



OPEN CODING CLUB

MON, FEB 08TH  
2000



ABDELHAKIM AZZOUZ

## DATA SCIENCE ROADMAP



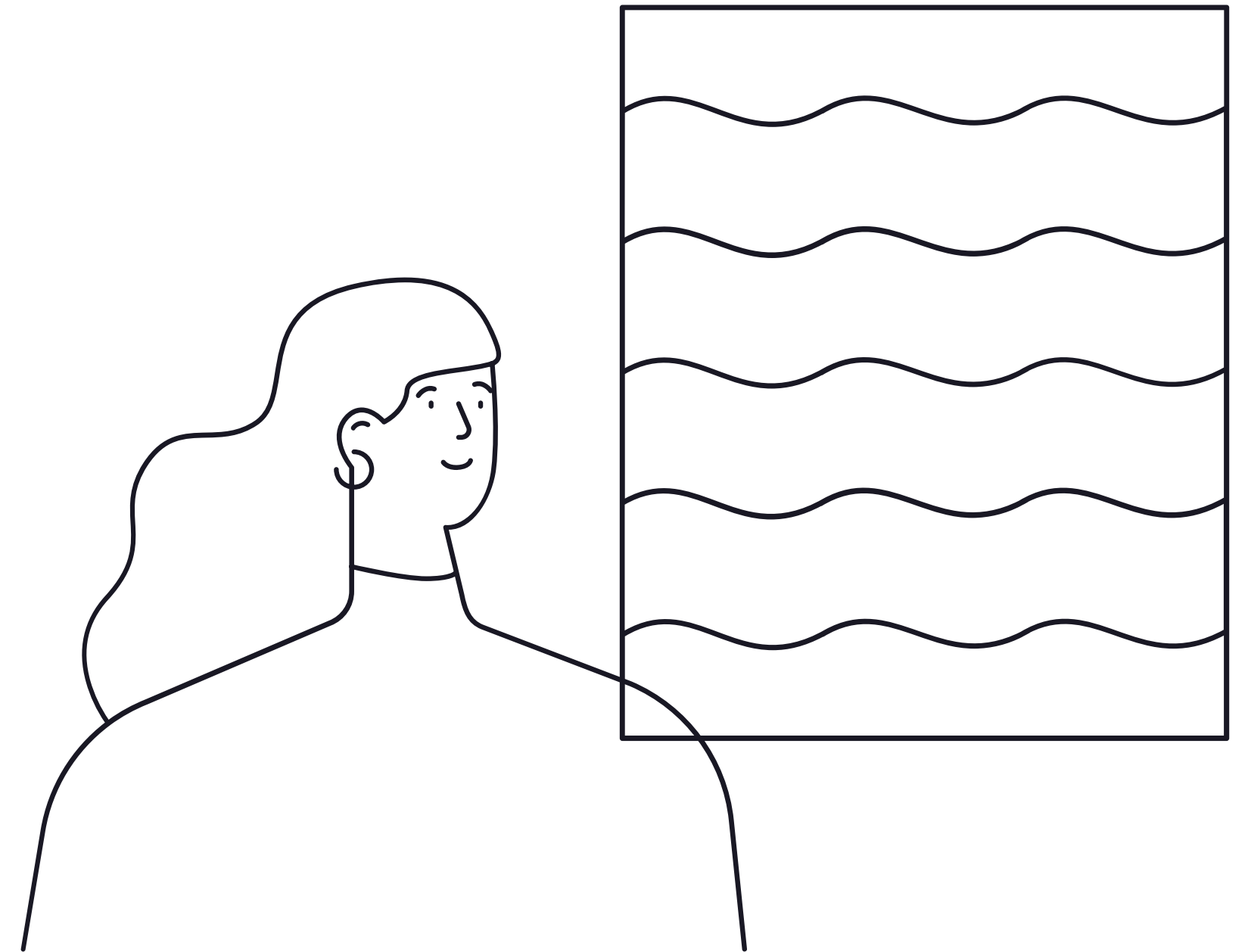
software engineering  
student and a full-  
stack developer,  
Ux Designer and  
Content Creator.

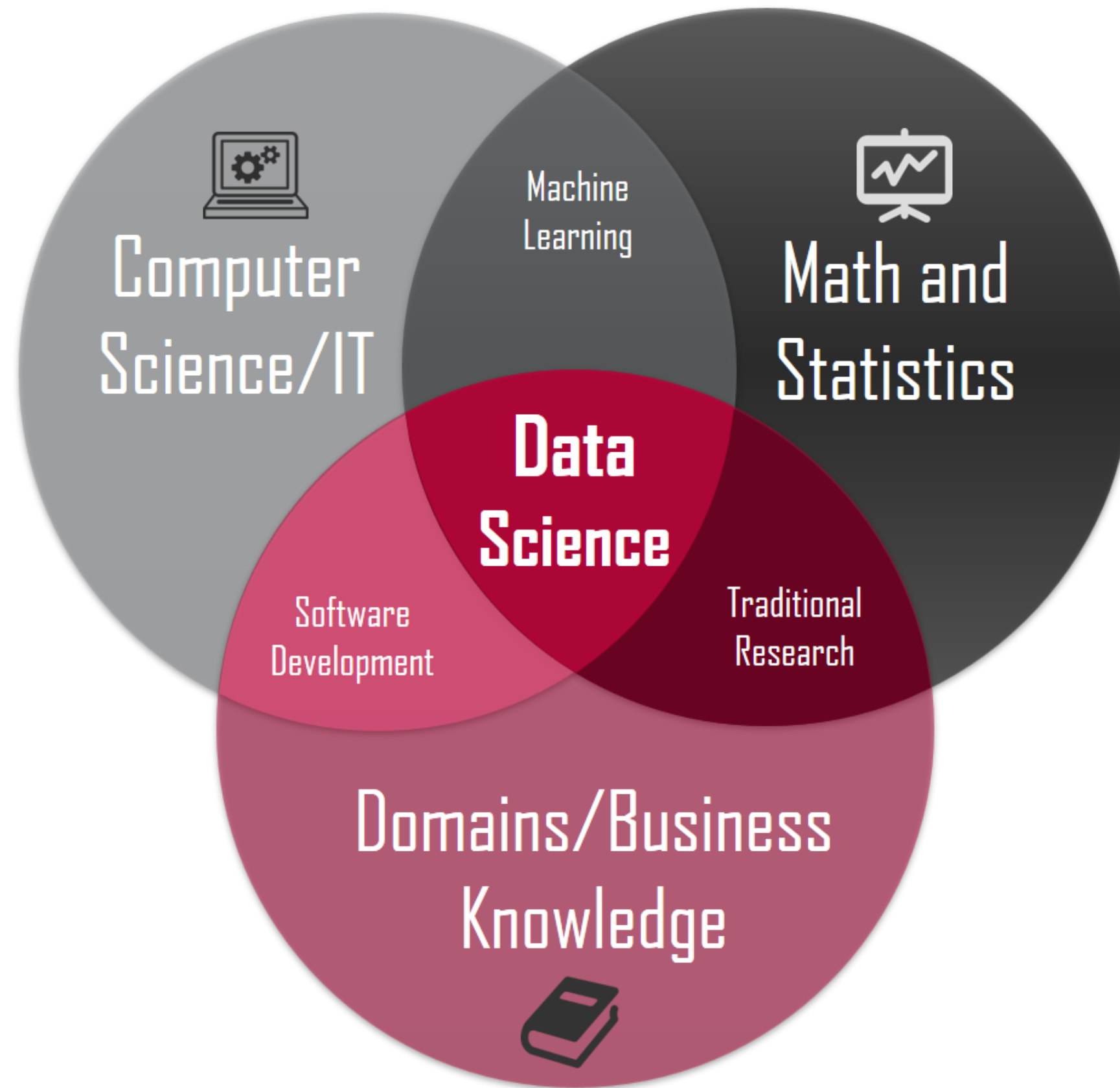
In order to be successful in that business, you have to have great predictions, Great predictions begin with one imperative: You need a lot of data.



What's Data Science?

# Introduction







O'REILLY®



# Data Science from Scratch

FIRST PRINCIPLES WITH PYTHON

Joel Grus

Making Everything Easier!™

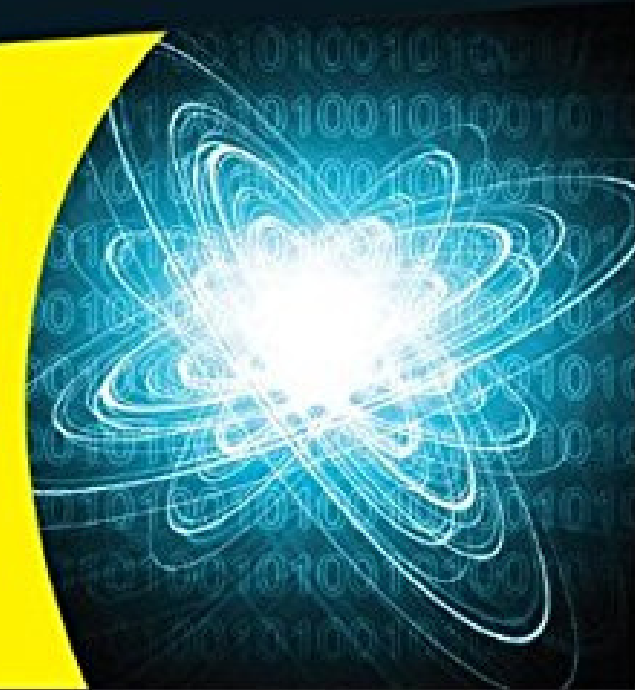
# Data Science

FOR  
**DUMMIES**  
A Wiley Brand

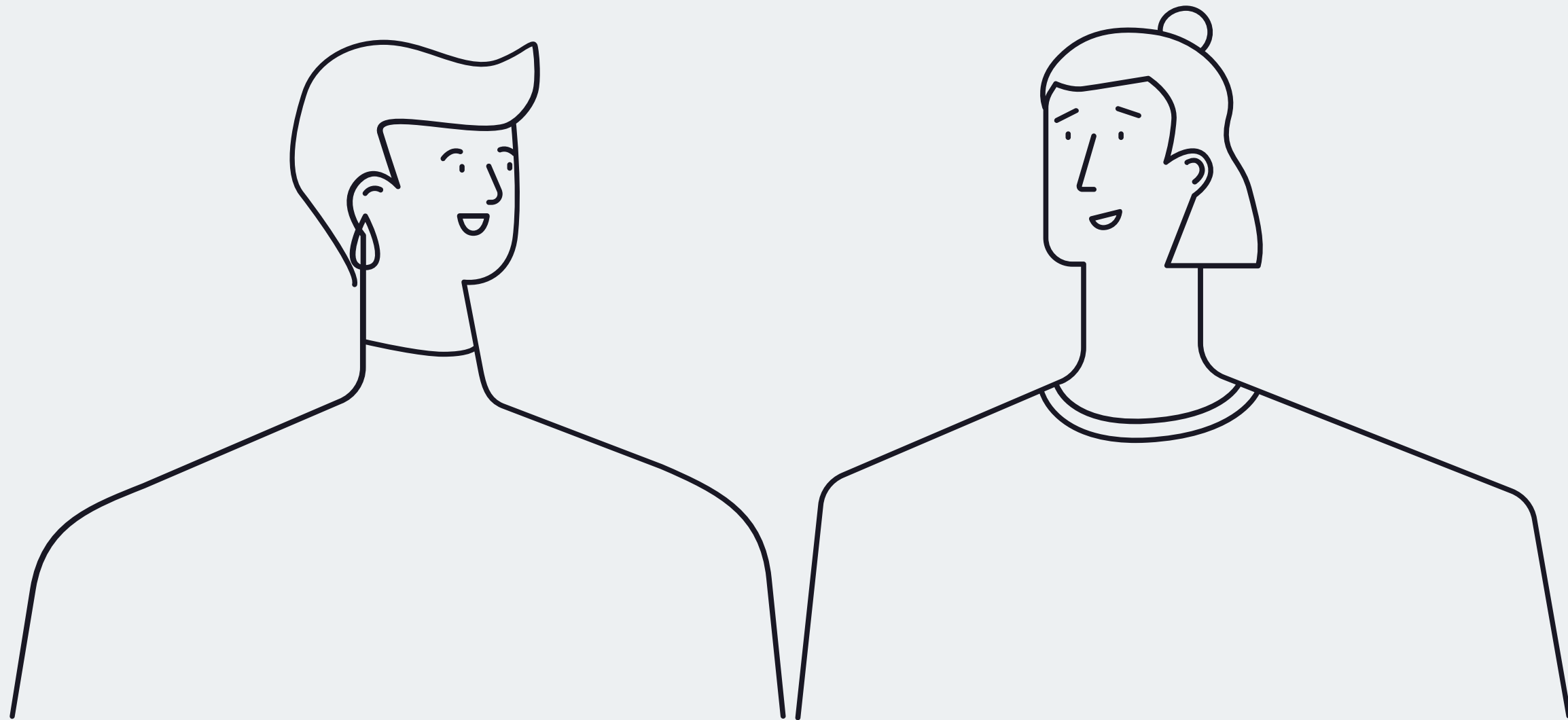
## Learn to:

- Deduce, discover, and communicate valuable insights from structured, semi-structured, and unstructured data sources
- Use meaningful visualizations to display and interpret data
- Take advantage of data processing tools like Hadoop® and MapReduce
- Turn your organization's data into a competitive advantage

Lillian Pierson



# DATA ANALYTICS VS ANALYSIS



# Data Scientist Steps



1) QUESTION?



# Data Scientist Steps

1) QUESTION?

2) WRANGLE

# Data Scientist Steps

1) QUESTION?

2) WRANGLE

3) EXPLORE

# Data Scientist Steps

1) QUESTION?

2) WRANGLE

3) EXPLORE

4) PRODUCTION

# Data Scientist Steps

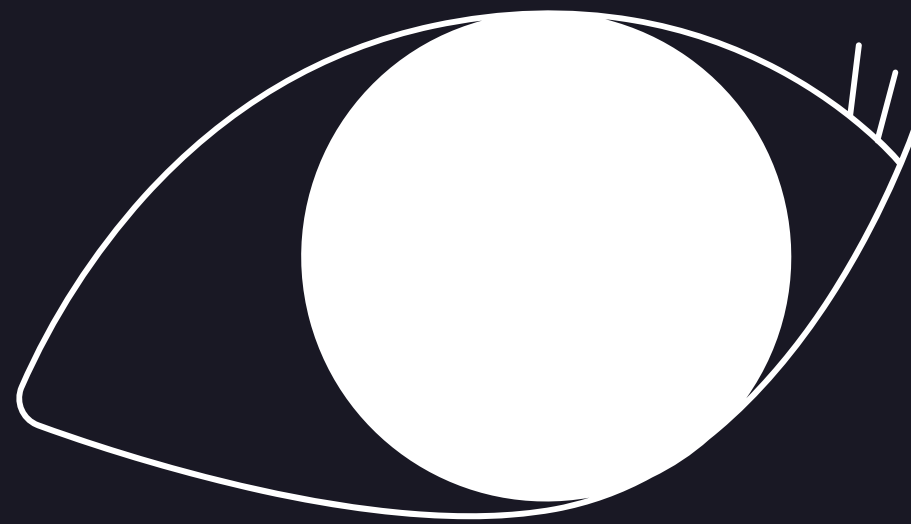
1) QUESTION?

2) WRANGLE

3) EXPLORE

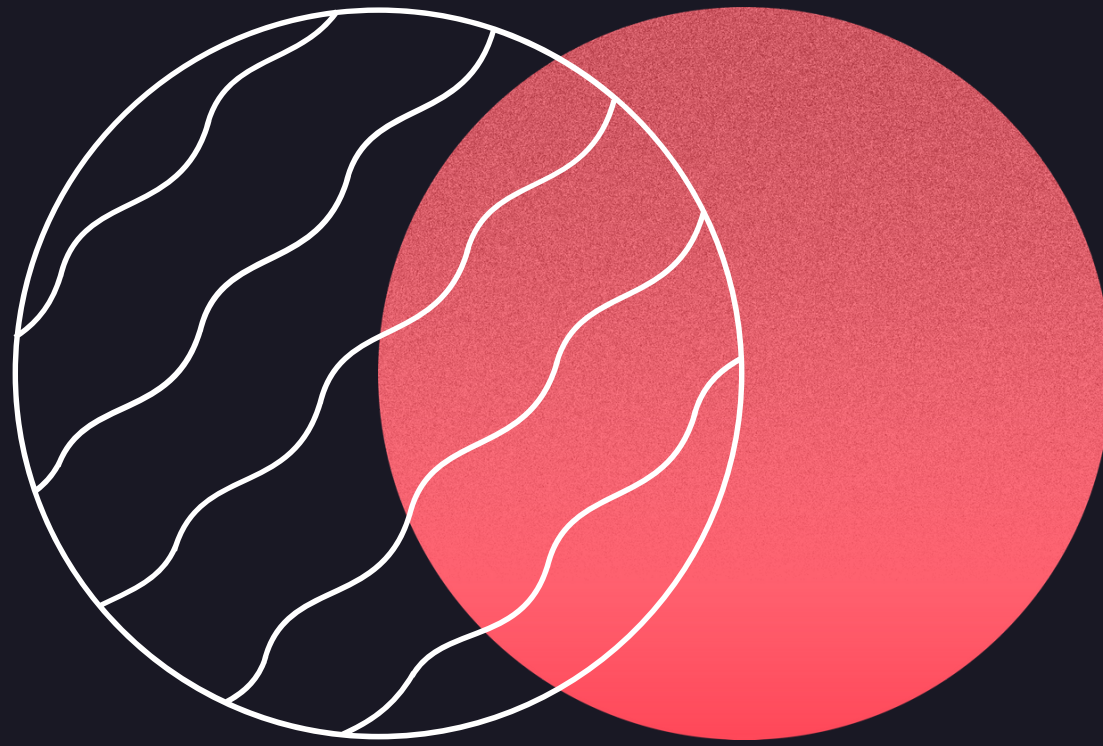
4) PRODUCTION

5) COMMUNICATION



# DATA VISUALIZATION

<https://www.data-to-viz.com/>

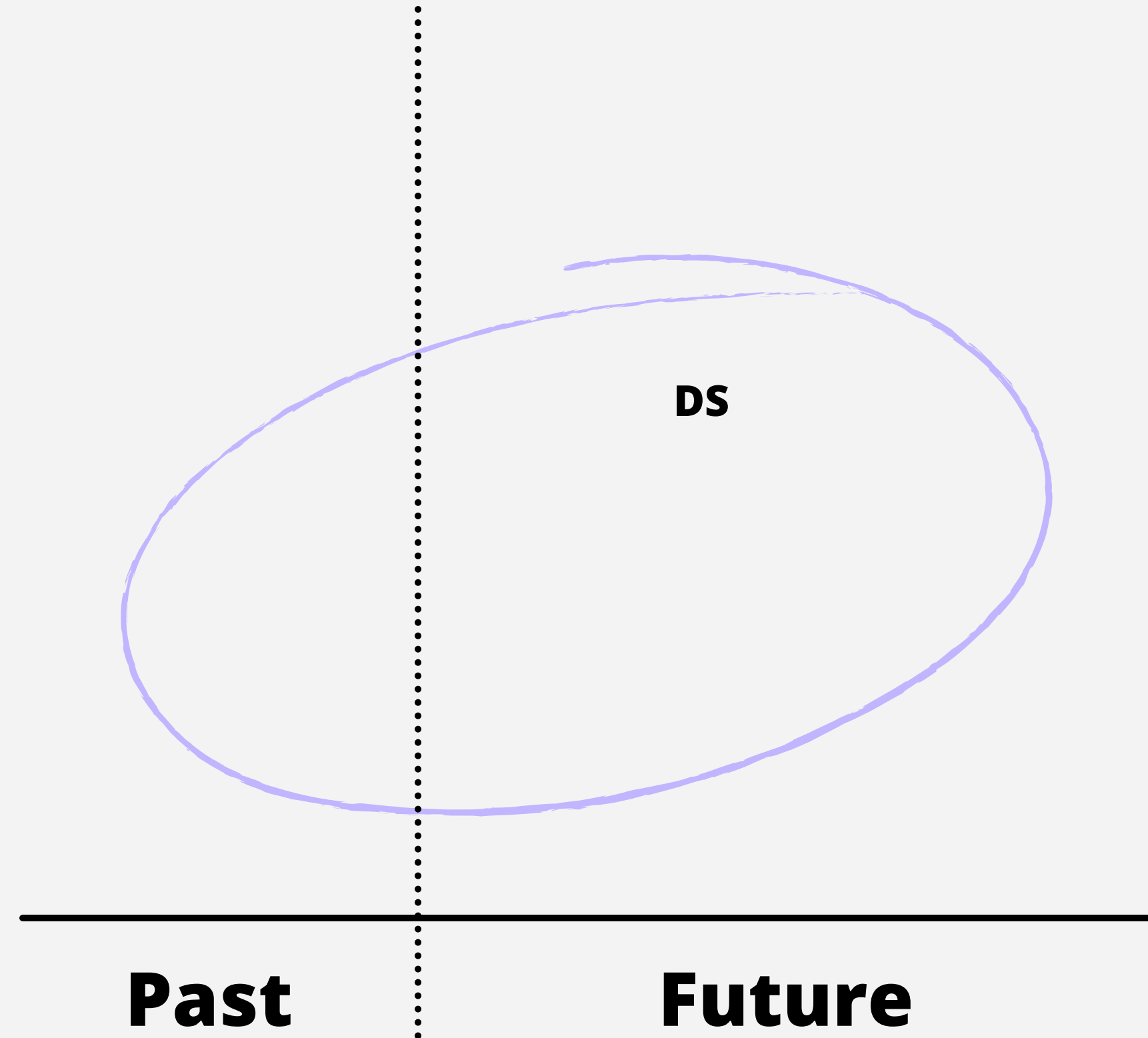


**DATA SCIENCE RELATED FIELDS**

**1**

Data Science



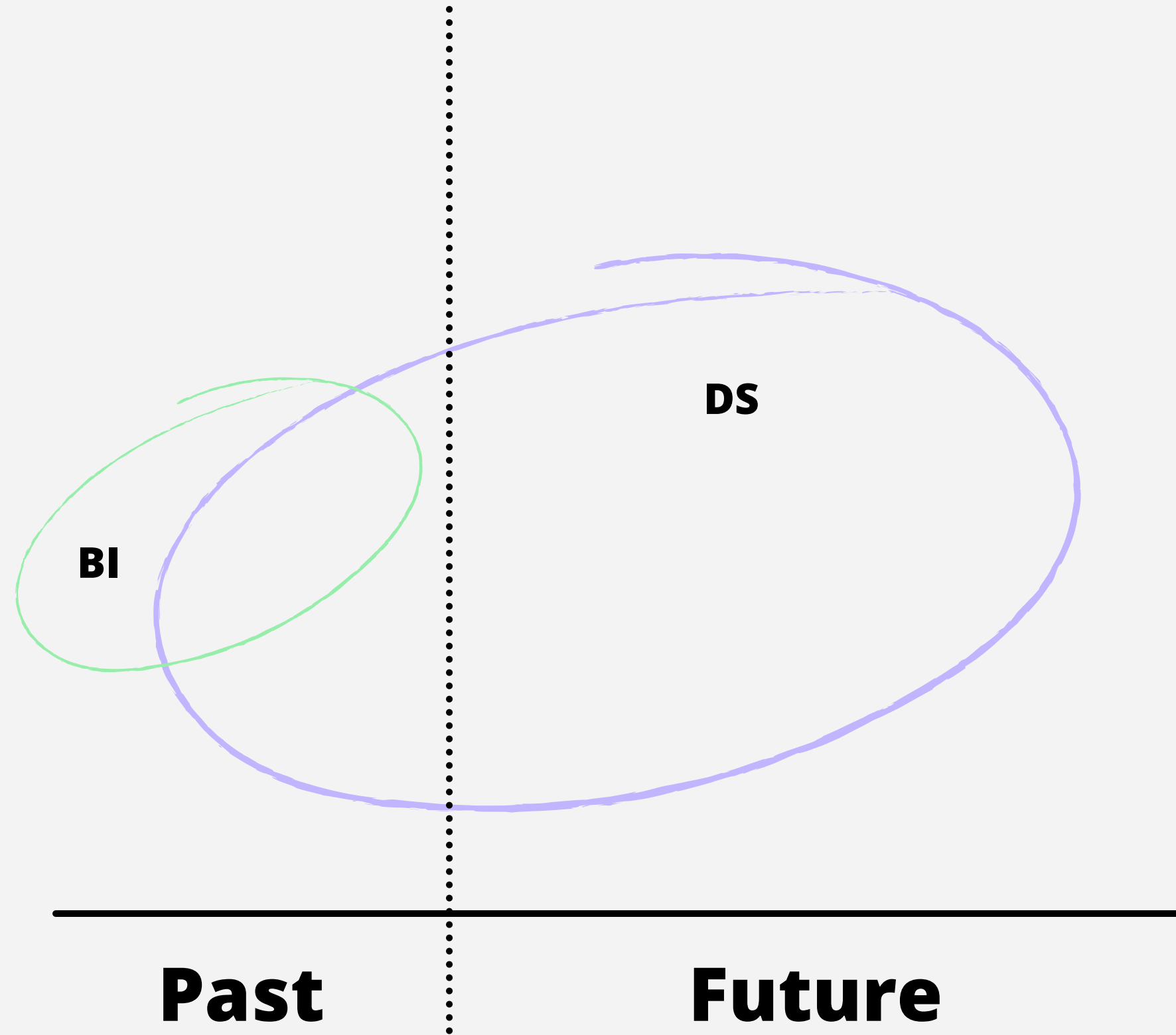


1

Data Science

2

Business Intelligence



**1**

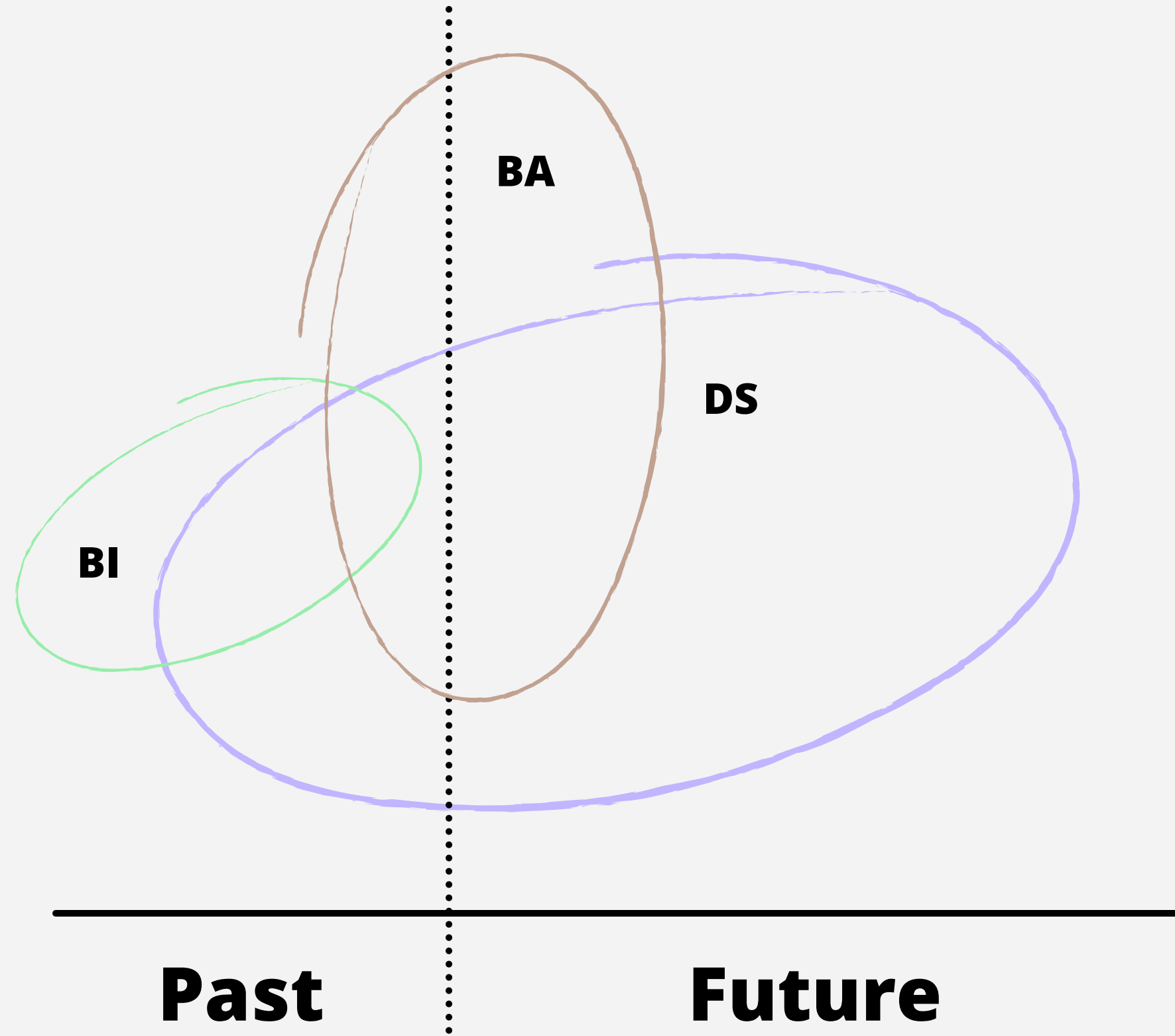
Data Science

**2**

Business Intelligence

**3**

Business Analytics



1

Data Science

2

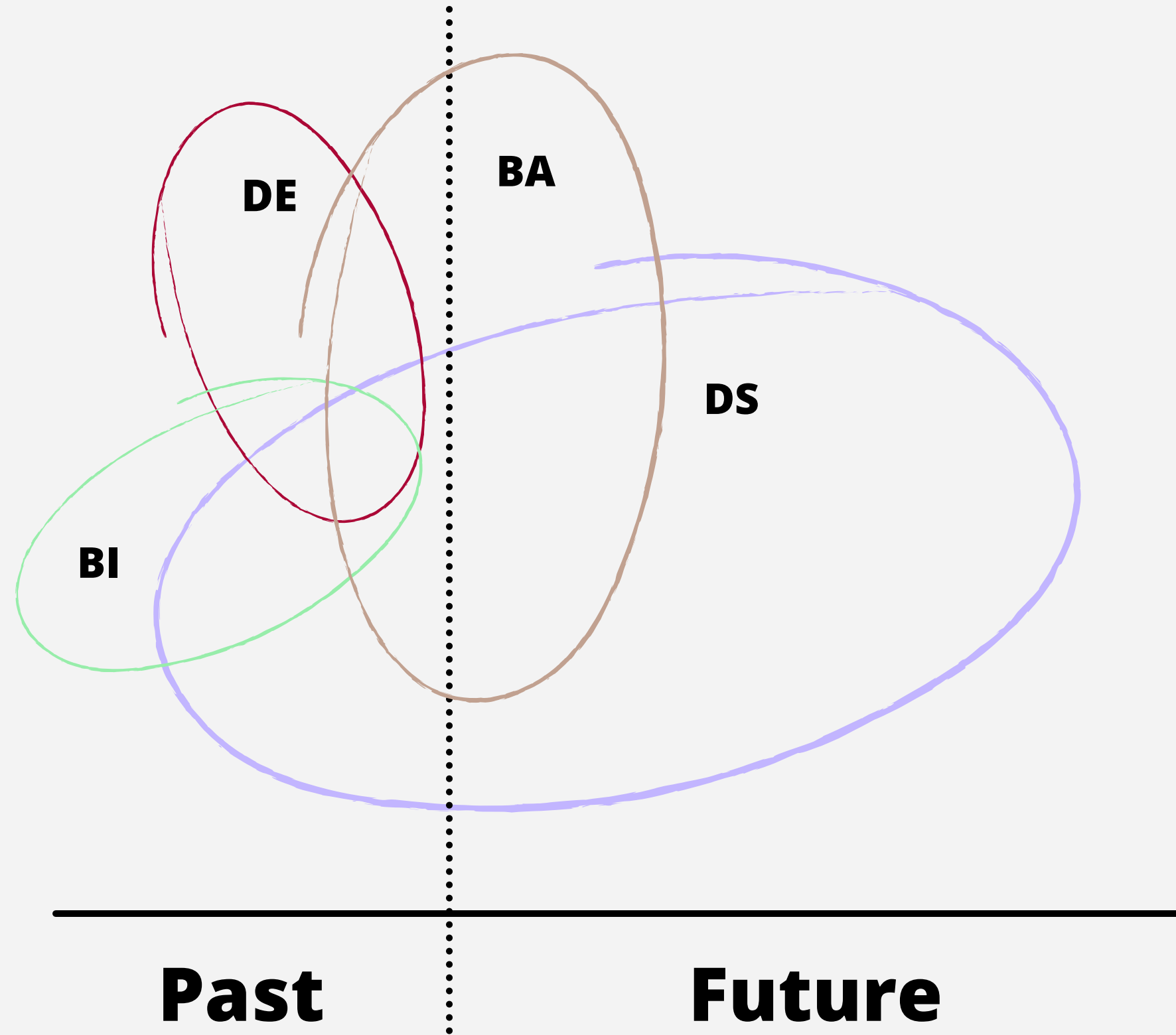
Business Intelligence

3

Business Analytics

4

Data Engineering





1

Data Science

2

Business Intelligence

3

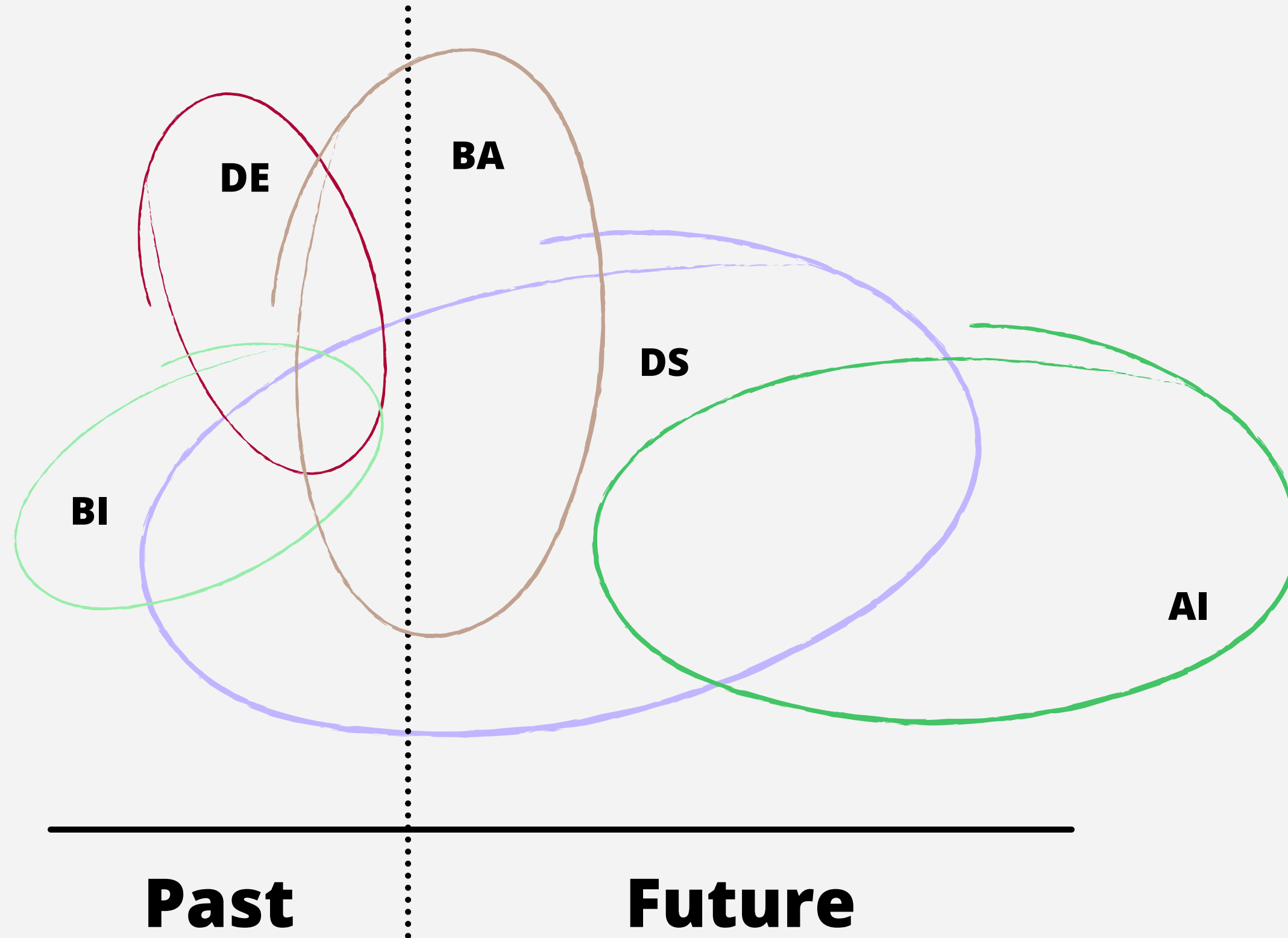
Business Analytics

4

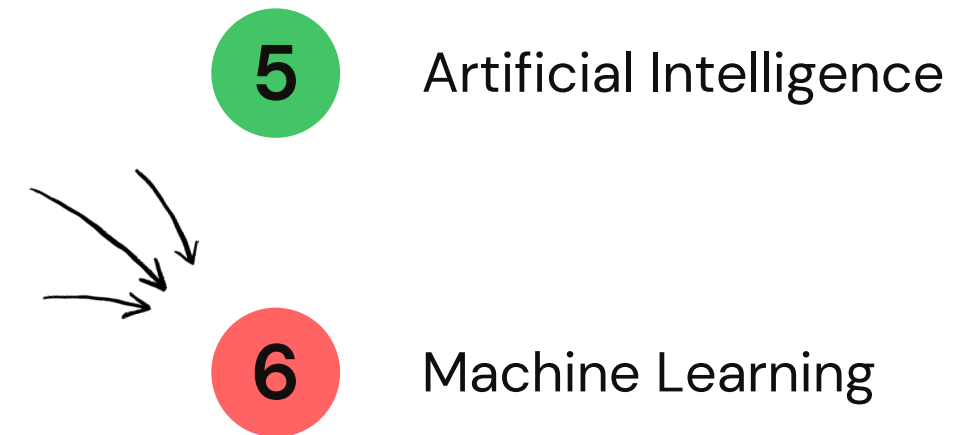
Data Engineering

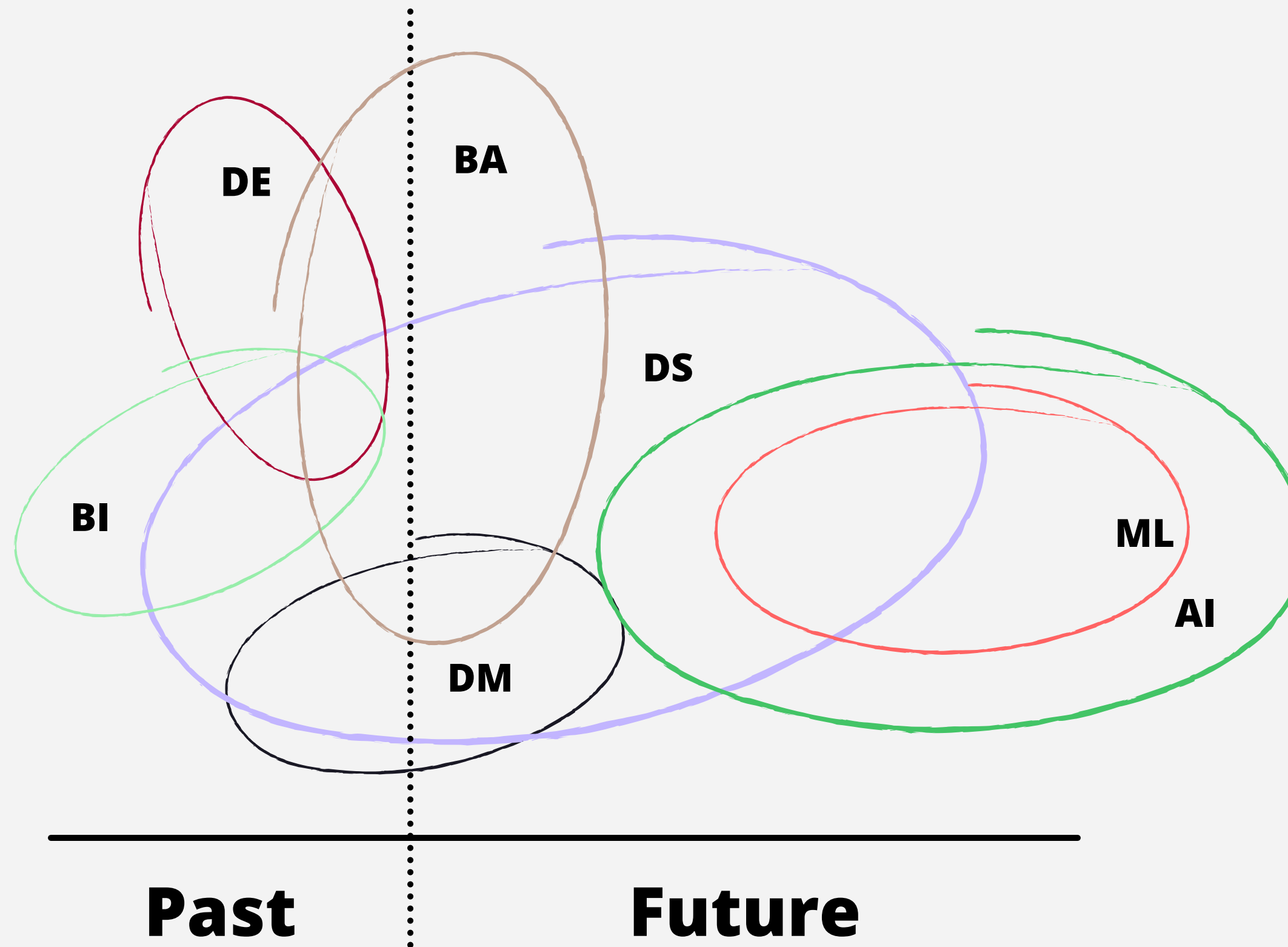
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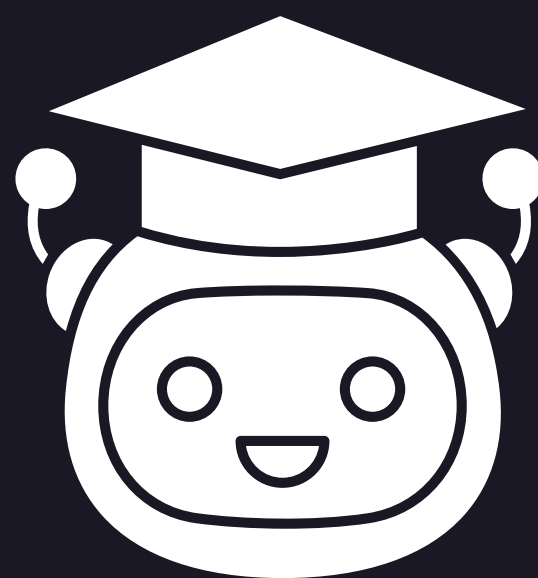
Artificial Intelligence



- 1 Data Science
- 2 Business Intelligence
- 3 Business Analytics
- 4 Data Engineering







**MACHINE LEARNING**

# MACHINE LEARNING

1

*Supervised learning*

# MACHINE LEARNING

1

*Supervised learning*

2

*Unsupervised learning*



# MACHINE LEARNING

1

*Supervised learning*

3

*Semi-Supervised  
learning*

2

*Unsupervised learning*

# MACHINE LEARNING

1

*Supervised learning*

3

*Semi-Supervised  
learning*

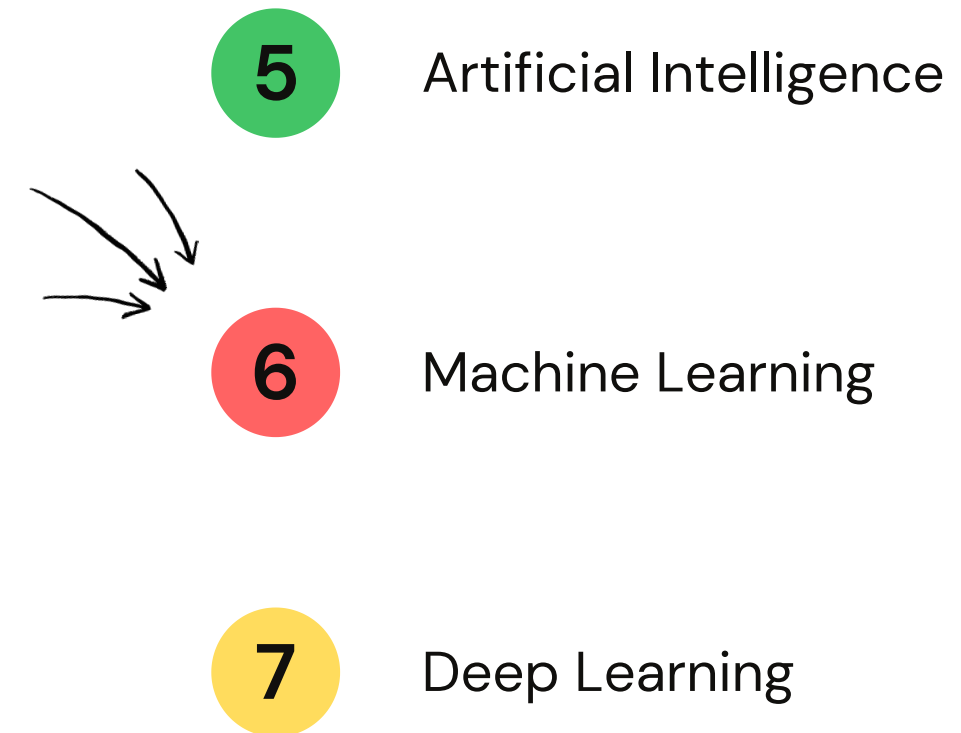
2

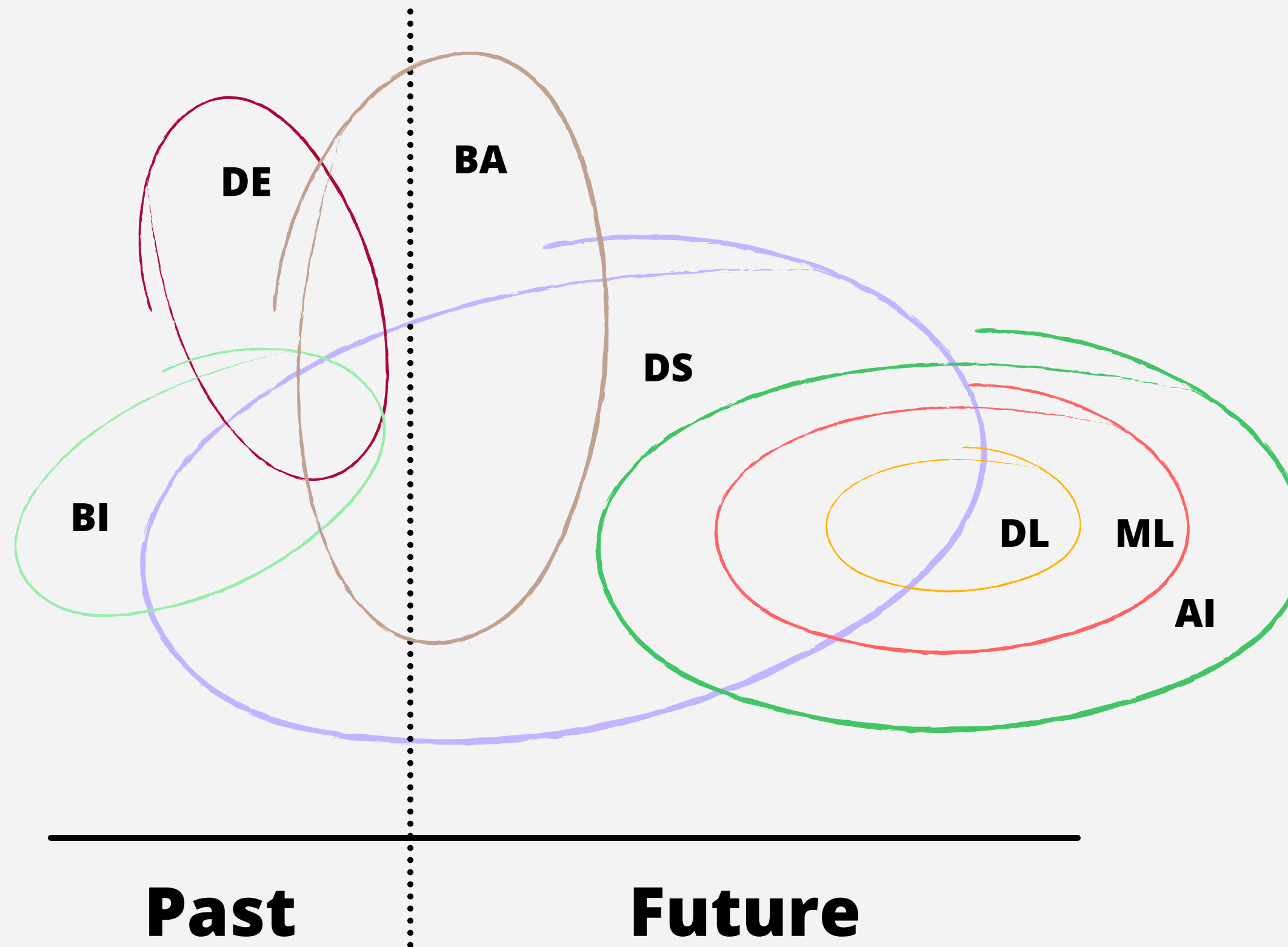
*Unsupervised learning*

4


*Re-inforcement learning*

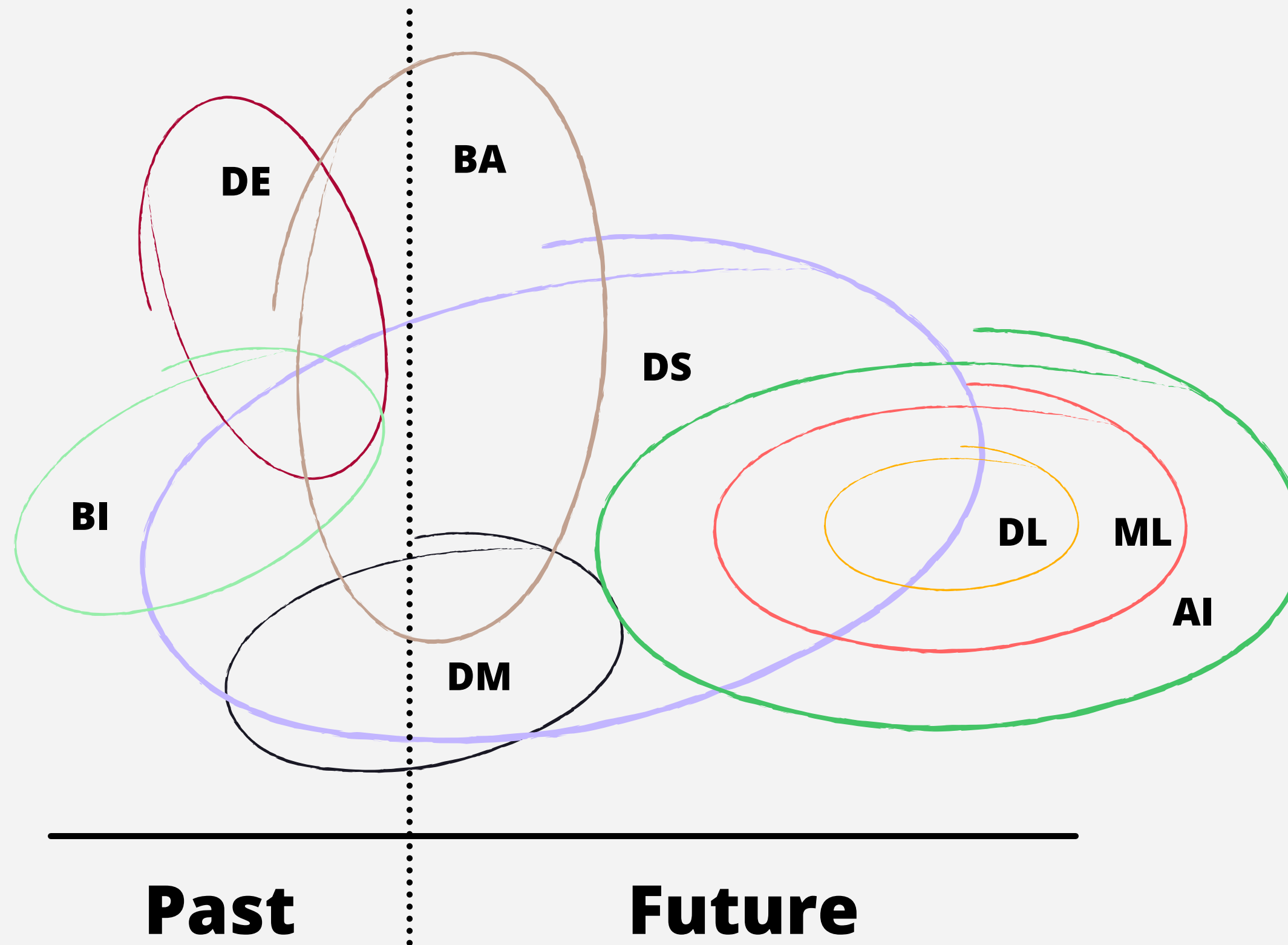
- 1 Data Science
- 2 Business Intelligence
- 3 Business Analytics
- 4 Data Engineering





- 1 Data Science
- 2 Business Intelligence
- 3 Business Analytics
- 4 Data Engineering

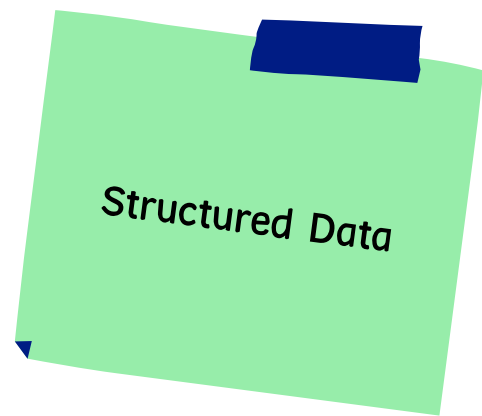
- 5 Artificial Intelligence
  - 6 Machine Learning
  - 7 Deep Learning
  - 8 Data Mining
- 



# Data Types



Data can be broadly classified into four types





# Data Types



Data can be broadly classified into four types

Structured Data

UnStructured Data

# Data Types



Data can be broadly classified into four types

Structured Data

UnStructured Data

DYNAMIC DATA

# Data Types



Data can be broadly classified into four types

*Structured Data*

UnStructured Data

DYNAMIC DATA

STATIC DATA

# Data Types



Data can be broadly classified into four types

Structured Data

UnStructured Data

DYNAMIC DATA

STATIC DATA

UnStructured

DYNAMIC

Office docs,  
media production

STATIC

medical imaging

Structured

transaction system

**BI,**  
Data warehousing

# Data Types



Data can be broadly classified into four types

Structured Data

UnStructured Data

DYNAMIC DATA

STATIC DATA

UnStructured

DYNAMIC

Office docs,  
media production

STATIC

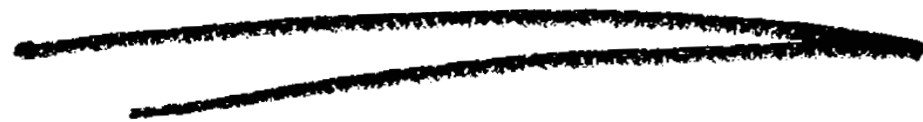
medical imaging

Structured

transaction system

**BI,**  
Data warehousing

# Thank you!



Link : <https://fb.watch/3BarQiOVYM/>