



Lesson 1: Intro and first steps

Meet & greet

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Who I am?

- PhD in Finance from Svishtov Thesis: "Improving Corporate Valuation Measurement in Bulgarian Stock Market"
- Published number of papers in the field stock market research
- Worked as Junior Analyst, BI Analyst, BI Lead & Senior BI Lead within Finance department of Experian LLC
- Current position: Analytics Manager at Experian Marketing Service doing market analytics
- Tools of choice: Tableau, Databricks, Python, SQL
- Research interests: stock market analytics, company valuations
- Hobbies: basketball, travelling, running



Meet & greet





Your Turn

Meet & greet

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Where are your interests? (1-no interest, 5-love it)

Name	Coding (tech)	Data analytics	Corporate Finance	Stock Market
Kal	2	5	3	5
Plamen				
Minh Dat				
Dannie				
David				
Emalyn				
Jai				



What we are doing here?

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University











Corporate Work



- University gives you base knowledge
- ➤ When you become "boss" then you will use this university knowledge
- > To start you need practical skills
- > What you will do will remind you to university days, but you won't find a way to apply your knowledge
- ➤ In age of Al it is even harder to start



Filters

Etc

What is different?

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types Role of finance

Functions Theoretical basis

requires

intersection

Numerical example

tc

Our way

Understand what is needed (no excess theory)

Use GenAl code it

Focus on analyzing the result



Our goals

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Expose you to near real-world corporate environment

Increase tech skills

Learn data analytics

See how data is organized

Expose you to different tools

Understand how data is transformed

See what tasks are usually given

Get a habit not to code, but to "DO" with AI

Hopefully "skip" the entry-level of just transforming data (boring and taken by AI)



Scenario you are thrown in

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You are starting as a "Financial Analyst" within the corporate department of "XYZ"



Few facts on XYZ

- ➤ It is one of the biggest chipmakers in Taiwan that is growing extremely fast
- > It is a private company
- XYZ uses Databricks environment to organize its corporate data

What is your job

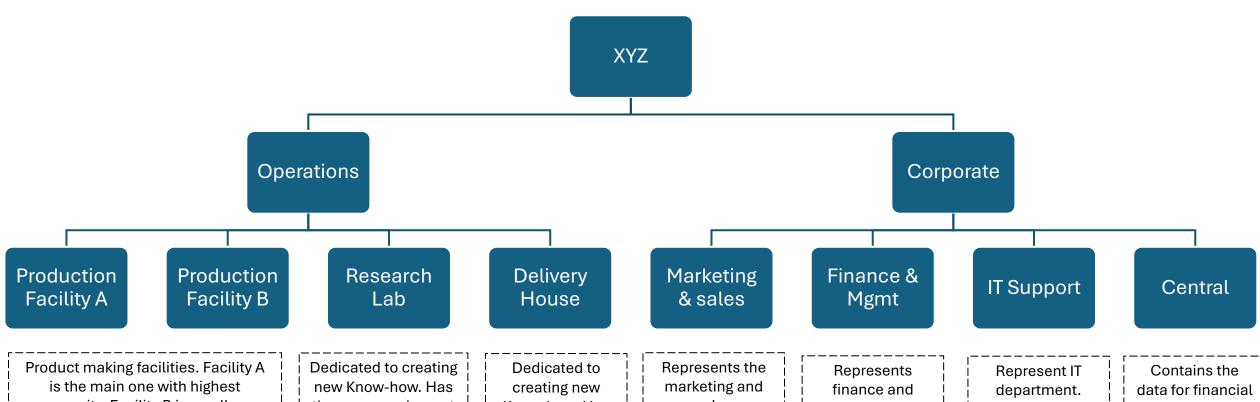
- Deliver analysis to senior management on various parts of the business
- Produce valuation of XYZ
- Since XYZ is going public, you will need to compile a pack to introduce the business to outside investors



How is XYZ organized

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Product making facilities. Facility A is the main one with highest capacity, Facility B is smaller, dedicated to lower quality chips and some special designs.

new Know-how. Has
the same equipment
as production
facilities.
Responsible for
licensing revenue.

creating new
Know-how. Has
the same
equipment as
production
facilities.
Responsible for
licensing
revenue.

marketing and sales departments. As corporate function only generates cost

finance and senior management roles and functions.

department.
Unlike other
corporate
function it has
long term assets
like servers etc.

data for financial investment, debt, interest, tax etc.
All other segments are operational, this one is for accounting purposes.



What is Databricks

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Cloud-based platform



Helps store, clean and analyze large data sets



Allows teams to collaborate in the same environment







Multiple coding tools available



Data analytics & Coding & Al

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No longer required to have advanced coding skills







Al can turn you knowledge into code











- Coding is getting replaced by AI
- You need to know what you are doing with the data rather than coding
- Focus on data analytics, this AI can't replace

Explain what you are trying to do to GenAl



Get the code



Execute in Databricks











Tasks to solve

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Task 1: What is the total market size (revenue) in Current Year?

Task 2: What is the total market size (revenue) in Previous Year?

Task 3: What is the total market growth?

Task 4: Create pie chart to see breakdown of market by segment

Task 5: Estimate earnings per share for each company and display

Task 6: Plot EPS vs current year revenue



Homework

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Task 1: Which is the fastest growing segment?

Task 2: What are top 5 fastest growing companies in each segment?

Task 3: How much the market share of the largest company has changed between the 2 years?