

# Machine Learning for everyone

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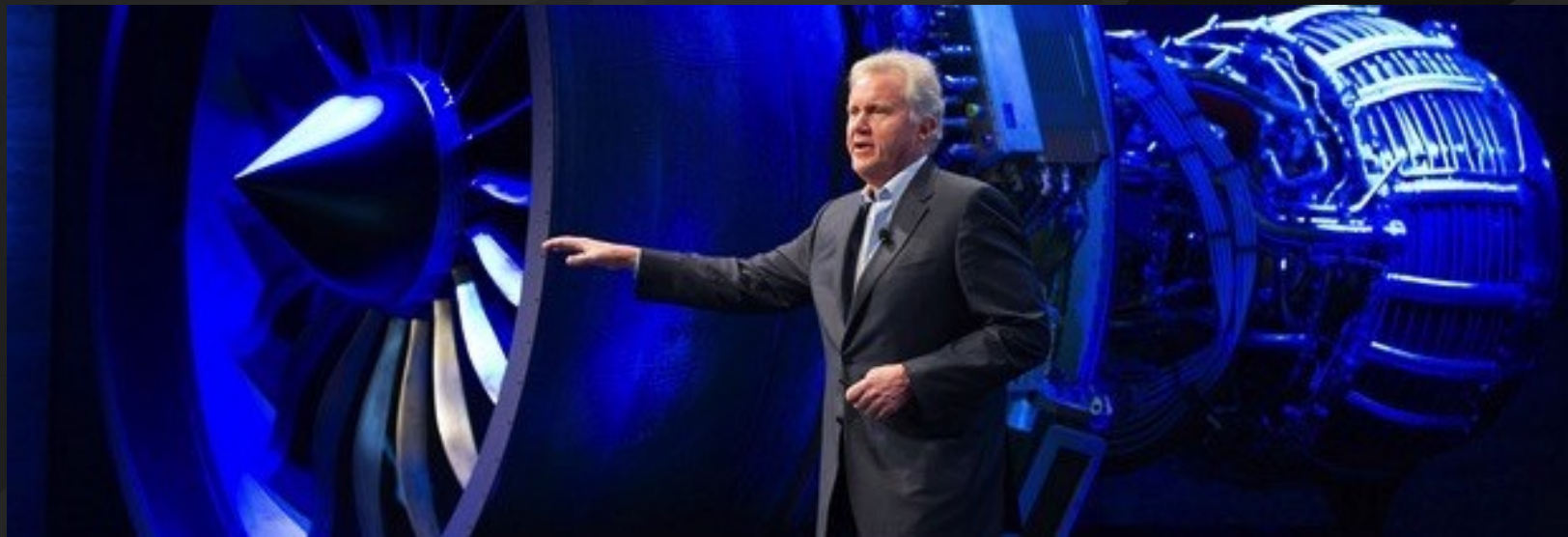
What does  
“Digital”  
really mean?



Turning  
**Data**  
into  
**Business Value**

...through  
Software

Jeff Immelt, GE Chairman & CEO



*“If you went to bed last night as an industrial company, you’re going to wake up this morning as a software and analytics company.”*

# AMAZON.COM

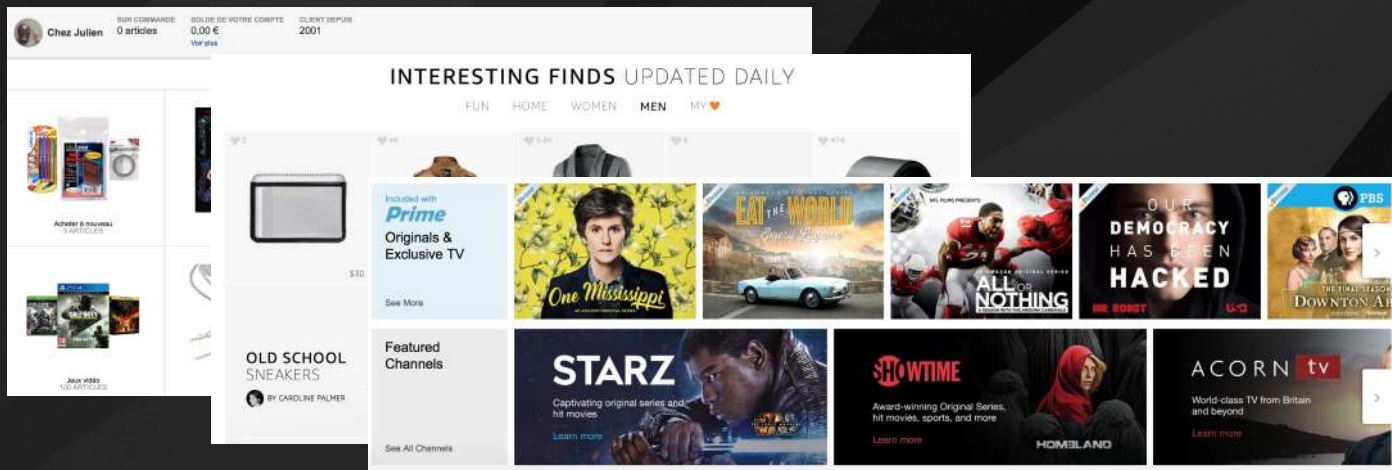
Building **practical**  
machine learning solutions

# Machine Learning @ Amazon.com



Amazon builds and uses **Machine Learning** solutions in **hundreds of services** across its various businesses. No off the shelf solution could handle the **scale**.

**Product recommendation** is visible in many services.





# Smart self-service



Amazon also uses Machine Learning for **Customer Support**, building models based on recent orders, click-stream, user devices, prime membership usage, recent cases, recent account changes, etc.

The models are used to provide **efficient self-service** to our customers.

The self-service page is **generated** according to what your most likely question will be.



# Bonjour Julien. Comment pouvons-nous vous aider ?



## Vos commandes ▸

- [Suivre votre colis](#)
- Modifier ou annuler des commandes



## Retours et remboursements ▸

- Retourner ou échanger des articles
- Imprimer une étiquette de retour



## Aide pour les appareils

- Obtenir aide et support pour appareils numériques
- Résoudre les problèmes avec votre appareil

*Premium*

## Amazon Premium ▸

- Avantages d'Amazon Premium
- Annuler votre inscription à Amazon Premium



## Options de paiement ▸

- Ajouter ou modifier un moyen de paiement
- Modifier une carte de paiement expirée



## Paramètres du compte

- Modifier votre e-mail ou mot de passe
- Mettre à jour vos identifiants de connexion

**Cherchez une solution dans nos pages d'Aide**

🔍 Saisissez un mot-clé puis cliquez sur Go.

Go

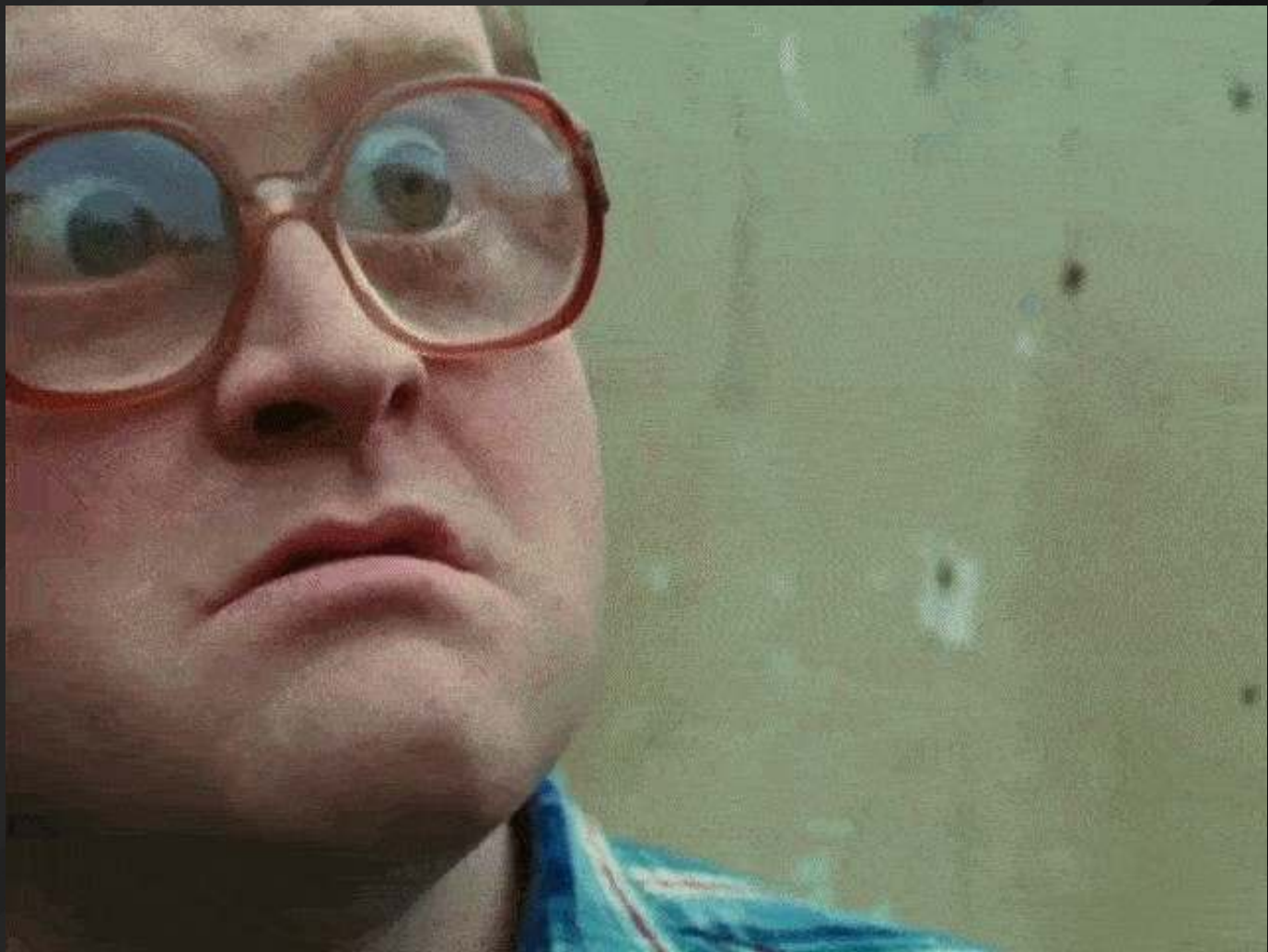
# Smart customer call routing



Not all customer interactions can be solved with self-service.

Therefore, Amazon operates large support centers where Customer Service Representatives (CSR) handle customer requests.

The Machine Learning models described above are used to **optimize the human interactions** of these requests. For example, they are used to route the customer call to the best CSR **before the customer has even started to speak!**

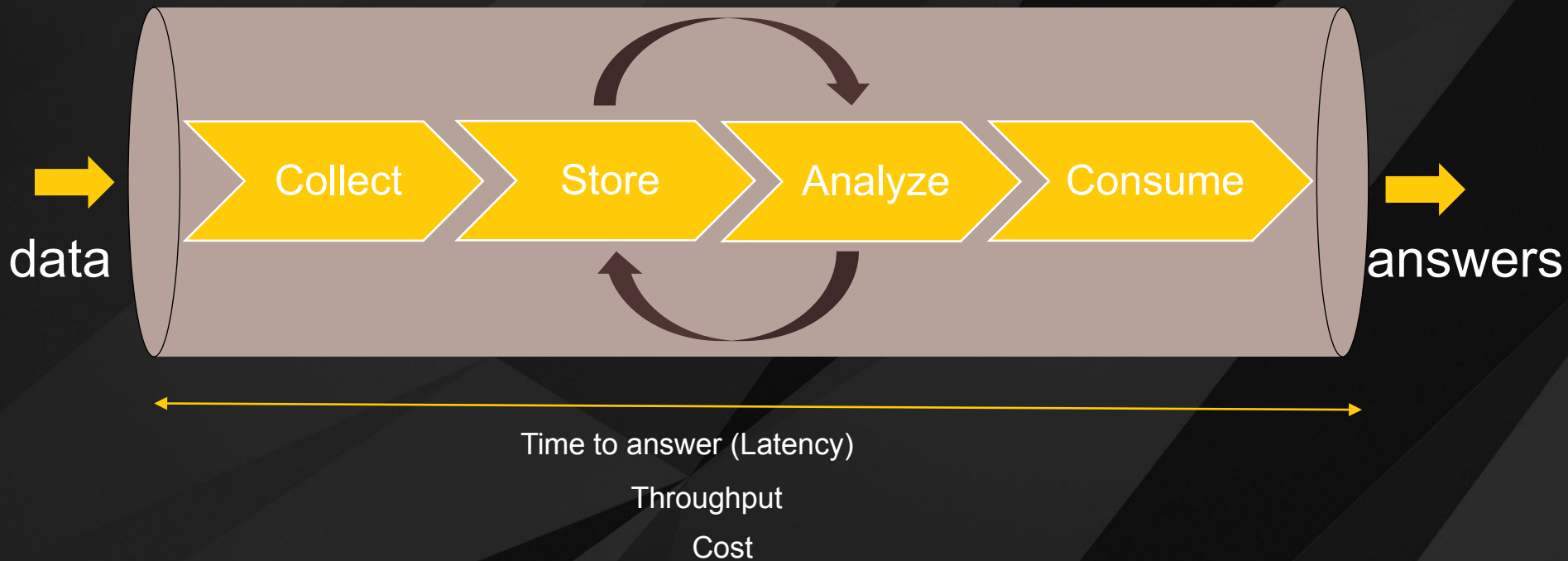


Well, we're not Amazon.  
Can we **still** use this?

# AMAZON WEB SERVICES

Helping companies of all sizes  
build **secure**, **scalable**, and **innovative**  
applications

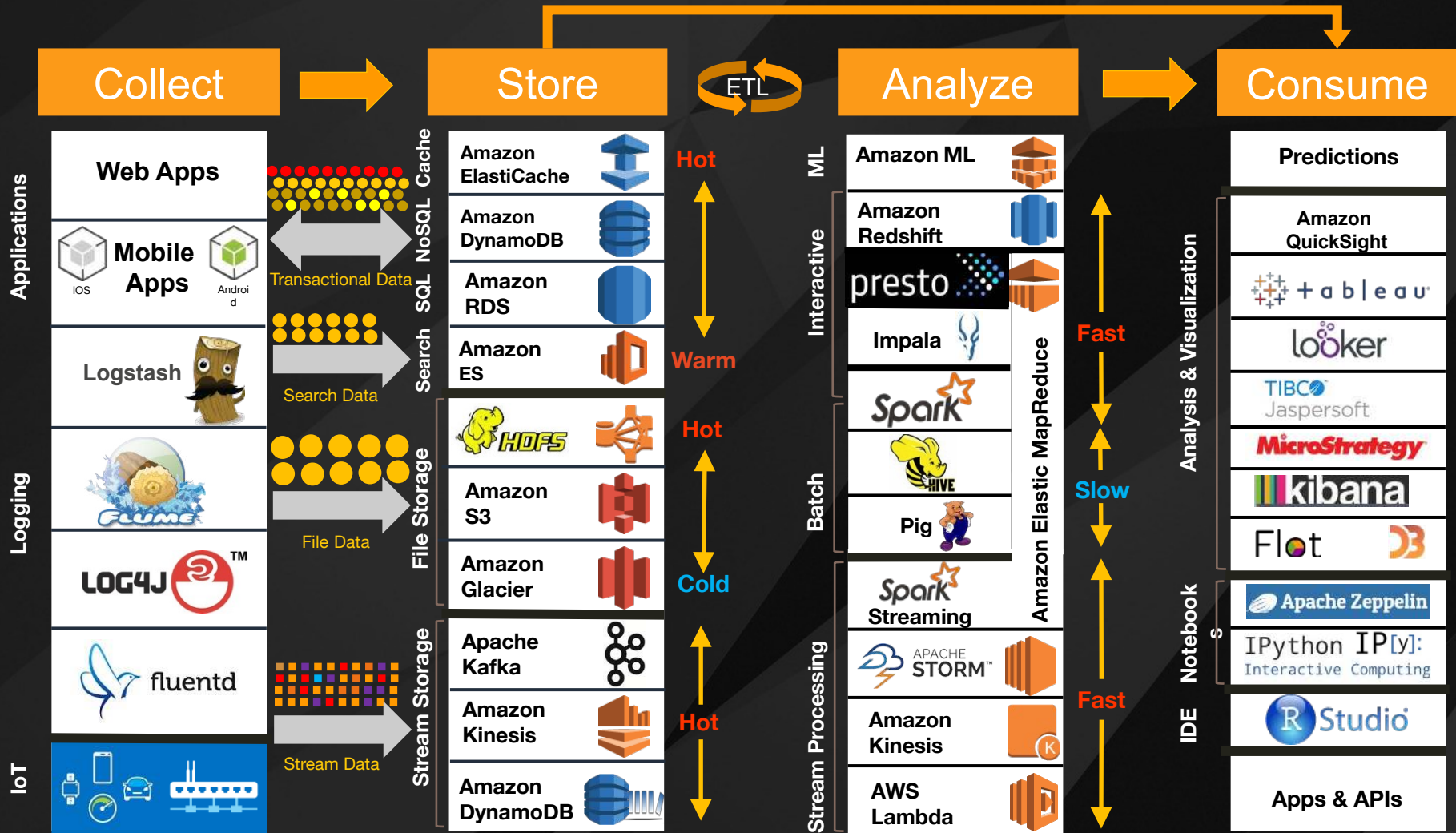
Let's try to keep it **simple**











# Amazon Machine Learning



Easy-to-use, managed machine learning service built for developers

Robust, powerful machine learning technology based on Amazon's internal systems

Create models using your data already stored in the AWS Cloud

Deploy models to production in seconds

# BuildFax

<https://aws.amazon.com/solutions/case-studies/buildfax/>

**BuildFax:**  
On-Demand Property Condition.

More than  
**8,000**  
Cities & Counties

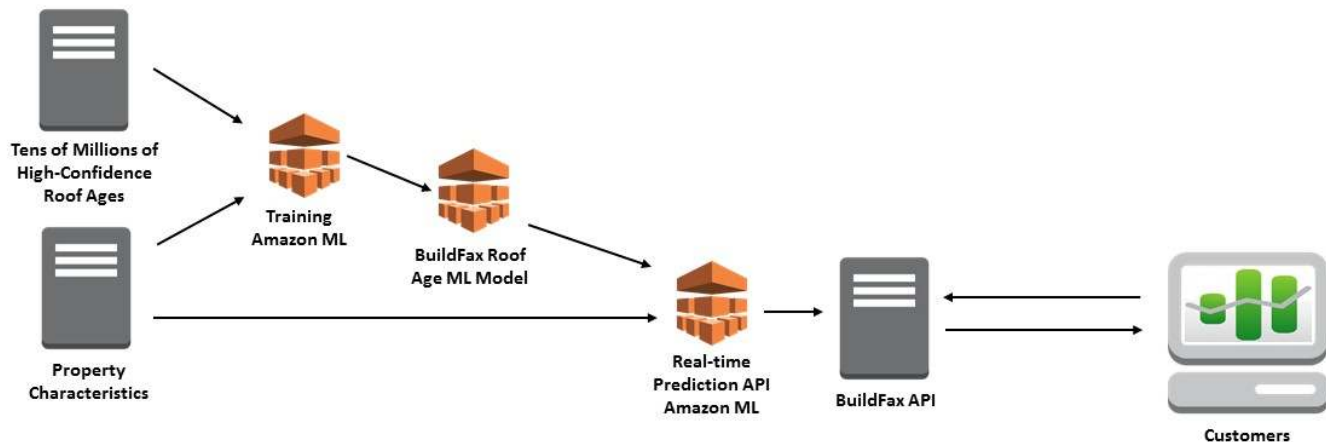
**90+**  
MILLION  
Properties

**185+**  
MILLION  
Building  
Permits

**10+**  
BILLION  
Data Points

*“Amazon Machine Learning democratizes the process of building predictive models. It's **easy** and **fast** to use, and has machine-learning best practices encapsulated in the product, which lets us deliver **results significantly faster** than in the past”*

Joe Emison, Founder &  
Chief Technology Officer





<https://aws.amazon.com/solutions/case-studies/upserve/>



**Upserve**

Upserve is a software and mobile point of sale provider that offers a **cloud-based restaurant management platform** to restaurant owners across the U.S.

*“Using **Amazon Machine Learning**, we can **predict** the total number of customers who will walk through a restaurant’s doors in a night. As a result, restaurateurs can better prep and plan their staffing for that night”*

*“It only took **two weeks** from the time we decided to use the technology to the moment we started using predictive data in the daily email we send out. And we immediately saw **Amazon ML beating the baseline** to predicting nightly covers”*

Bright Fulton, Director of Infrastructure Engineering

Alright, but we don't  
want to build.

Can we **STILL** use  
this?

# PREDICISIS

Machine Learning for **everyone**

Jean-Louis Fuccellaro, CEO

[jeanlouis.fuccellaro@predicisis.com](mailto:jeanlouis.fuccellaro@predicisis.com)

# Machine Learning for business

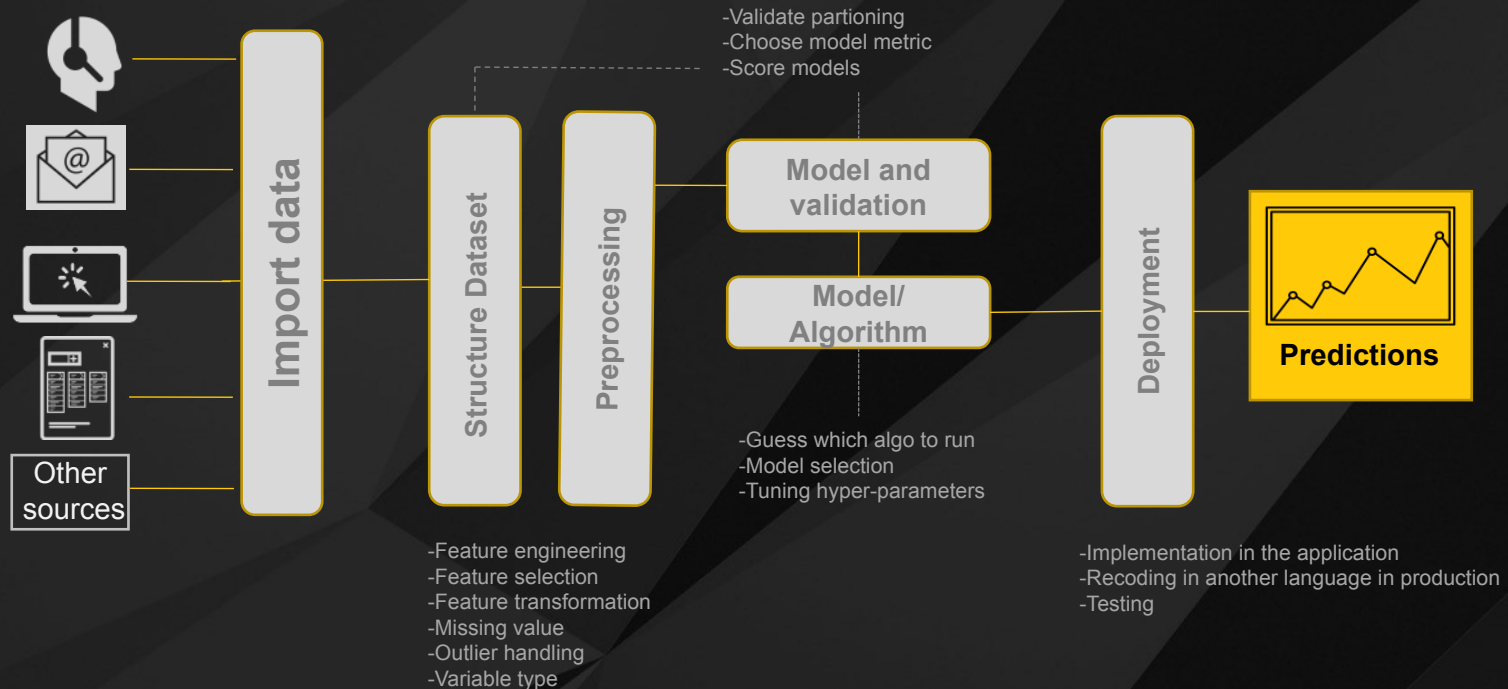
Can I spot the right prospects ?

Can I predict contract cancellations ?

What drives my upsell for this product ?



# Standard way



# PredicSis way



Out-band calls  
conversion rate.

**+30%** ; **1** data analyst

Who to contact to  
prevent attrition ?

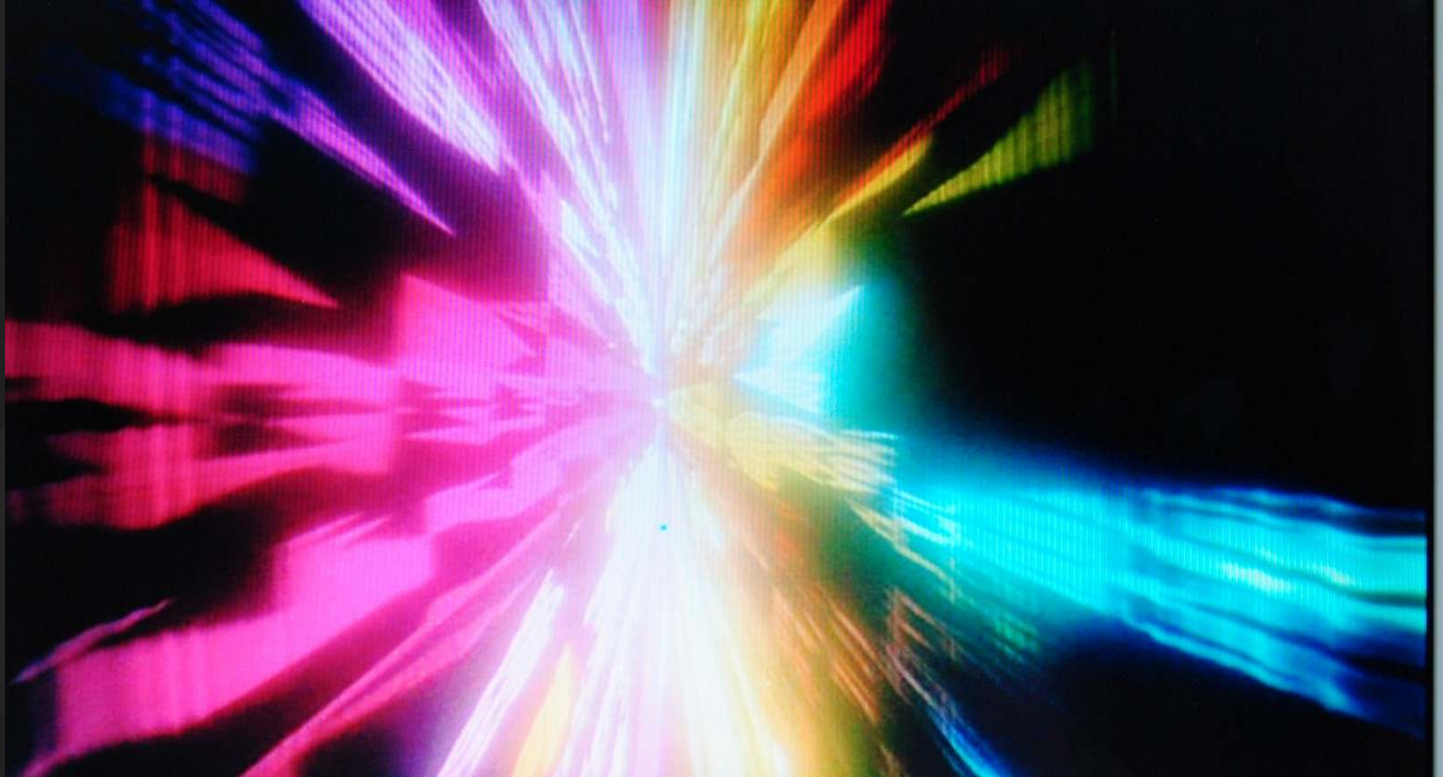
**+100%** ; **1** business  
analyst

**1 / 1 / 10**

# Why should Big Data look like this...



When it could look like this?





# Resources

Big Data Whitepaper: <http://bit.ly/2deGEVL>

Case studies: <https://aws.amazon.com/solutions/case-studies/big-data/>

Big Data Architectural Patterns and Best Practices on AWS

<https://www.youtube.com/watch?v=K7o5OIRLtvU>

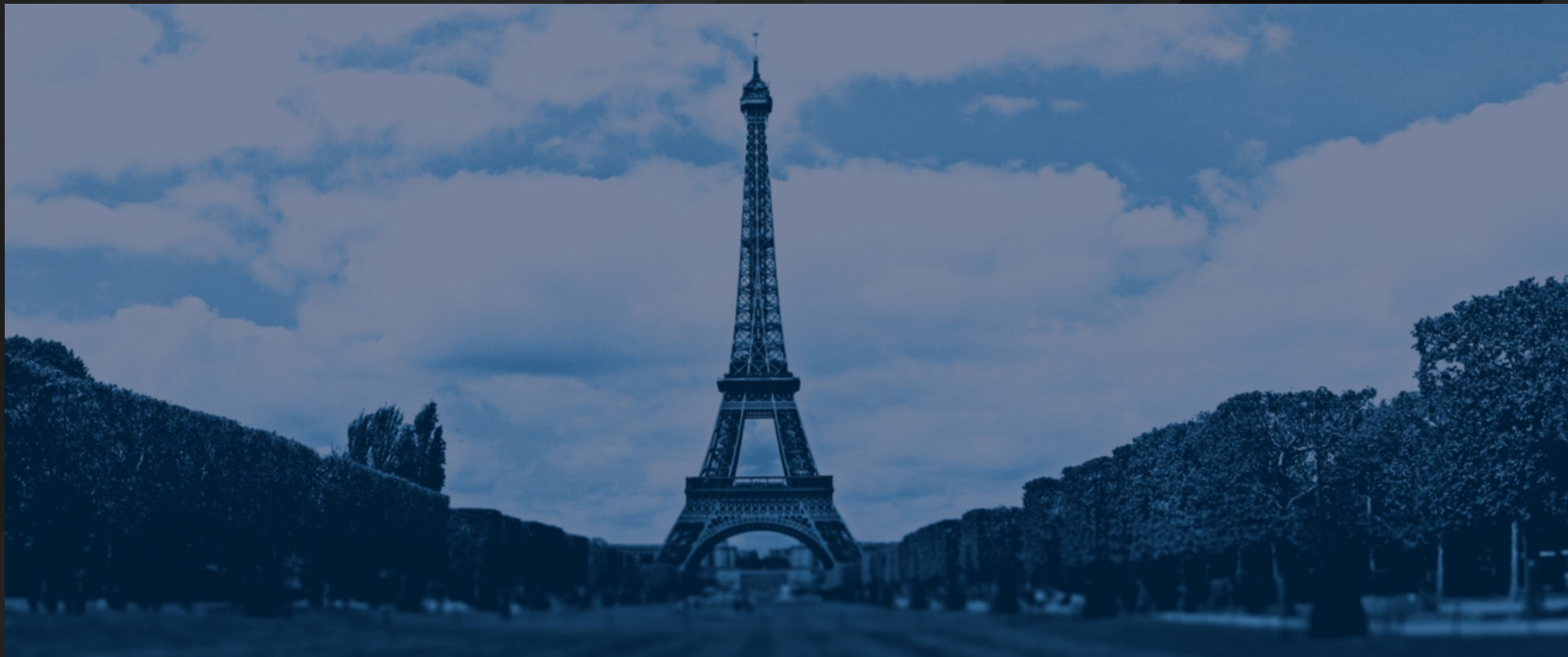
Real-World Smart Applications With Amazon Machine Learning

<https://www.youtube.com/watch?v=sHJx1KJf8p0>

Deep Learning: Going Beyond Machine Learning

<https://www.youtube.com/watch?v=Ra6m70d3t0o>

# AWS Enterprise Summit – 27/10/2016, Paris



<http://amzn.to/1X2yp0i>

# AWS User Groups



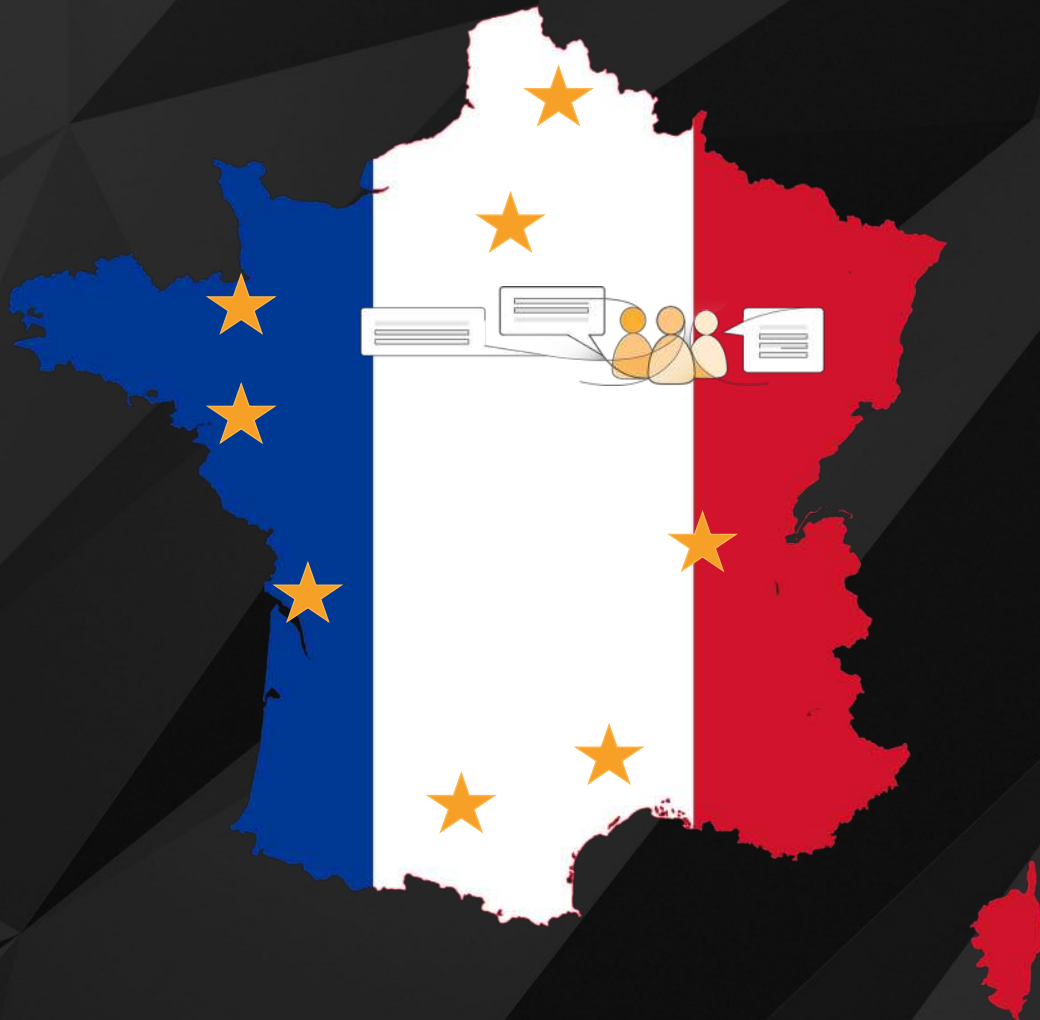
Lille  
Paris  
Rennes  
Nantes  
Bordeaux  
Lyon  
Montpellier  
Toulouse



[facebook.com/groups/AWSFrance/](https://facebook.com/groups/AWSFrance/)



[@aws\\_actus](https://twitter.com/aws_actus)



# Thank you!

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