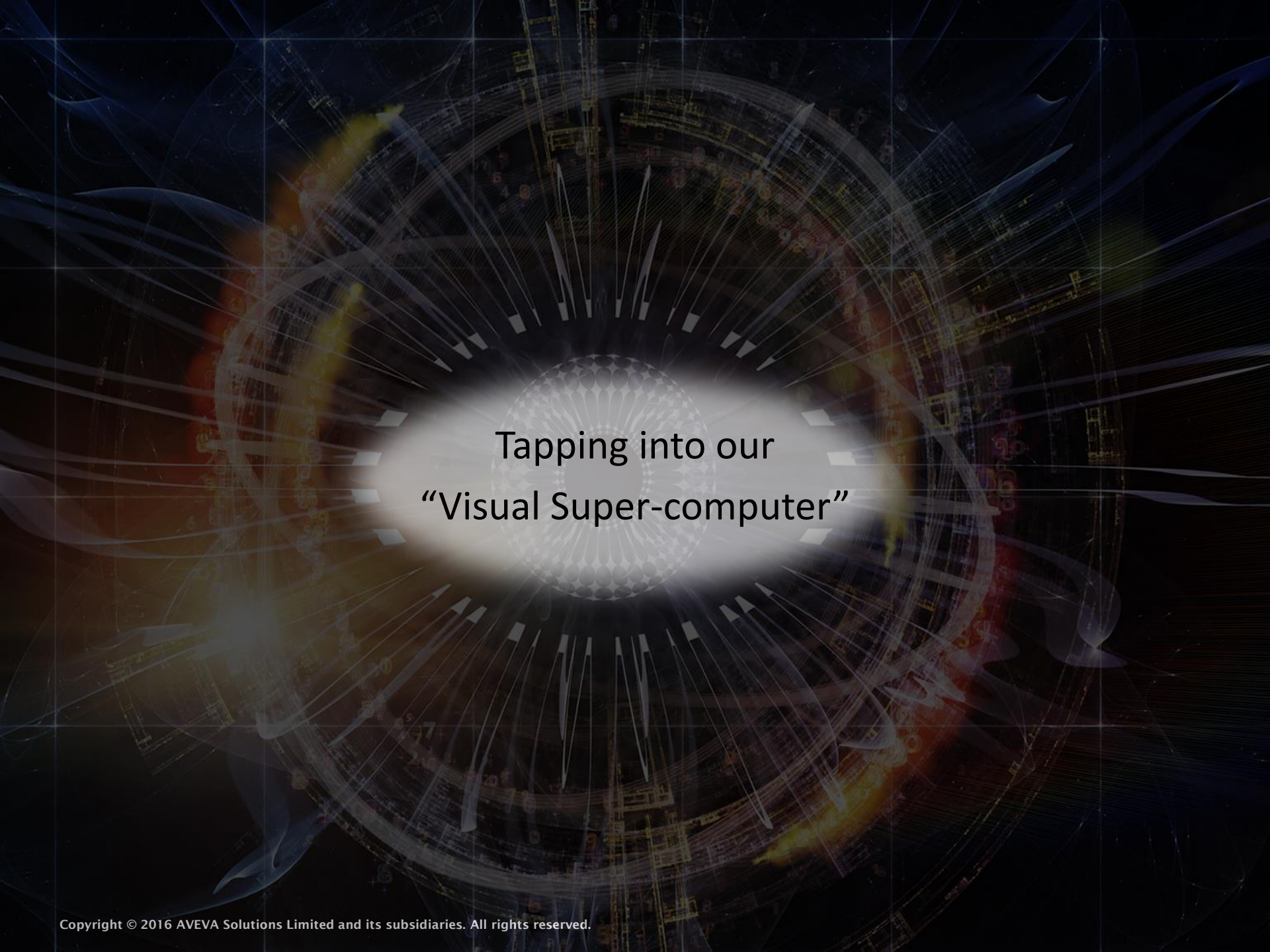


Improving onshore planning using visual collaboration and decision support solutions

World's most
powerful
Supercomputer

Optimised for
Visualisation and
Spatial Recognition



The background is a dark, complex composition. A central, glowing white orb with a textured, cellular surface is the focal point. From this orb, numerous thin, white lines radiate outwards, some ending in small arrowheads. These lines are set against a backdrop of faint, overlapping circular patterns and a grid of thin, light blue lines. The overall color palette is dominated by dark blues and blacks, with highlights of yellow and orange emanating from the central orb and along some of the radiating lines.

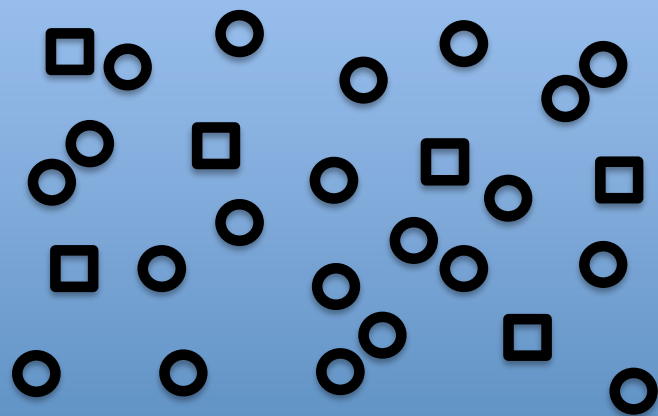
Tapping into our
“Visual Super-computer”

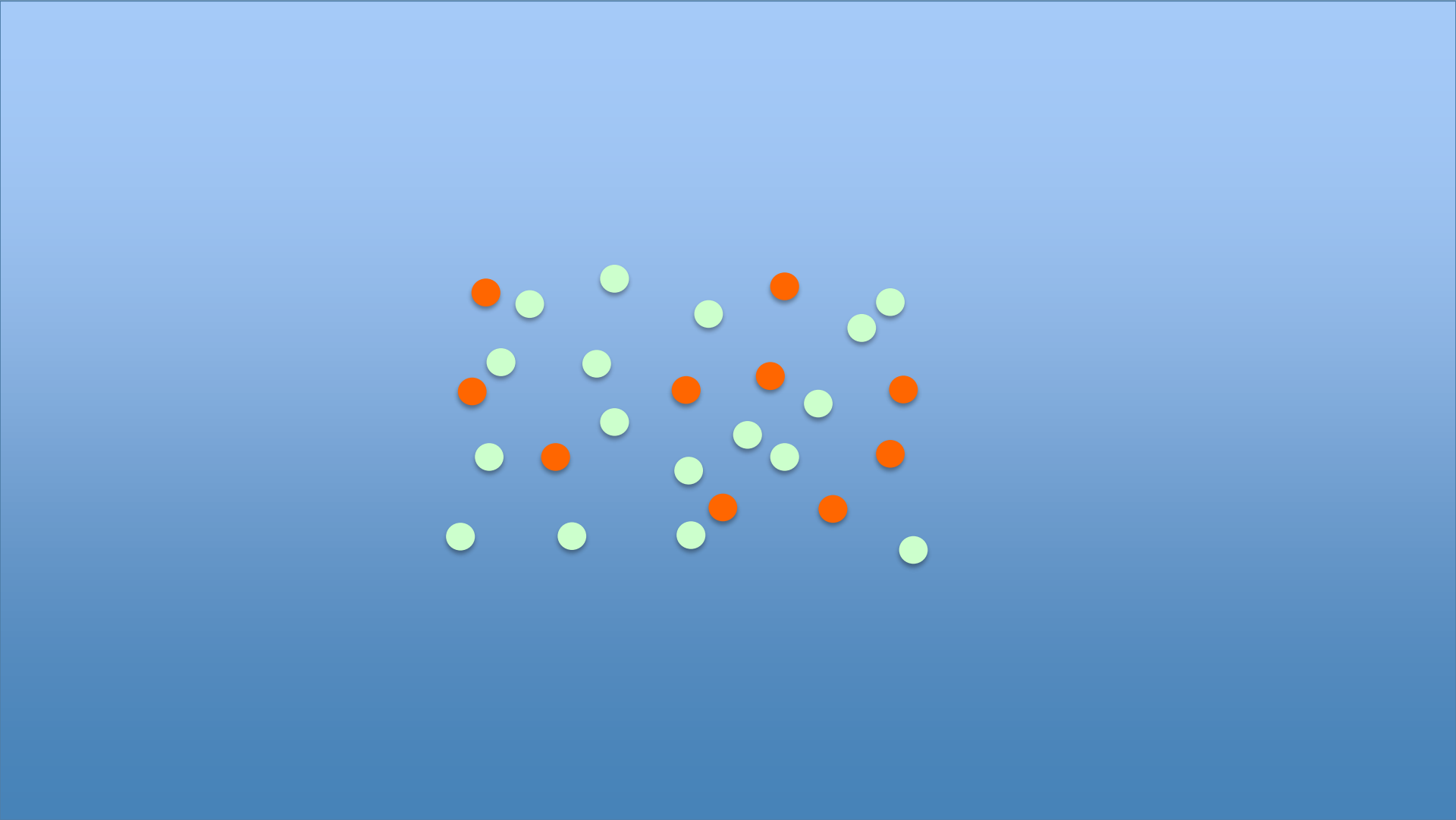
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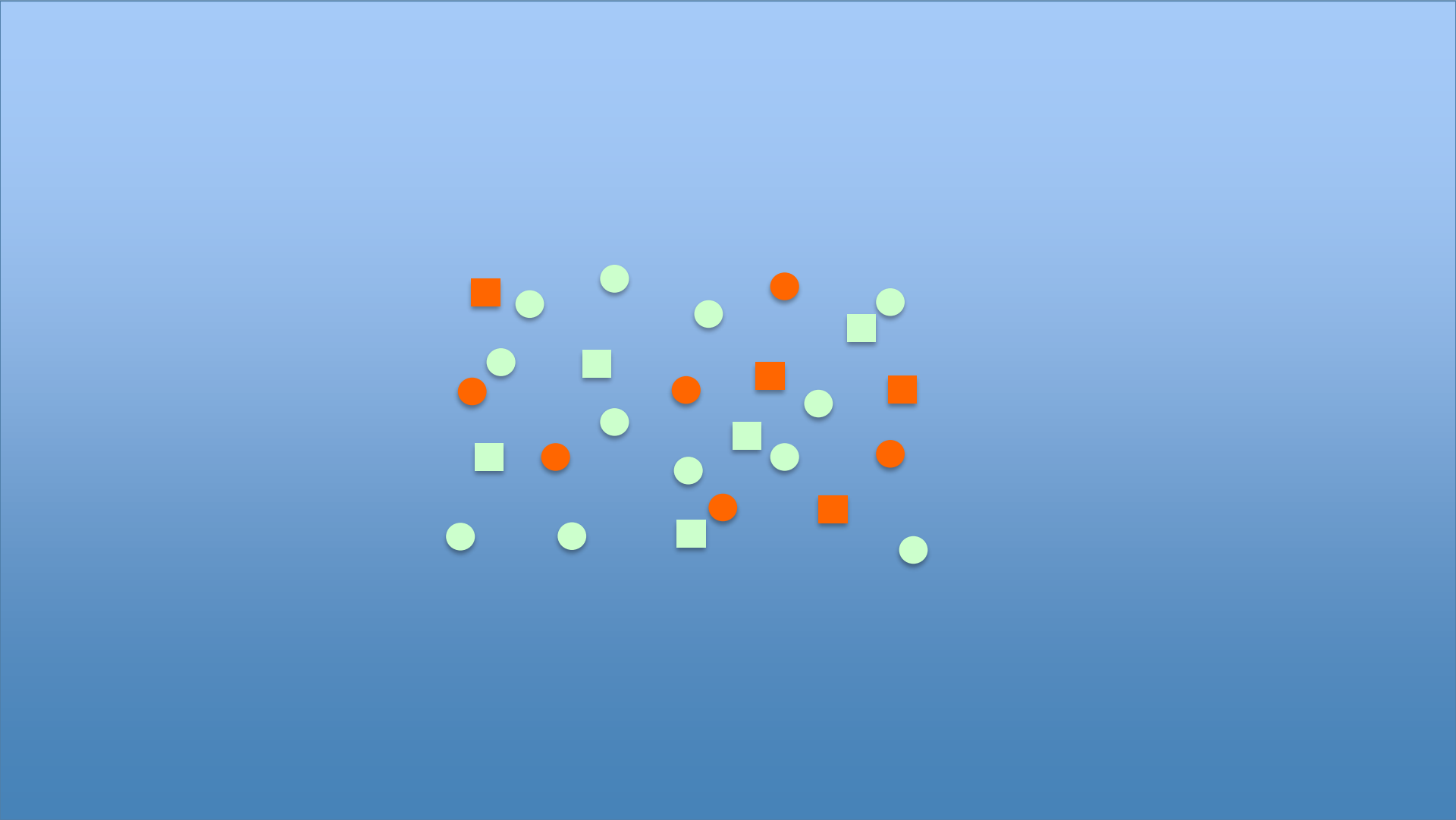
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3	8	4	6	2	6	4	3	3	8	3	2	7	9	5	0
2	8	8	4	1	9	7	1	6	9	3	9	9	3	7	5
1	0	5	8	2	0	9	7	4	9	4	4	5	9	2	3
0	7	8	1	6	4	0	6	2	8	6	2	0	8	9	9
8	6	2	8	0	3	4	8	2	5	3	4	2	1	1	7
0	6	7	9	8	2	1	4	8	0	8	6	5	1	3	2
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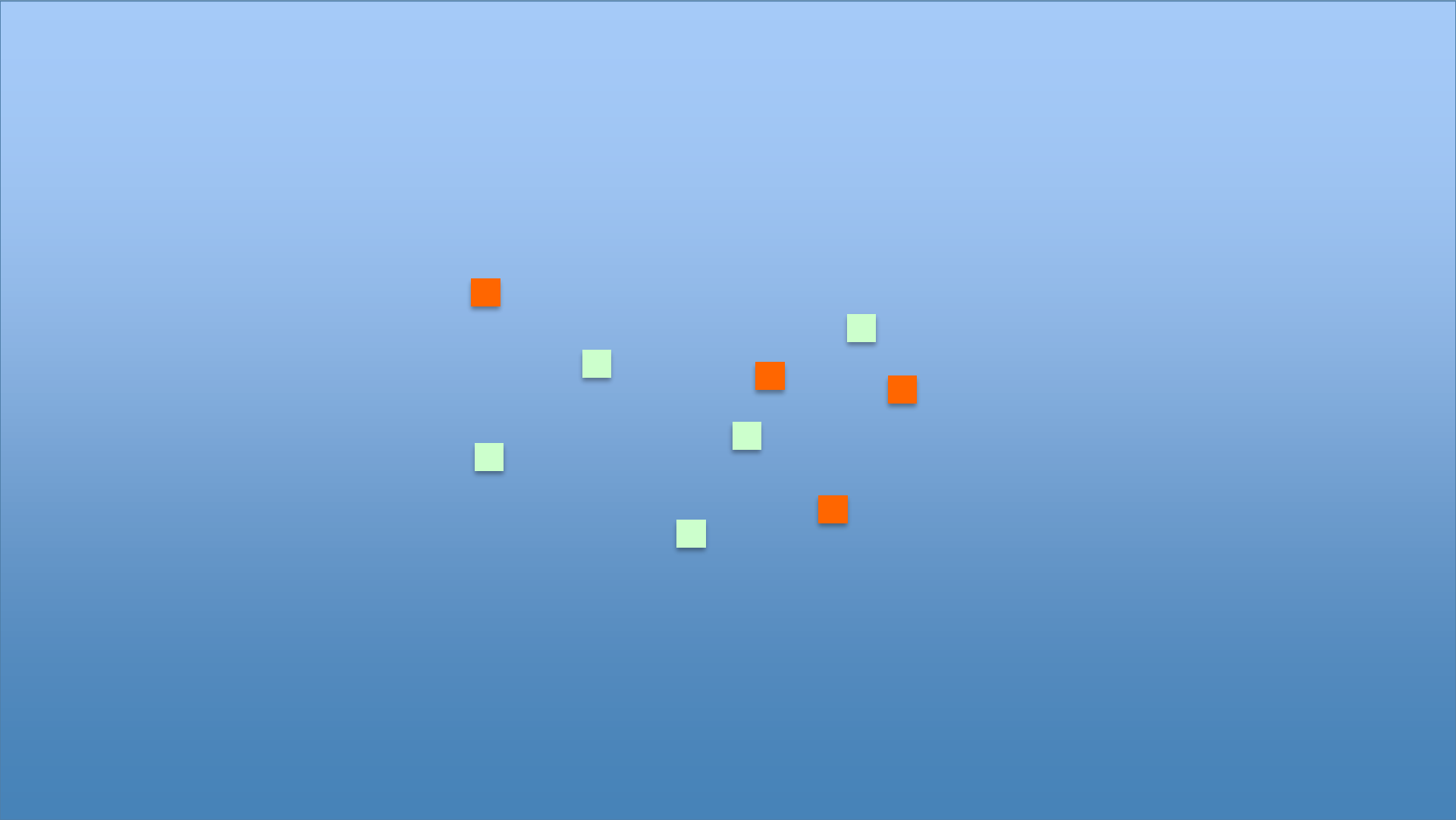
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1	4	1	5	9	2	6	5	3	5	8	9	7	9	3	2
3	8	4	6	2	6	4	3	3	8	3	2	7	9	5	0
2	8	8	4	1	9	7	1	6	9	3	9	9	3	7	5
1	0	5	8	2	0	9	7	4	9	4	4	5	9	2	3
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8	6	2	8	0	3	4	8	2	5	3	4	2	1	1	7
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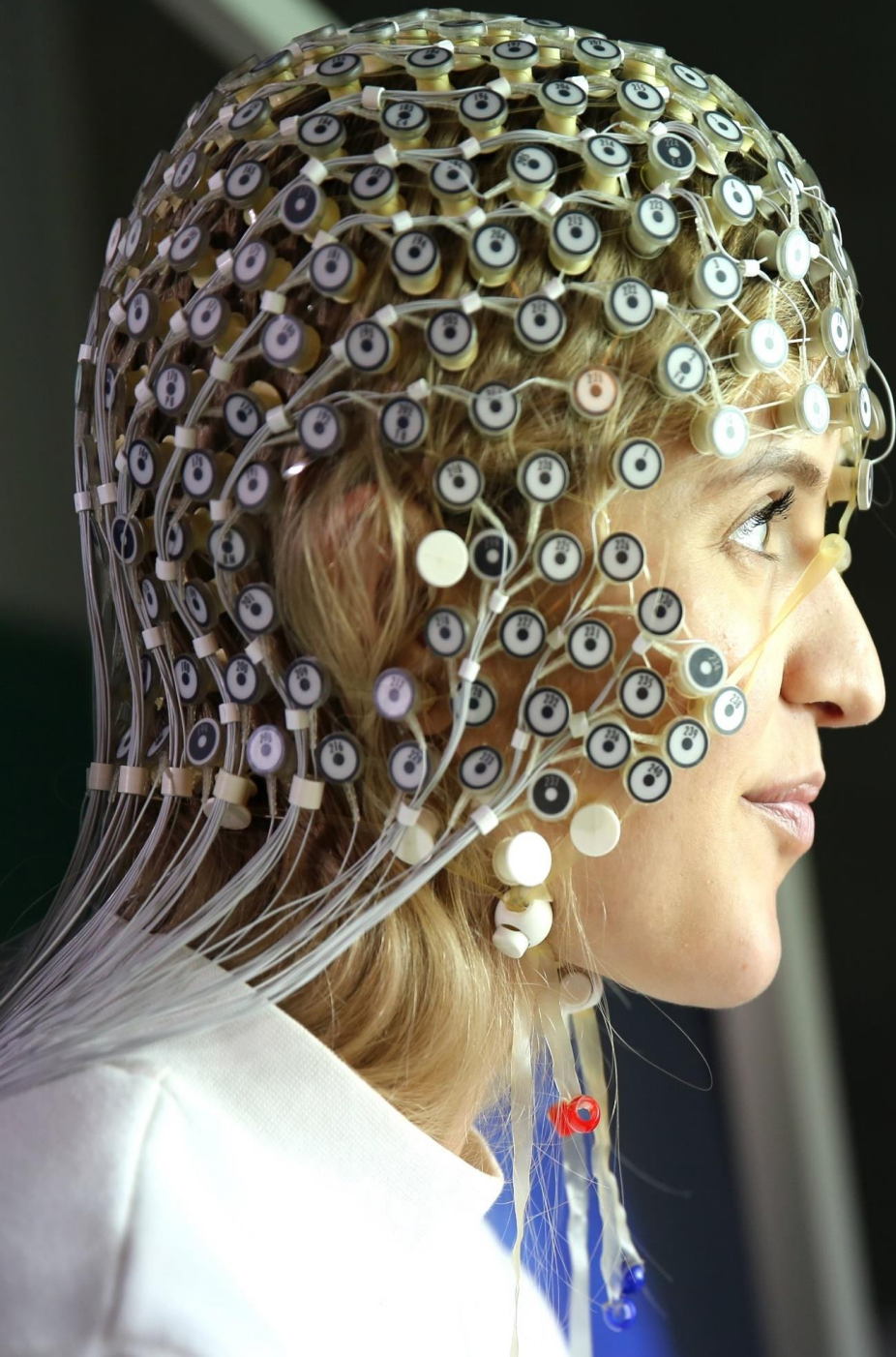


Our brain processes
visuals

times faster than text



Our brain processes
visuals
60,000
times faster than text



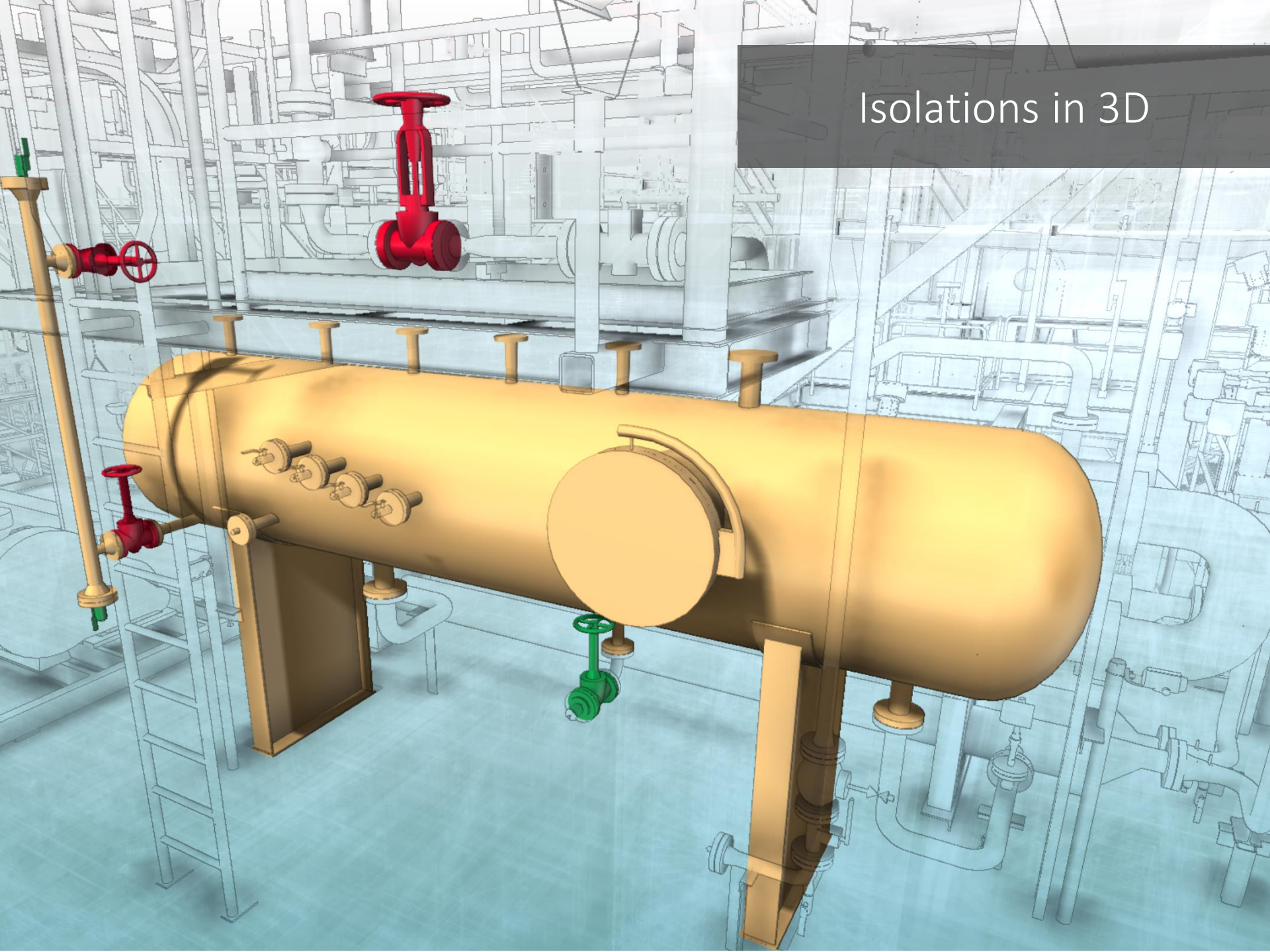
New Brain Research:
Physical movement
makes a significant
difference when it
comes to
understanding and
learning.

Why is this relevant?





Isolations in 3D



Case Study

AVEVA™

Lundin

Norway





The diagram is an isometric illustration of the LUNDIN NORWAY integrated solution. It features a central blue area representing the sea, surrounded by landmasses. In the top left, a red helicopter flies over the water. In the top right, a large blue warehouse with a red crane is shown. In the bottom left, a grey industrial facility with a helipad is depicted. In the bottom right, a modern onshore building with a helipad is shown. Five circular callouts are overlaid on the illustration, each containing text describing a specific part of the solution. The central text 'LUNDIN NORWAY's Integrated Solution' is prominently displayed in the middle of the sea area.

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

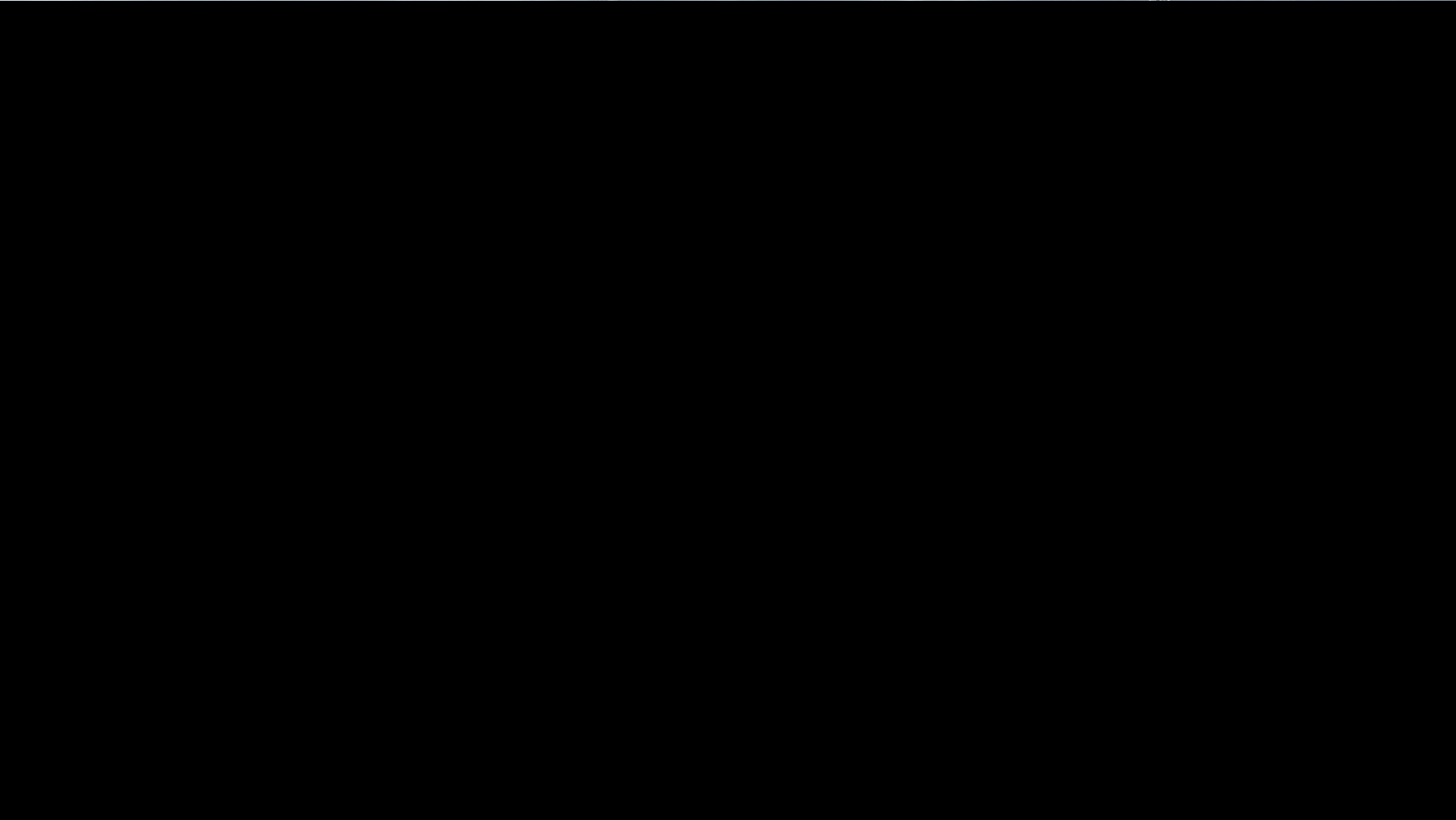
Pack / Unpack
Shipment, Manifest
Stock Inventory
Goods Receipt
Logistics

Onshore Operation

Planning
Onshore
Operation Centre
Procurement and
Contracts

Supplier

3-party
warehousing
Web order



Lundin Video



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



Thank You!