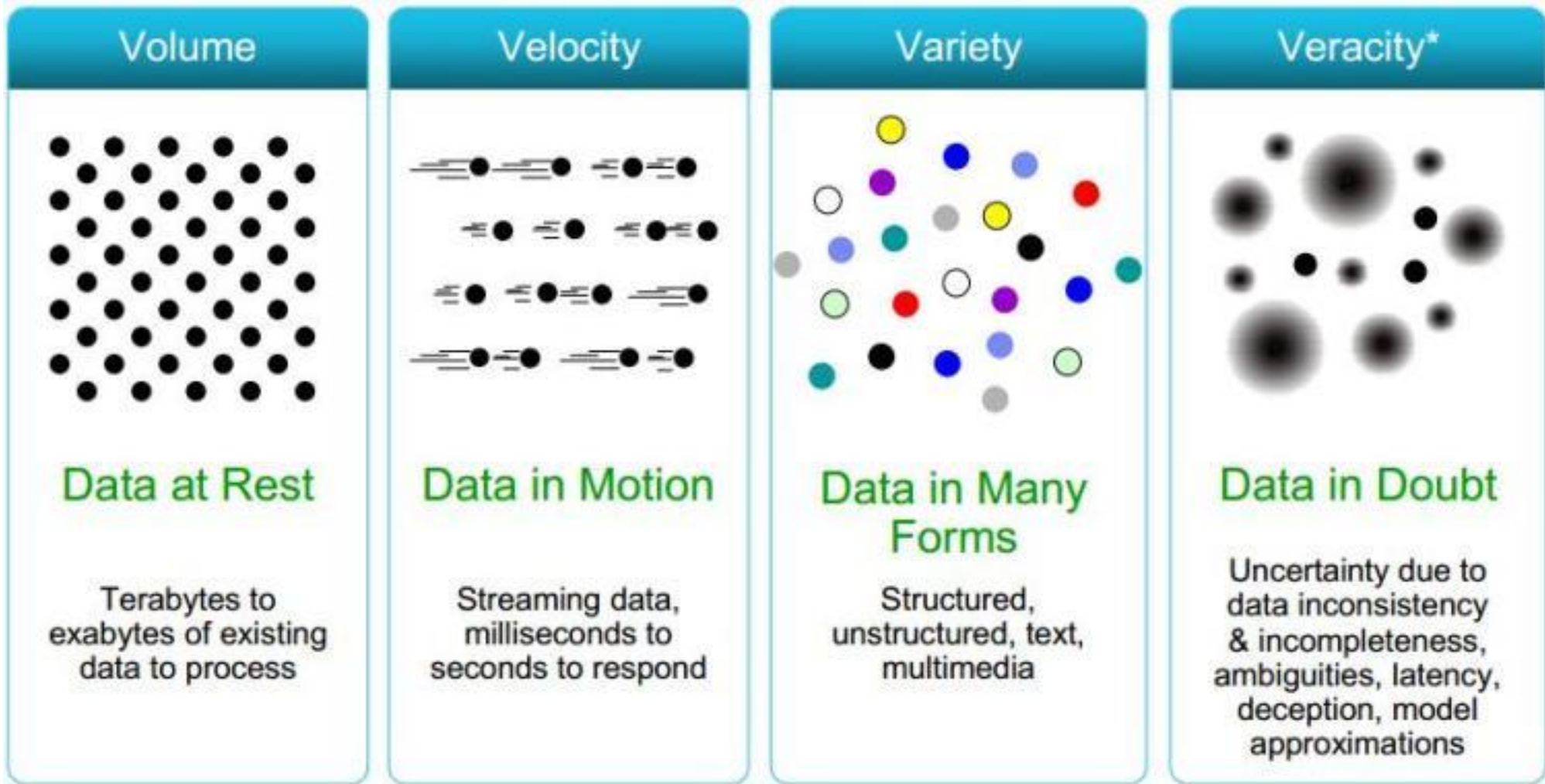


Indonesia EIT Law and GR 82/2012

Investigatory Power	Civil/Administrative Sanction	Criminal Sanction
Unlawful access to computers and/or Electronic Systems of other persons.	Maximum fine of Rp. 600,000,000.	Maximum imprisonment of 6 (six) years.
Unlawful acquirement of electronic information and/or electronic records.	Maximum fine of Rp. 700,000,000.	Maximum imprisonment of 7 (seven) years.
Breaching, hacking into, trespassing into, or breaking through security of Electronic Systems.	Maximum fine of Rp. 800,000,000.	Maximum imprisonment of 8 (eight) years.
Unlawful alteration, addition, reduction, transmission, tampering with, deletion, moving, and/or hiding of electronic information and/or electronic records of other persons.	Maximum fine of Rp. 2,000,000,000.	Maximum imprisonment of 8 (eight) years.
Unlawful move or transfer of electronic information and/or electronic records to Electronic Systems of unauthorised persons.	Maximum fine of Rp. 3,000,000,000.	Maximum imprisonment of 9 (nine) years.
Divulgence of confidential electronic information and/or electronic records to the public.	Maximum fine of Rp. 5,000,000,000.	Maximum imprisonment of 10 (ten) years.

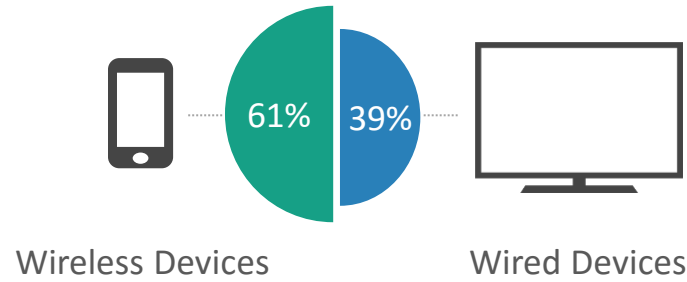


What makes Big Data so BIG?

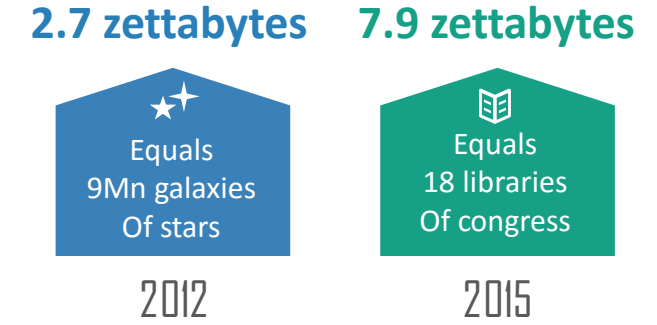
- 90% of world's data has been created in **Past 2 years**, more than in the entire previous history of the human race.
- By the year 2020, about **1.7 megabytes** of new information will be created every second for every human being on the planet.

	6 Billion Mobile subscriptions world wide	=	87% Of the world's population
	1.6 Billion Facebook users worldwide	=	604 Million Users login monthly from mobile devices
	400 Million Tweets per day	=	84 Million Users access Twitter via mobile

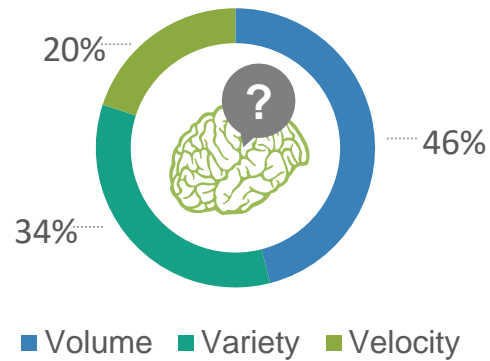
Percentage of web traffic in 2016



Volume of Digital content

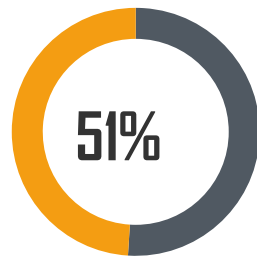


Top Data challenges for retailers

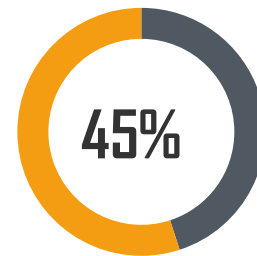


Challenges of using Big Data

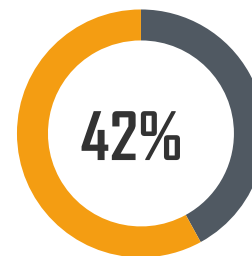
Nearly one third of retailers are in dark about their available data, it make sense that silos are the primary hurdle in using information.



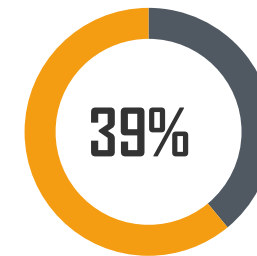
Lack of sharing data is obstacle to measuring marketing ROI



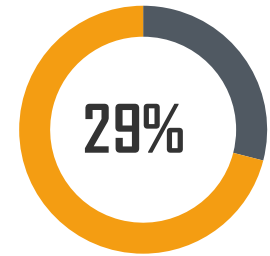
Not using data effectively to personalize marketing communications



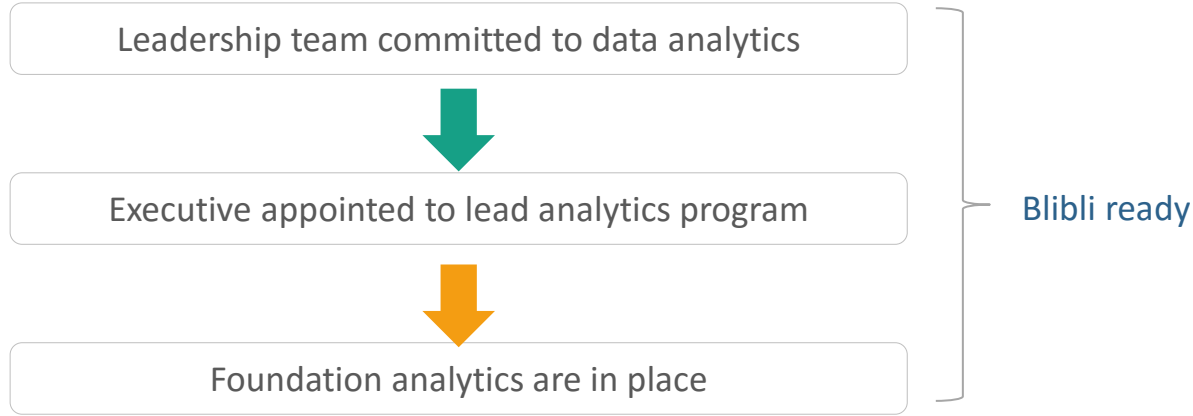
Not able to link data together at the individual customer level



Data collected too infrequently or not quickly enough



Too little or no customer data



01 Detecting & managing fraud

Risk

Currently Performed & In Progress

02 Personalization

Relevancy

In progress

03 Customer acquisition & retention

Growth

In progress

04 Customer service optimization

Better service

In progress

05 Predictive analysis

Run the business

In progress

06 Supply chain optimization

Inventory efficiency

In progress

07 Dynamic pricing

Pricing efficiency

Starting soon

Fraud detection and avoidance is a big issue for online retailers. Use of –

- Ticket sizes
- Periodic volume limits
- Transaction velocity per customer
- High risk country filtering
- IP matching to billing address
- Other pattern matching

A **Transaction Risk probability score** to filter transactions for further investigations is used.

Data Privacy and protection

- Blibli has processes and systems in place for protecting customer data
- We do not store financial payments provider data on our platforms
- User and customer data is kept in Indonesia
- User and customer data is used for analysis internally only
- Data is protected by using industry protocols for
 - ✓ Data security
 - ✓ Sharing and accessibility controls
 - ✓ Anti-hacking measures and protocols
 - ✓ Regular penetration tests of the systems and infrastructure
- Blibli does not share or sell customer data

- Big Data adoption and usage are VERY CRITICAL for ecommerce
- It requires full commitment from TOP to Bottom in the whole organization
- It's a journey and rather increasingly complex problems to solve
- It requires talents and high skillsets
- BIG Judgment is still required



THANK YOU



Big Data Stack

