

MEETUP AI

Pipeline de Modelagem analítica



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Mentor Startups IA – Ahead Farm



[claudio-pinheiro-cloud](#)



Instituto Brasileiro de
Neuromarketing e
Neuroeconomia

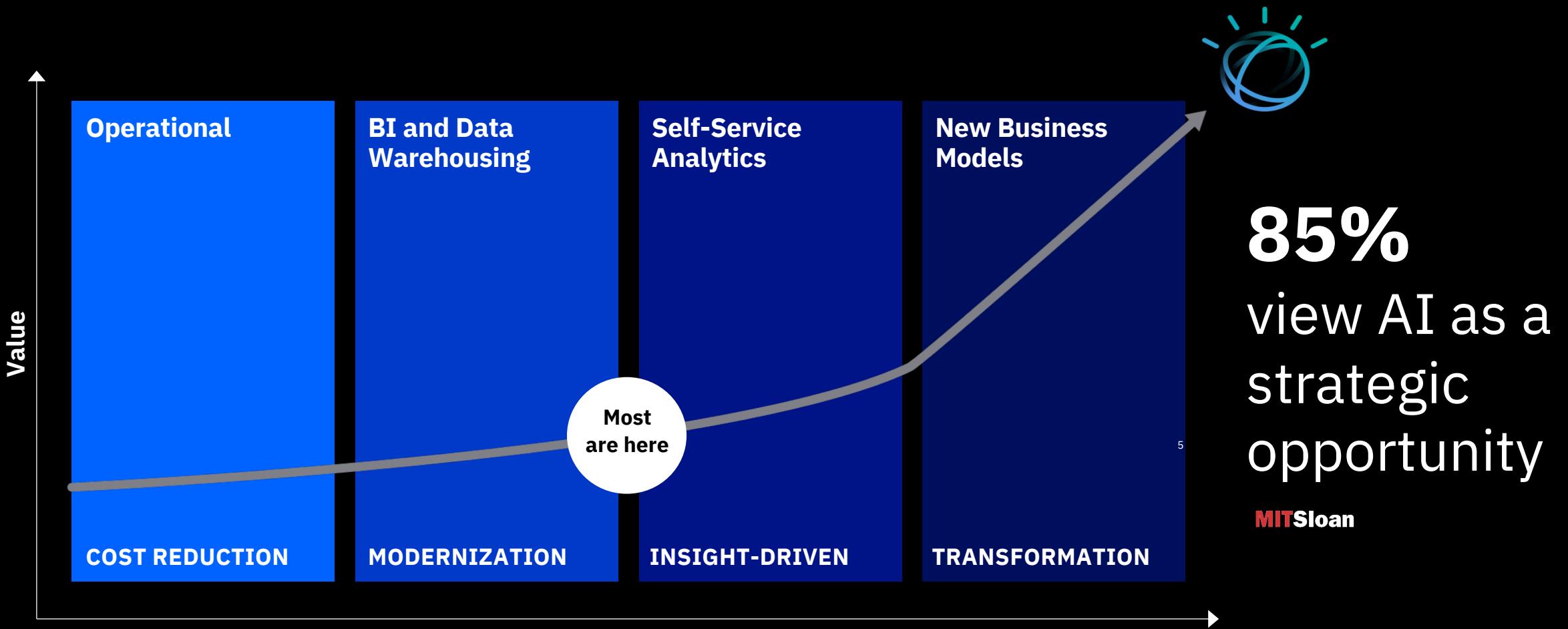


AI é a nova
eletricidade

15.7T



I want AI !



details 100 articles loaded

Vectra Cognito Platform Now Available for the Department of Homeland Security Continuous Diagnostics and Mitigation Program

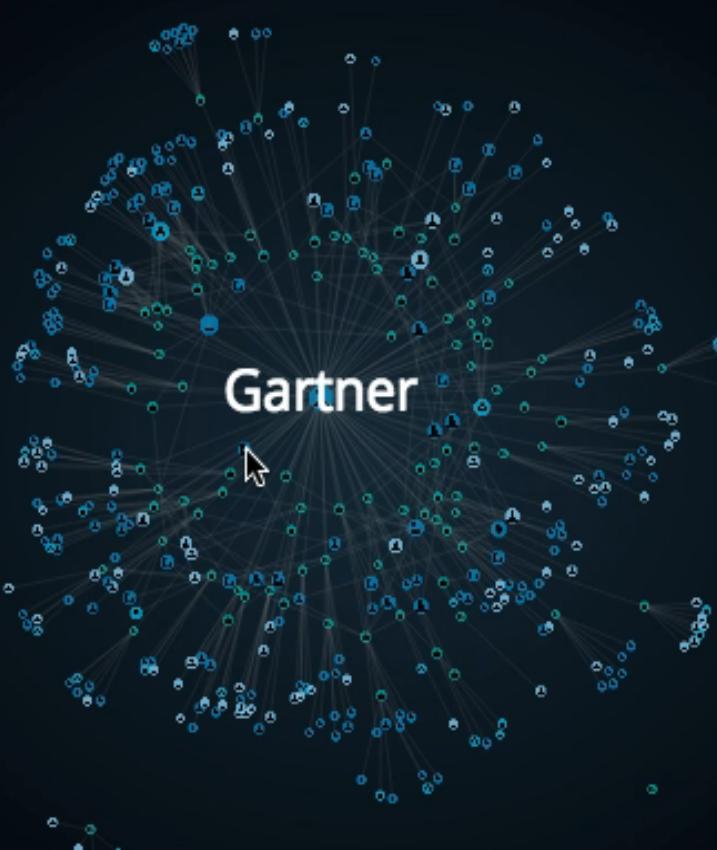
technology and computing

Thu Apr 12 2018 14:36:00 GMT-0300 (-03)

SAN JOSE, Calif. , April 12, 2018 -- Vectra , the leader in automating the hunt for in-progress cyberattacks ,

[full article...](#)companies linked: [Vectra](#), [Vectra Cognito](#), [Vectra Networks](#), [Gartner](#)organizations linked: [Department of Human Services](#), [Federal government of the United States](#), [United States Department of Homeland Security](#), [AI](#)

people linked: none

locations linked: [San Jose California](#), [United States](#), [Singapore](#)topics linked: [Security](#), [Computer security](#), [Artificial intelligence](#)**Malaysian IT spending to reach RM64b this year****Timeline** news articles across 60 days, 5 hrs, 4 min, 0 sec up to the current date: 5/22/2018**News Network**show/hide: companies, organizations, people**Locations**63 found, view in map list**Topics People Companies Organizations**Digital Commerce Corporate America
IT department IESE Business School
Wisconsin Investment Board

RPA The Home Depot

Contact Center Infrastructure UK Labour Market

NIST Dockers

QADA Dar Al Sharq Press

Zacks Arlington School Board

North American Free Trade Agreement

School Board Dept. of Natural Resources

Division of Fish & Wildlife

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Exemplos de Complexidade de Big Data

IBM Watson News Explorer recent news about **michel temer** as **a person** investigate advanced [+]

Details 100 articles loaded

News Network show/hide: companies, organizations, people

Locations 98 found, view in map list

Michel Miguel Elias Temer Lulia (Portuguese pronunciation: [miʃw̃ m̃i g̃w̃ ẽ lies t̃em̃er lũ lie]; born 23 September 1940) is a Brazilian lawyer and politician who is the 37th and current President of Brazil. He took office on 31 August 2016, after the impeachment and removal of his predecessor Dilma Rousseff, having served as Vice President since 2011 and as Acting President since 12 May 2016, when Rousseff was suspended

Further Reforms Could Lead Latin American Economies To Become Bigger Growth Players | Seeking Alpha

World Cup 2018: Peru captain banned, Brazil names squad | Daily Telegraph

MEXICO CANNABIS – Hundreds demonstrate in Mexico demanding legalization of marijuana use

Newcomers To The World's Most Powerful People List

The US is Definitely Meddling in the Venezuelan

Timeline news articles across 60 days, 11 hrs, 52 min, 0 sec up to the current date: 5/20/2018

Investigation stats:
articles: 100
companies: 40
organizations: 40
people: 170

News Network

Topics

People

Companies

Organizations

Enrique Peña Nieto, Frank Behrens, Geraldo Alckmin, Lee Hsien Loong, Gustavo Stenzel, Jair Bolsonaro, Ciro Gomes, Pedro Pablo Kuczynski, Zoe PC, Kayser Ponto, Andrés Manuel López Obrador, Vladimir Putin, Ricardo então, Eulalia Reyes, Marielle Franco, Poder, Maduro, Mike Pence, Luiz Inacio, Henri Falcón, Daniel Alves, Zanu, Mauricio Macri, Porto TCU, Xi Jinping, Donald Trump, Dilma Trump, Dilma Rousseff, Até lá, Michel Temer, Lula Tite, Macri, Nicolás Maduro, Luiz Inácio Lula da Silva, Rodrigo Lasmar, Yan Xin, Hugo Chávez, Striker Neymar, Barack Obama, Sebastián Piñera, João Doria, Joesley Batista, Danilinho Rios, Da Silva, Qamar Javed Bajwa, Aécio Neves, Segundo ele, Luis Alejandro Ratti, Gilmar Mendes, Trump é

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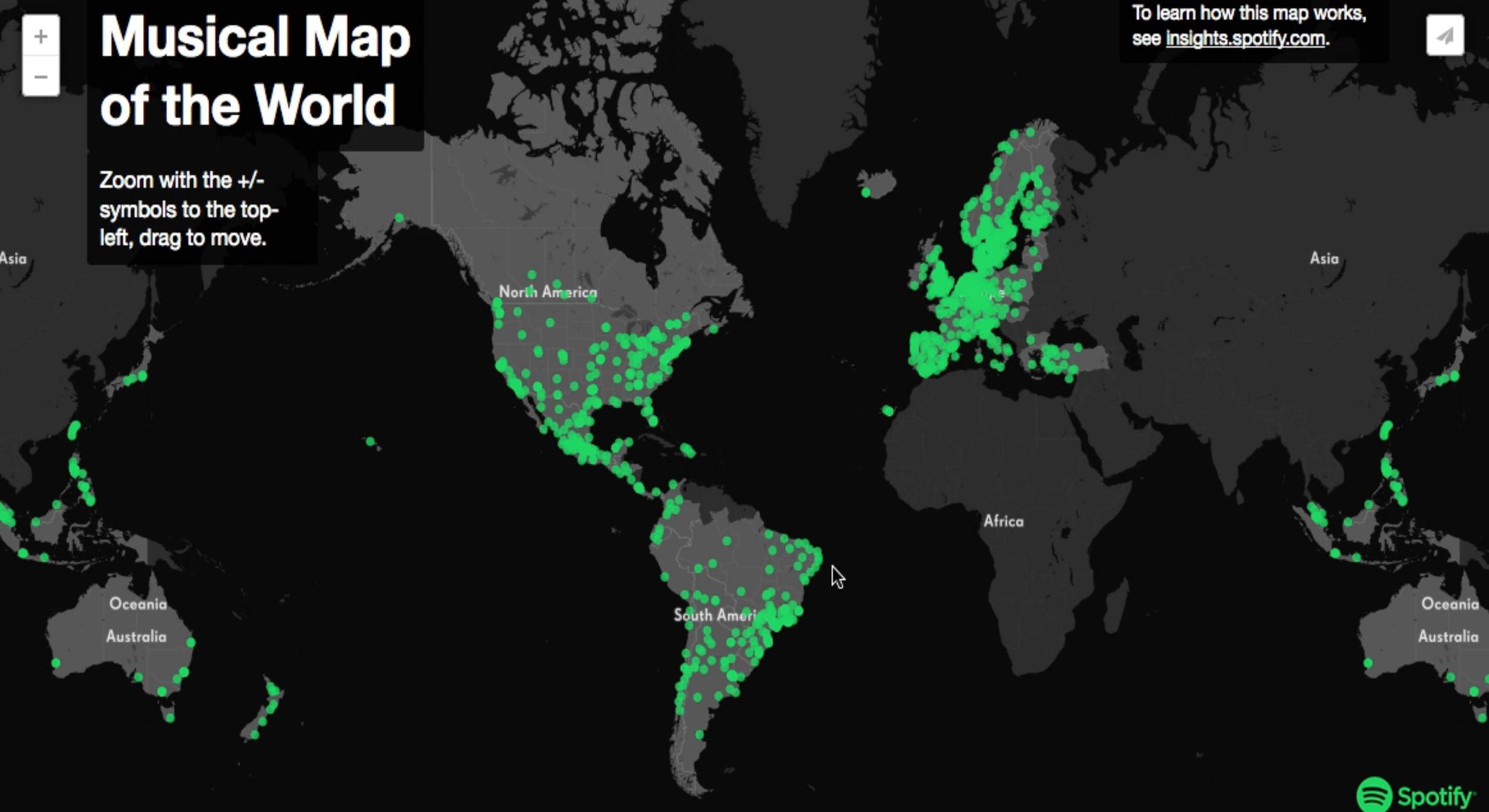
The interface displays a complex network graph in the center, with 'Michel Temer' at the center node, connected to numerous other nodes representing people, companies, and organizations. The graph is composed of small blue and green circular icons connected by thin grey lines. To the left, there is a sidebar with news headlines and a detailed profile of Michel Temer. On the right, there is a world map showing the locations of the entities found in the investigation, and a list of names under the 'Topics' section.

To learn how this map works,
see insights.spotify.com.



Musical Map of the World

Zoom with the +/-
symbols to the top-
left, drag to move.





WORLD POVERTY CLOCK

The World Poverty Clock provides real-time poverty estimates until 2030 for almost every country in the world. It monitors progress against Ending Extreme Poverty, which is the UN's first Sustainable Development Goal (SDG1). The escape rate calculates the current rate of poverty reduction in the world. [Read more](#)

1.6 | 0.5
TARGET ESCAPE RATE | CURRENT ESCAPE RATE

people/sec

OFF TRACK
95,903,250
behind SDG1

596,999,185

people live in extreme poverty
8% of the world population



INDIA

43,559
escaped
poverty
today

14,562
fell into
poverty
today

JUNE
2019

2016

2017

2018

2019

2020

2025

2030

UPDATED ON: MAY 2019

But

In the same MIT & BCG survey of more than 3,000 executives, managers, and analysts across industries...

39%



Of all companies have an AI strategy in place

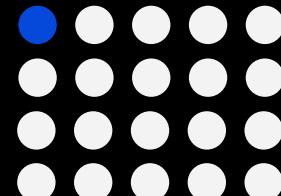
(50% when only counting companies with at least 100,000 employees)

1/5



Has incorporated AI in *some* offerings or products

1/20



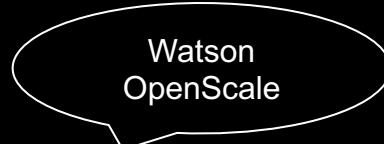
Has *extensively* incorporated AI in offerings or process

The AI Ladder

A prescriptive approach to accelerating the journey to AI



INFUSE – Operationalize AI with trust and transparency



ANALYZE - Scale insights with AI everywhere

ORGANIZE - Create a trusted analytics foundation

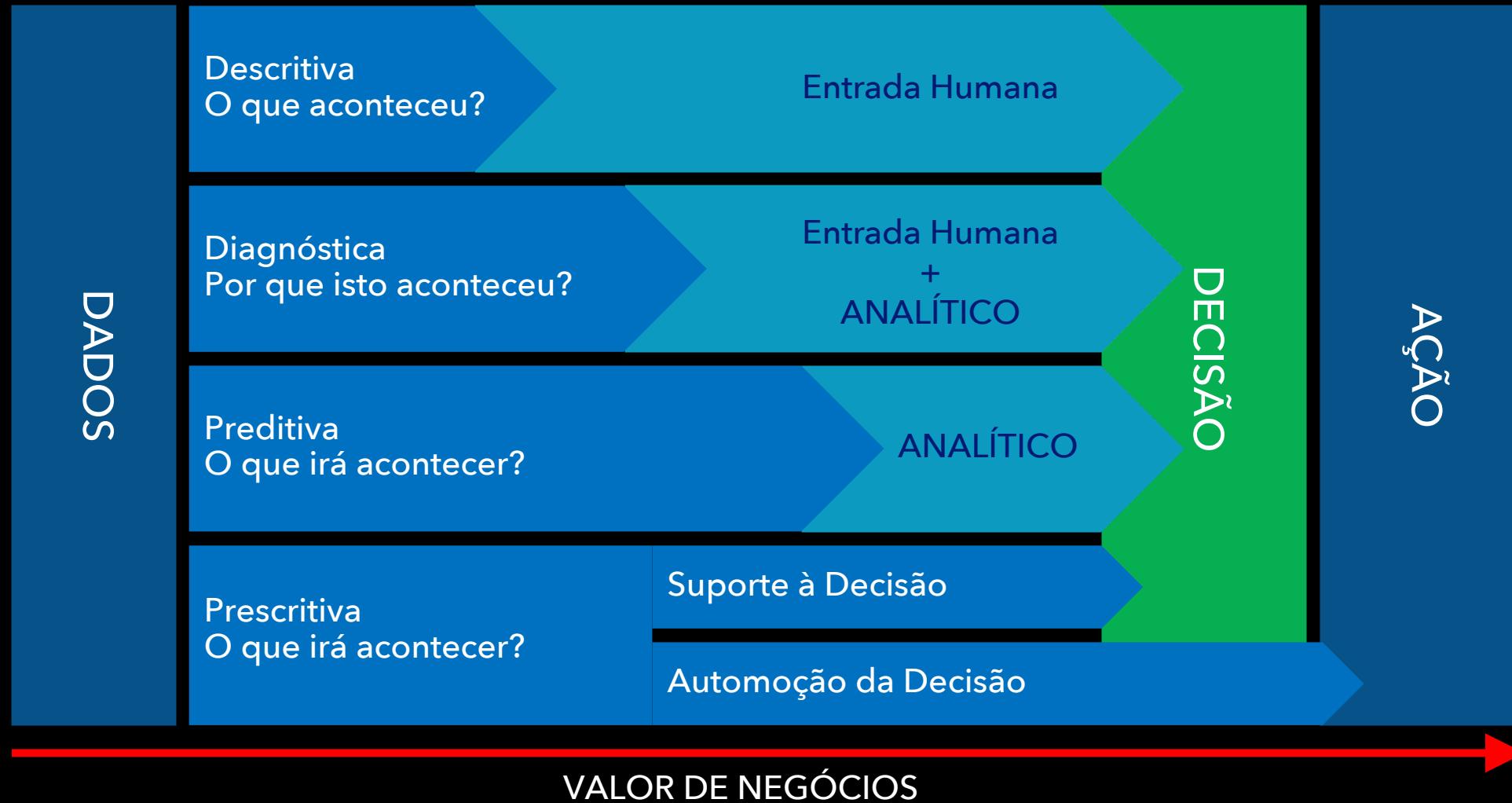
COLLECT - Make data simple and accessible

Data of every type,
regardless of where it lives



MODERNIZE
your data estate for an
AI and multicloud world

AS MELHORES DECISÕES NO MENOR TEMPO



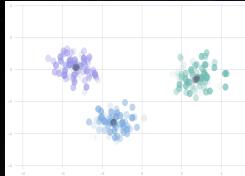


Tarefas Analíticas



Sumarização

Quantos produtos vendemos?
Qual o tempo médio de atendimento?
Quanto dura o ciclo de venda?



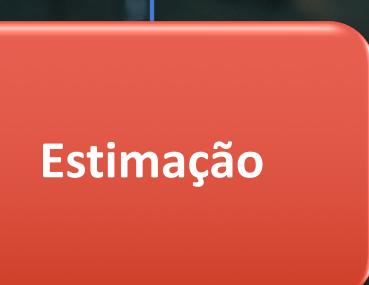
Segmentação

Quantos grupos diferentes de clientes temos?



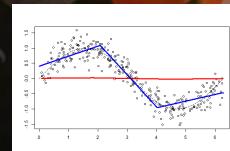
Classificação

Qual é a classe deste novo cliente?



Estimação

Quanto devemos gastar em mídia para vendermos 20% a mais?



Previsão

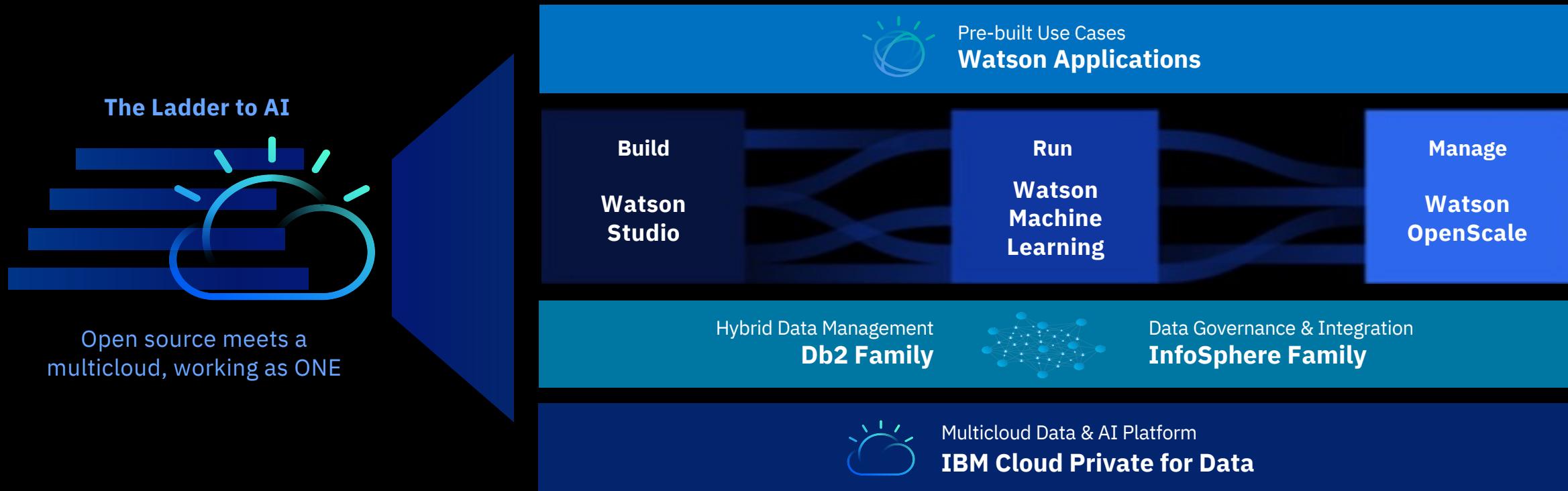
Quanto iremos vender mensalmente deste produto na região sul em 2019?



Quais produtos devemos recomendar a um cliente que está comprando um determinado produto?

IBM Data and AI Portfolio

Everything you need for Enterprise AI, on any cloud



IBM Cloud



RED HAT
OPENSHIFT



amazon
webservices



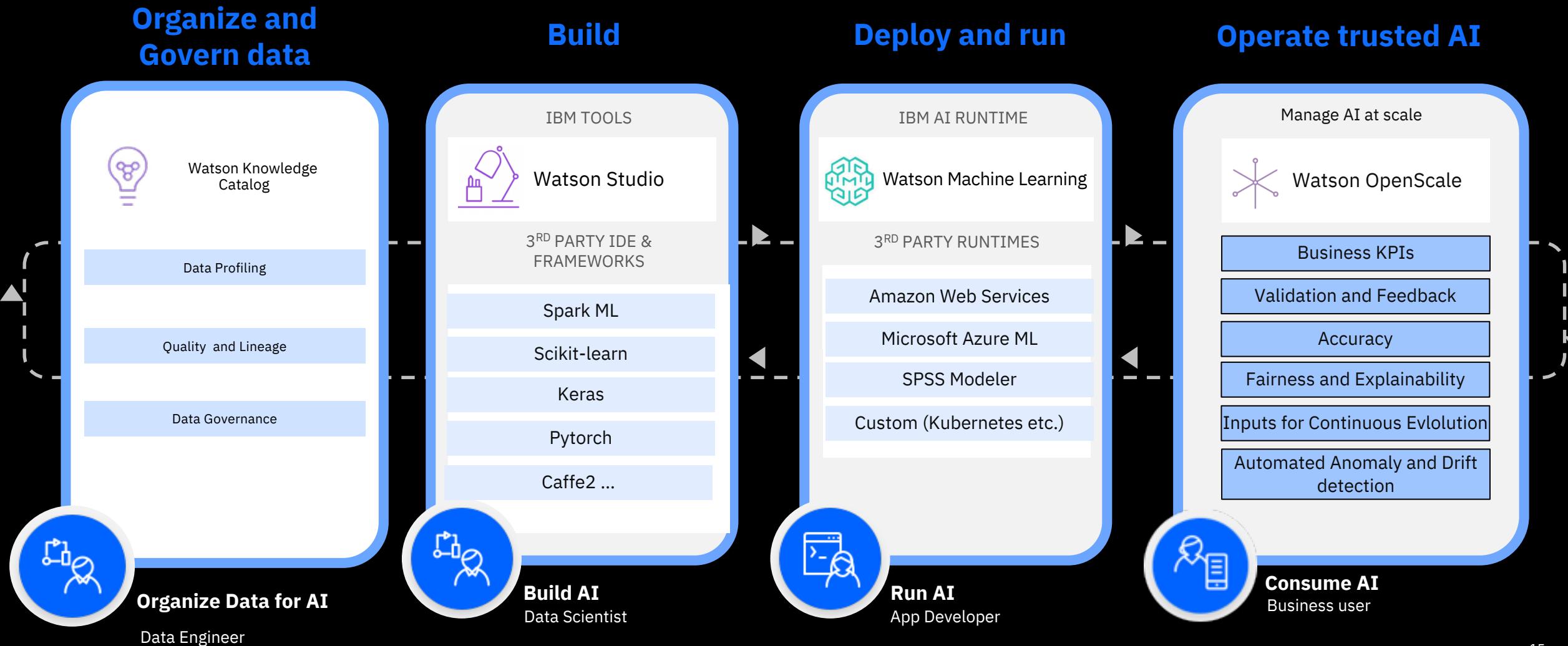
Azure



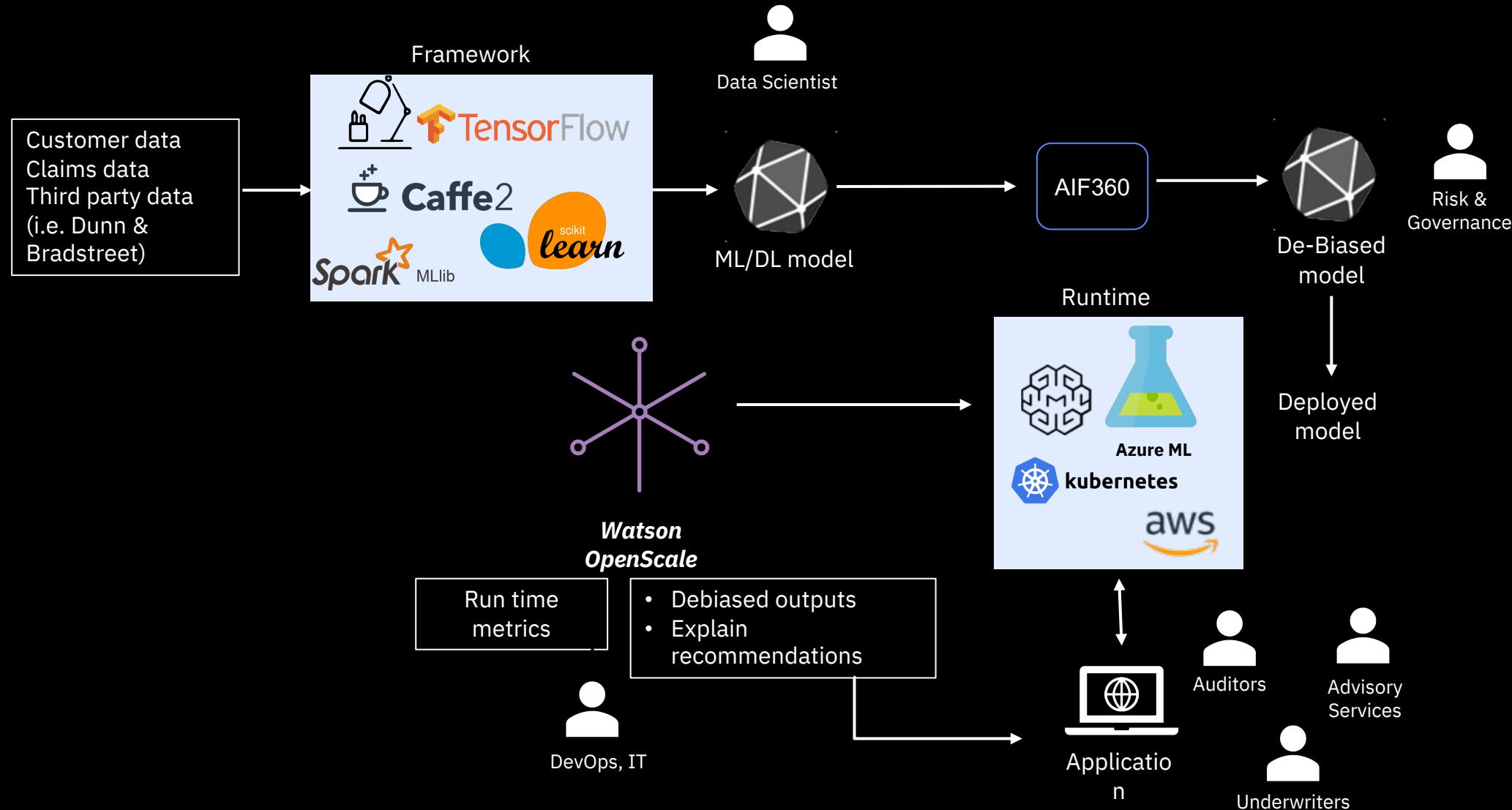
openstack



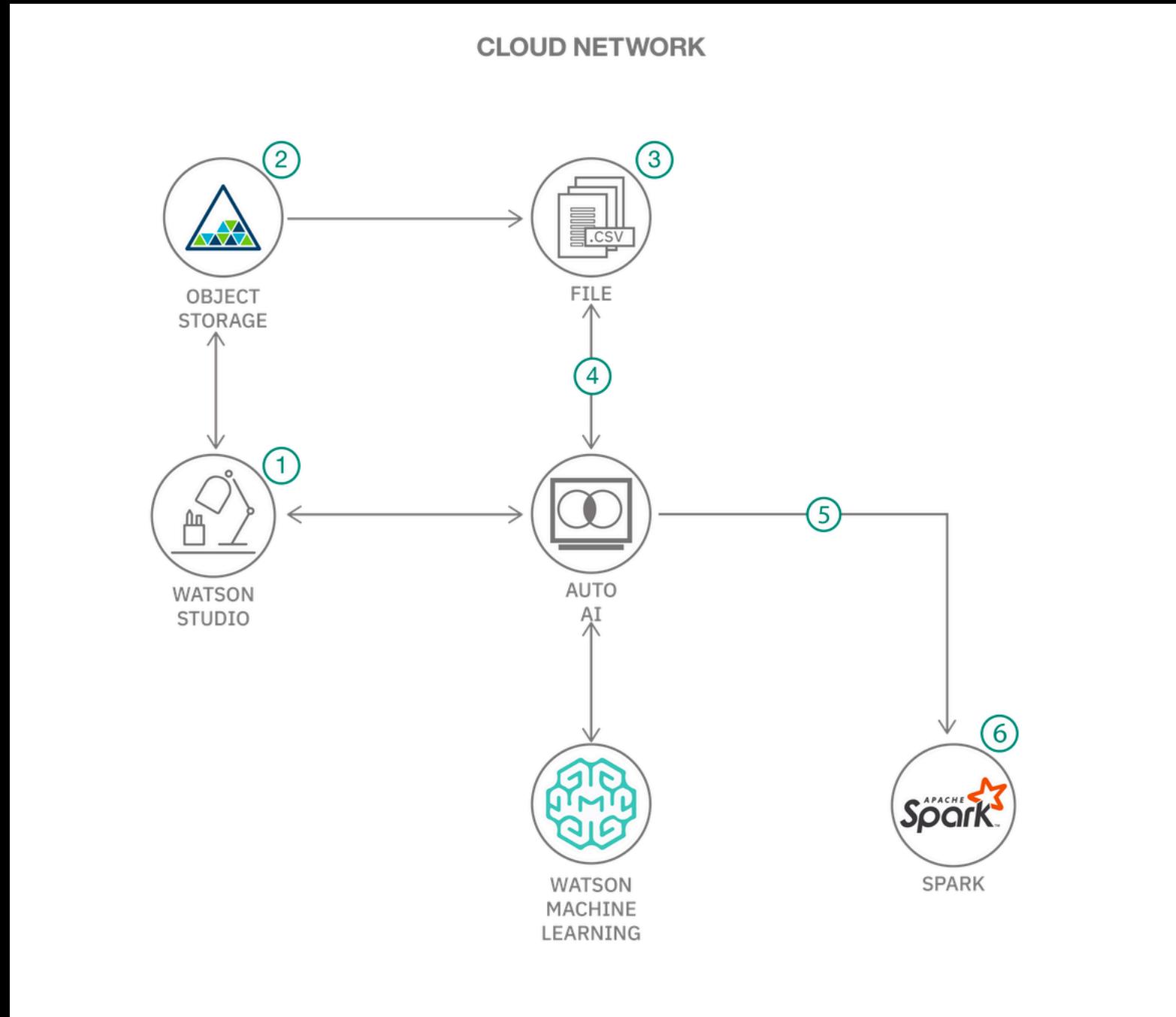
Watson OpenScale along with Watson Studio and WML enables enterprises to operationalize AI across the enterprise



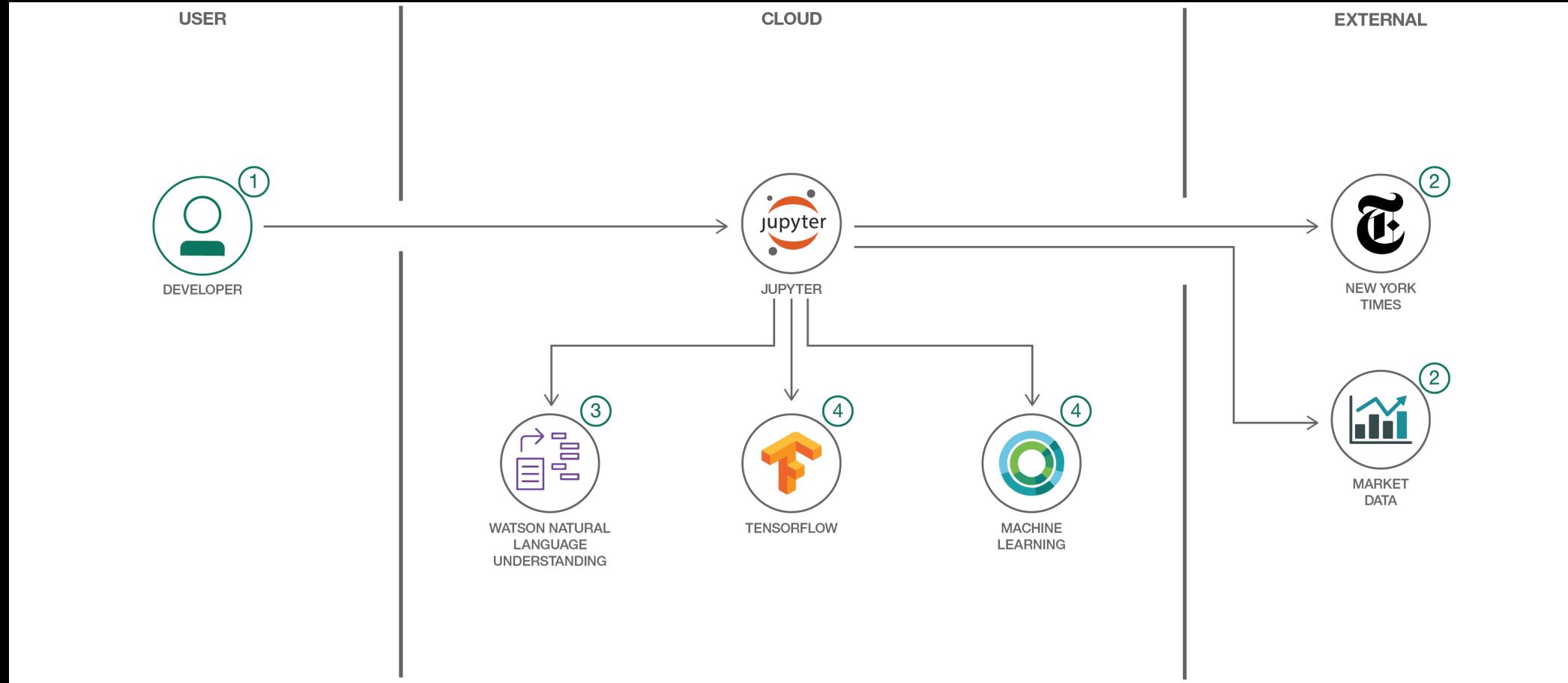
Example Data Flow: Insurance Underwriting Use Case



Criando um modelo preditivo com AutoAI

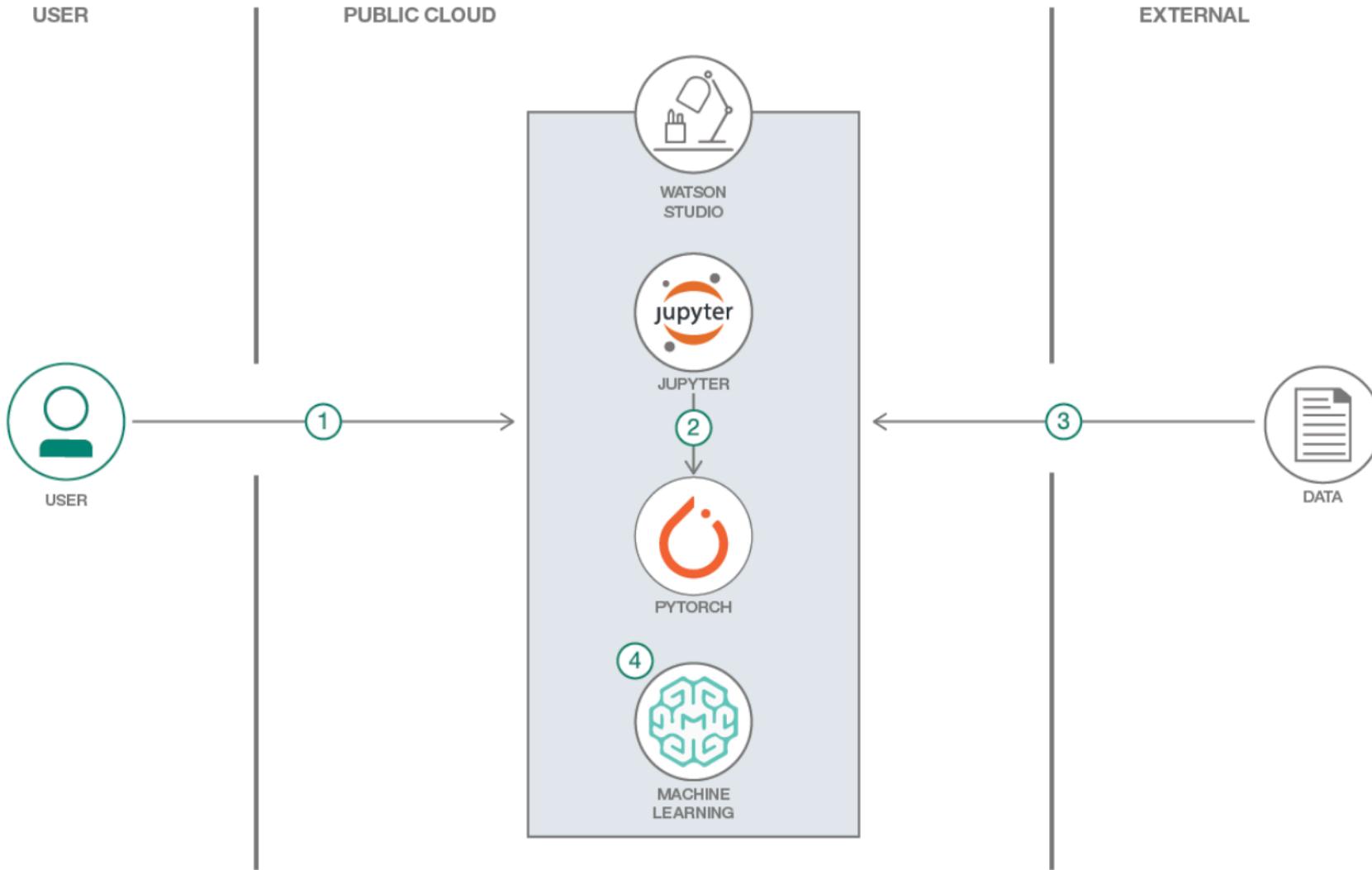


Criando um modelo preditivo com AutoAI



Criando um modelo com Deep learning

Flow





Import 

 Data Asset

 User Input

 Record Operations 

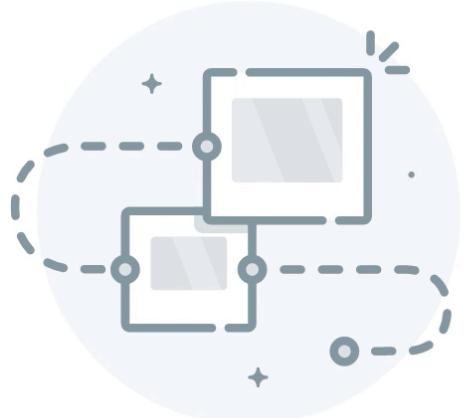
 Field Operations 

 Graphs 

 Modeling 

 Outputs 

 Export 

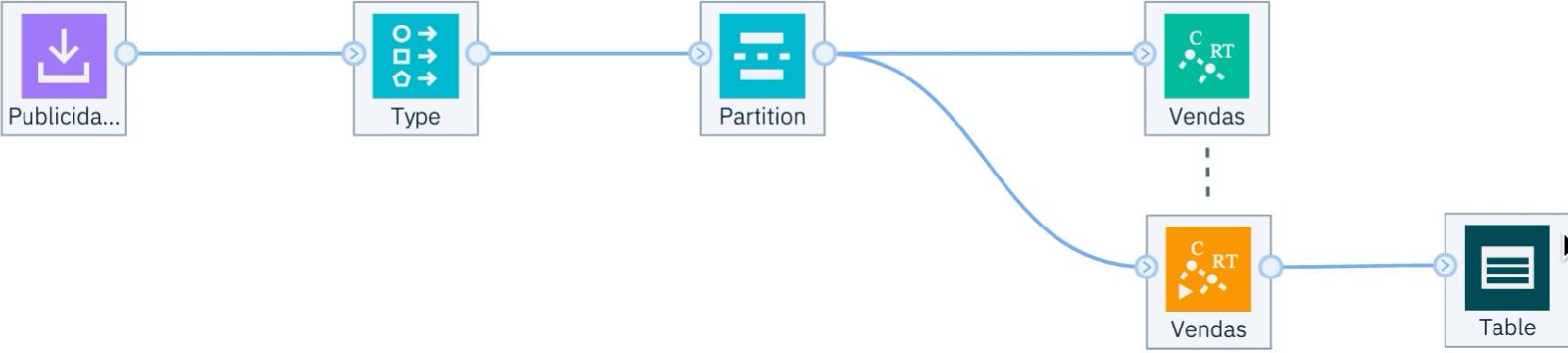


You don't have any nodes yet

Add **nodes** from the palette to create your flow.

My Projects / 1 BP Watson Studio - Claudio / Publicidade

Search Palette Import Record Operations Field Operations Graphs Modeling Outputs Export



```
graph LR; Source[Publicida...] --> Type[Type]; Type --> Partition[Partition]; Partition --> Vendas1[Vendas]; Vendas1 --> Table[Table]; Vendas1 --> Vendas2[Vendas]; Vendas2 --> Table
```



```
In [1]: %cd /gpfs/global_fs01/sym_shared/YPPProdSpark/user/s84a-b0b45068a9ec87-f90433abd686/notebook/work/  
#!git clone https://github.com/aruizga7/CarND-Vehicle-Detection.git  
  
/gpfs/global_fs01/sym_shared/YPPProdSpark/user/s84a-b0b45068a9ec87-f90433abd686/notebook/work  
Cloning into 'CarND-Vehicle-Detection'...  
remote: Counting objects: 84, done.  
remote: Total 84 (delta 0), reused 0 (delta 0), pack-reused 84  
Unpacking objects: 100% (84/84), done.
```

Go grab some data!

Click the **Find and Add Data** icon to load CSV files. Drag CSV files or other data assets to add them to the notebook.

1 of 2

Next



Jose Claudio dos... 5:15 PM

avaliar velocidade de deteccao do modelo

March 13th



Jose Claudio do... 10:06 AM

melhorando o modelo

February 25th



Jose Claudio dos... 1:18 AM

em breve agregarei o material de analise com GPUs

October 25th

Setting up the environment and importing libraries

```
In [2]: %cd /gpfs/global_fs01/sym_shared/YPPProdSpark/user/s84a-b0b45068a9ec87-f90433abd686/notebook/work/  
rk/  
!ls  
%cd CarND-Vehicle-Detection  
  
/gpfs/global_fs01/sym_shared/YPPProdSpark/user/s84a-b0b45068a9ec87-f90433abd686/notebook/work  
CarND-Vehicle-Detection lenet.index traffic-signs-data.zip  
checkpoint lenet.meta train.p  
core.42896 Self-Driving-Car-in-DSX valid.p  
lenet.data-00000-of-00001 test.p  
/gpfs/global_fs01/sym_shared/YPPProdSpark/user/s84a-b0b45068a9ec87-f90433abd686/notebook/work/  
CarND-Vehicle-Detection
```

In [3]: !ls

examples	README.md	vehicle detection.ipynb
output_images	test_images	writeup_template.md
project_video.mp4	test_video.mp4	

AutoAI

My Projects / meetup AI / Investimentos elasticidade



Experiment summary

Pipeline comparison

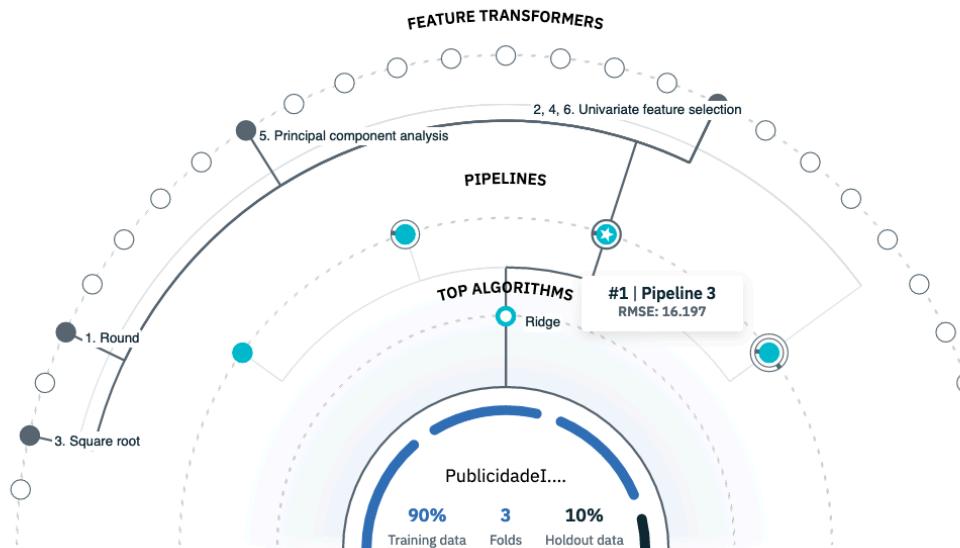
Rank by: Root Mean Squared Error (RMSE) (Optimized)

Score: Cross validation

Holdout

Relationship map

Prediction column: Vendas



Progress map

Swap view



Experiment complete

4 PIPELINES GENERATED

4 pipelines generated from algorithm. See pipeline leaderboard below for details.

Time elapsed: 86 seconds

[View full log](#)

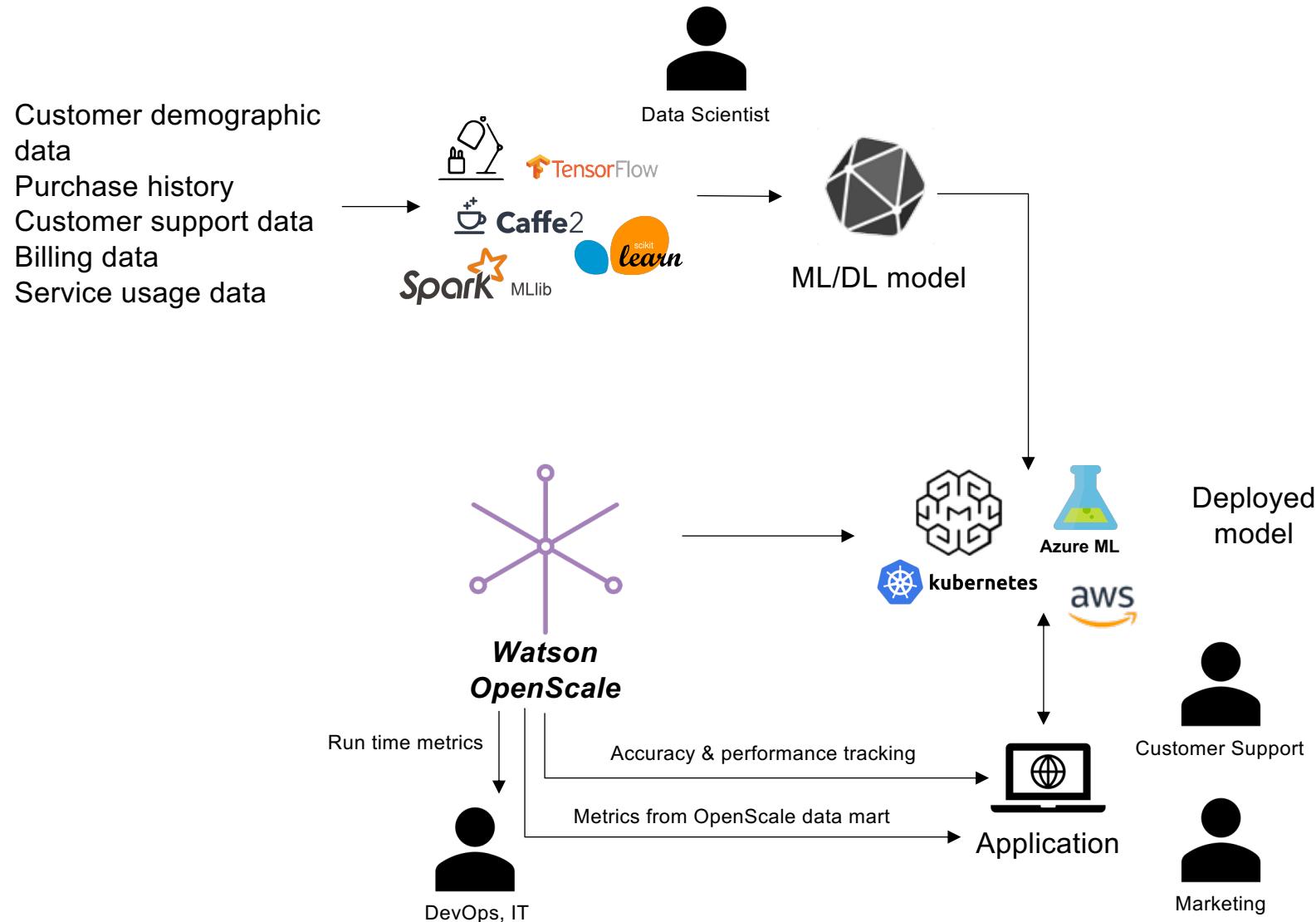
Pipeline leaderboard

Rank	Name	Algorithm	RMSE (Optimized)	Enhancements	Build time
★ 1	Pipeline 3	Ridge	16.197	HPO-1 FE	00:00:32

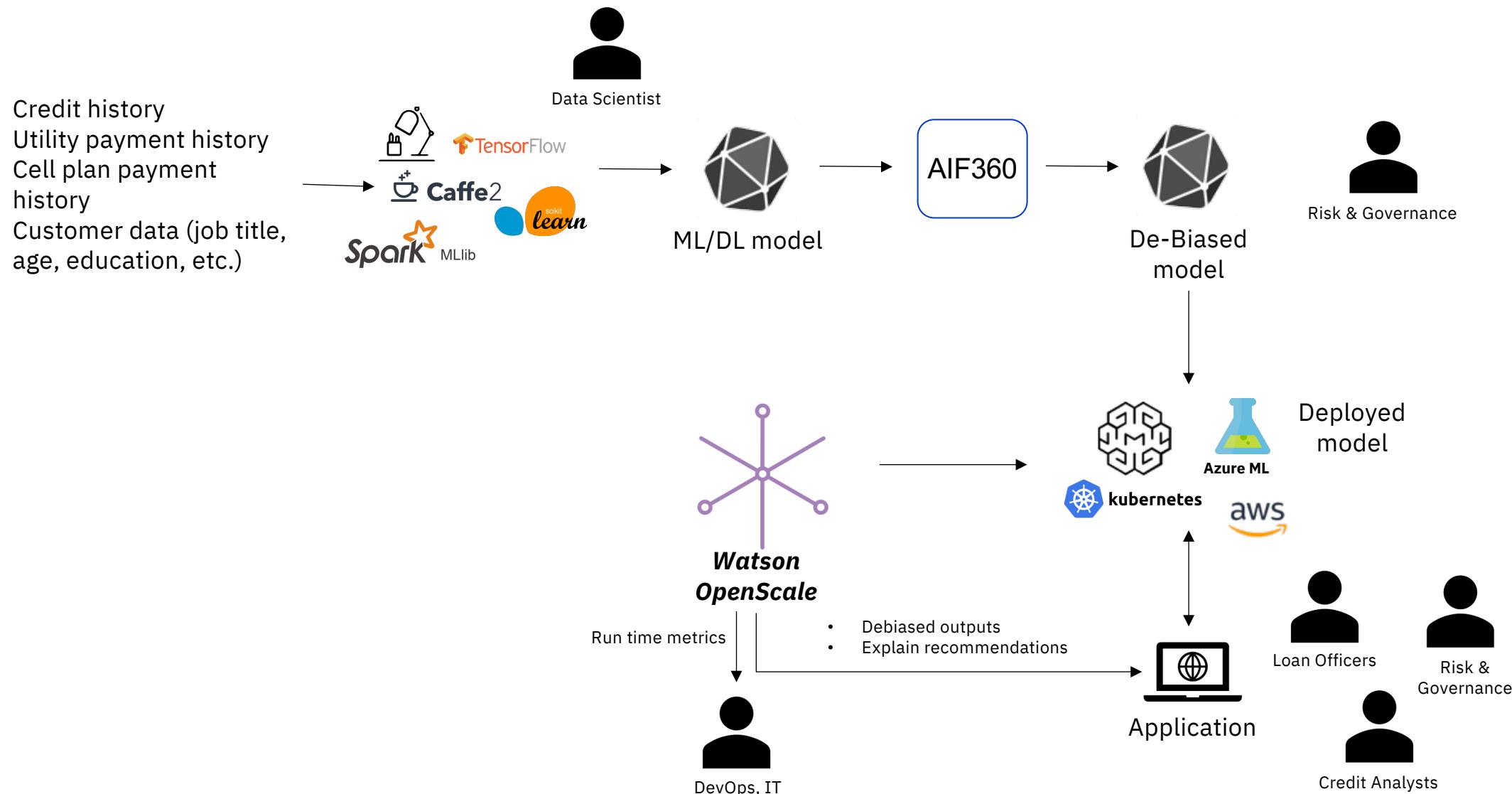
Model evaluation measures

	Cross validation score	Holdout score	Feature Importance
Explained Variance	0.959	0.996	Propaganda 0.53

Architecture Diagram: Data Flow for Telco Churn Prediction Use Case



Architecture Diagram: Data Flow for Credit Risk Modeling Use Case





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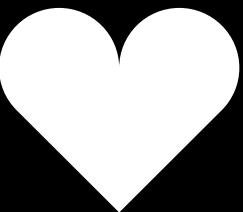
Data Science and Cognitive Computing Courses

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Professor Pós-graduação – **ESPM/FIAP**
Mentor Startups IA – Ahead Farm



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Muit 
Obrigado !