How to NOT miss the big picture in new big data initiatives

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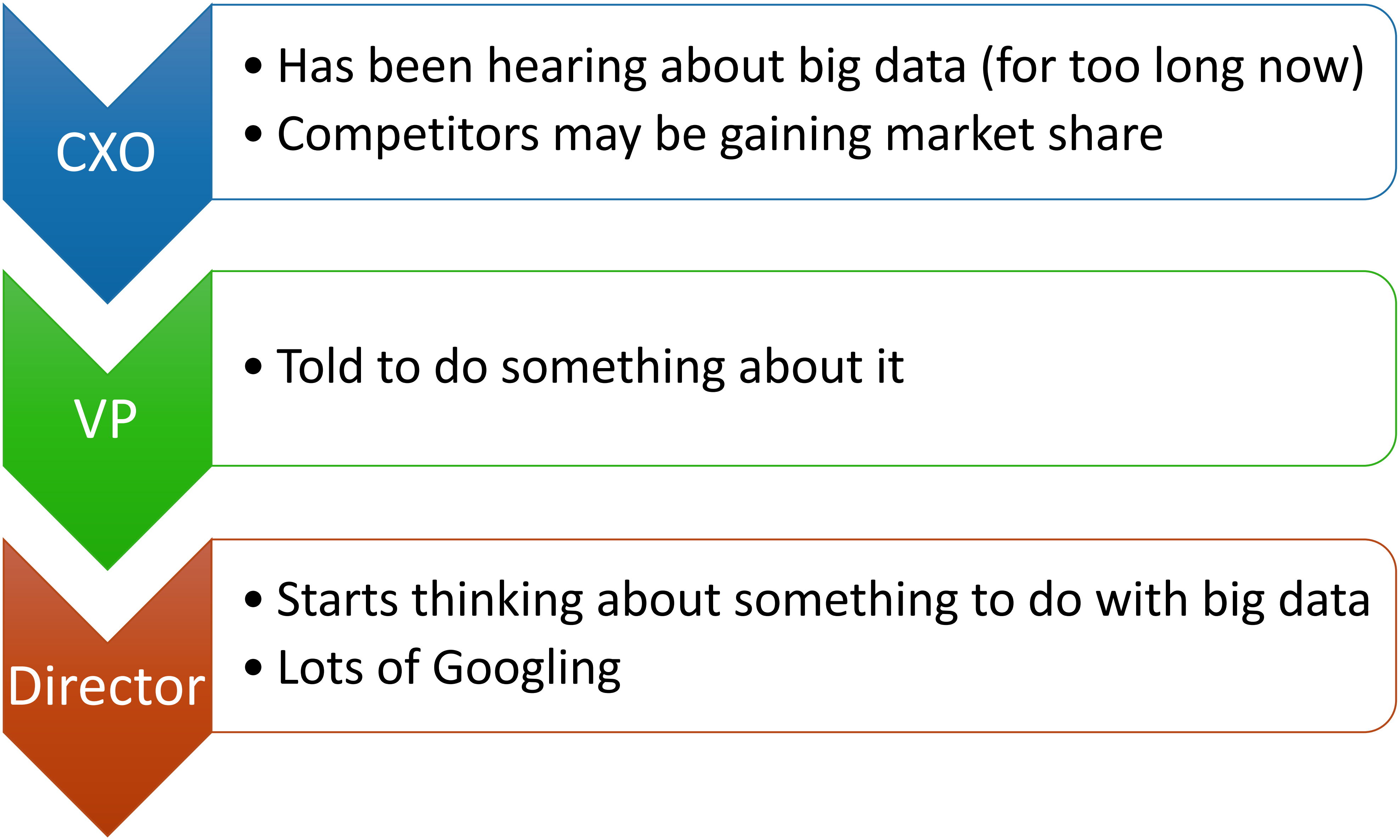
A common scenario



CXO

- Has been hearing about big data (for too long now)
- Competitors may be gaining market share

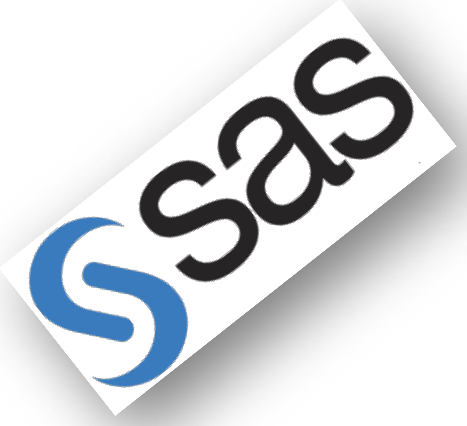
VP

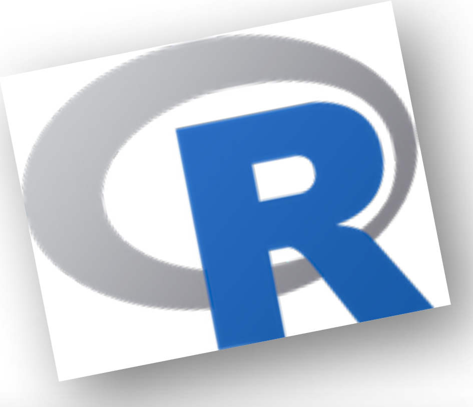
- Told to do something about it

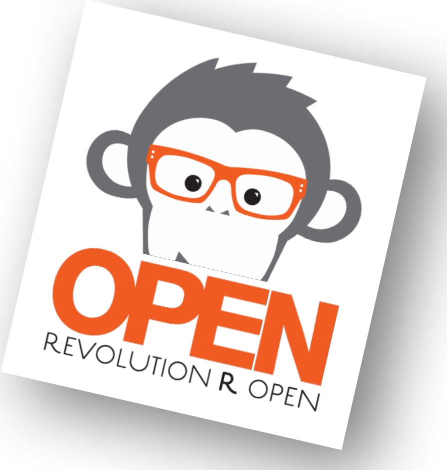
Director

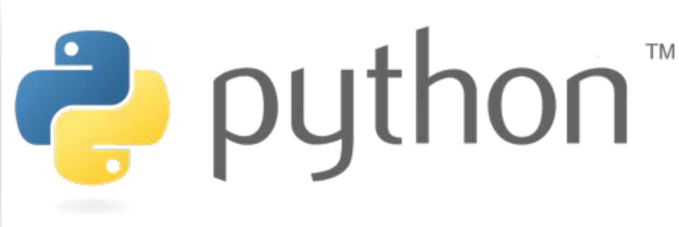
- Starts thinking about something to do with big data
- Lots of Googling

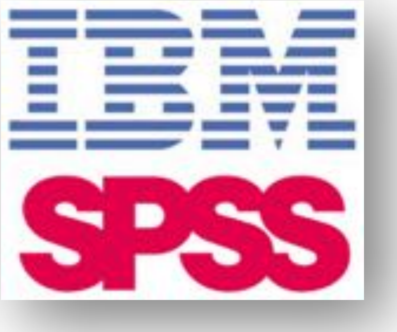
riak
cloudera
MySQL
IBM DB2
CouchDB relax
SAP
APACHE Spark
ORACLE
DATASTAX
NoSQL
SQL
Hortonworks
Microsoft SQL Server
Storm
Greenplum
HERON
APACHE HBASE
VERTICA An HP Company
NETEZZA an IBM Company
PostgreSQL
New SQL
HIVE
mongoDB
HAWQ

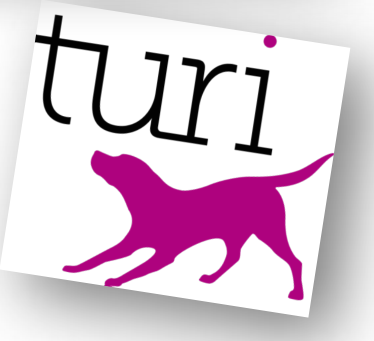


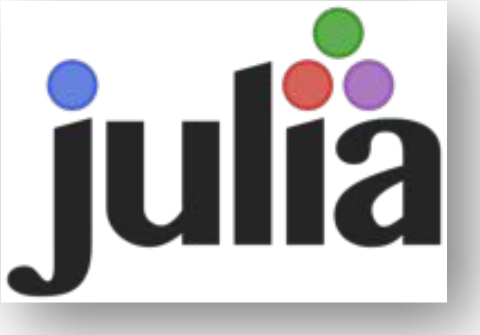






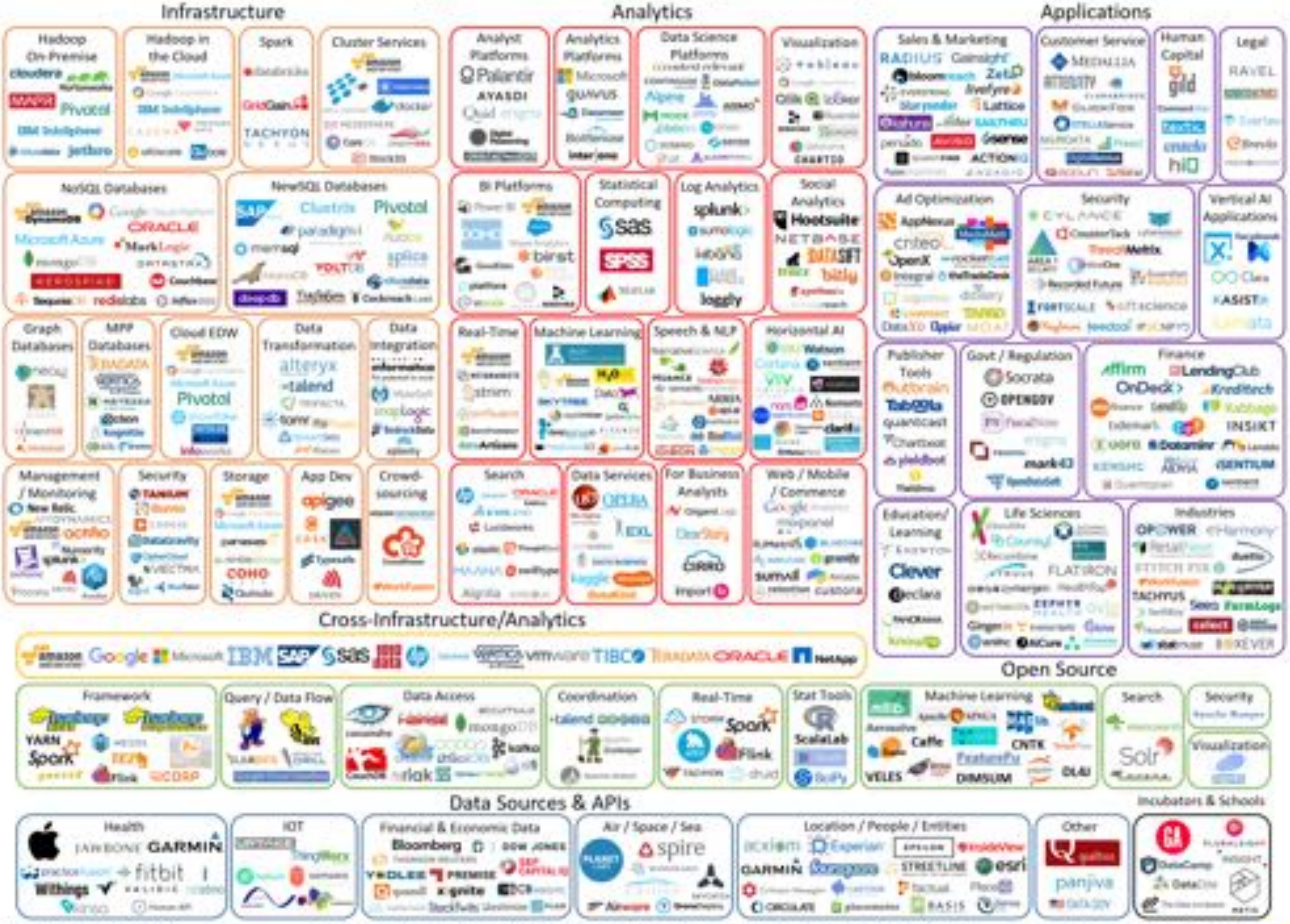






An even longer list at: https://en.wikipedia.org/wiki/List_of_statistical_packages

Big Data Landscape 2016 (Version 3.0)



Infrastructure

Hadoop On-Premise

Hadoop in the Cloud

Spark

Cluster Services

NoSQL Databases

NewSQL Databases

Graph Databases

MPP Databases

Cloud EDW

Data Transformation

Data Integration

Management / Monitoring

Security

Storage

App Dev

Crowd-sourcing

Analytics

Analyst Platforms

Analytics Platforms

Data Science Platforms

Visualization

BI Platforms

Statistical Computing

Log Analytics

Social Analytics

Real-Time

Machine Learning

Speech & NLP

Horizontal AI

Search

Data Services

For Business Analysts

Web / Mobile / Commerce

Applications

Sales & Marketing

Customer Service

Human Capital

Legal

Ad Optimization

Security

Vertical AI Applications

Publisher Tools

Govt / Regulation

Finance

Education/ Learning

Life Sciences

Industries

Cross-Infrastructure/Analytics

Open Source

Framework

Query / Data Flow

Data Access

Coordination

Real-Time

Stat Tools

Machine Learning

Search

Security

Visualization

Data Sources & APIs

Health

IOT

Financial & Economic Data

Air / Space / Sea

Location / People / Entities

Other

Incubators & Schools

Last Updated 3/23/2016

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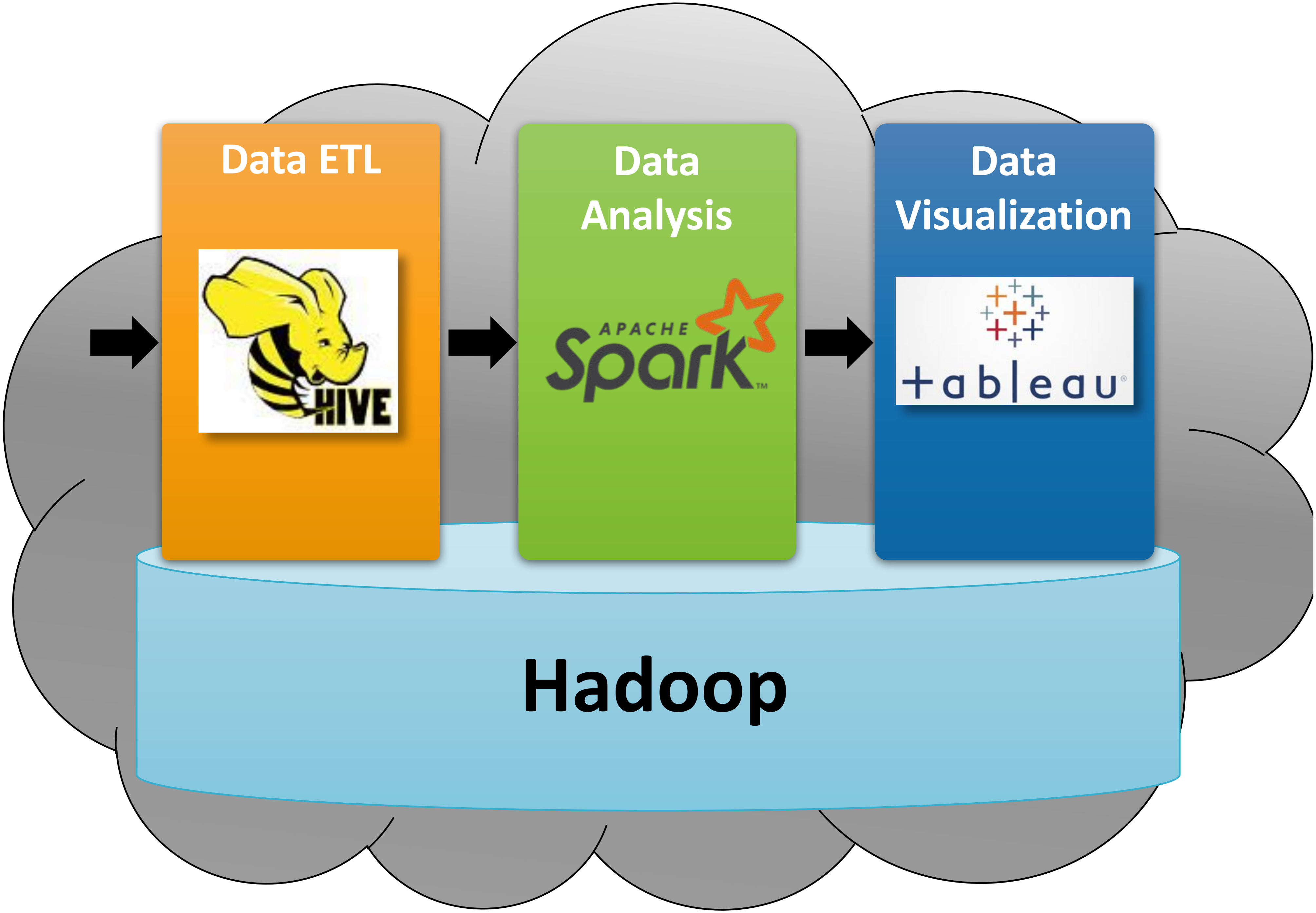


Data ETL

Data Analysis

Data Visualization

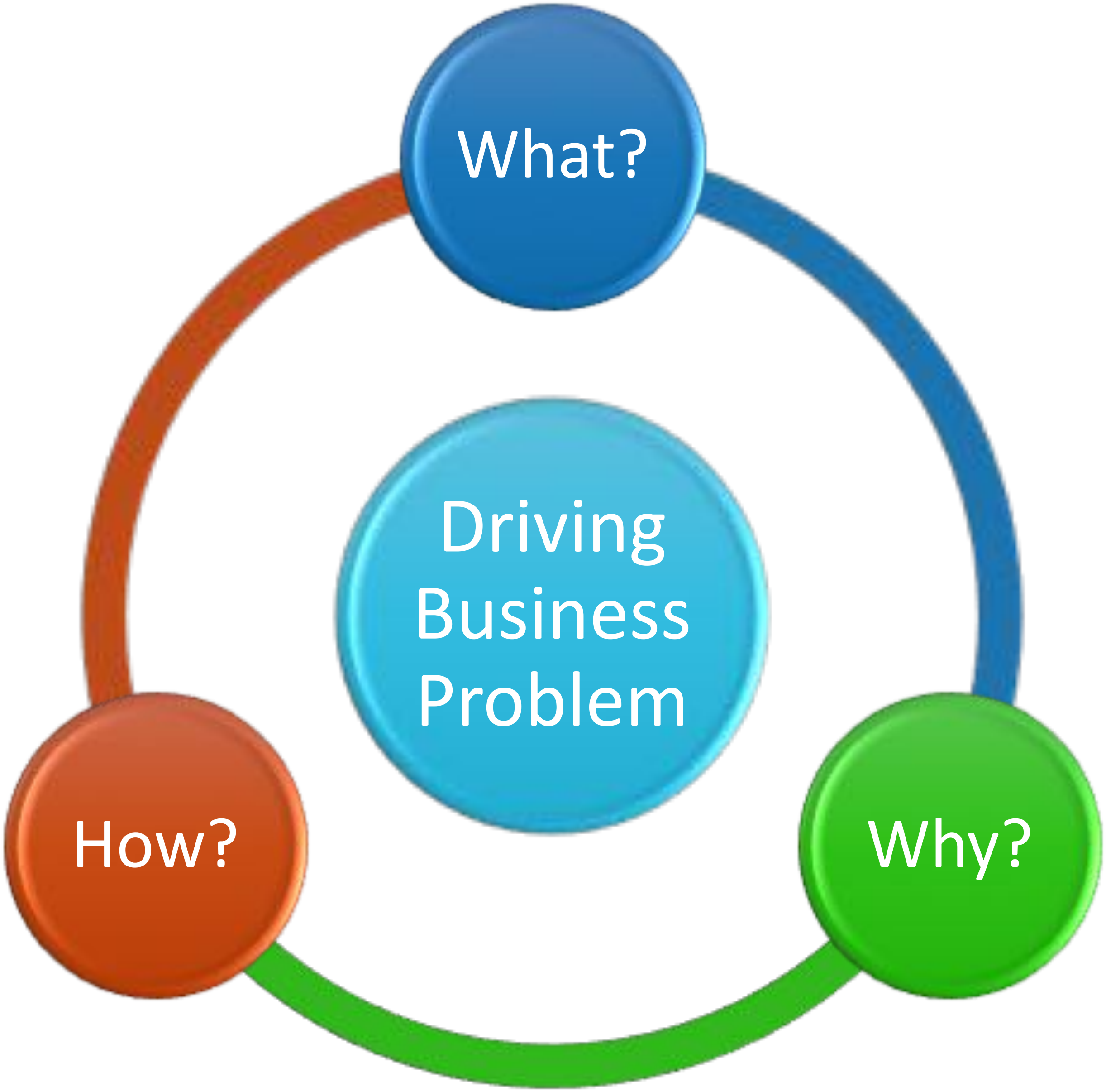
Hadoop

Outcome: Bundle of buzzword compliant technologies

Refine, retune, redesign …

Hire consultants …

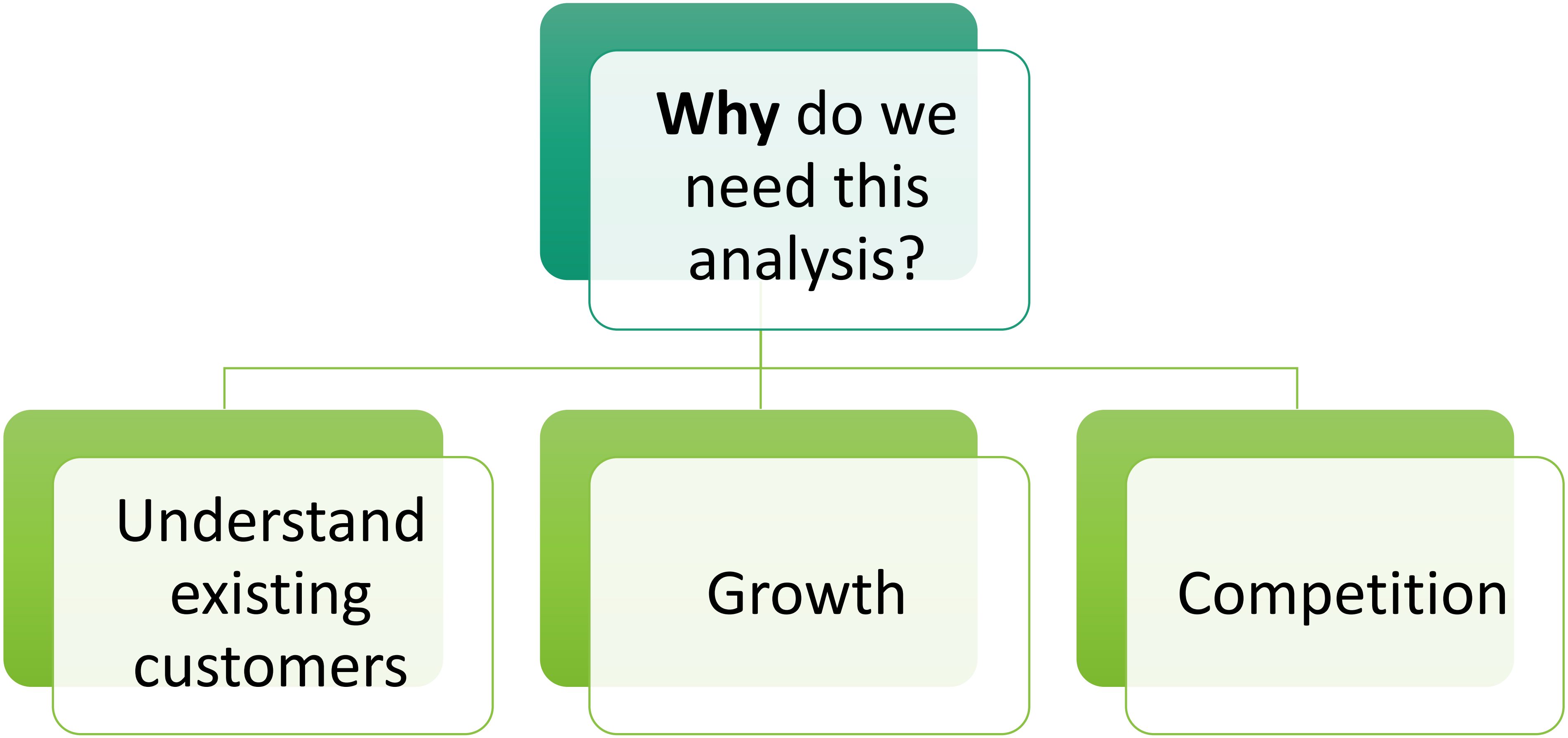
Repeat …


What?
Driving Business Problem
How?
Why?

What is the business problem?

ROI Analysis

It is an investment for a business!

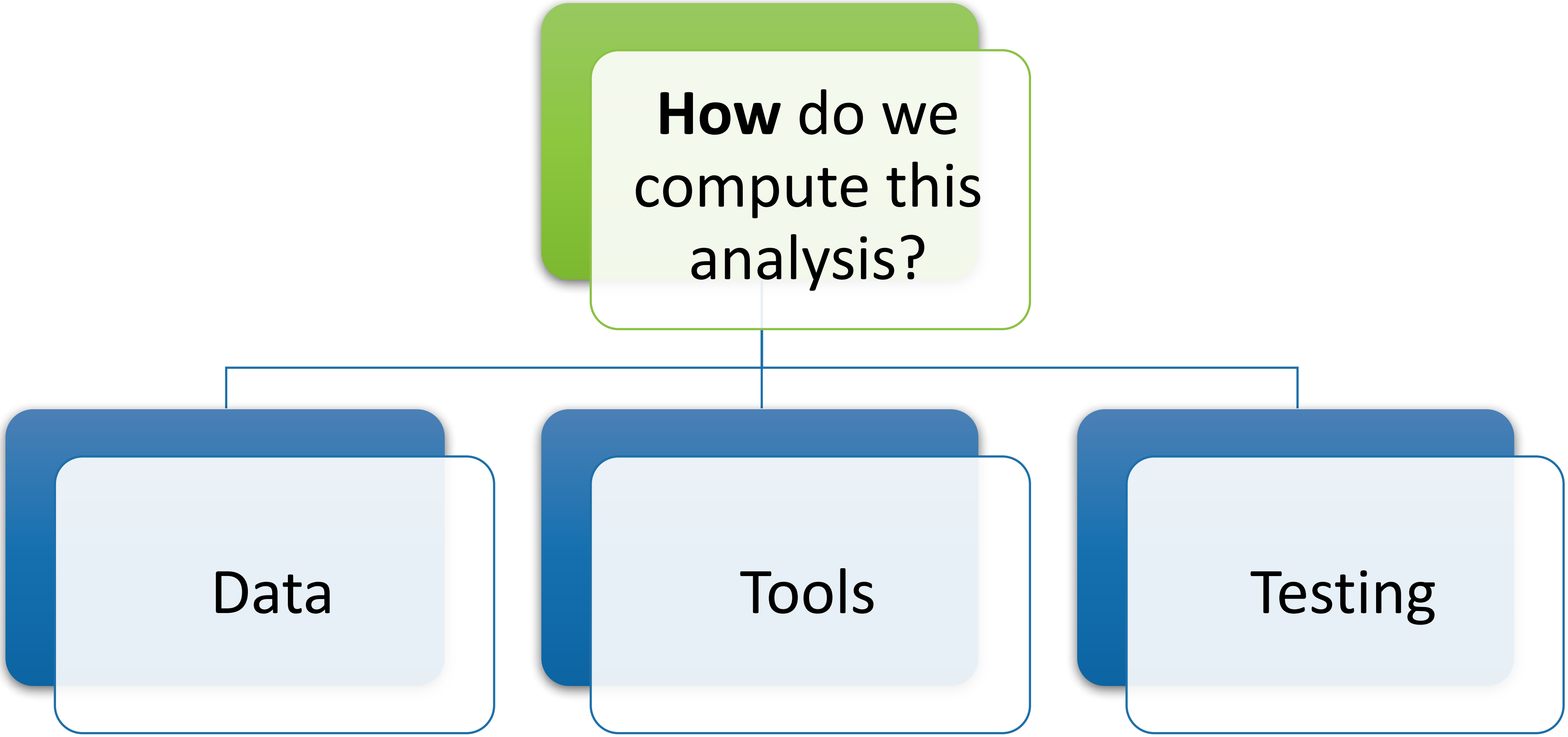


Why do we need this analysis?

Understand existing customers

Growth

Competition



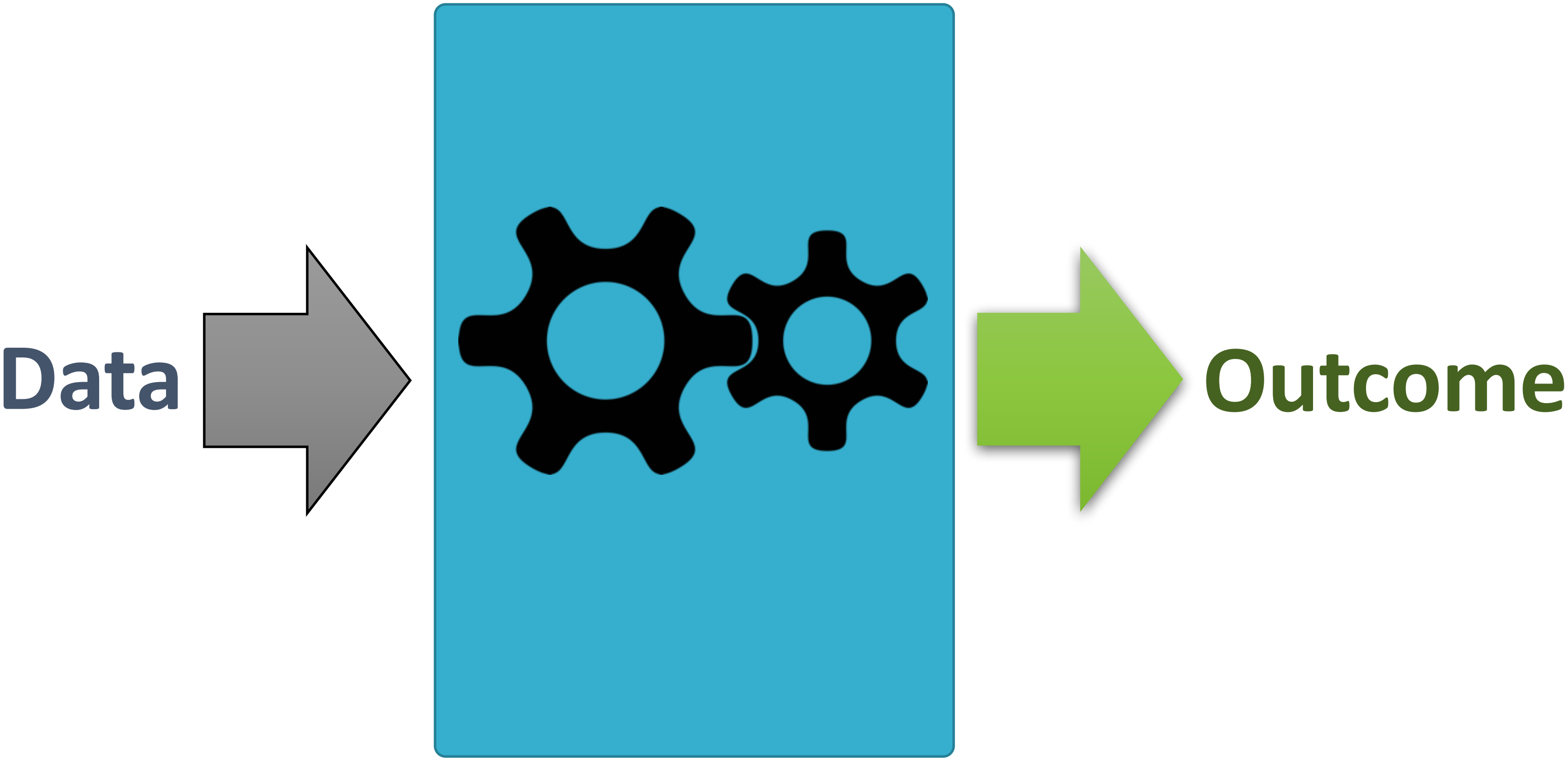
How do we compute this analysis?

Data

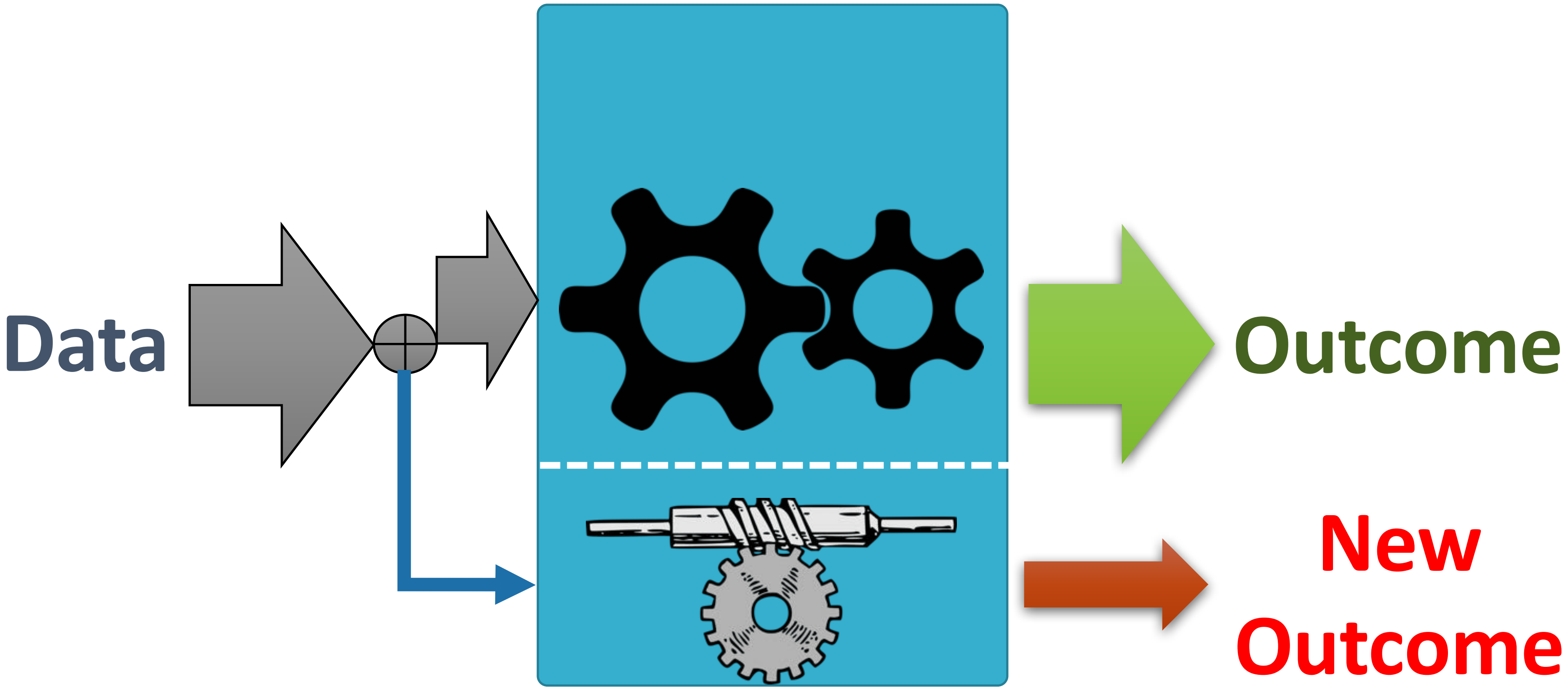
Tools

Testing

A/B testing infrastructure



A/B testing infrastructure

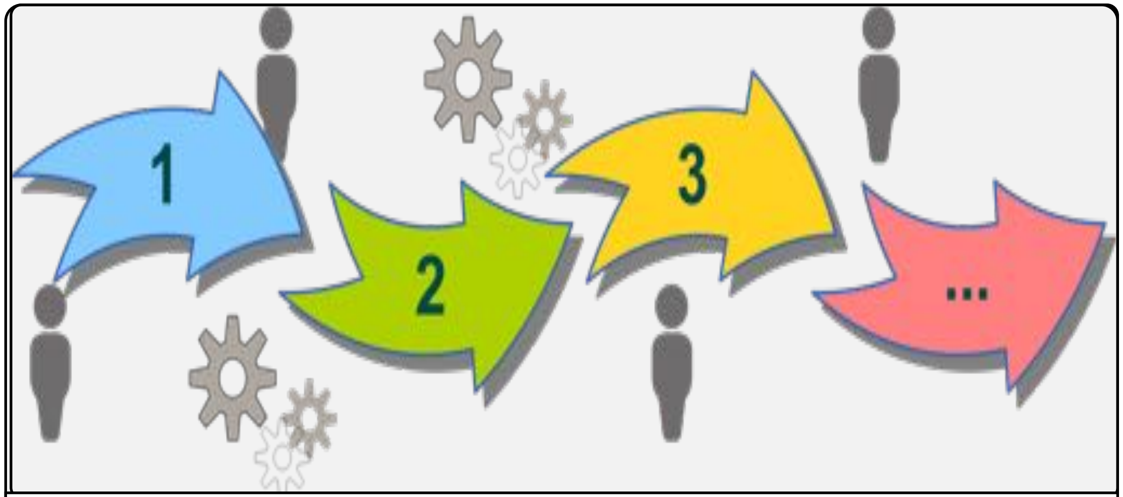


Data

Outcome

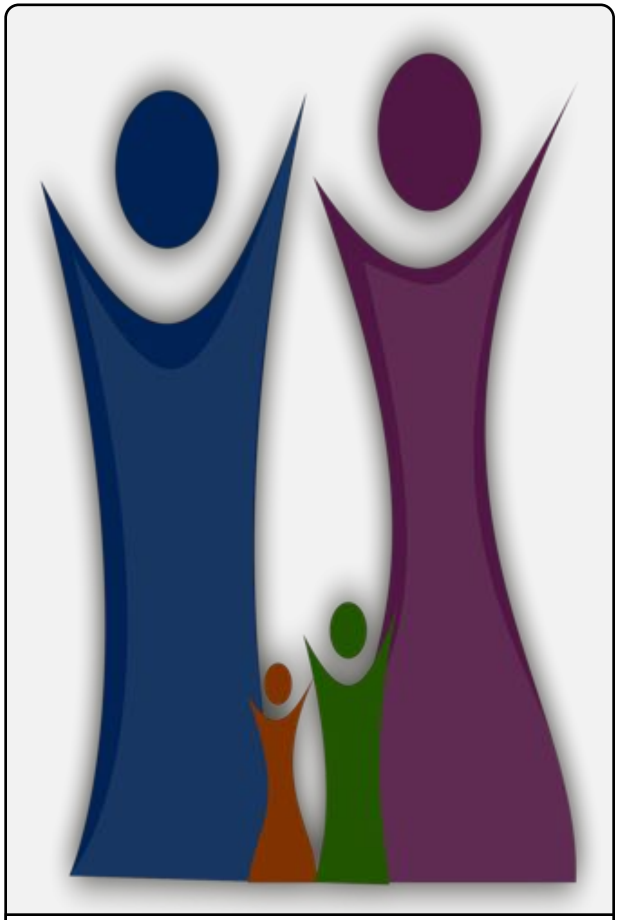
New Outcome

In addition …



Process

Agile, transparent, and **short** iterations. And ego-less.



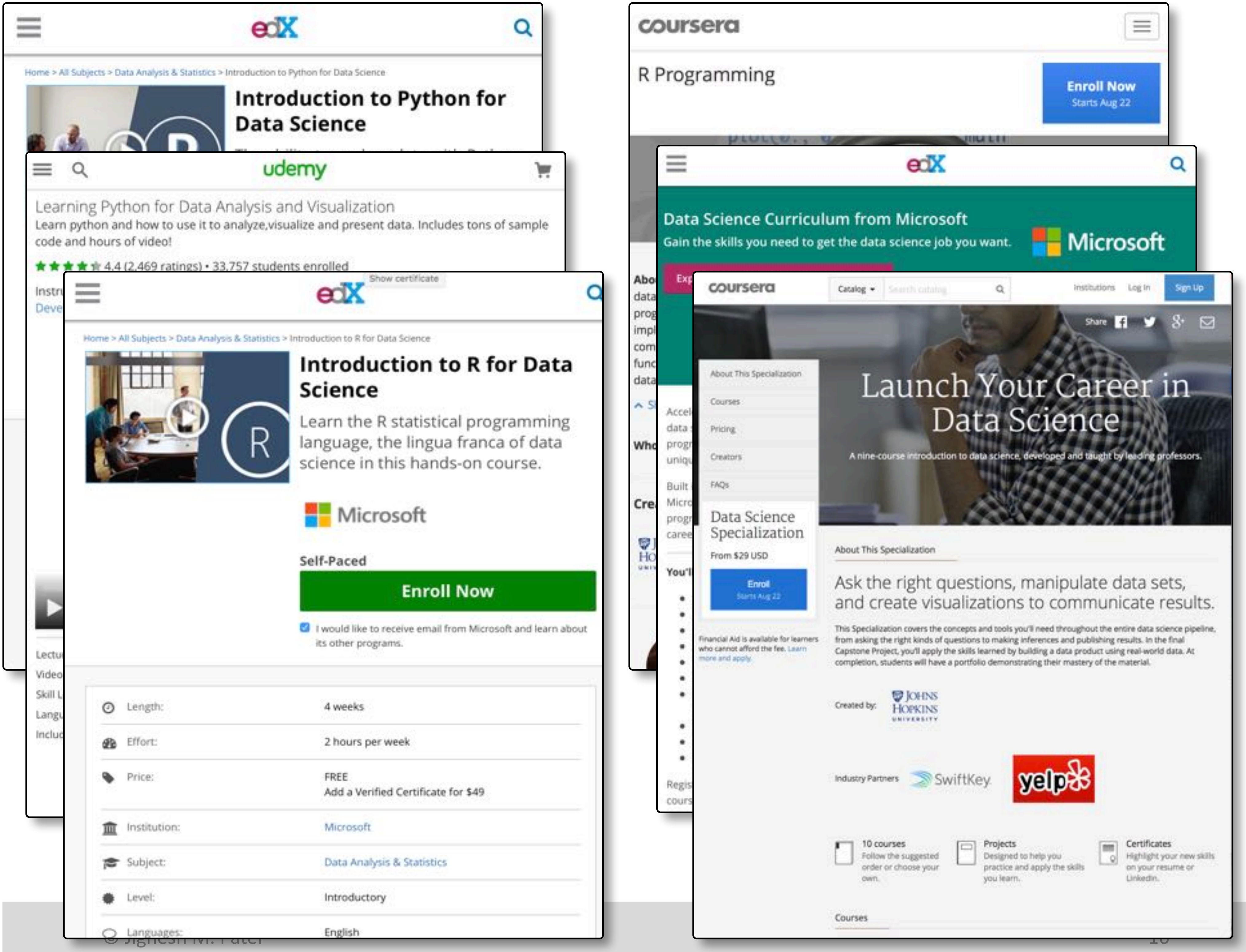
People

Invest in your existing people!

Democratization of data and tools

Open-source tools

Open access to education



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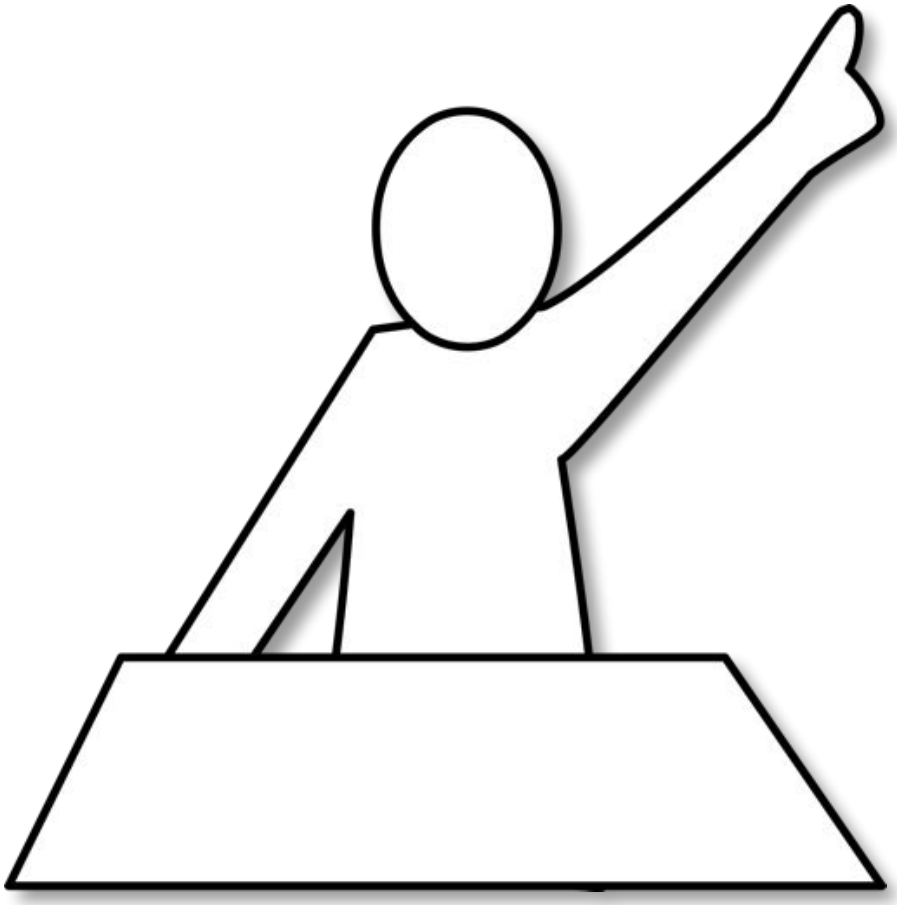
Courses

Summary

Goal-oriented approach, with clear ROI

Separate means from the end

(Re-)invest in your existing people



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