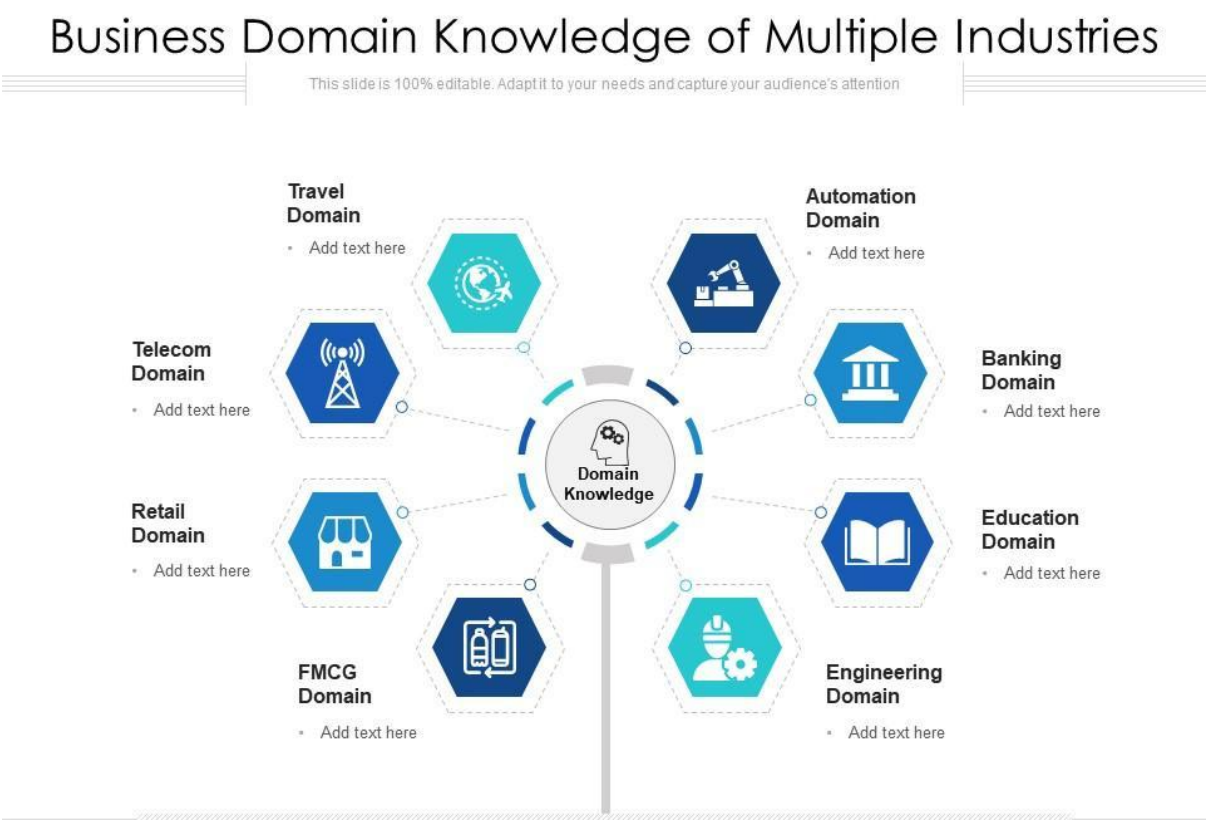
INDIVIDUAL TASK – 4

Take one domain and build business Understanding



Business Understanding

Domain: Online Retail (E-Commerce Company)

Let us take the domain of an online retail company that sells clothes and accessories.

1️⃣ Business Objective

The main goal of the company is:

Increase sales

Improve customer satisfaction

Reduce customer churn

Increase profit

Example Business Problem:

👉 Many customers visit the website but do not complete purchases.

2️⃣ Problem Statement

The company wants to:

Predict which customers are likely to buy.

Identify customers who may stop purchasing.

Recommend products to increase sales.

3️⃣ Business Goals

Increase conversion rate by 10%

Reduce customer churn by 15%

Improve personalized recommendations

Increase repeat purchases

4️⃣ Key Stakeholders

Business managers

Marketing team

Sales team

Data science team

Customers

5️⃣ Key Questions to Answer

Why are customers leaving without purchasing?

Which customers are likely to buy?

What products should be recommended?

What factors affect sales the most?

6️⃣ Data Required

Customer demographics (age, gender, location)

Purchase history

Website browsing behavior

Payment methods

Product categories

7️⃣ Success Criteria

Business Success:

Higher revenue

More customer retention

Technical Success:

High model accuracy

Low prediction error

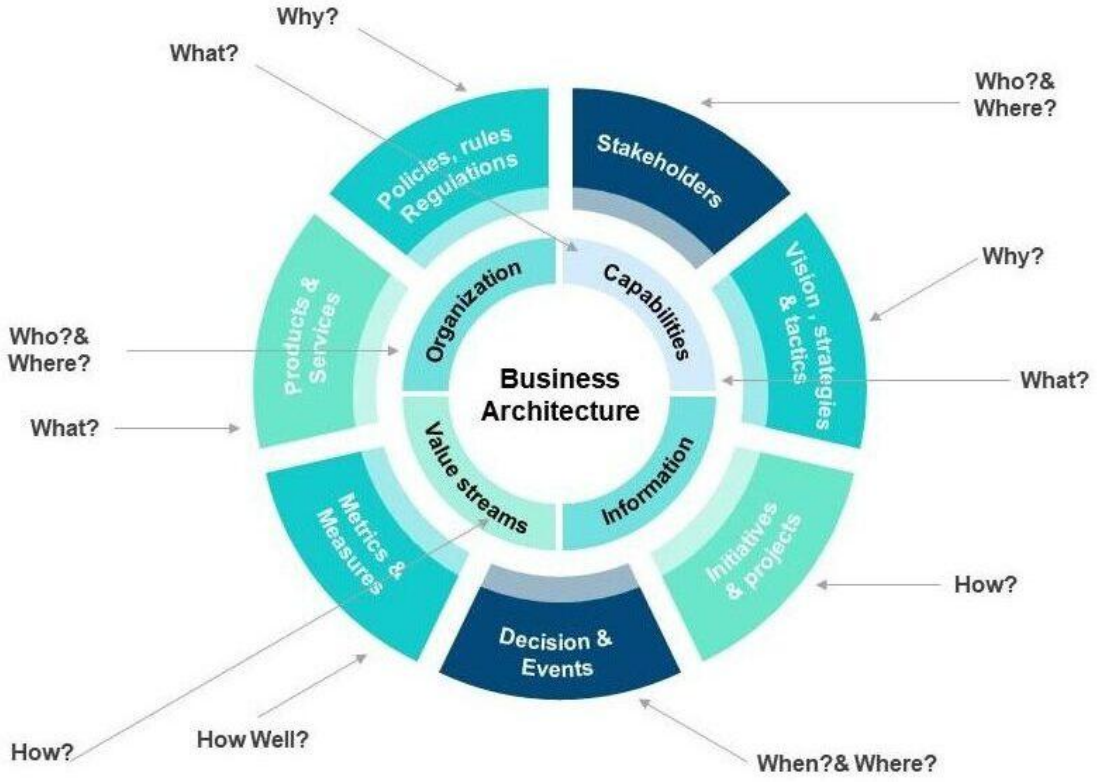
8️⃣ Risks and Challenges

Poor data quality

Data privacy issues

Changing customer behavior

Incorrect model predictions



Business Understanding (Detailed Explanation)

Domain: Online Retail (E-Commerce Company)

Business Understanding is the first and most important step in any data science project.

It focuses on clearly understanding:

What the business wants to achieve

Why the problem matters

How success will be measured

Let's explain it in detail using an Online Retail Company example.

1️⃣ Understanding the Business Background

An online retail company sells clothes and accessories through a website.

Current situation:

Many visitors browse products.

Only a small percentage complete purchases.

Some customers buy once and never return.

This affects revenue and growth.

2️⃣ Defining the Business Problem

The company notices:

Low conversion rate

High customer churn

Irregular sales patterns

So the business problem becomes:

👉 "How can we increase sales and retain customers?"

3️⃣ Translating Business Problem into Data Problem

Business Problem → Increase sales

Data Science Problem →

Predict which users are likely to purchase

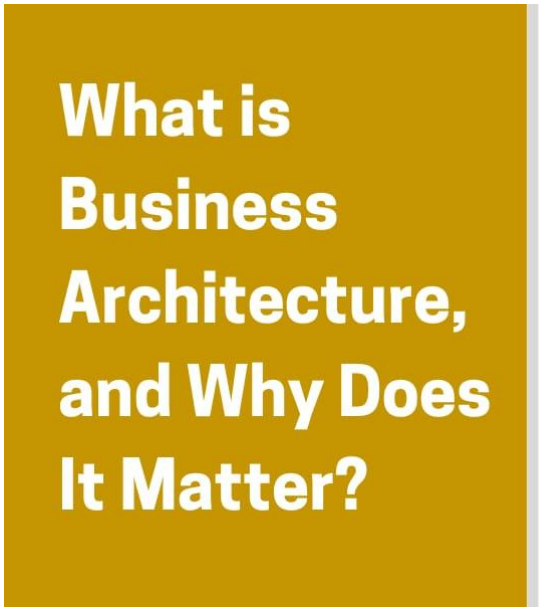
Identify customers likely to churn

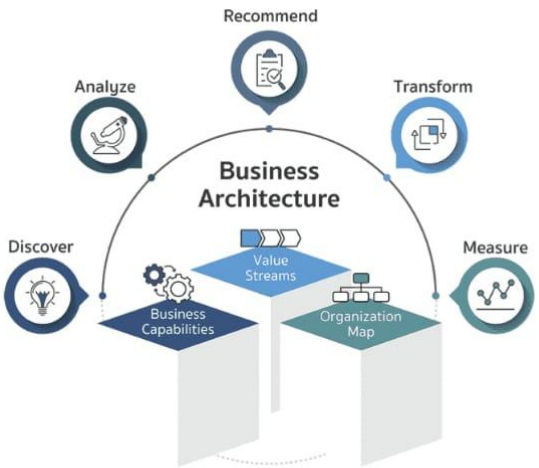
Recommend personalized products

This conversion is very important in Business Understanding.

4️⃣ Setting Clear Objectives

Objectives must be measurable.





Example:

Increase sales by 15% in 6 months

Reduce churn rate by 10%

Improve recommendation accuracy

Clear objectives help measure success.

5️⃣ Identifying Stakeholders

Different people are involved:

CEO → Interested in profit

Marketing team → Interested in customer engagement

Sales team → Interested in conversions

Data team → Builds predictive models

Understanding stakeholders ensures alignment.

Conclusion

Business Understanding is the foundation of any successful data science or analytics project. It ensures that the technical work is aligned with real business needs.

By clearly defining:

The business problem

The objectives and goals

Key stakeholders

Success metrics (KPIs)

Risks and constraints

the organization can develop solutions that create measurable value.

In the online retail example, understanding the goal of increasing sales and reducing customer churn helps guide the data analysis and model building process.

Therefore, Business Understanding ensures that data-driven solutions are practical, relevant, and beneficial to the organization.