Data Science Implementation for Marketing

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About Me

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IS A DATA-DRIVEN COMPANY

Data Informed vs Data Driven

data-informed → data is only a *factor* in decision making

data-driven → data is the **fundamental** of decision making

- "Do you have data to support what you've just said?"
- "Let's make an experiment to confirm this hypothesis."
- "We'll just follow what the data tells us."

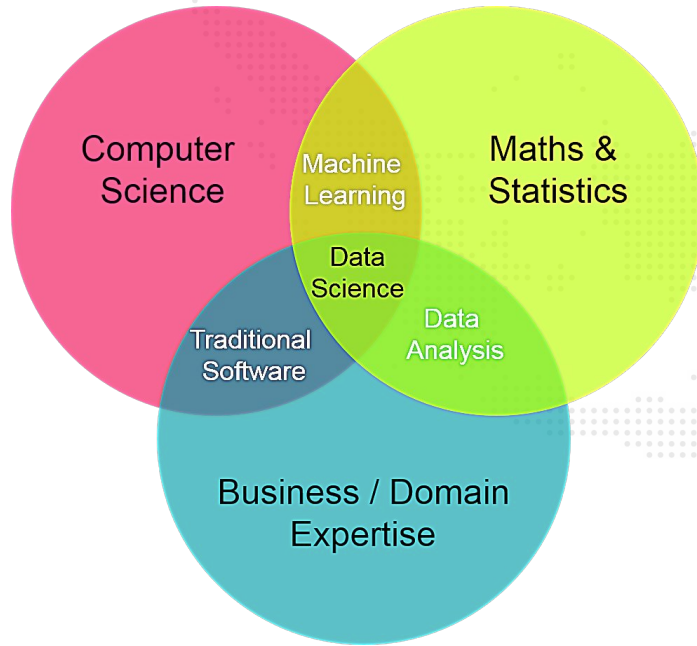**BukaLaPak**

Data Scientist

Data Engineer

Data Architect

Data Analyst

AI Engineer

AI Scientist

[Business Analyst]

[Business Intelligence]

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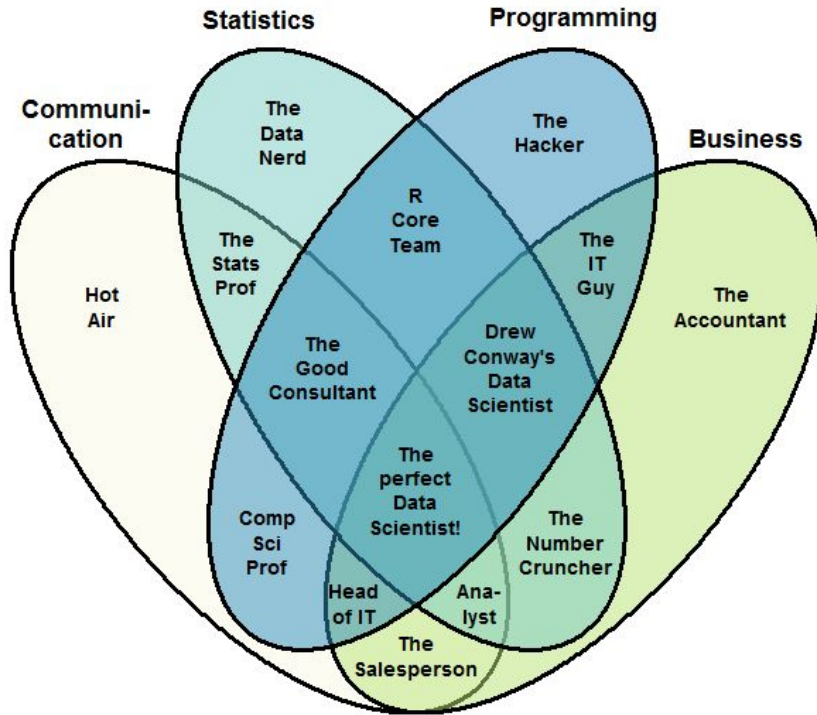# What is Data Science?

Computer Science

Maths & Statistics

Machine Learning

Data Science

Traditional Software

Data Analysis

Business / Domain Expertise

drew conway

a method to extract **insights** from **data** to formulate **actionable plans**

What is Data Scientist?

a method to extract **insights** from **data** to formulate **actionable plans**

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Let's Learn About Marketing

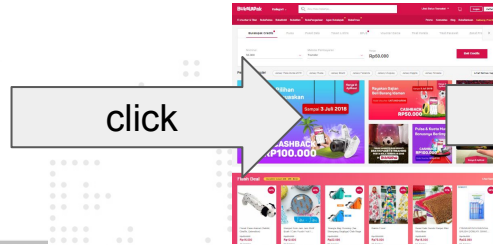# e-Commerce Conversion Funnel

Marketing Channels

Online
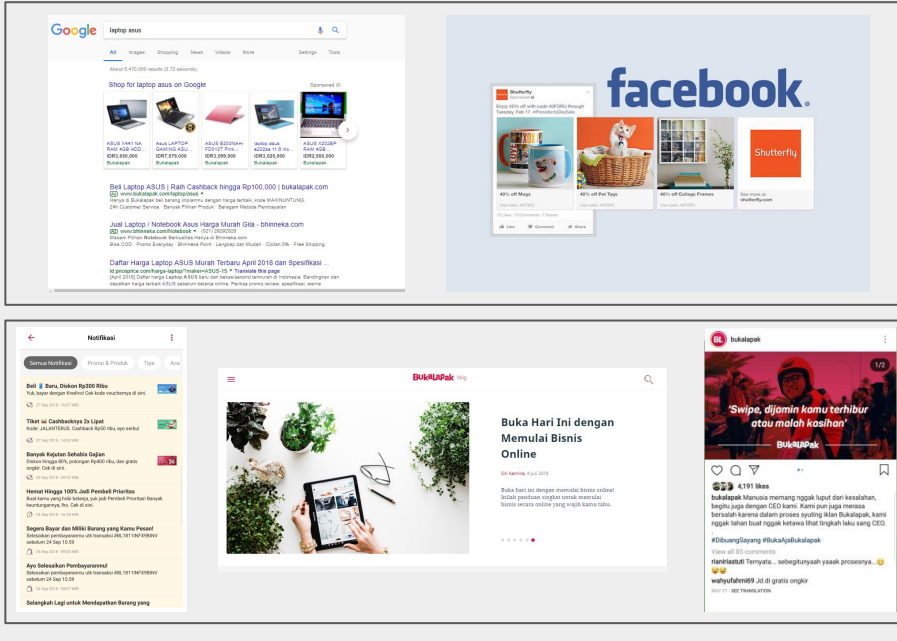
Offline
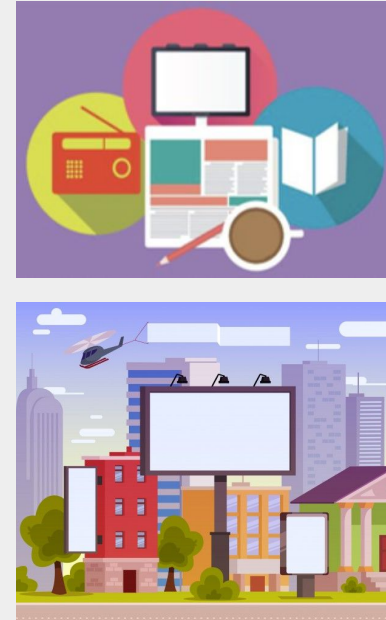
Digital Marketing - Know Your Metrics!
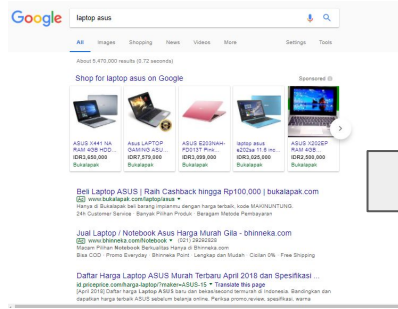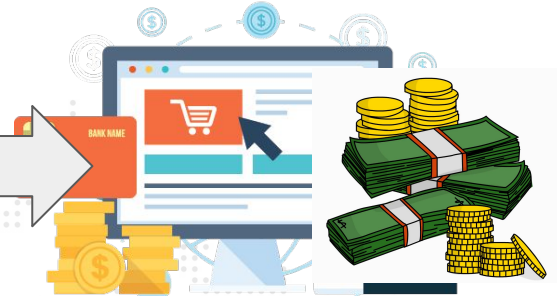
#impressions   #clicks (#visits)   #conversions (#transactions)

cost   GMV

QUIZ!!

CTR (click-through rate)   =   **#clicks / #impressions**

CPC (cost per clicks)   =   **cost / #clicks**

CvR (conversion rate)   =   **#conversions / #clicks**

ROAS (Return on Ad Spend)   =   **GMV / cost**

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Use Cases
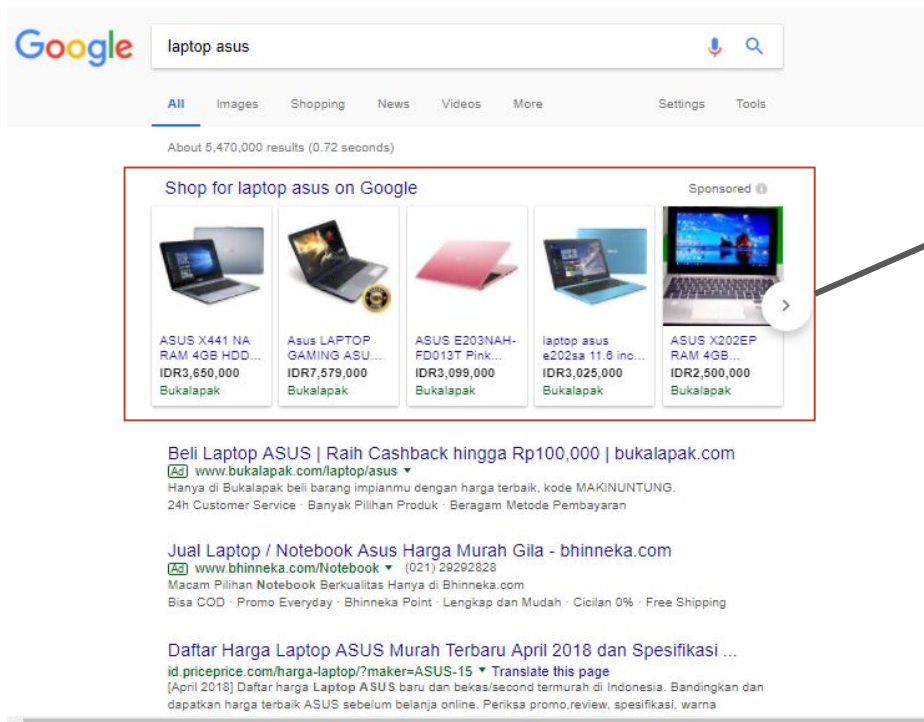
Metrics Monitoring & Measurement
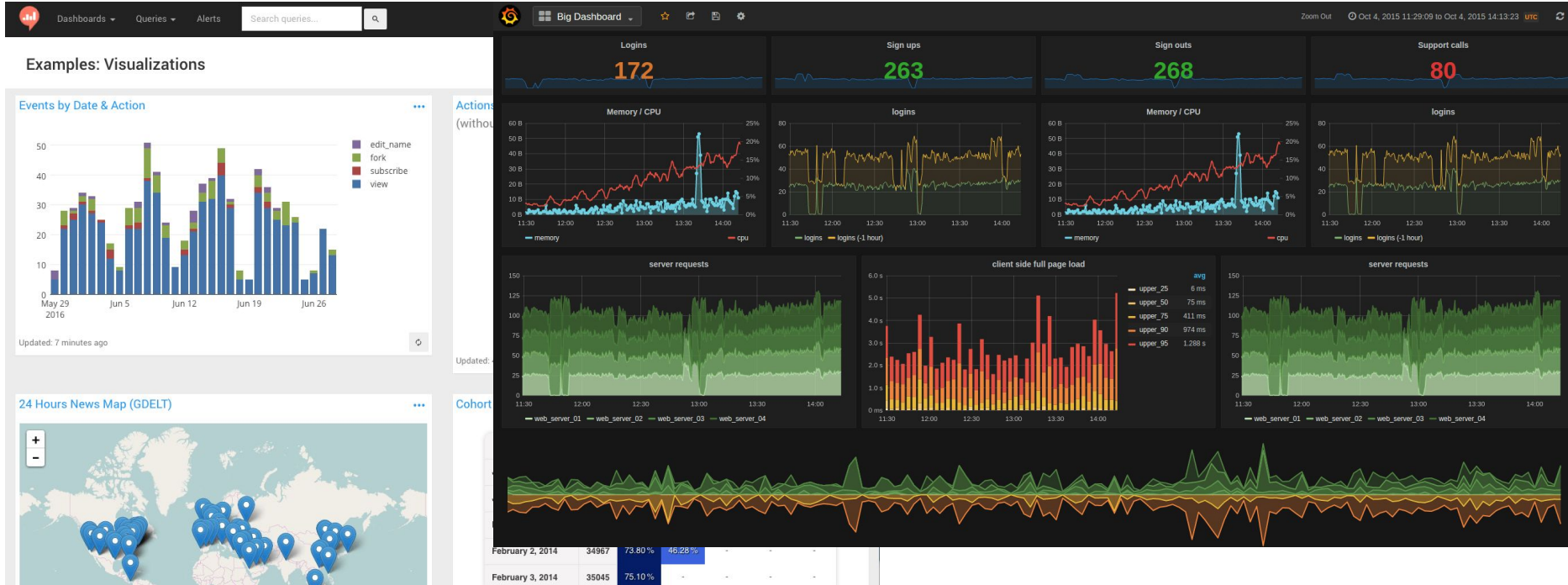
Data Projection

Product Feed Filtering

How to select good products for product feed?

1. Identify existing high & low performing products

2. Extract features

3. Exploratory Data Analysis

4. Develop classification model (supervised-learning)
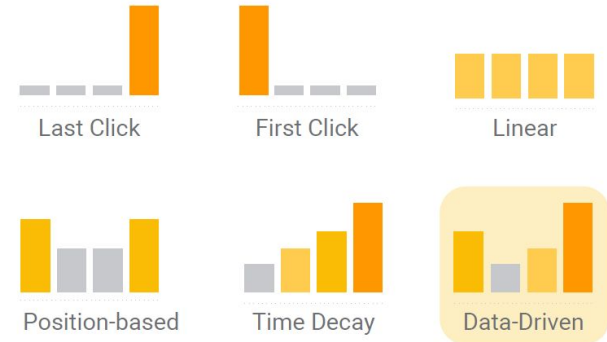
A/B Test
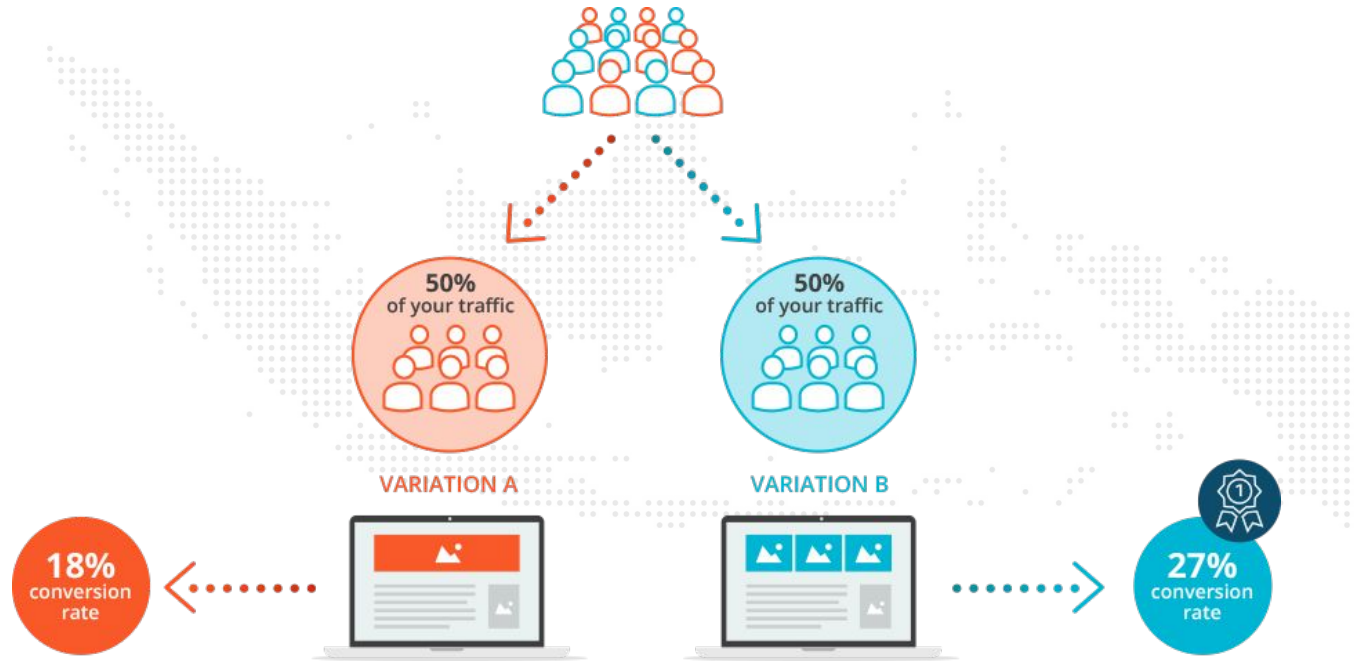
Channels Attribution
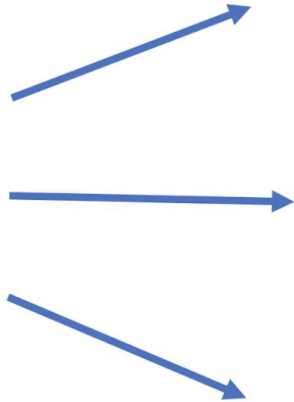
How is the contribution of each channel?

Which channel is the most effective?

How to optimize budget distribution?

Last Click

First Click

Linear

Position-based

Time Decay

Data-Driven

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User Segmentation

❖ Customer lifecycle
❖ Interest
❖ Demographics
❖ Promo dependency
❖ etc ...

Terima Kasih

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