Thinking Machines
Data Science

Artificial Intelligence & Data Science

The Philippine Context

July 22, 2017

Overview

00 Setting the Stage

Before we start

Who am I?

✦ Early employee at a social media marketing startup. Got acquired by Google. Built data products at both places.

✦ Stanford grad. I studied "computational statistics" before it got rebranded to "data science"

✦ Founder/Data scientist at Thinking Machines Data Science.

Thinking Machines
Data Science

Thinking Machines is a full stack data science consultancy, with offices in Manila Philippines, and San Francisco, California.

We solve business problems using data.

01 **Fundamentals & Key Terms**

AKA Google these

01 What is
Big Data?
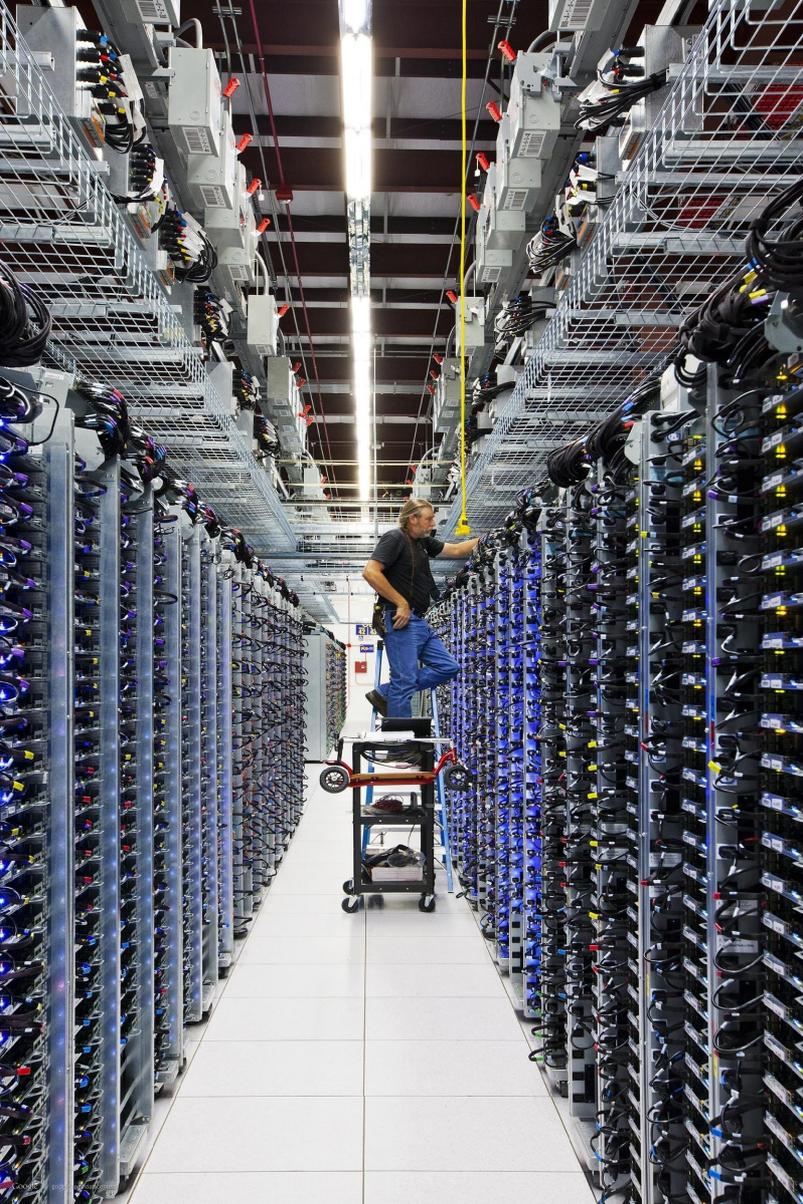
We create 2.5 million terabytes of data every single day.

We create social media posts, videos, transaction records, satellite data, cellular data and so much more!

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3 Types of Valuable Data Sources

Known by 3rd Parties

Globe Text Messages
Waze Movement
Facebook Activity
Google Browsing

Known by *You

Customer Accounts
Historical Purchases
Marketing Data

Known by Your Customers

Life Goals
Income and Expenses
Lifestyle Preferences
Hobbies

Connect these data silos to get more value!

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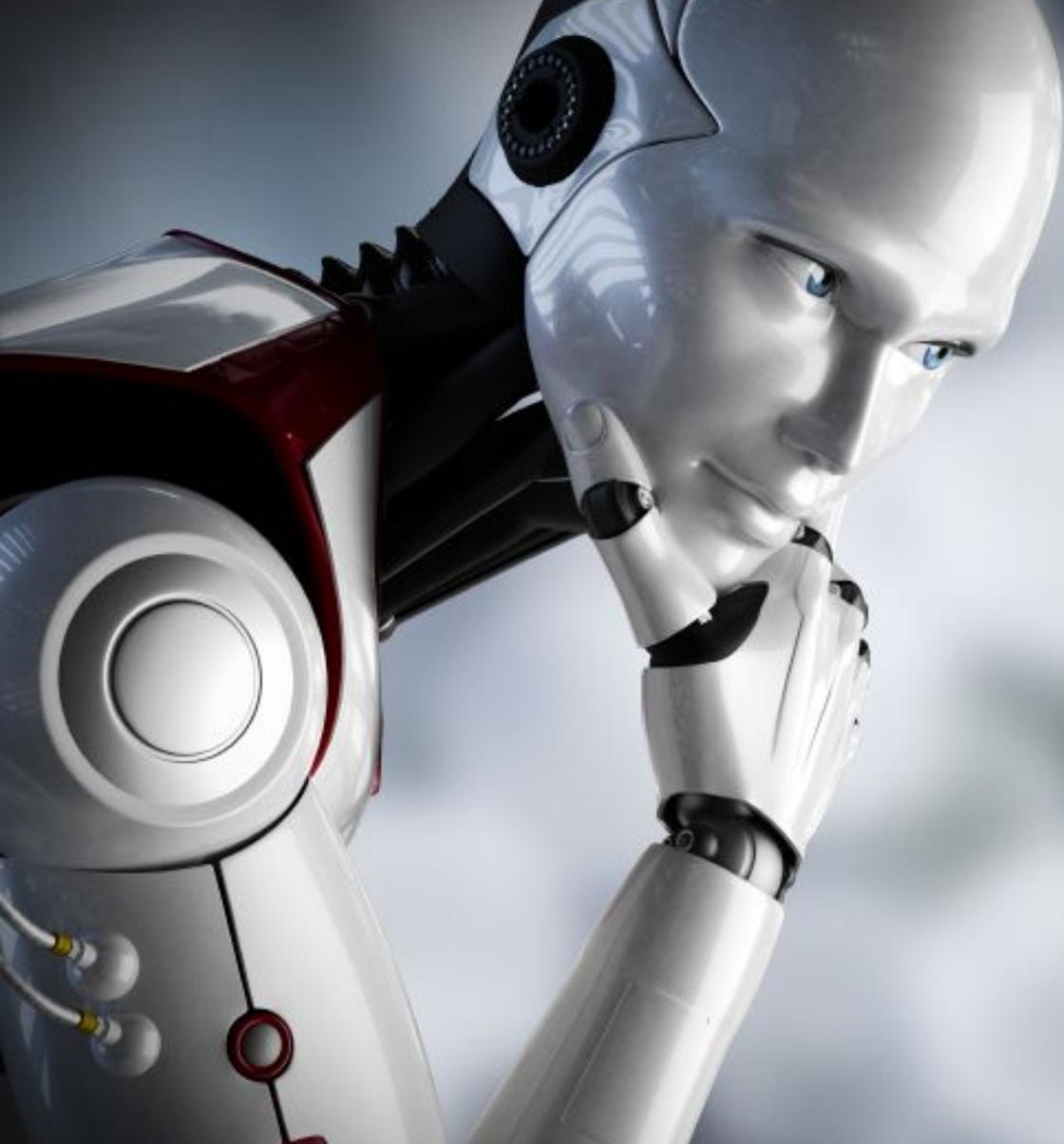
02 What is
Data Science?

Data Science is

The interaction of the following fields

1. Statistical Modeling
2. Predictive Modeling
3. Software Engineering
4. Big Data Engineering
5. Business Intelligence

for the purpose of making good decisions based on previous knowledge

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✦ **Artificial Intelligence** - One of the many applications of data science. It is **letting machines do tasks** in a way that is "smart" or "logical"

   ○ Machine Learning

   ○ Deep Learning/Reinforcement Learning

✦ What kind of AI am I talking about?

   ○ The kind of AI that VCs in 2017 fund

   ○ AKA Narrow Artificial Intelligence

   ○ AKA Idiot Savants

How are they related?

| Big Data | ➕ | Data Science | ➡️ | Artificial Intelligence |
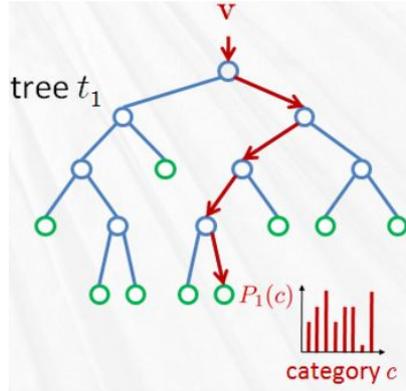
02 **Data Science and AI in the Philippines**
What's happening in the local context?

Big Data in the Philippines Today
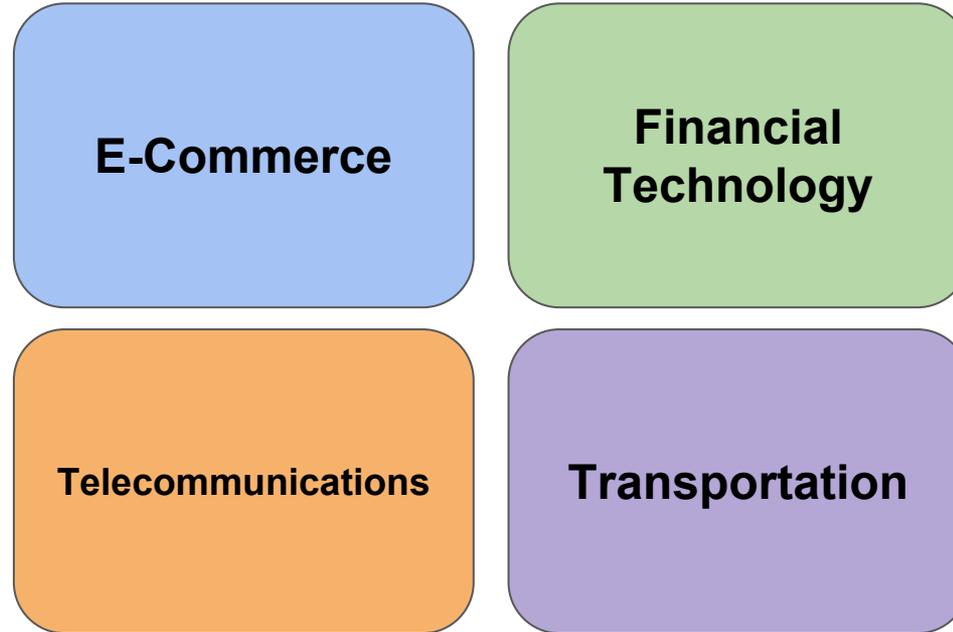
# What about Artificial Intelligence in the Philippines?

Scene from Her

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# AI Personal Assistant chatbots like
Facebook M
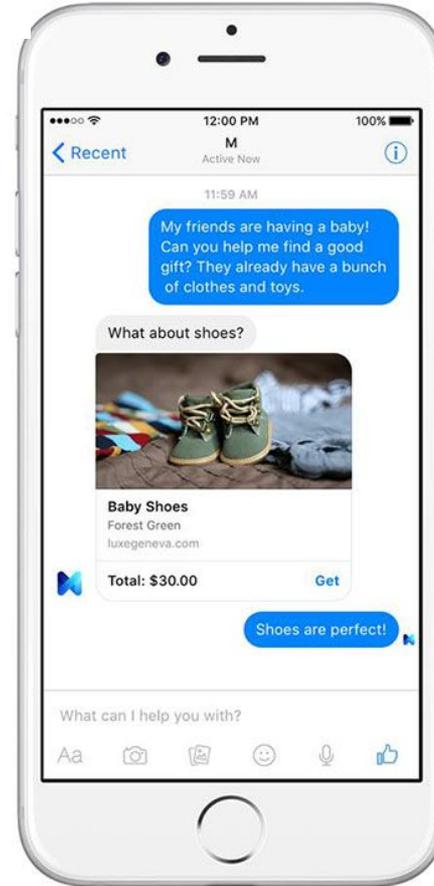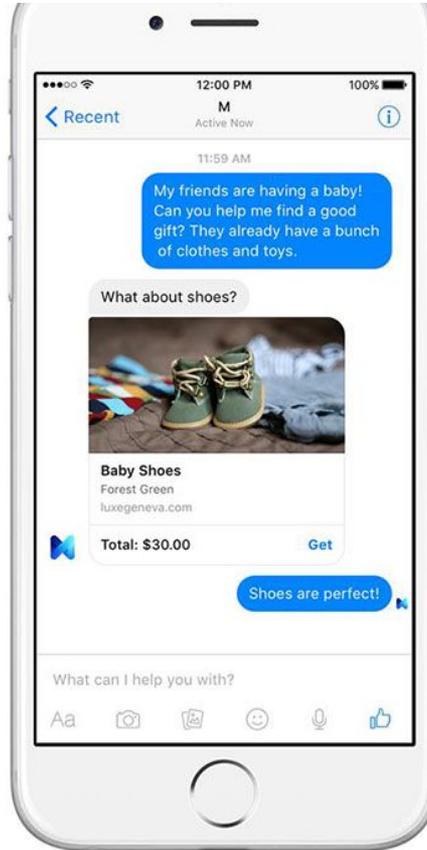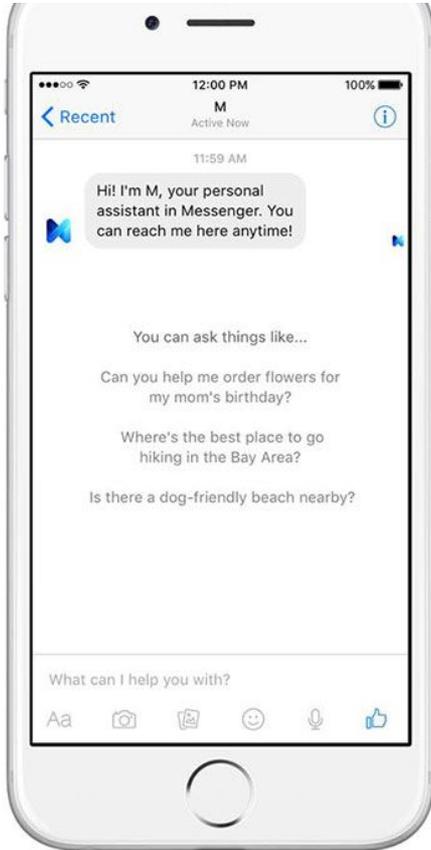
Hybrid AI, or
The Augmented Human

Blurring the lines, are you talking to a human or a machine?

The Philippine BPO Industry
2015: $22 billion in revenues, 11 million direct jobs, 7.3% of GDP.
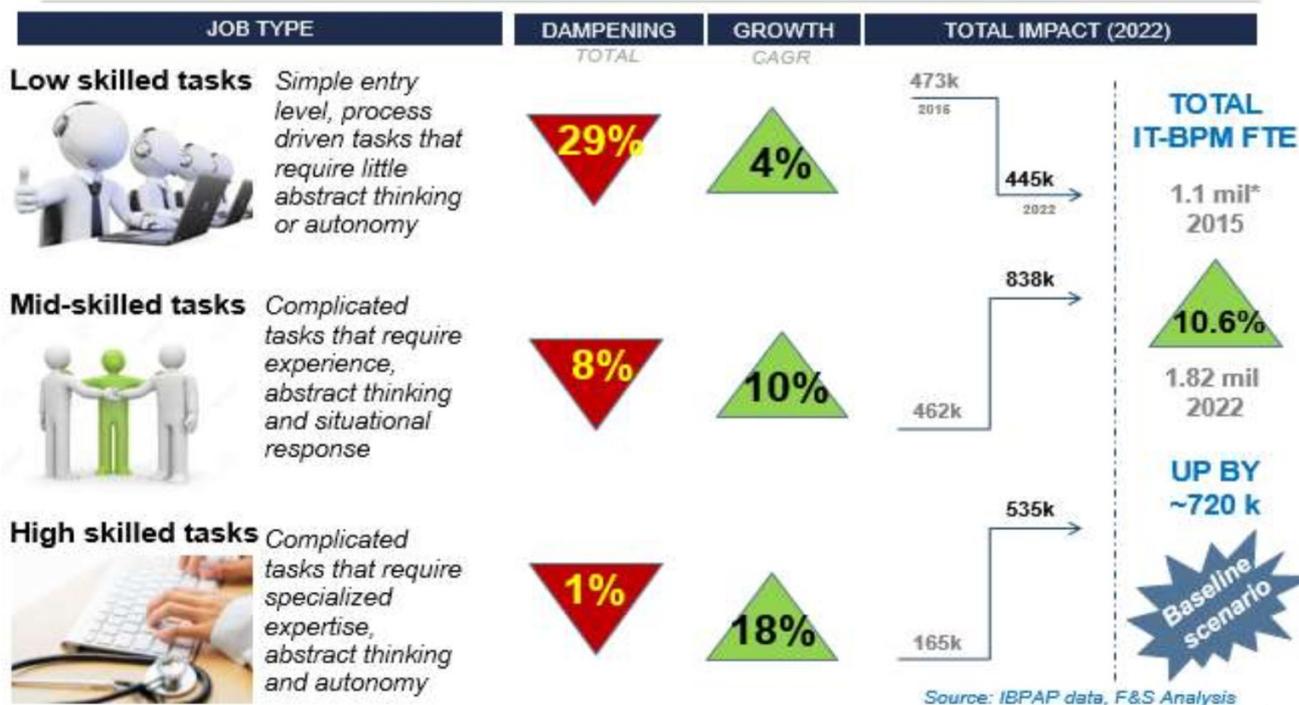
Traffic

✦ A lot of data can be used to inform policy

✦ Smart traffic signals have reduced wait times of up to 40%

✦ AI applications + Traffic theory
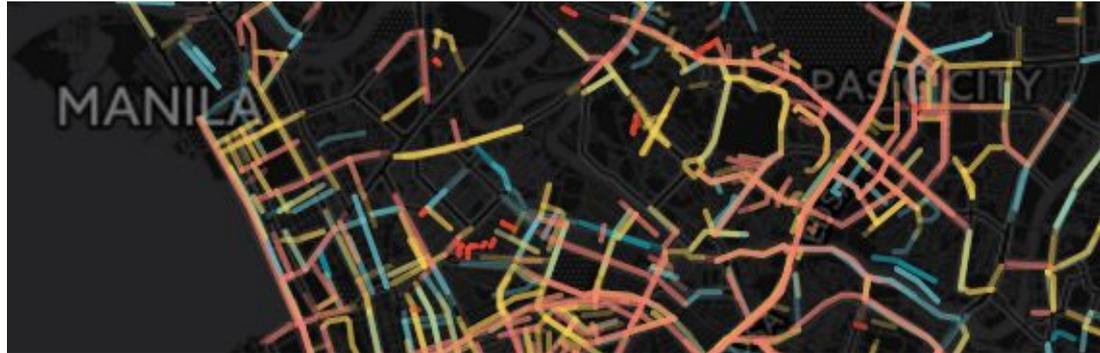
Smart Homes

✦ A lot of products that turn your home in to a "smart home" already exist - with surprising features

✦ As technology costs decrease and more adopters come on board, it likewise presents an opportunity for the Philippines

Further Reading

Learn more!

✦ Use today's keywords and framework to help Google your way to more knowledge. Huge quantities of stuff online.

✦ Udacity, Coursera, MIT, Stanford online courses

✦ Arxiv has all the papers

Thank You!

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