

DIGITALIZATION IN AQUACULTURE – FROM VISION TO ACTION

Per Ivar Lund

VP Business Development and Digital

SCALE **AQ**

We deliver a **complete** value chain

*From tailor-made solutions
to complete turn-key projects*



Seabased



Landbased



Software



Service



*A Norwegian based company, providing
high-quality solutions and services for
the fish farming industry world-wide.*

At the forefront

Be at the forefront of new technology for the aquaculture industry.

Customer focused

Together with our customers and research partners transform know-how into cutting-edge products.

Partner and advisor

A partner and advisor for developing land- and seabased aquaculture projects with an unbroken history within aquaculture for nearly 40 years.



900 Employees
in the Group

2,5 BILLION
NOK Group revenue

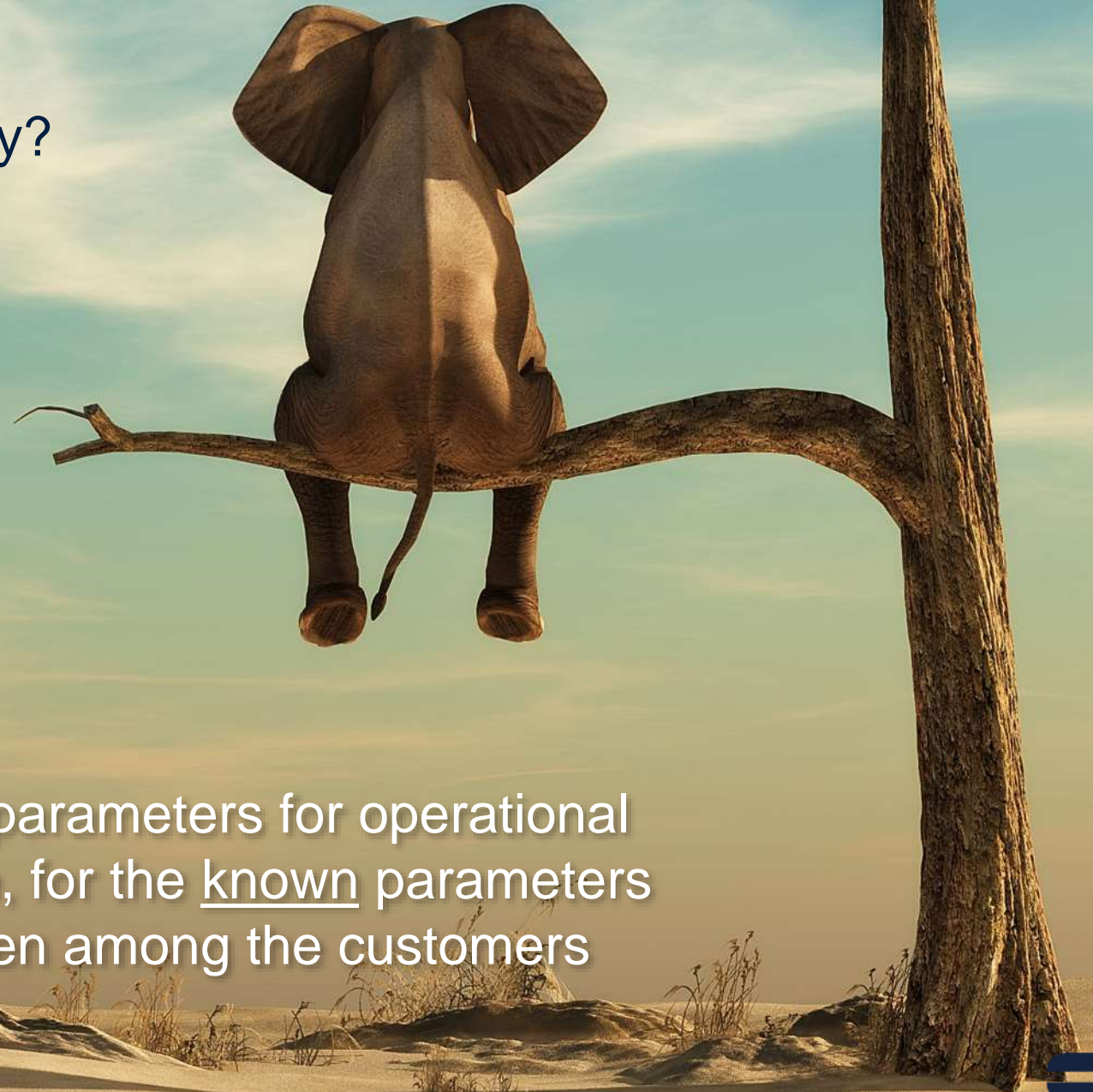
27 Offices in
11 countries



Vision – Drivers – Challenges - Focus

Vision – we all have a feeling where we are headed

What is it we are trying to achieve, and why?



Statement: There are still many unknown parameters for operational excellence in salmon farming. Furthermore, for the known parameters there is often a lack of «best practice», even among the customers different locations





Is more data the problem solver?



Common challenge we are trying to solve



Understanding what influences
fish behavior, wellness and growth

Drivers for digitalization



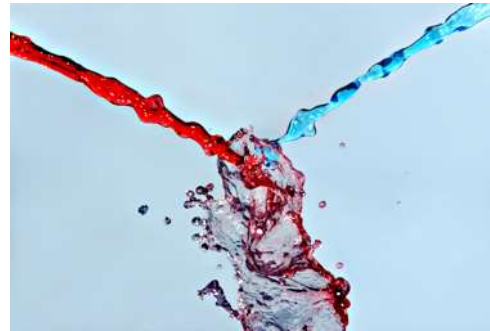
Proprietary software

that alone is not utilized enough and offers limited **data exchange**



Understanding

What are the **success criteria** in fish farming – hoping to find the **holy-grail**(more data)



Convergence

Land based (CAS) and sea based are closing in on each other, but not well linked in data



Regulatory

Requirements



Consumer

Push for more transparency of the value chain

"how much medicine did this fish get?"



Growth will come from exposed and landbased

New complex infrastructure



Unhabitable locations



Monitoring – Automation – Autonomous feeding



Challenges

- «Let's make one big jump into the perfect world»
- Ownership of data is linked to the platform where it was created.
- AI needs a lot of data – from several sources
- Centralized vs decentralized operational models with customer
 - Most likely to have accept and understanding at «office level» – not «sea-cage» level





Focus

1. Develop simple standards without making it a beast for data handling
2. Respect costs involved creating data and maintaining systems where data is produced
3. Focus on the whole doughnut – not the hole in the doughnut