

Big Data from the perspective of the statistician



Who we are

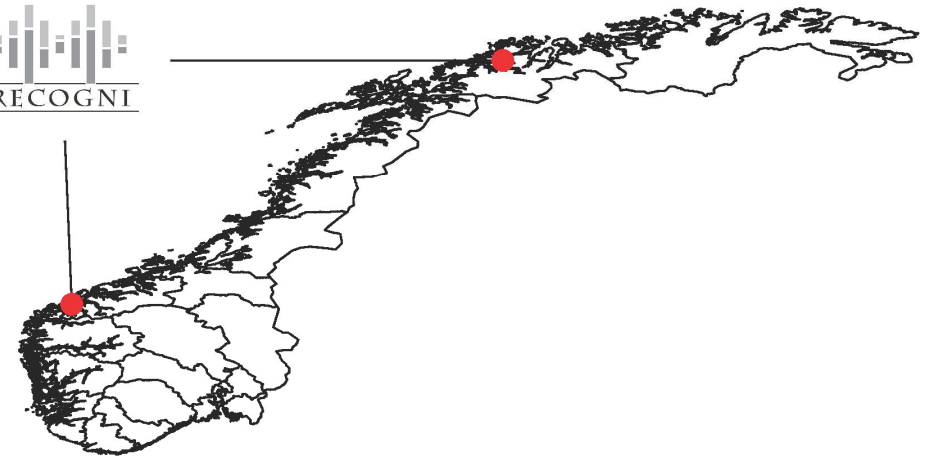
We have a passion for number crunching

Extract value from existing data

Specializes in

Pattern recognition

Model selection





Paal Haugen, MSc, PhD

Head of analysis

Paal holds a PhD in applied statistics in health sciences from the University of Tromsø. He is an expert in multivariate analysis, model selection and graphical display of data.



Stian Grønning, Master of Economics

CEO

Stian holds a masters degree in economics with specialization in technical finance. Stian excels in time series, and financial – analysis.



Outline

Experience from collaboration projects

The problem of Big Data

How to think like a statistician

Example with ecological data

Forward



Experiences

Challenges

The academic world and the business world has different goals and motivations

Projects are often explorative

The translation between the two worlds can pose a challenge



Experiences

Solutions

Define questions

Define hard ends

Short and long term goals



Possibilities

Downtime on airplanes can cost 10 000\$ an hour

Predictive maintenance reduces unplanned downtime in aviation industry with 18%

This is achieved through analysis of large amounts of data



The problem of Big Data

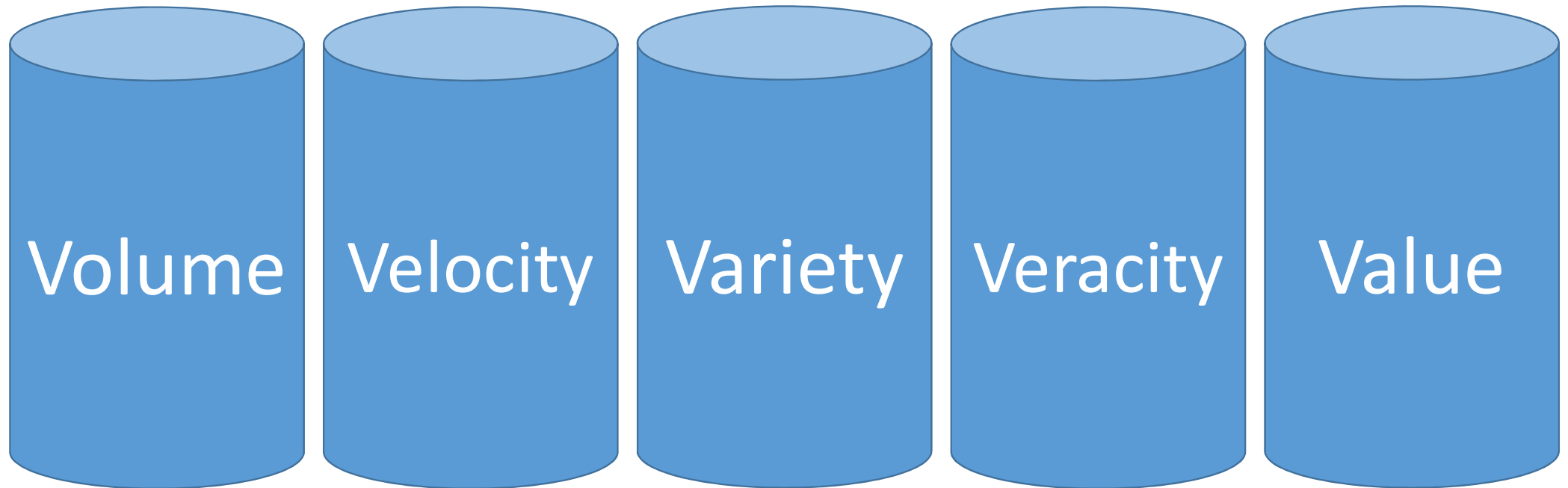
Big

A collection of techniques

A “new” way of addressing problems



5 v's (and counting)



How to think like a statistician

The three S's of statistics

S

S

S

Statisticians do not start by selecting method, they start with a question!
This question and the structure of the data governs the choice of method



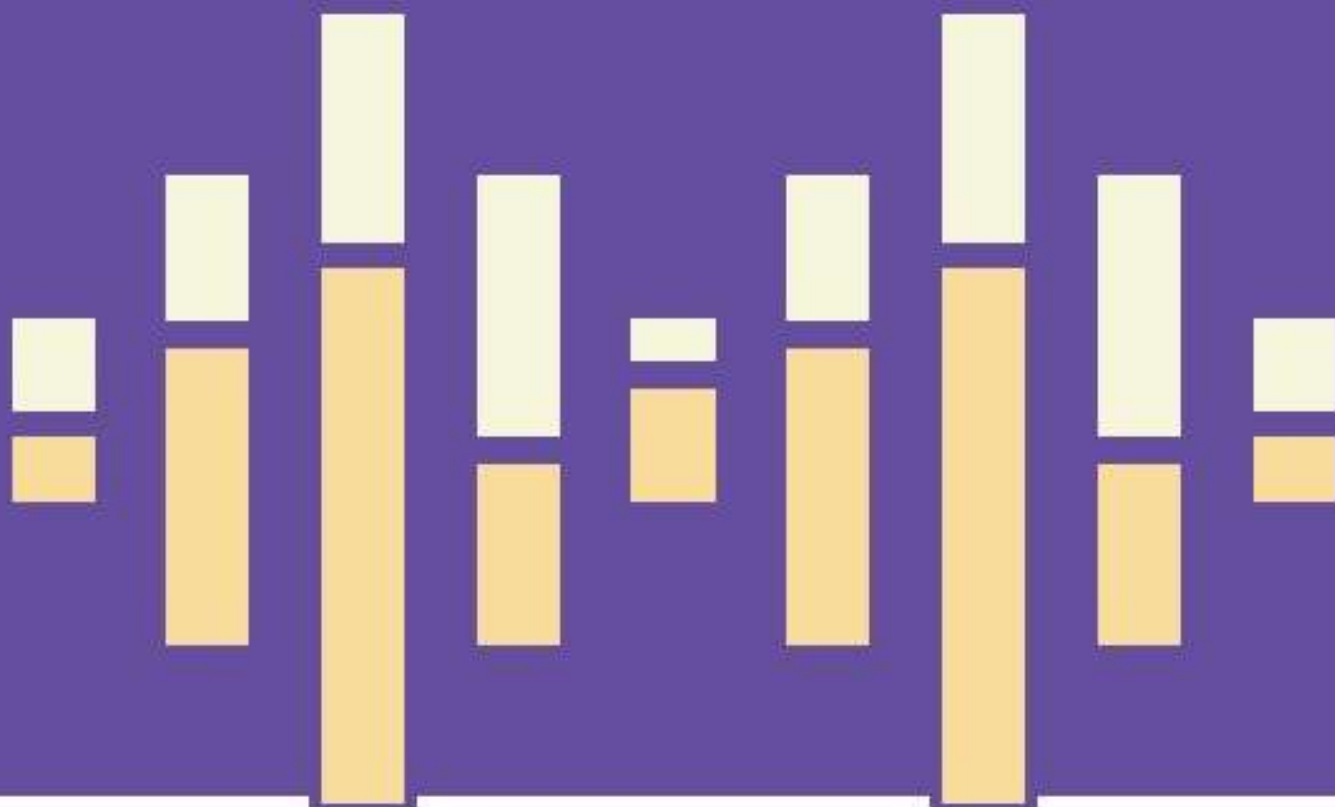
Forward

- Main challenge is not development of
Software
Theory
Models

It is the use of analytical methods in decision making

- Create value from existing data
- This is possible through collaborative efforts between industry know-how, technology companies and statistical analysis





RECOGNI
