

Navigating the digital landscape in the agri-food sector

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**Chances &
Strategies to Grow &
Expand your
Business Using
Modern Technology**



MODULES

- 1 ➡ INTRODUCTION TO DIGITAL TRANSFORMATION IN AGRI-FOOD
- 2 ➡ BUILDING A DIGITAL PRESENCE
- 3 ➡ E-COMMERCE & ONLINE SALES
- 4 ➡ DIGITAL MARKETING STRATEGIES
- 5 ➡ DATA ANALYTICS & INSIGHTS
- 6 ➡ MOBILE TECHNOLOGY & APPS
- 7 ➡ INTERNET OF THINGS (IOT) IN AGRICULTURE
- 8 ➡ ONLINE NETWORKING & COLLABORATION
- 9 ➡ CYBERSECURITY & DATE PRIVACY
- 10 ➡ FUTURE TRENDS & ADAPTATION STRATEGIES



Data Analytics & Insights

- Importance of data analysis in the agri-food sector
- How to derive actionable insights from data
- Key data sources relevant to the agri-food sector
- Apply data driven decision making



1) Importance of Data Analysis

Informed Decision Making

- data driven insights
- risk assessments
- resource allocation
- improve operational efficiency
- market analysis

Example:

Customers prefer one product over another > manage stock accordingly

Identifying Trends

- understanding market trends
- recognizing trends in consumer behavior

Example:

Environmental awareness of general public increased > investment into eco-friendly packaging

Performance Measurement

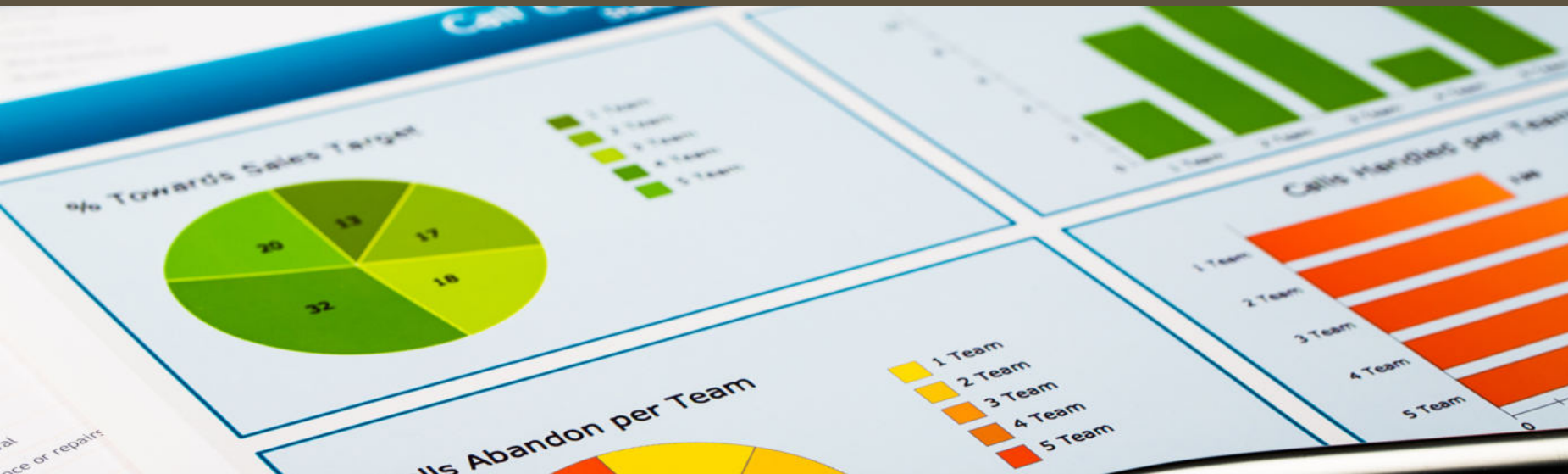
- using data to assess effectiveness of marketing campaigns, product offerings & customer engagement

Example:

Conversion rate of ad A is bigger than the one of ad B > stop ad B and invest in ad A



2) Key Data Sources



➔ Internal Data

- sales data
- customer feedback
- operational metrics

Example: Operational

It takes more time to make product A than product B > product A higher price



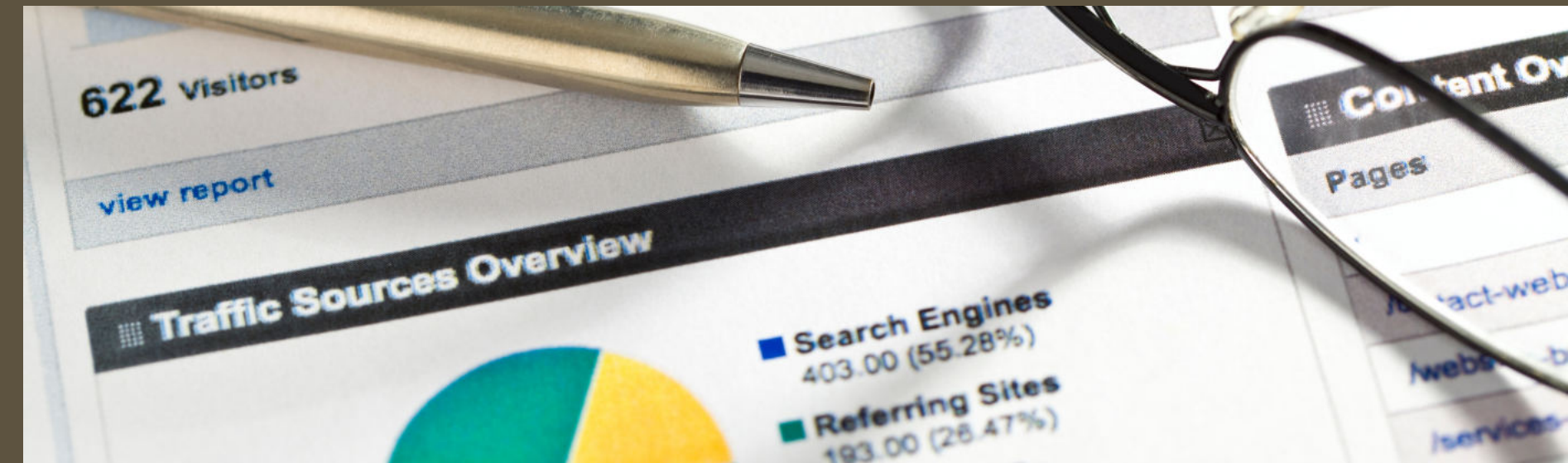
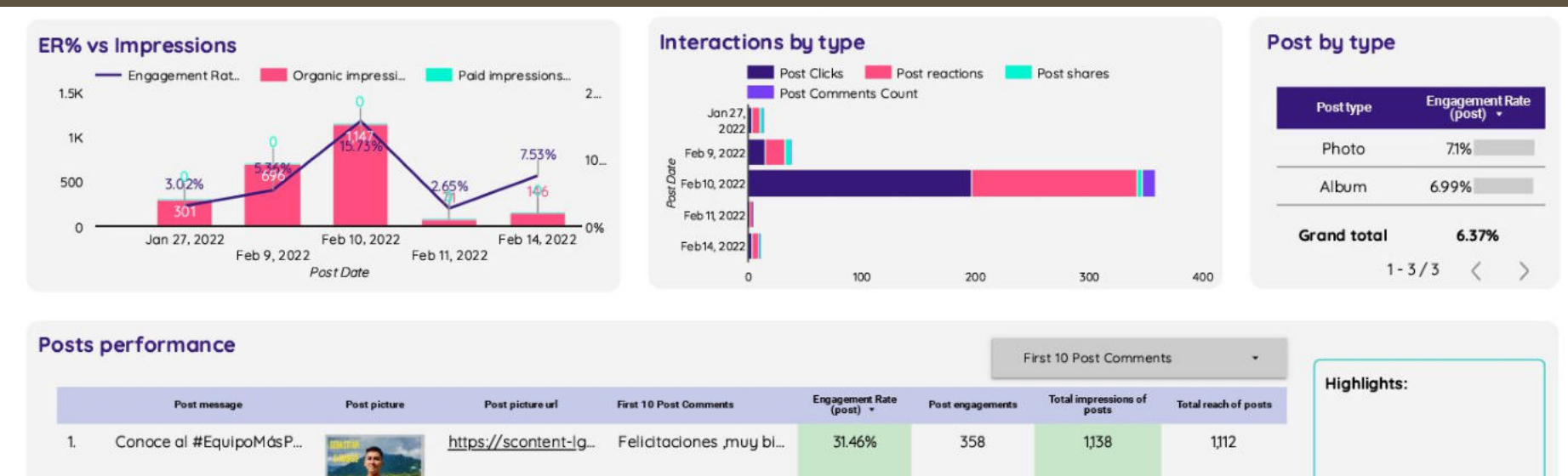
➔ Market Research

- utilizing industry reports, surveys & competitive analysis to gather external data

Example:

Send surveys out to your email subscribers to receive feedback & market trends

2) Key Data Sources



➔ Social Media Insights

- analyzing engagement metrics, audience demographics & content performance
- tools: Hootsuit, Social Insider

Example:

Reel A got 100 views, reel B got 2k views > analyze determining factors (duration, content, time posted..)

➔ Website Analytics

- leveraging tools like Google Analytics, Adobe Analytics, Clicky
- track website traffic, user behavior & conversion rates (FUNNEL!!)

Example:

use data to simplify & streamline website experience to increase sales

3) Data Analysis Techniques

Descriptive Analysis

summarizing historical data to understand past performance & trends

Example:

Offering discounts at various times on certain products/services increased their sale (data from past 5 years)

Diagnostic Analysis

identifying the causes of certain outcomes by analyzing data relationships

Example:

Why do discounts increase sales of certain products/services at certain times? > seasonal relation to offers/discounts



3) Data Analysis Techniques

Predictive Analysis

using statistical models & algorithms to forecast future outcomes based on historical data

Example:

Predict seasonal sales based on numbers from past years

Prescriptive Analysis

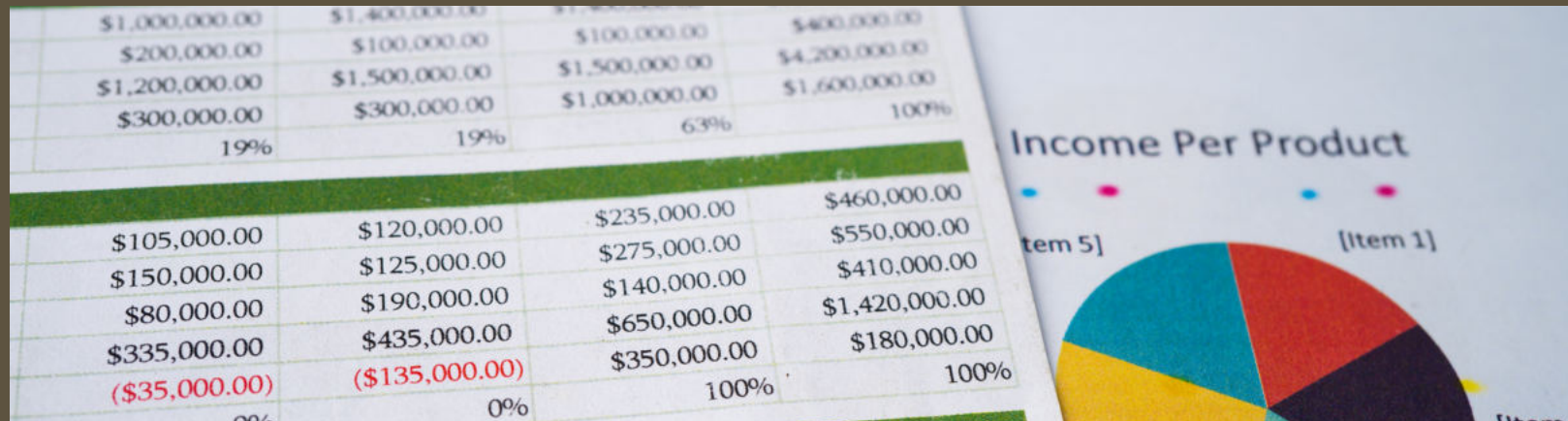
recommending actions based on data insights to optimize performance

Example:

Create seasonal sales campaigns based on past years' performance



4) Tools for Data Analysis



➔ Spreadsheet Software

- MS Excel, Google Sheets



➔ Data Visualization Tools

- Tableau, Power BI



➔ Statistical Analysis Software

- R, Python

5) Practical Example



Company: agri-food producer

Situation: *Launching organic products*

- 1) **Market Research & Consumer Trends** > social media, online surveys, research reports > use information to gauge interest
- 2) **Customer Segmentation:** purchase history, loyalty program data, demographic information > tailoring ads to specific needs of customers
- 3) **Social Media Engagement:** engagement metrics from previous posts > invest in most engaging formats
- 4) **Website Analytics:** user behavior, identifying which pages have high conversion rates & which have high drop-offs







5) **Predictive Analytics for Demand Forecasting:** forecasting demand for new organic products based on historical sales during similar seasons, optimizing planning schedules & inventory levels to match predicted demand

6) **Performance Monitoring & Adjustments:** real-time sales data, feedback > after launching new organic produce, company continuously tracks KPIs (key performance indicators), make real-time adjustments based on performance

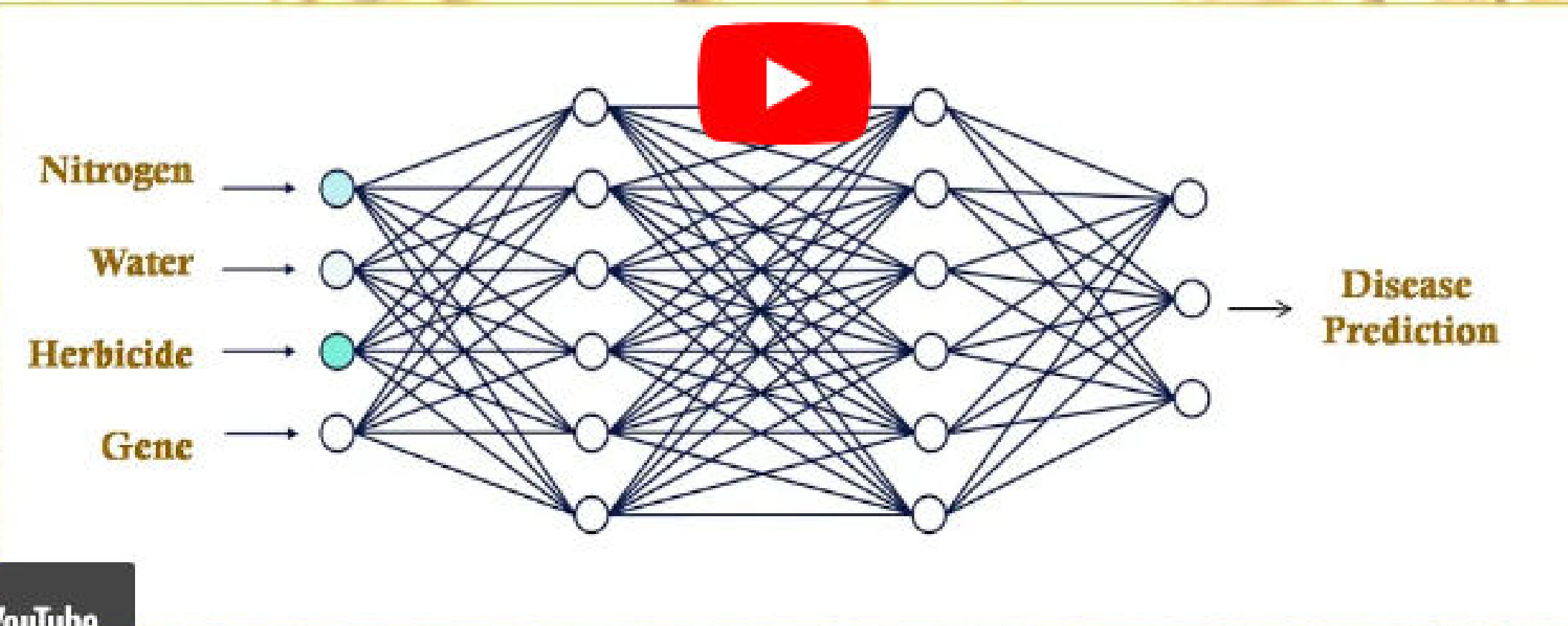
7) **Supply Chain & Logistic Data:** identify inefficiencies, implement optimization strategies to reduce operational costs

CONCLUSION: by leveraging data analysis & insights the company successfully launches its new organic products


6) Data Driven Agriculture

 Data-Driven Agriculture and Role of AI in Farming: Example of Applying Fungicide for W...  Share

Data-Driven Agriculture



Nitrogen → Water → Herbicide → Gene → Disease Prediction

Watch on  YouTube

7) In Conclusion

Harnessing the power of data analysis is crucial for making informed decisions in the agri-food sector.





7) Active Engagement Exercises

Analyzing

What data do you currently collect and how do you use it?.

Researching

Find a case study of a business which uses analytics to implement changes that significantly improve their profits.

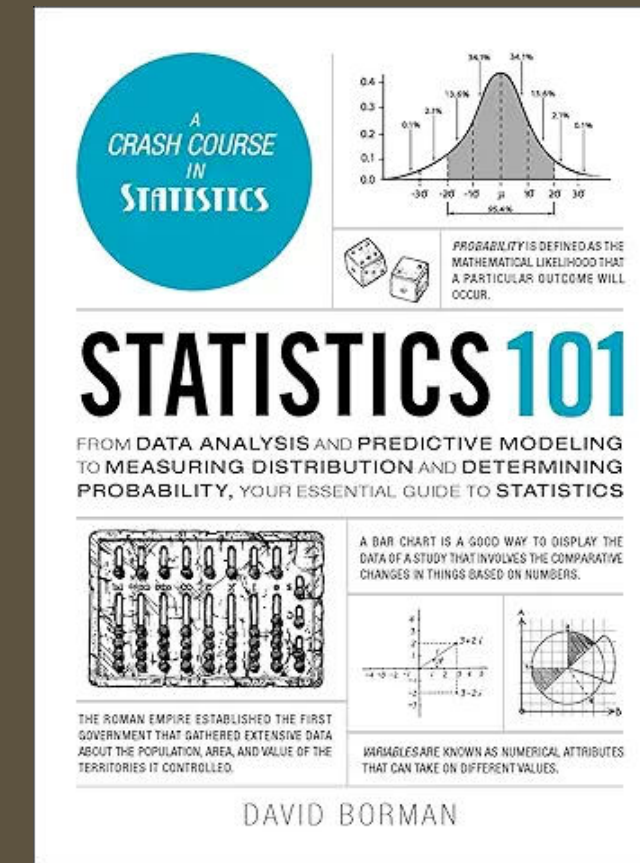
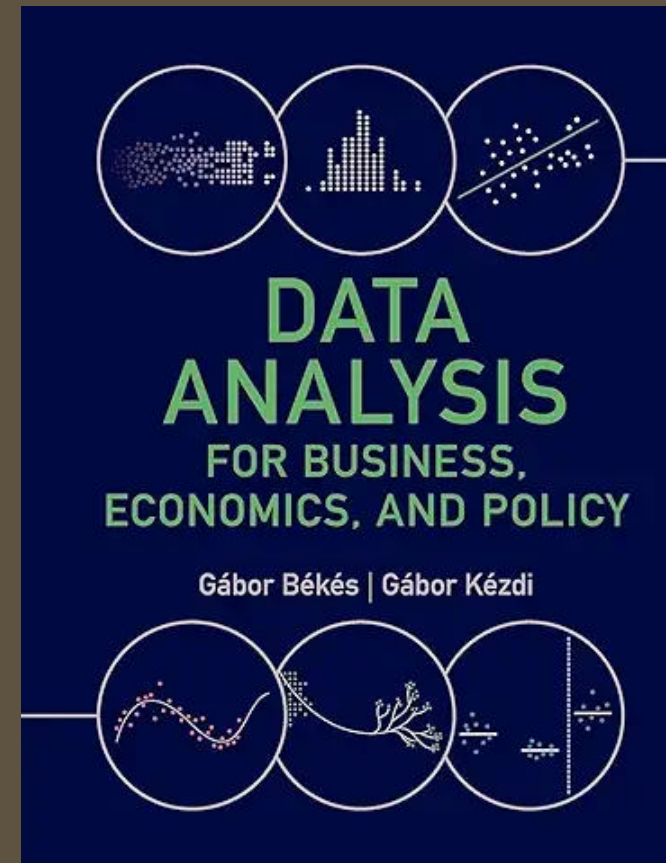
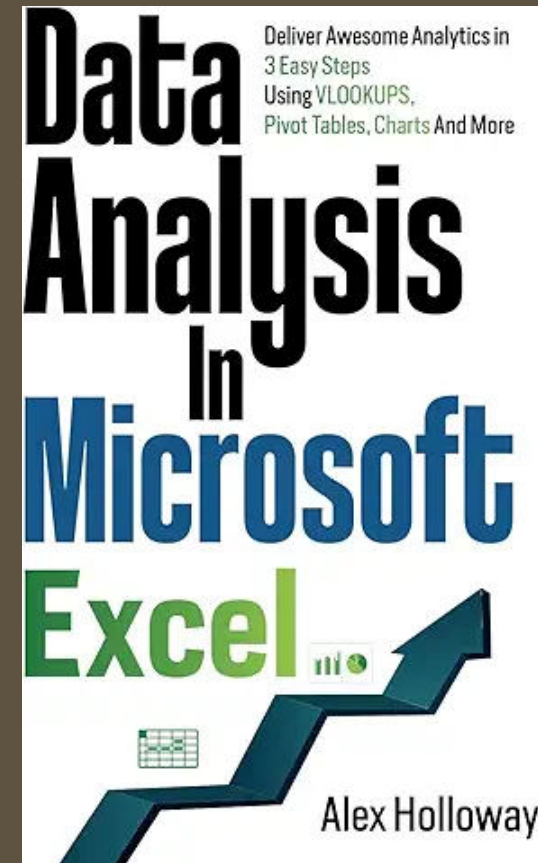
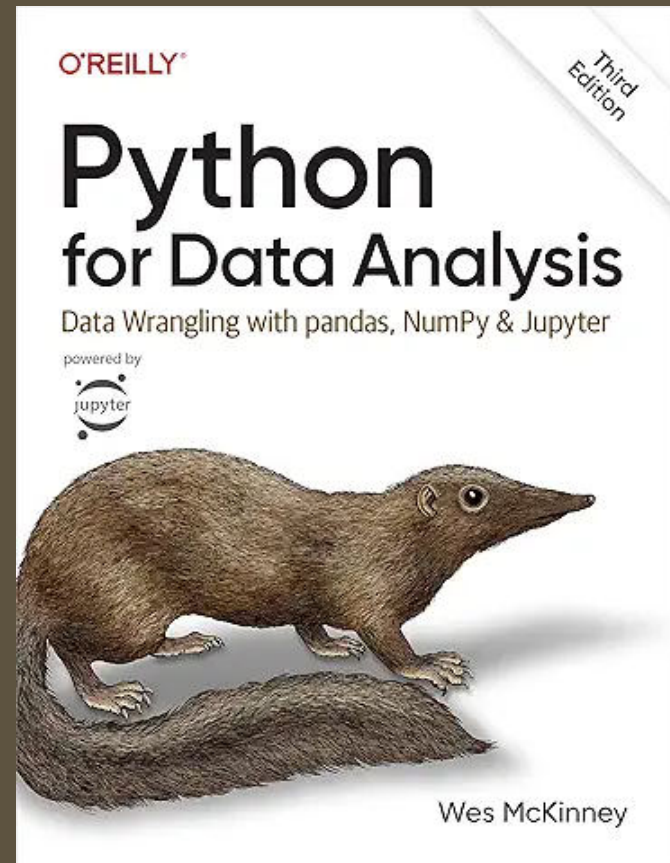
What can you learn from it?

Examples: <https://digitaldefynd.com/IQ/business-analytics-case-studies/>

Planning

Connect Google Analytics to your website and discover its features. Utilize data to make improvements

RESOURCES



Data-Driven Agriculture and Role of AI in Farming: Example of Applying Fungicide for Wheat

www.youtube.com/watch?v=OeQEbaSWNRA

The Future of Farming: utilizing Data Analytics in Agriculture (by IABAC)

iabac.org/blog/the-future-of-farming-utilizing-data-analytics-in-agriculture

THANK YOU

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