



Data Science Implementation for Marketing

BUKALAPAK

About Me

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BukaLapak

Data Scientist Lead

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Bukalapak

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.”

Data Scientist

Data Engineer

Data Architect

Data Analyst

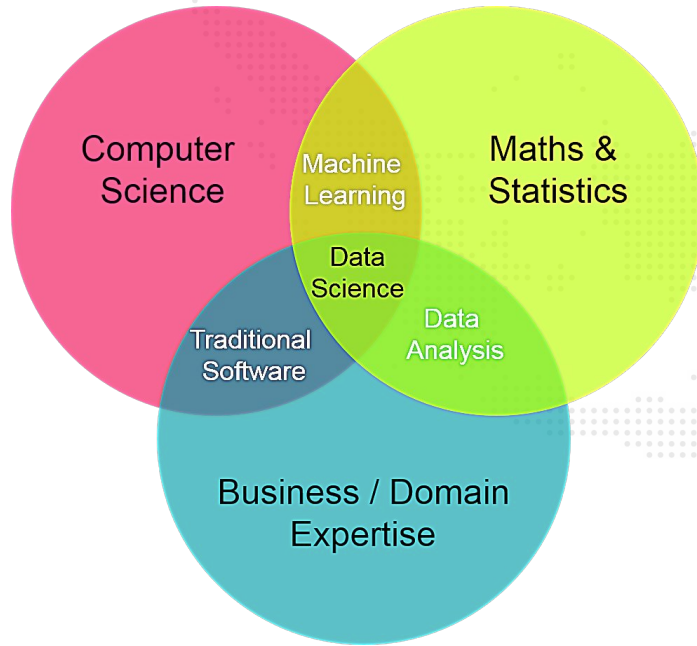
AI Engineer

AI Scientist

[Business Analyst]

[Business Intelligence]

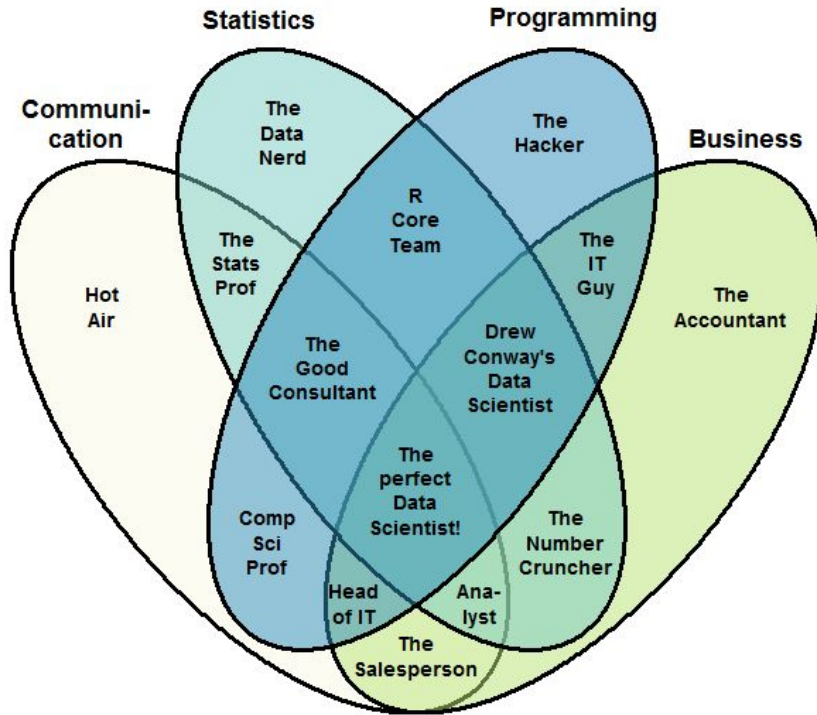
What is Data Science?



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

drew conway

What is Data Scientist?



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





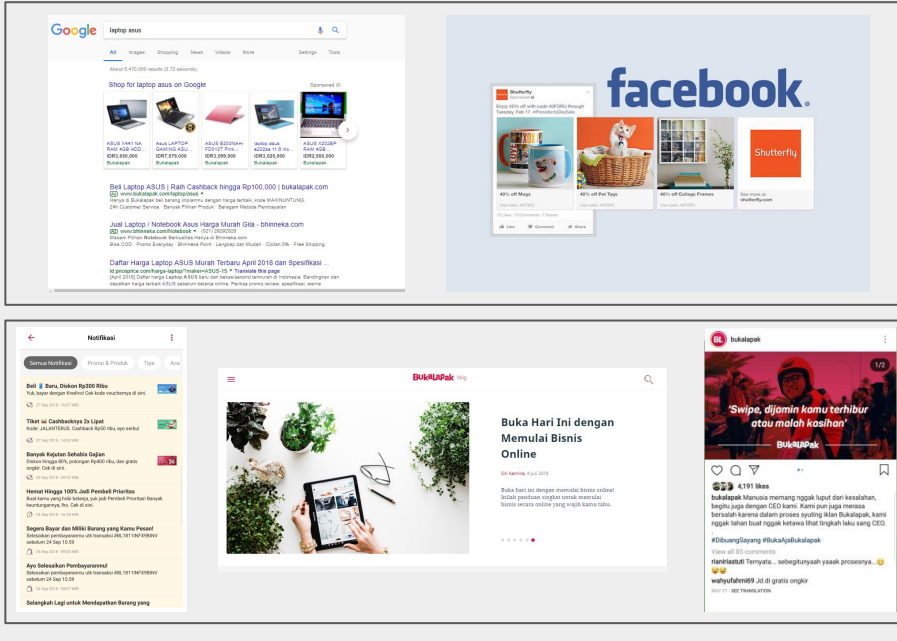
Let's Learn About Marketing

e-Commerce Conversion Funnel

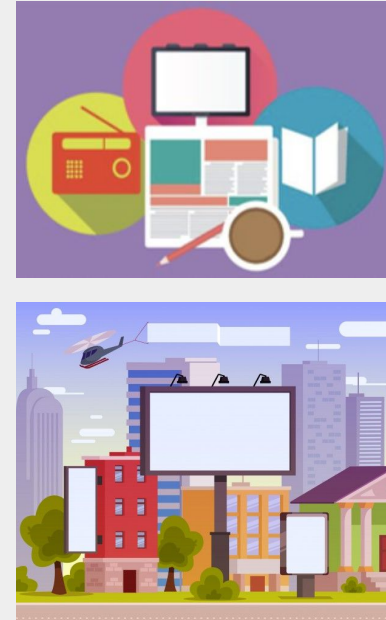


Marketing Channels

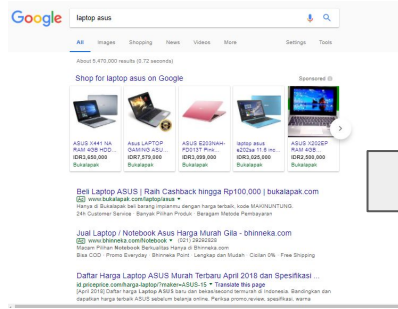
Online



Offline

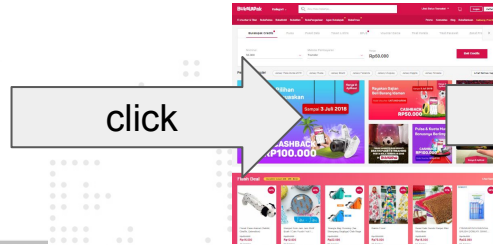


Digital Marketing - Know Your Metrics!



#impressions

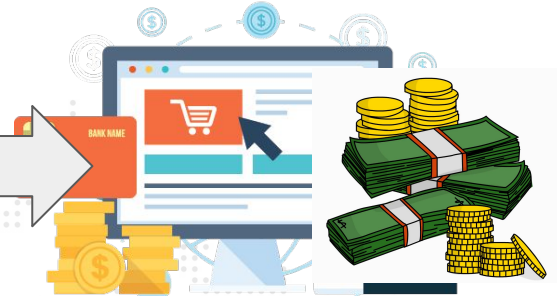
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#clicks (#visits)

cost

buy



#conversions (#transactions)

GMV

QUIZ!!

CTR (click-through rate)

= **#clicks / #impressions**

CPC (cost per clicks)

= **cost / #clicks**

CvR (conversion rate)

= **#conversions / #clicks**

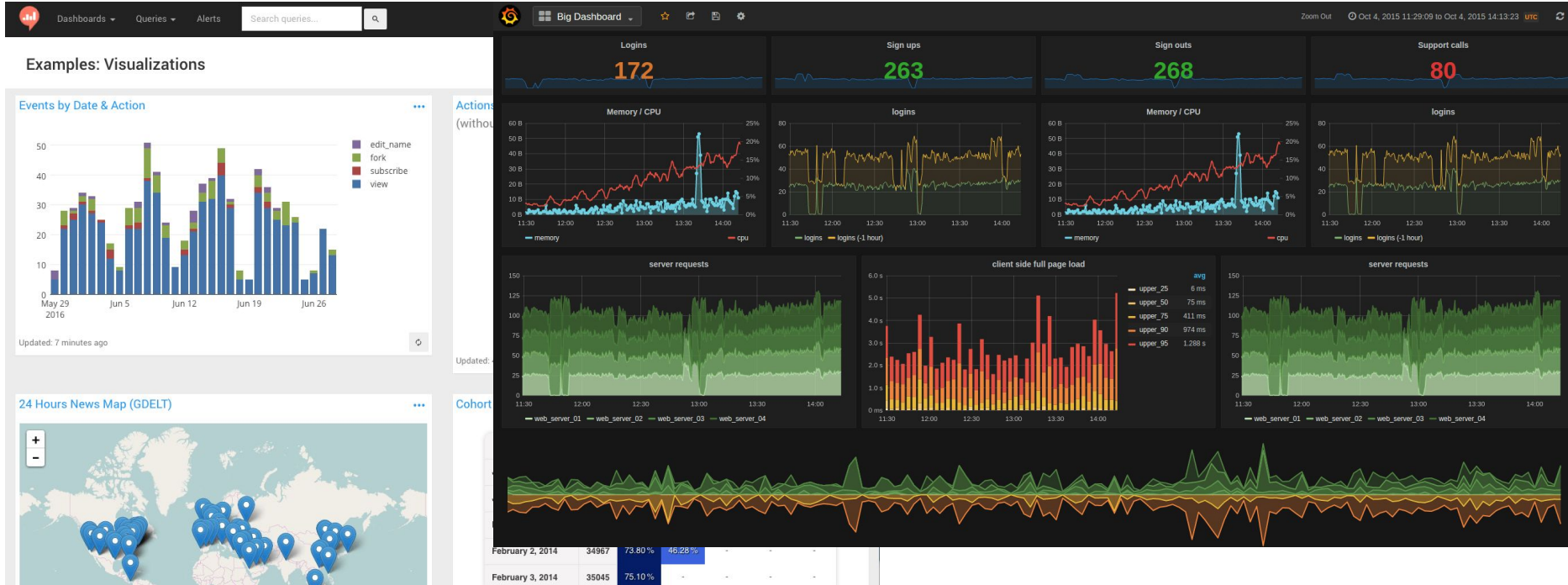
ROAS (Return on Ad Spend)

= **GMV / cost**

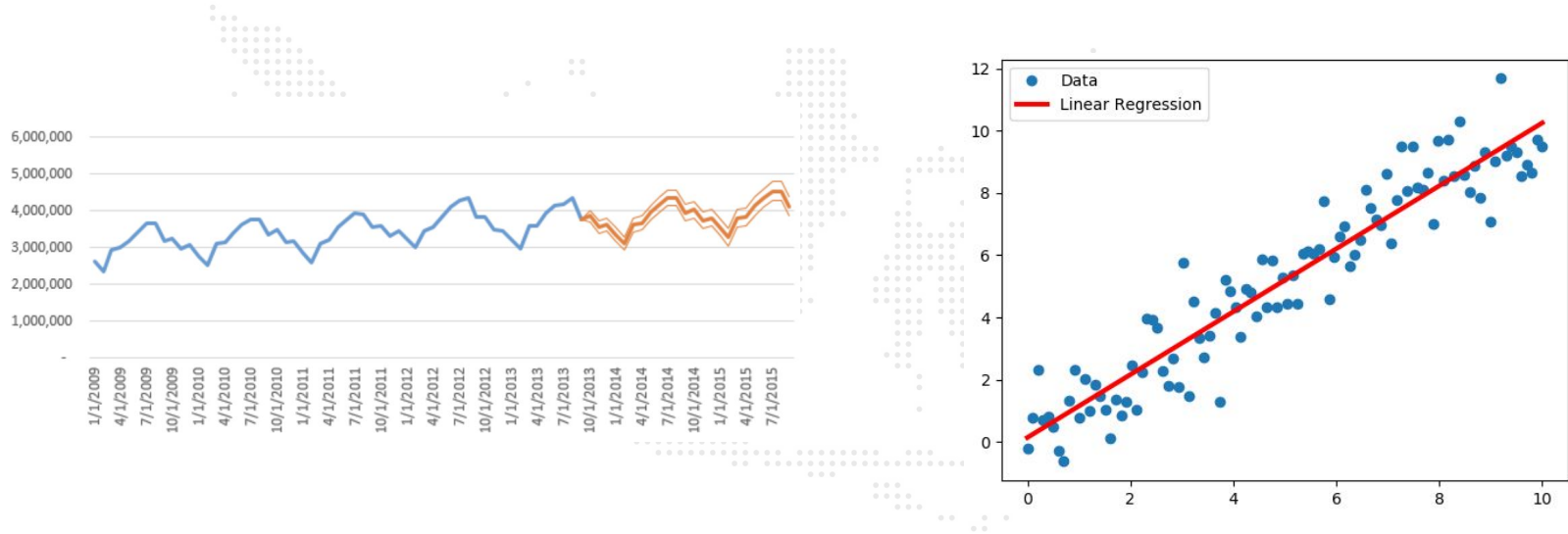


Use Cases

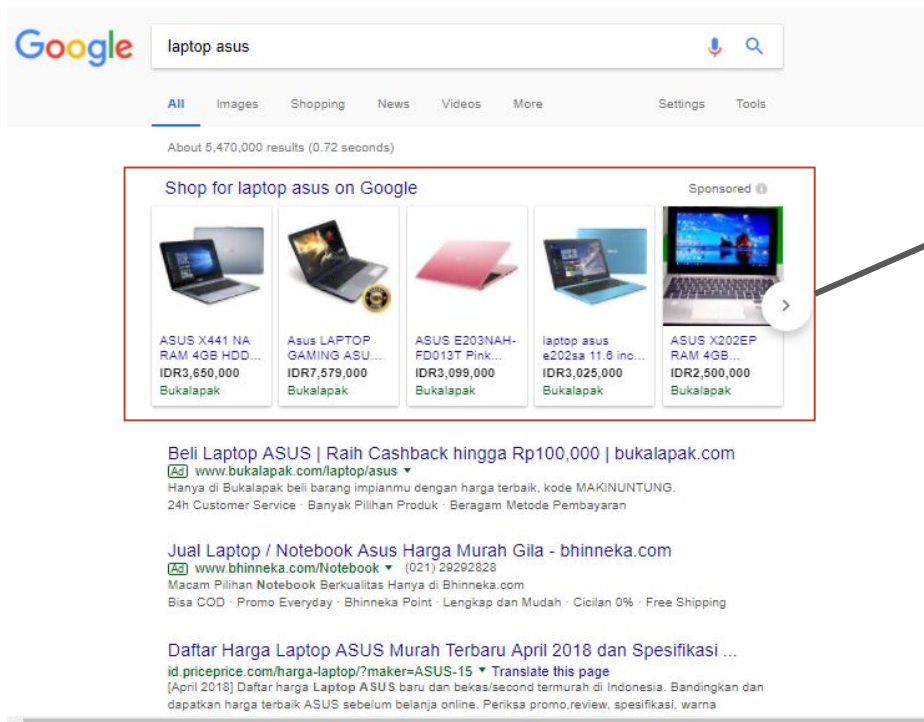
Metrics Monitoring & Measurement



Data Projection



Product Feed Filtering








Google laptop asus

All Images Shopping News Videos More Settings Tools

About 5,470,000 results (0.72 seconds)

Shop for laptop asus on Google

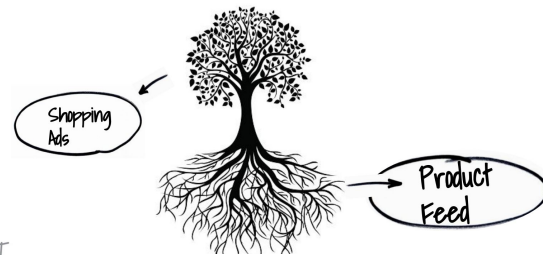
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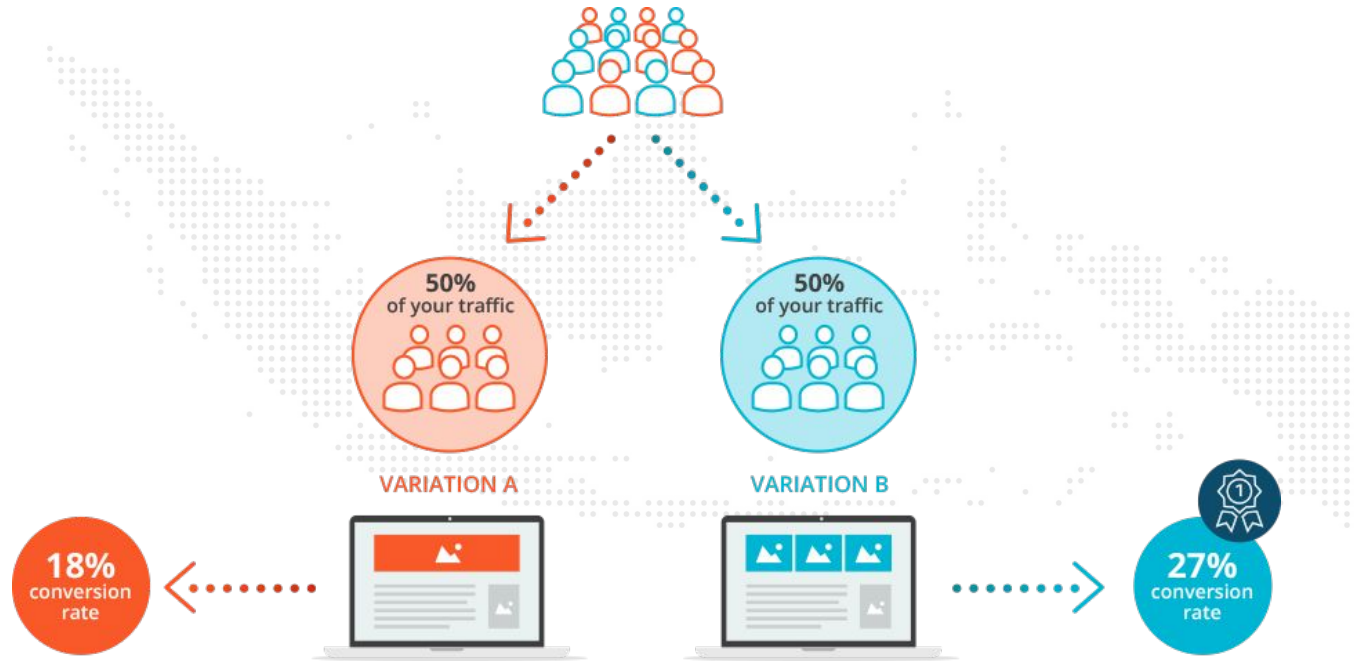
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How to select good products for product feed?

1. Identify existing high & low performing products
2. Extract features
3. Exploratory Data Analysis
4. Develop classification model (supervised-learning)

A/B Test



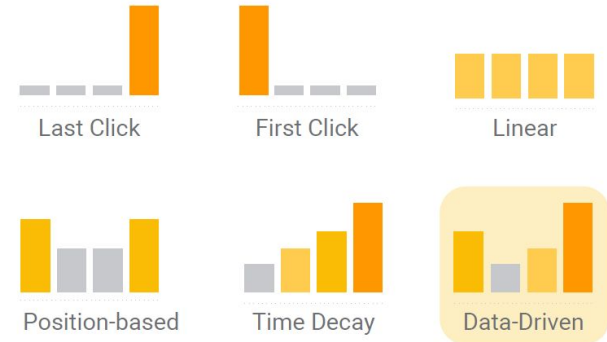
Channels Attribution



How is the contribution of each channel?

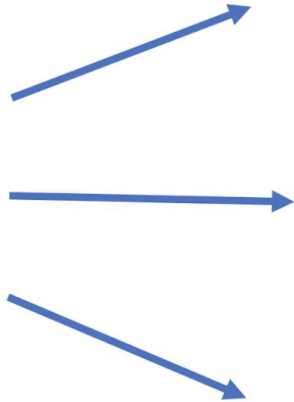
Which channel is the most effective?

How to optimize budget distribution?



User Segmentation

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





Terima Kasih

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