Don't Panic

AI meets biology

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Background

- Knut Drange – Head of IT and digitalization in Måsøval
  - Working with software for fish farming since 2006
  - Spent most of my career with different vendors

- Måsøval
  - Started in 1973
  - Operations in PO5 and 6
  - 4 land sites, 18 sea sites, 1 harvest plant and a sales division
  - About 360 employees
  - Aiming for 29 000 tonnes in 2025

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AI meets biology

- Focus: when the fish is alive
- Digitalization is not just the paperless vision anymore
- AI to combine information from multiple sources
- Types of AI

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Visual AI – Seeing is believing

- Dependent of visual feedback
- Weight precision
- Wounds
- Welfare
- Lice
- Feeding
- Operational assessment
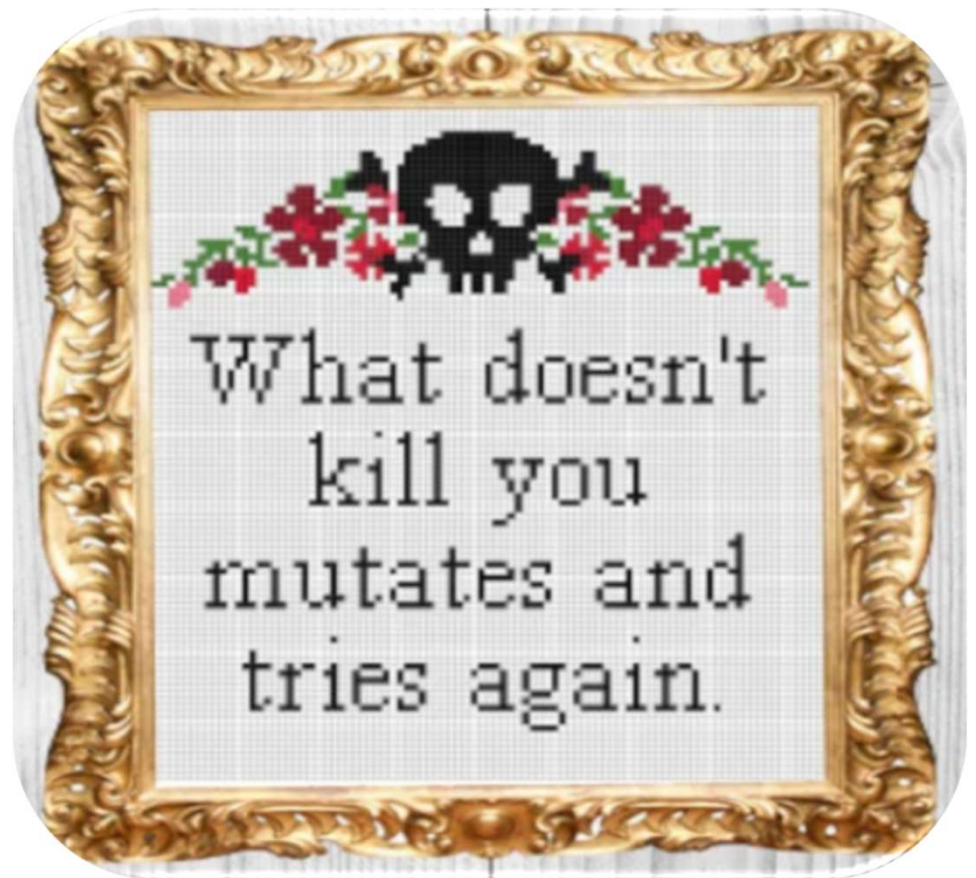- Behavioral analysis
- Disease

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Automation and forecasting

- Automation – equipment - sensors

- Clustering and forecasting techniques

- Include operational forecasts and production forecasts

- Forecast sensors and other time series

- Proactive possibilities

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Language models

- ChatGPT and similar models
- Research assistant
- Validate results
- Faster to utilize new methods

Requirements: How do I get AI to work?

- Availability and accessibility
- Contracts / business models
- Cloud dependency
- Equipment
- Measurement and data quality
- Bias and accuracy
- Trust and causality
- Cost/benefit
- Organization and people

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Next steps?

- From deterministic software to AI agents
- Performing tasks on behalf of users
- Autonomous operations
- Precision farming

Marvin the paranoid android: *"Funny, how just when you think fish farming can't possibly get any worse it suddenly does."*

Douglas Adams – The Hitchhiker's Guide to the Galaxy

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Made by nature

Pioneered by Måsøval