

DATALAB

Data Analytics Crash Course

Content of the course and
OpCo requirements

Goal of the Course

○
**BE INSPIRED BY
WHAT YOU CAN DO
WITH DATA**

○
**IDENTIFY
OPPORTUNITIES
AND MAKE A PLAN**

○
**LEARN WORKING
IN DATA ANALYTICS
TOOLINGS**

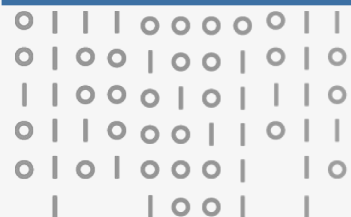
○
**VISUALIZE YOUR
STORY AND CREATE
SUSTAINABLE
IMPACT**

General structure of the three course days

DAY ONE

DAY TWO

DAY THREE



brand	script	latitude	longitude	country	countryscrupdate	source	grouping
Specialized	specialized.py	65.84416139	22.3051147	Sweden	SE	01/01/2018	Retailer
Specialized	specialized.py	64.75288391	20.9578765	Sweden	SE	01/01/2018	Retailer
Specialized	specialized.py	65.50840709	25.4781915	Finland	FI	01/01/2018	Retailer
Specialized	specialized.py	64.15325165	-21.94882774	Iceland	IS	01/01/2018	Retailer
Specialized	specialized.py	63.84970248	20.1104244	Sweden	SE	01/01/2018	Retailer
Specialized	specialized.py	62.81537292	16.7414644	Sweden	SE	01/01/2018	Retailer
Specialized	specialized.py	63.39965057	13.07866001	Sweden	SE	01/01/2018	Retailer
Specialized	specialized.py	62.88079782	27.6811118	Finland	FI	01/01/2018	Retailer
Specialized	specialized.py	63.43394852	10.46407032	Norway	NO	01/01/2018	Retailer
Specialized	specialized.py	62.7911285	17.16619172	Norway	NO	01/01/2018	Retailer
Specialized	specialized.py	63.11302795	7.76631126	Norway	NO	01/01/2018	Retailer
Specialized	specialized.py	62.98997343	17.31153396	Sweden	SE	01/01/2018	Retailer
Specialized	specialized.py	62.78623405	22.84107038	Finland	FI	01/01/2018	Retailer
Specialized	specialized.py	61.67812822	27.36675987	Finland	FI	01/01/2018	Retailer
Specialized	specialized.py	61.20999542	17.05506825	Sweden	SE	01/01/2018	Retailer

```
SELECT placeid AS pid, count(*),
(SELECT email FROM bicycle_world
WHERE placeid = pid AND email
GROUP BY email
ORDER BY COUNT(*) DESC
LIMIT 0,1) AS email,
(SELECT phone FROM bicycle_world
WHERE placeid = pid AND phone
GROUP BY phone
ORDER BY COUNT(*) DESC
LIMIT 0,1) AS phone,
```



```
def get_article_urls(base_url, article_url=None, article
article_urls = []
domain = get_domain(base_url)

if article_class:
    urls = []
    items = BeautifulSoup(requests.get(base_url).tex
    for item in items:
        item_urls = list(set([a.get('href') for a in
        urls += item_urls
    else:
        urls = [a.get('href') for a in BeautifulSoup(req
    urls = list(set(urls)) # Make unique
    for url in urls:
        if 'http' not in url:
```



DATA

EXCEL

SQL & DATABASES

TABLEAU

SCRAPING

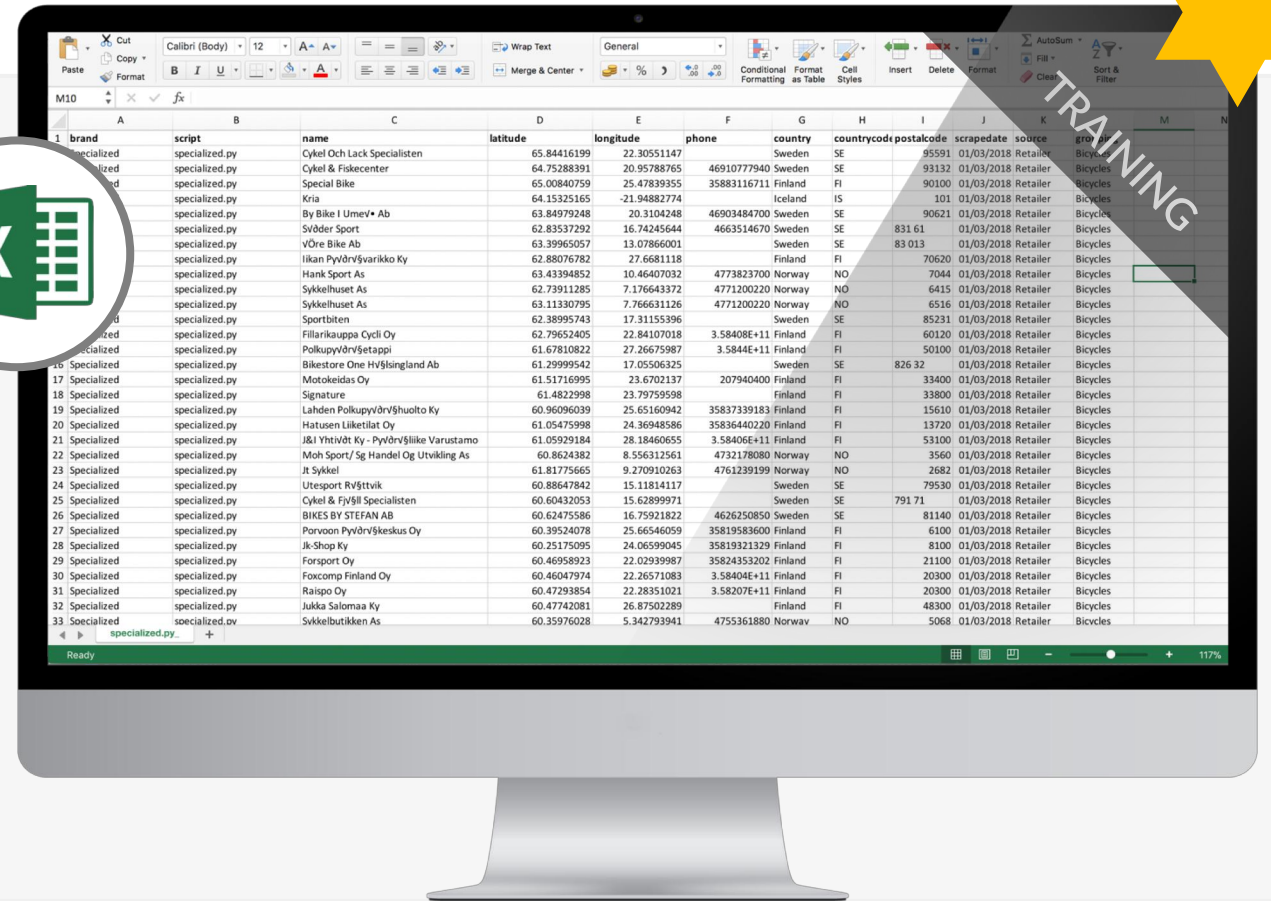
AI

COMPLEXITY / MATURITY

What will you learn?

Tools - Excel

- Formatting and editing data
- Learn new Excel functionalities and work more efficient
- Creating simple visualisations or dashboards



Extract

Prepare

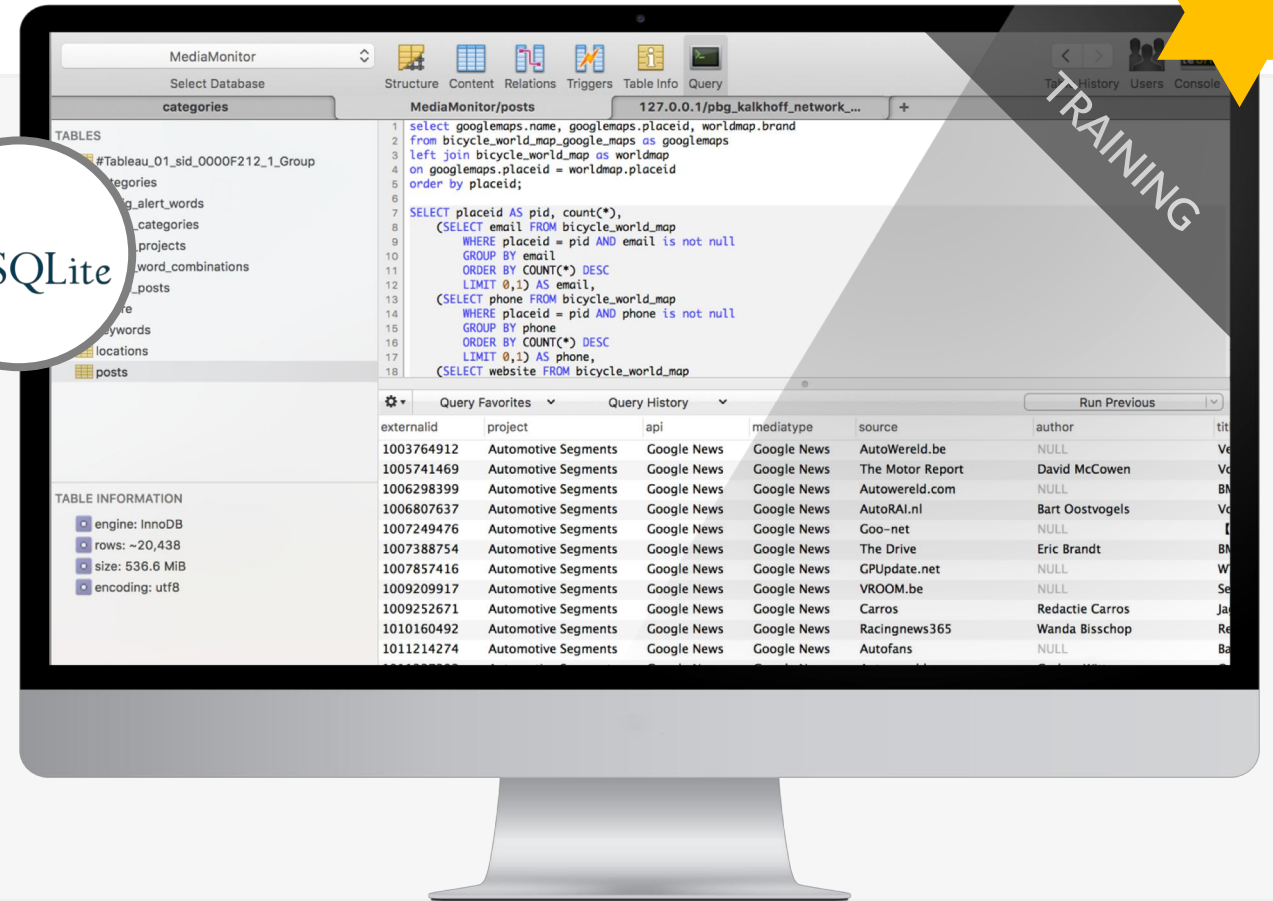
Analyse

Deliver

What will you learn?

Tools - SQL (database language)

- Storing data in databases
- Formatting and editing data
- Linking different data sources



Extract

Prepare

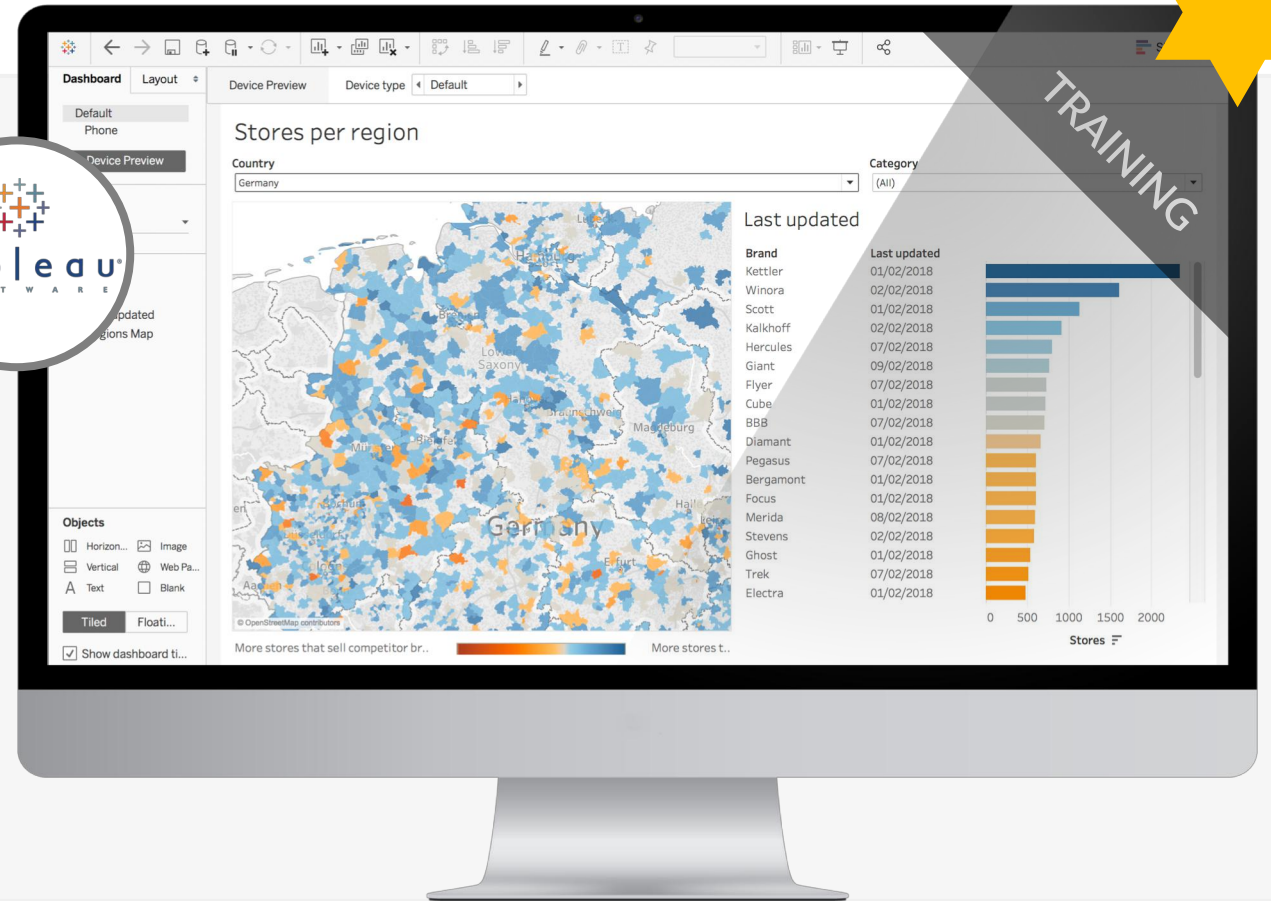
Analyse

Deliver

What will you learn?

Tools- Tableau

- Data exploration
- Visualization
- Creating and sharing dashboards



TRAINING

Extract

Prepare

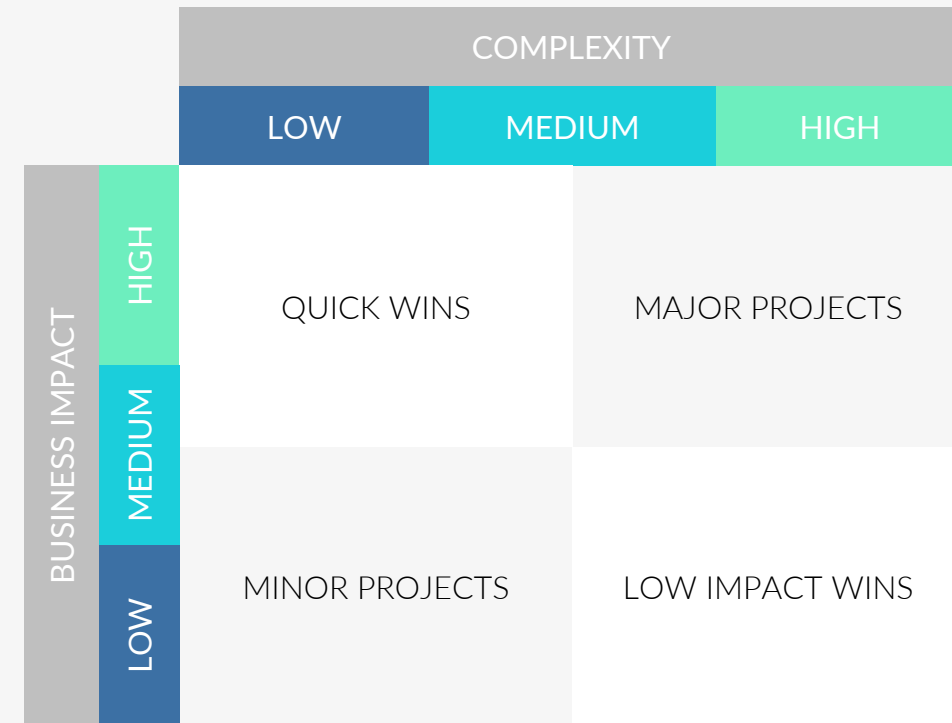
Analyse

Deliver

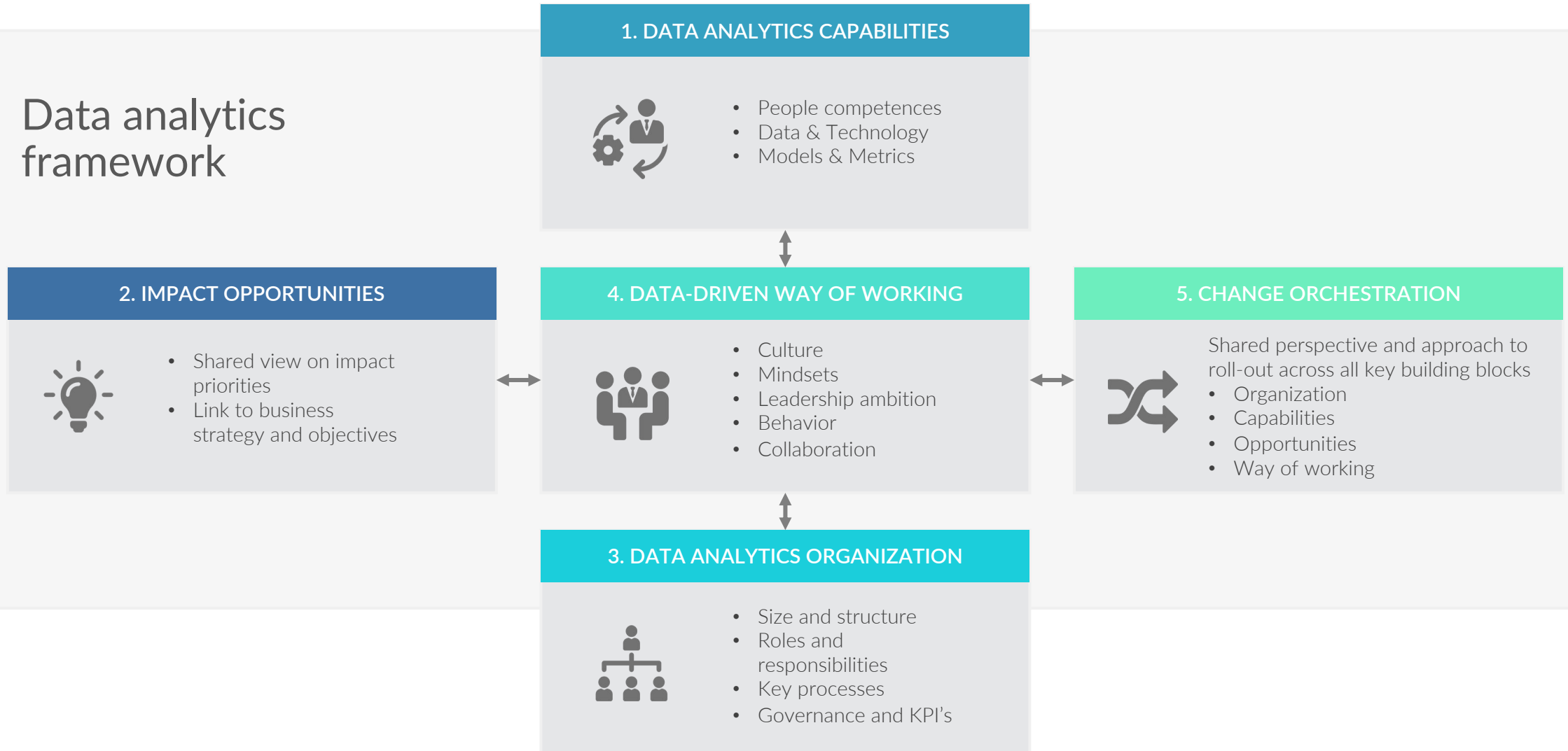
What will you learn?

Other skills

- Critical way of thinking towards data analytics
- Classification model and project planning model to capture, classify and execute business cases
- Data analytics framework to support a data analytics mindset (see next slide)
- Comprehensive overview of the techniques that are currently used and those that are on the rise



Data analytics framework



Audience

The course will benefit management as well as operational employees. We would recommend to send employees from both levels as both have a crucial role in your business becoming more data driven.

- Management team: people that are able to see the big picture and manage the process
- Operations: people who are able to spot opportunities and take initiative in starting data analytics projects

Management



- Personnel in a position to determine goals and direction
- Personnel that sees the bigger picture and has a vision
- Strong focus on business value



Operational



- Employees that are able to spot opportunities
- Business people who already do some small analysis in e.g. Excel
- People who love to take initiative and kick-start projects

Audience

- Employees that like to experiment or start new initiatives (these can be small or big experiments/ initiatives)
- Eager learners that are curious and already have some interest in data analytics
- Employees that have ideas on how to improve their business, but who may lack technical skills to execute some of these ideas
- No knowledge in any of the tools is required, but an affinity with Excel or data analytics is good

Management



- Personnel in a position to determine goals and direction
- Personnel that sees the bigger picture and has a vision
- Strong focus on business value



Operational



- Employees that are able to spot opportunities
- Business people who already do some small analysis in e.g. Excel
- People who love to take initiative and kick-start projects

Course program - Day 1

Morning

Introduction to data analytics, data analytics capabilities and your own dataset

Afternoon

Data quality, Excel exercises, inspiration by Datalab and impact opportunities

Course program - Day 2

Morning

Data analytics organization, SQL & databases, SQL exercises and inspiration by Datalab

Afternoon

Data-driven way of working, visual analytics, Tableau demo and Tableau exercises

Course program - Day 3

Morning

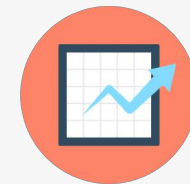
Web scraping, machine learning and AI, inspiration by Datalab and brainstorming on business cases

Afternoon

Work on your own data set and business case using Tableau

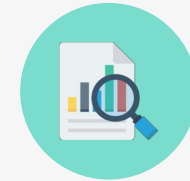
What to expect after the training

- Your employees will have a better understanding of data analytics and the possibilities this can bring for your business
- Participants develop their analytics skills and are therefore better equipped to start data analytics projects
- Participants will learn the framework for data-driven business transformation and are able to identify on quick wins
- Participants will have the skills to visualize their story and measure the business impact



What to expect from the Pon Datalab

- Two enthusiastic and experienced data scientists will train the group for three days
- While the training is on a technical subject, we will always trigger the participants to think about the business value and impact
- On day three, we let the participants brainstorm on possibilities for their own business and work with their own data to see where they can already add value in three days



Experiences so far

- Participants were able to see new ways of working, both in their day to day work and on a longer term
- Participants saw opportunities to save costly hours in their day-to-day work by using tools from the course
- Participants were inspired by possibilities on which they can start on the short term, but the training also sparked ideas about long term developments

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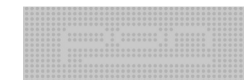
*"I have been to many trainings in the past,
but this is one of the best I have ever had."*

Graham Berry
CFO Prochem



*"A look into the future for your
operations."*

Somchai Virabhak
CEO QPM





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