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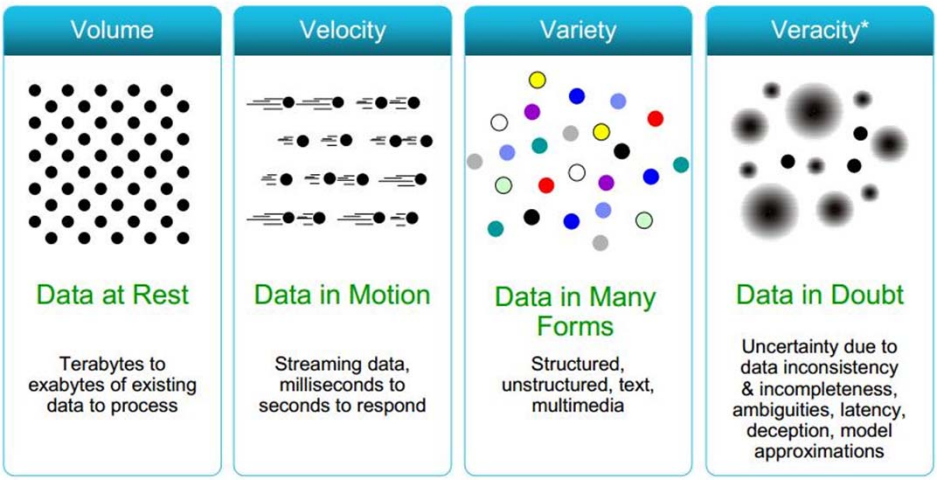
Why is Big Data a big deal?

1

Nature of data is complex



2

Importance of effective Big Data strategy

Improved operations

Better customer service

Personalized marketing campaigns

Competitive advantage

Increased profitability

3

Data explosion + digital transformation = many challenges

- Storage
- Transmission
- Access and sharing

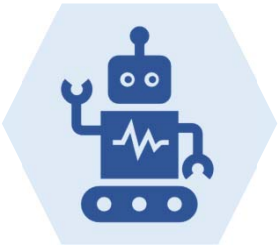
- Analysis
- Privacy
- Compression

- Using and managing
- Using others' data
- Management support

4

Data infrastructure for the enterprise

- Can we do more?
- Process more data, faster and cheaper?
- Deploy more machine learning (ML) models in production?
- Do more in real-time?



5

Analytics & AI for the enterprise

- Data Science and Machine Learning (DSML) platforms for deployment
- Expanding offering – more constituencies and more use cases
- Advances in Natural Language Processing (NLP)
- Variety of players – large cloud providers (e.g Google), nonprofits (Open AI) and startups

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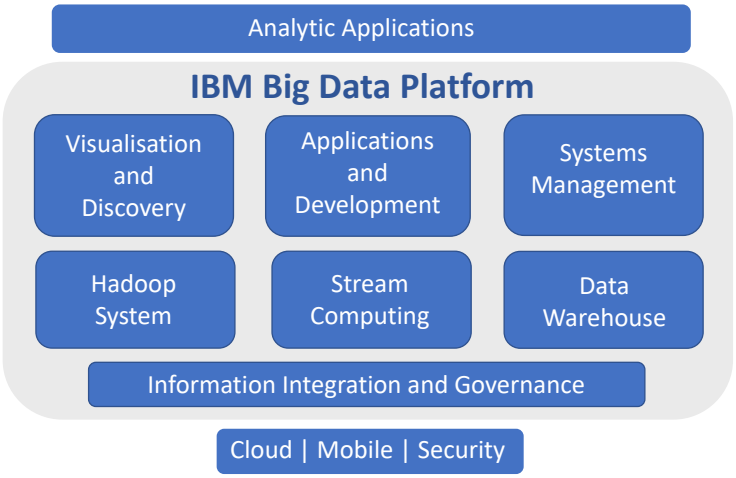
How it comes together – example from IBM



7

A few use cases

Etsy

Clickstream data
In-house Hadoop framework
Open-source ML framework

amazon.com

Recommendation engine
Oracle on Linux
Collaborative filtering
Metadata

JOHN DEERE

Crowdsourcing
Machine sensors
Weather and financial data
SAP HANA

IBM Watson

Cognitive computing
Natural Language Processing
Deep learning
Apache Hadoop

NETFLIX

Recommendation engine
Apache Hadoop and Spark
AWS Cloud
Content filtering

8

Big Data job opportunities

- Companies are and will continue to look for skilled people who can tap into Big Data's promise of competitive advantage.

Chief Data Officer

Big Data Engineer

Data Scientist

Big Data Analyst

Big Data Visualiser

Big Data Manager

Big Data Solutions Architect

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