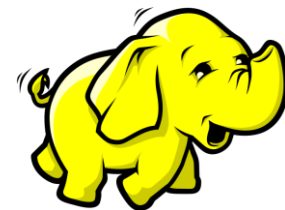


# SQL, NoSQL, Big Data & Hadoop

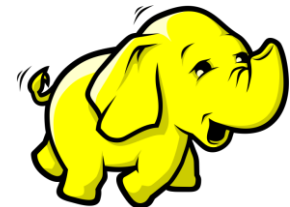
Michael Enudi

*Journey through the world of databases and data engineering*



# Scope

- Relational Database Systems, their features, use cases and limitations
- Why NoSQL?
- CAP Theorem
- Key-Value store and their use cases
- Document-oriented databases and their use cases
- Wide-columnar store and their use cases
- Time-series databases and their use cases
- Search Engines and their use cases
- Graph databases and their use cases
- Distributed Logs and real time streaming systems
- Hadoop and its use cases
- SQL-on-Hadoop tools and their use cases



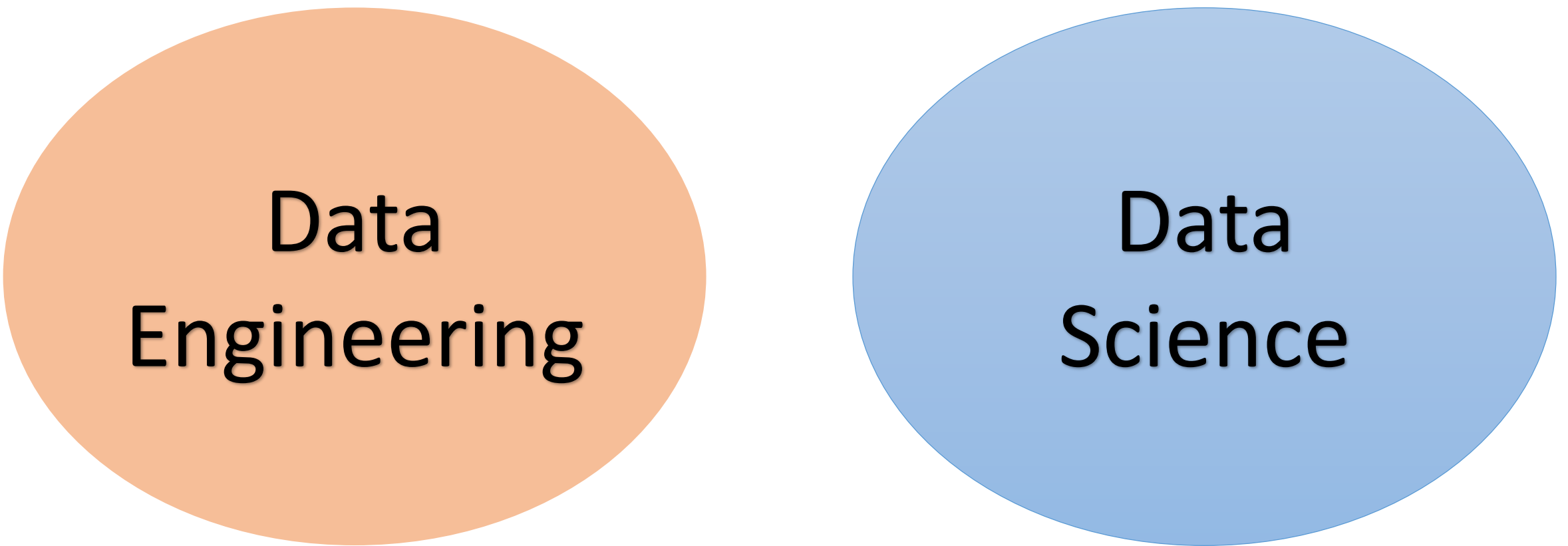
**What is the target audience?**

**What you will get out of this  
course?**

**What we don't cover?**

**What do I need to know/have to get  
the best out of this course?**

**How do I follow through this  
course?**



The diagram consists of two large, horizontally-oriented ovals. The left oval is orange and contains the text 'Data Engineering'. The right oval is blue and contains the text 'Data Science'. Below these two ovals, centered horizontally, is the text 'Big Data Analytics'.

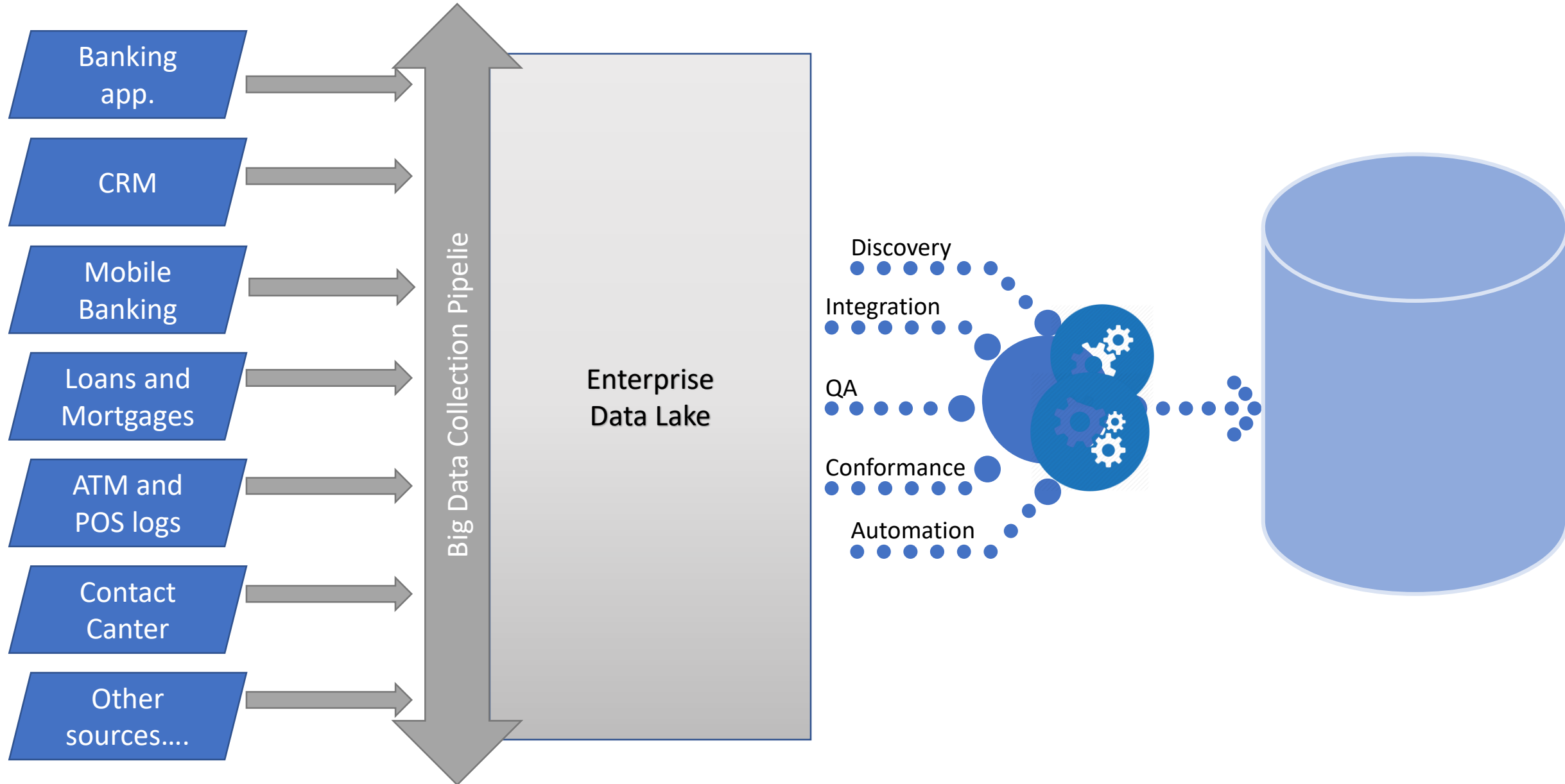
**Data  
Engineering**

**Data  
Science**

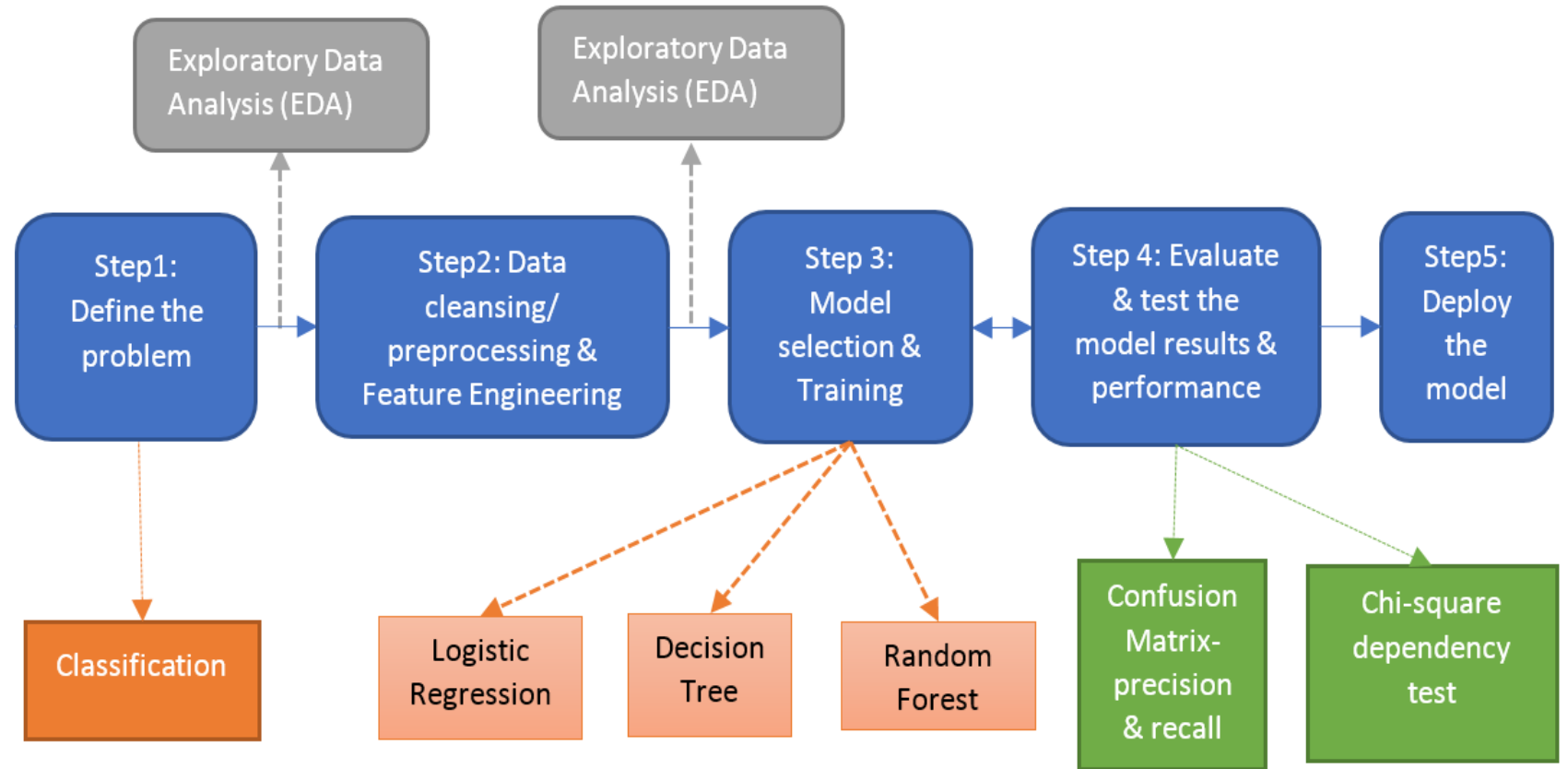
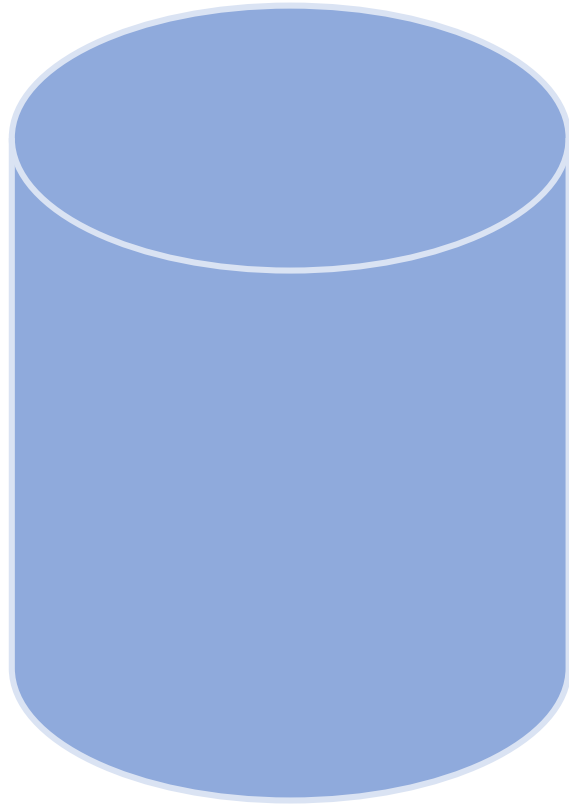
**Big Data Analytics**



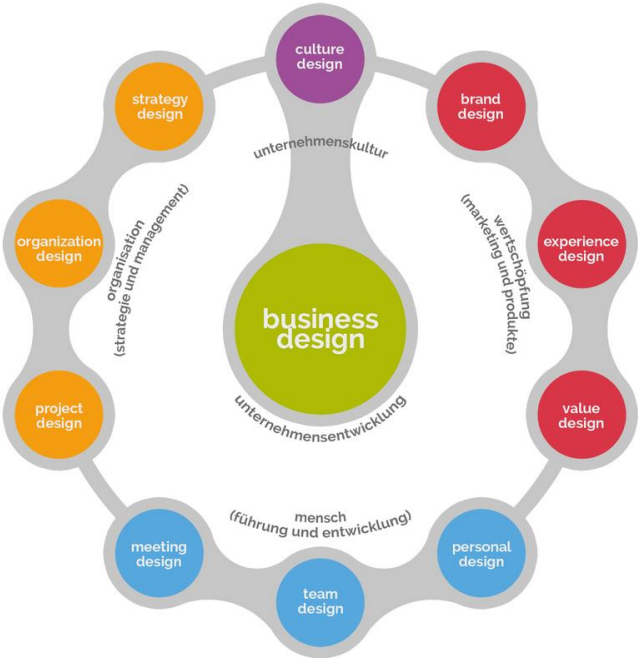
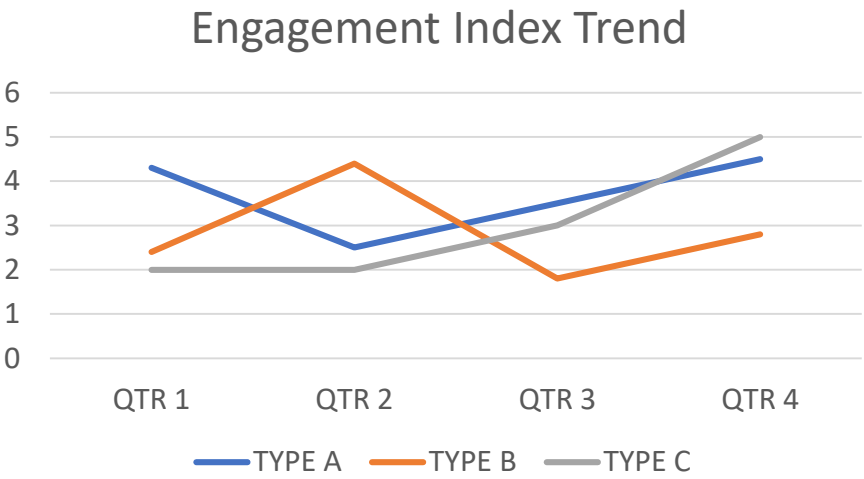
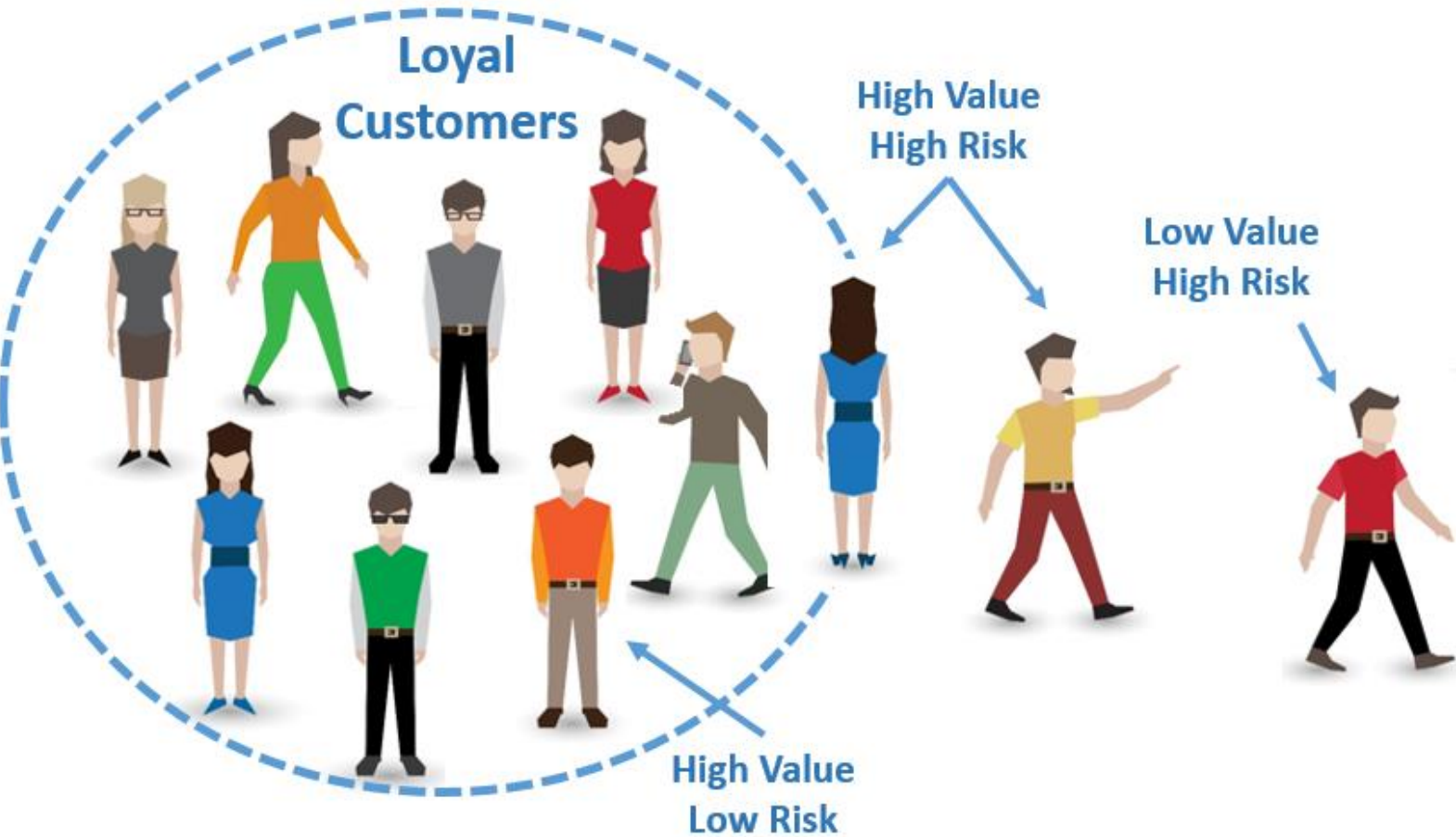
# Data Engineer @ work



# Data Scientis @ work



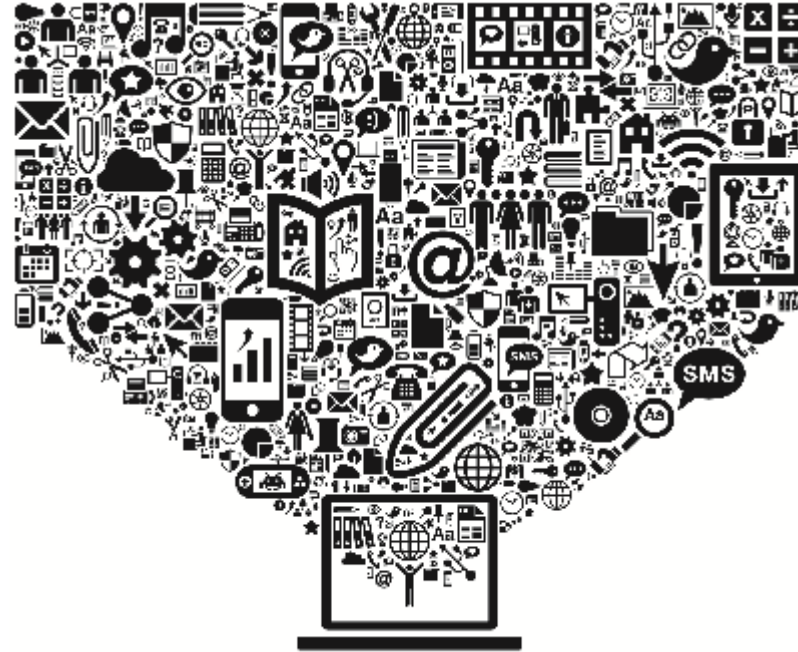
# Business Value



# What do we do with Data

## Data/Software Engineers

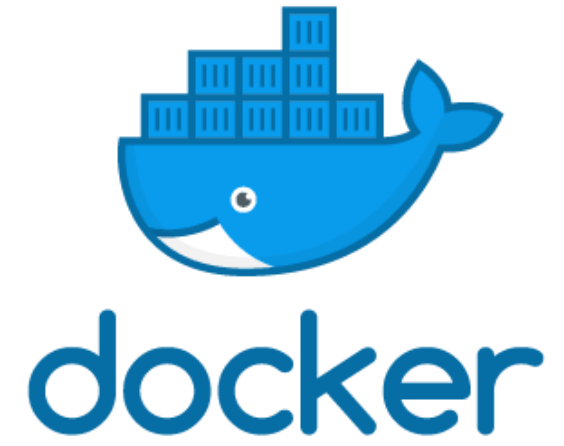
- ☐ Collect
- ☐ Storage
- ☐ Process
- ☐ Query / Report
- ☐ Visualize
- ☐ Analyze / Mining
- ☐ Integrate



## Everyone Else

- ☐ Journal
- ☐ Knowledge
  - ☐ Descriptive
  - ☐ Inferential
  - ☐ Analytical
- ☐ Action (Decision)
- ☐ Model Building

# **Learning Environment & Course Material**



/

Pull requestsIssuesMarketplaceExplore

okmich / rdbms\_2\_nosql

Unwatch

1

Star

0

Fork

0

<> Code

Issues 0

Pull requests 0

Projects 0

Wiki

Security

Insights

Settings

Exploring data platforms options from relational databases, NoSQL data stores to Hadoop

Edit

Manage topics

26 commits

1 branch

0 releases

1 contributor

We found potential security vulnerabilities in your dependencies.

Only the owner of this repository can see this message.

[Manage your notification settings](#) or [learn more about security alerts](#).

See security alerts

Branch: master

New pull request

Create new file

Upload files

Find File

Clone or download

okmich

removed extracted files

Latest commit ec1b98c 15 hours ago

datasets	removed extracted files	15 hours ago
elasticsearch	neo4j completed. es wip	6 days ago
hadoop	added hadoop stuff, and kafka simulators	21 days ago
hbase	completed mongodb content	25 days ago
influxdb	completed sample code for mongodb	3 months ago
kafka	various changes	9 days ago
mongodb	various changes	9 days ago
neo4j	neo4j completed. es wip	6 days ago
rdbms	final preping for mongodb	last month
redis	completed redis demo	15 hours ago
.gitignore	wip	11 months ago

# Databases