

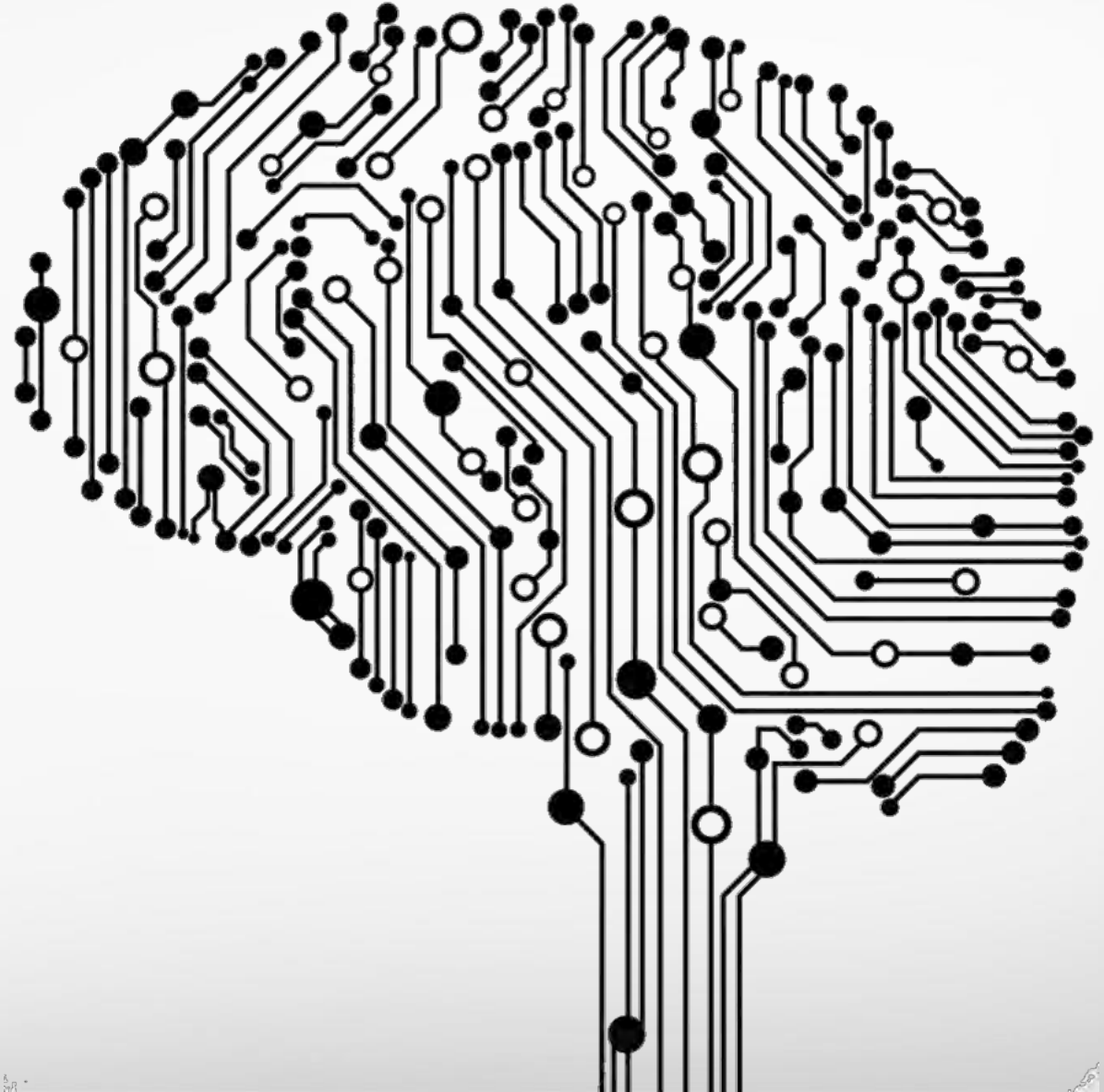
Artificial Intelligence

Making AI real for
every organization

Claudio Mirti
Advanced Analytics & AI Specialist EMEA



www.linkedin.com/in/claudio-mirti



WHY?



WHAT?



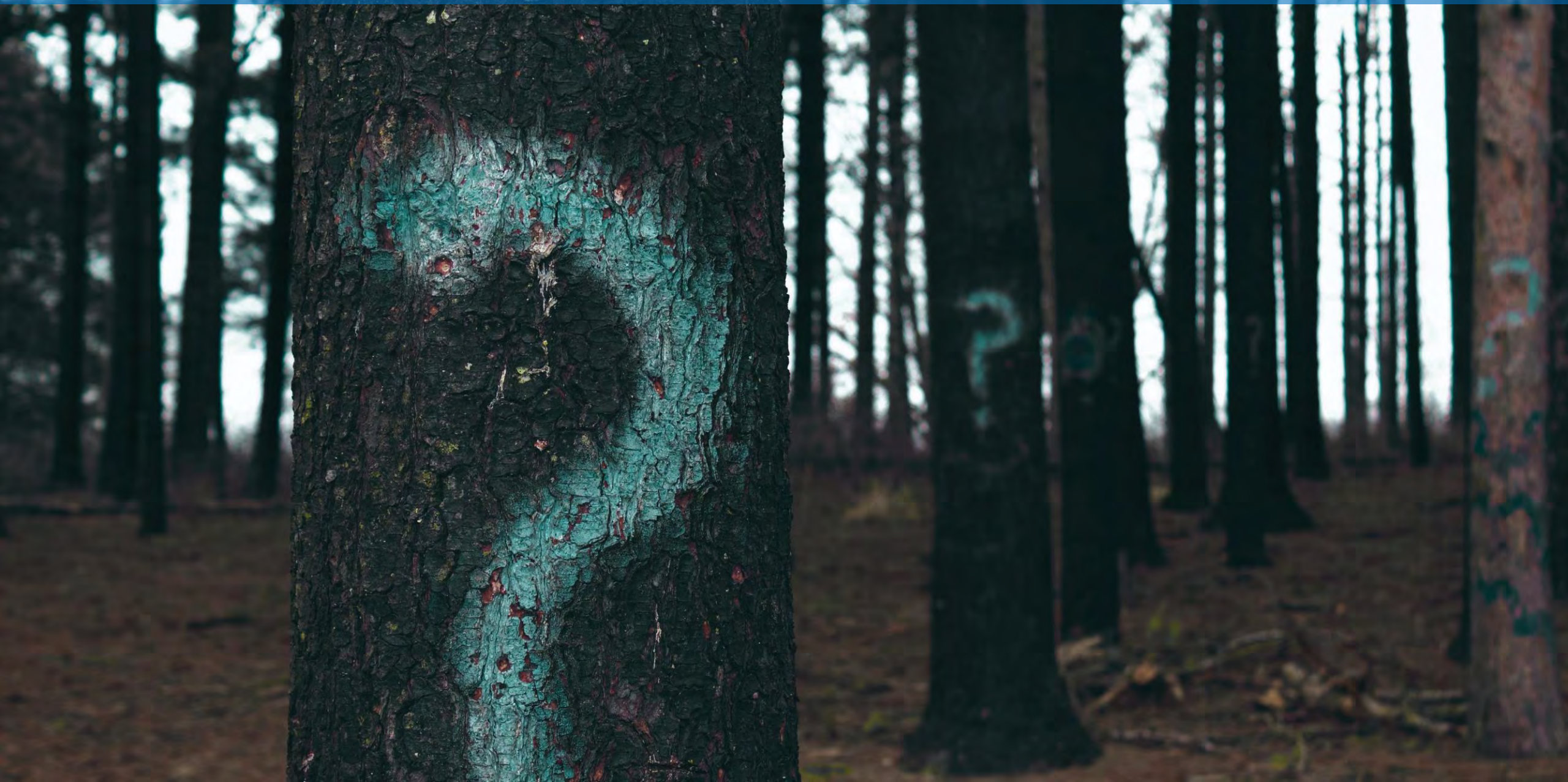
HOW?



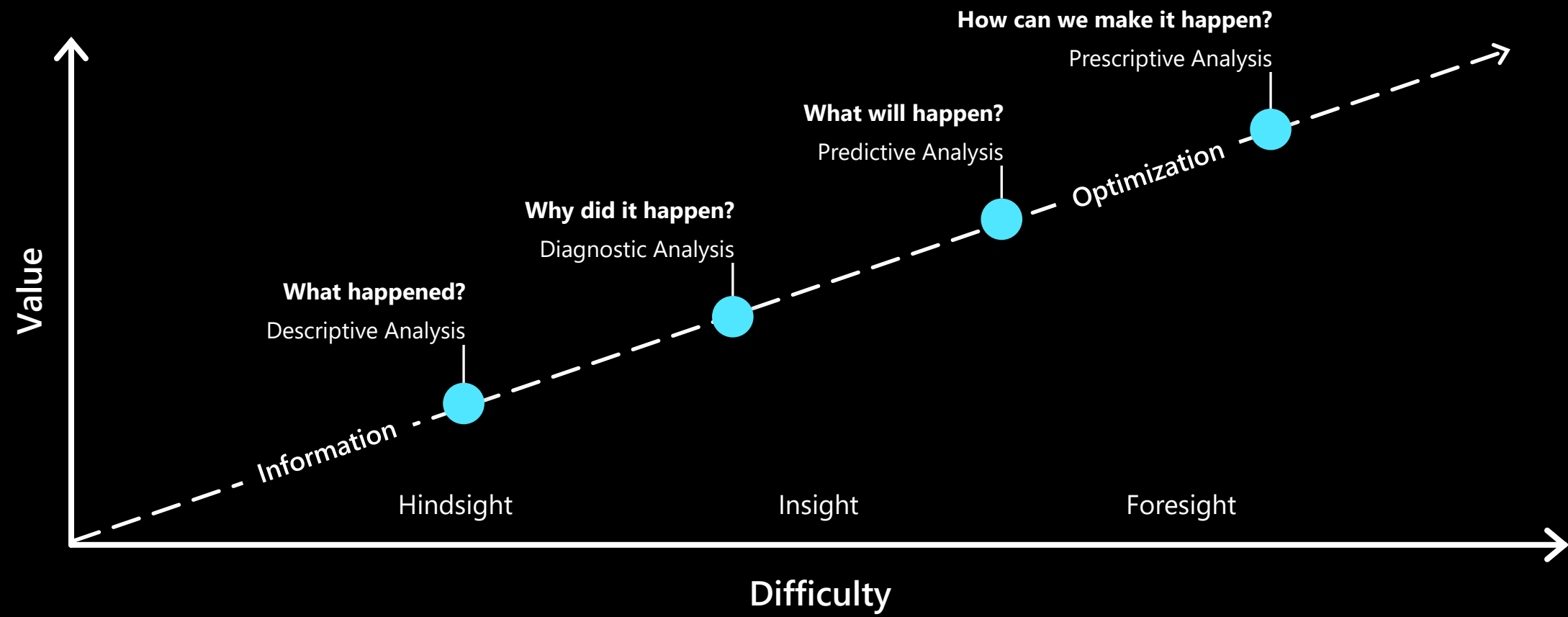
TOOLS



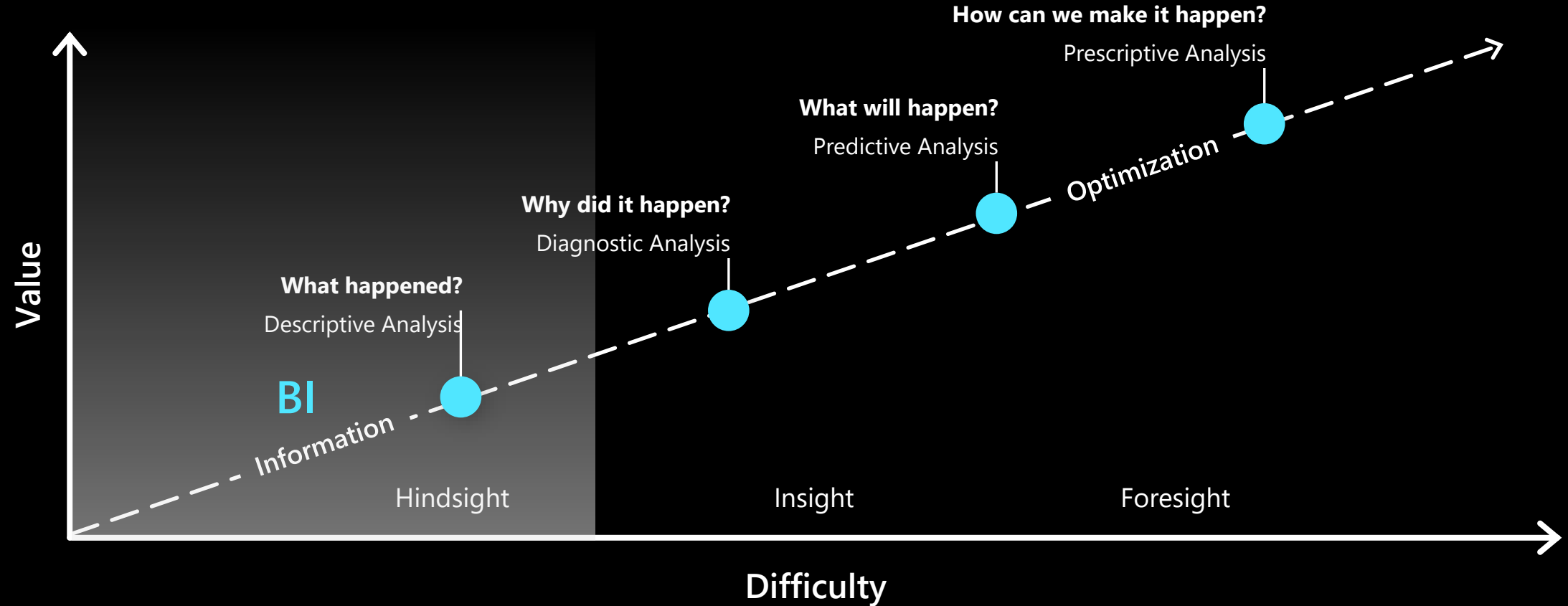
WHY?



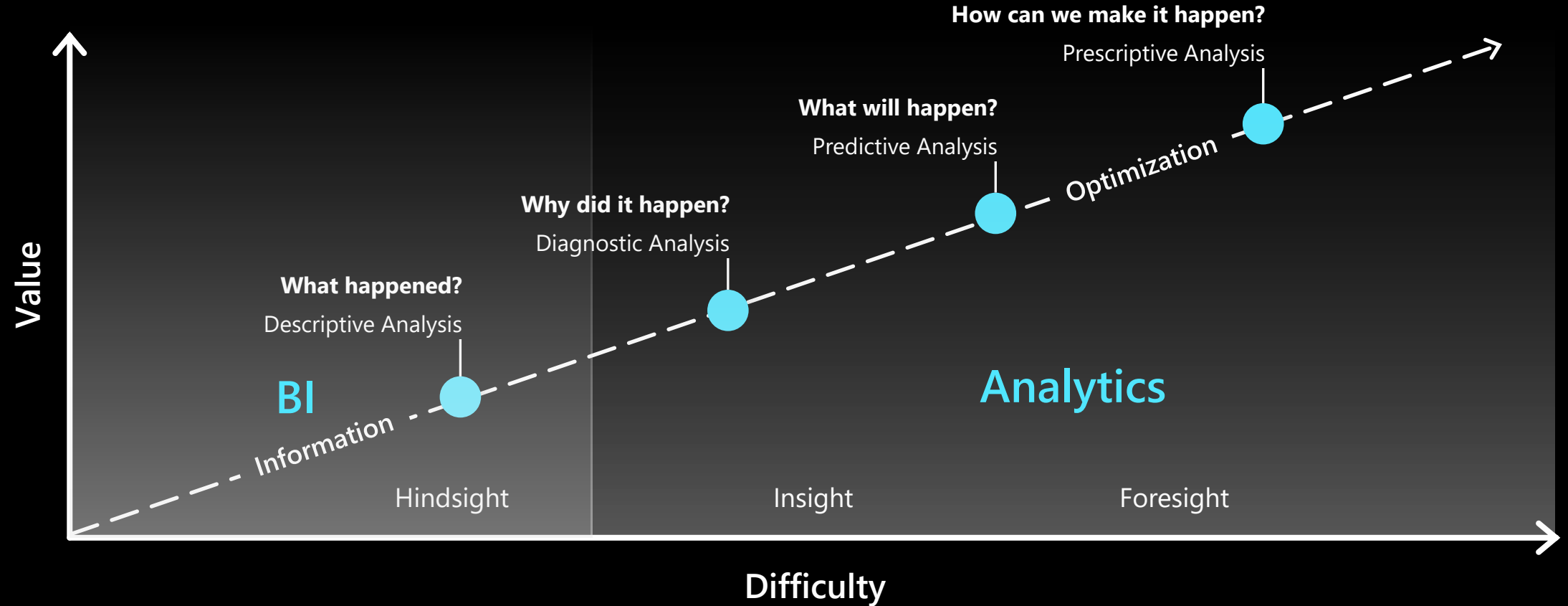
Where do you find yourself on the curve?



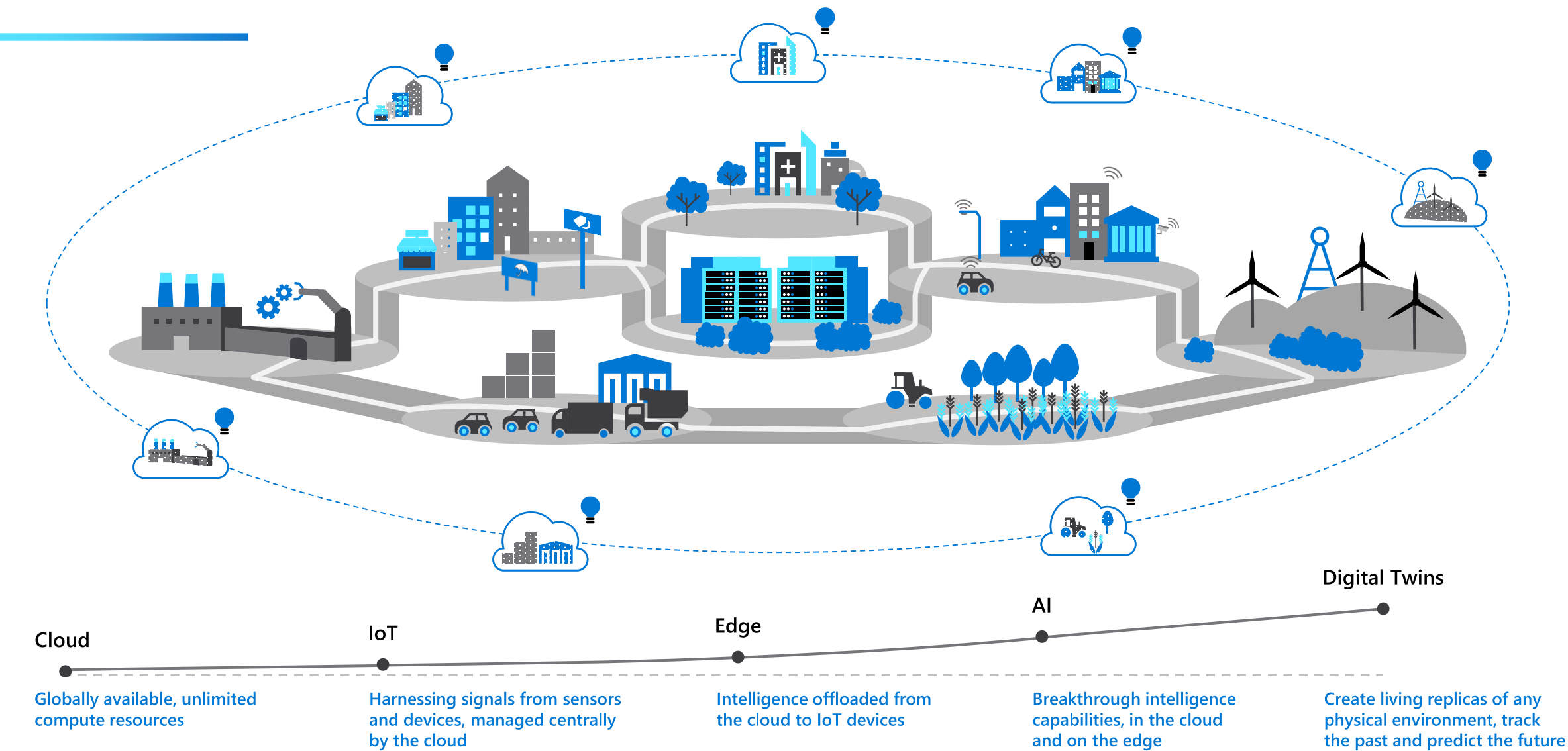
Where do you find yourself on the curve?



BI + Analytics unlock the door to AI, machine learning, and real-time insights



Innovations enabling new opportunities



Today's data realities



Volume



Variety



Velocity

What **data** do I have?

Break down silos

Is it **trustworthy**?

Can people access the data
needed to make the right decisions?

Democratize access to insights

How can I
enable faster business insights?


Upgrade legacy to cloud

What's my **compliance exposure**?

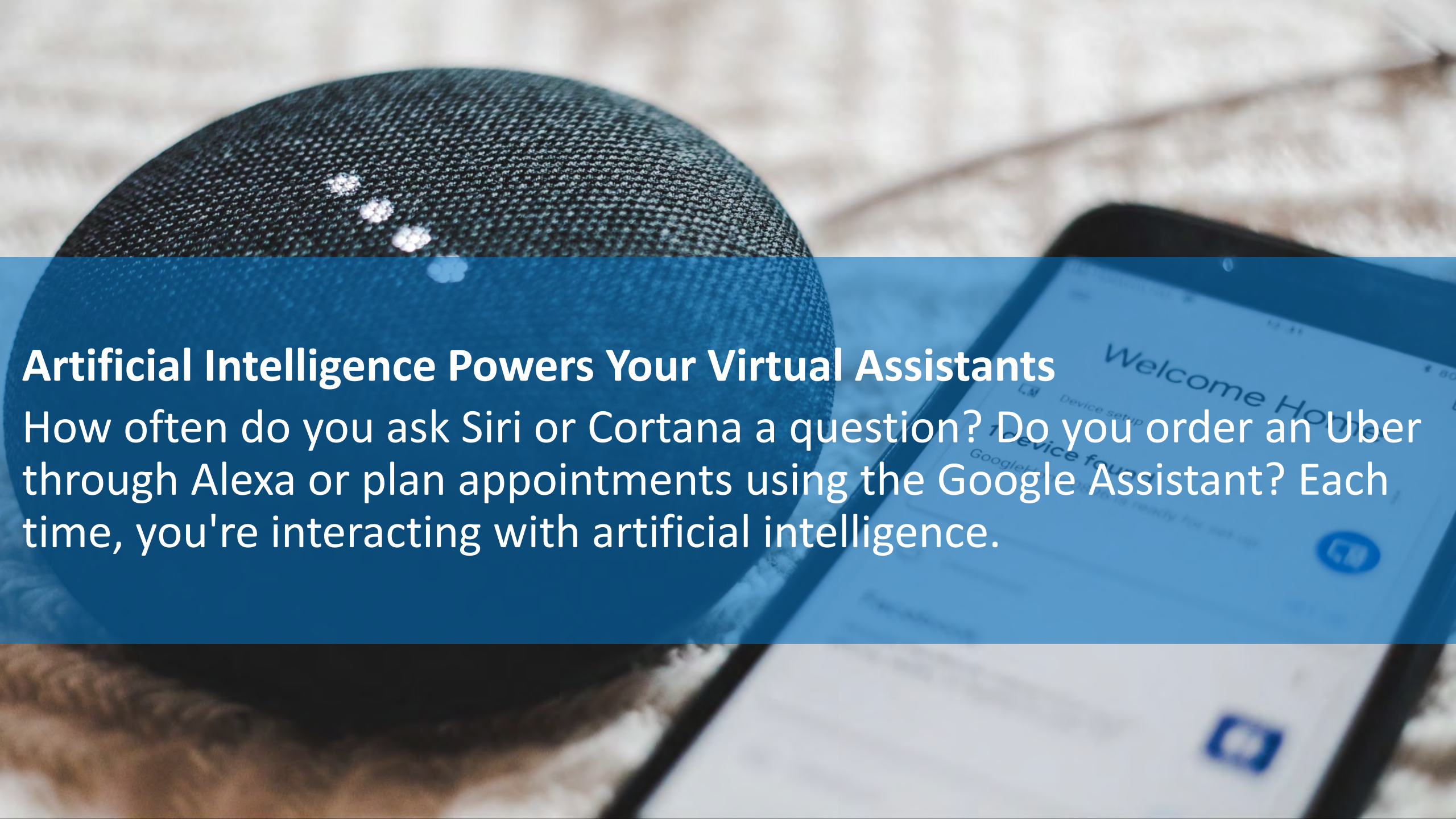
Ensure data privacy and governance

ARTIFICIAL INTELLIGENCE

TIPPA

A close-up photograph of a dark brown leather wallet lying flat on a wooden chair. The wallet is open, revealing several Chase debit cards. One card is blue with 'CHASE' and 'Debit' visible. Another card is yellow. The background is dark and out of focus.

Financial Companies Use Artificial Intelligence To Monitor For Fraud
Financial companies often use artificial intelligence to monitor transaction requests since algorithms process information so quickly. They spot patterns in your transactions and alert users to suspicious activity.



Artificial Intelligence Powers Your Virtual Assistants

How often do you ask Siri or Cortana a question? Do you order an Uber through Alexa or plan appointments using the Google Assistant? Each time, you're interacting with artificial intelligence.

OrderTypeCategory

Multiple selections

35,731

Orders since 01.01.2018

142

Beverages Today

127

Coffees Today

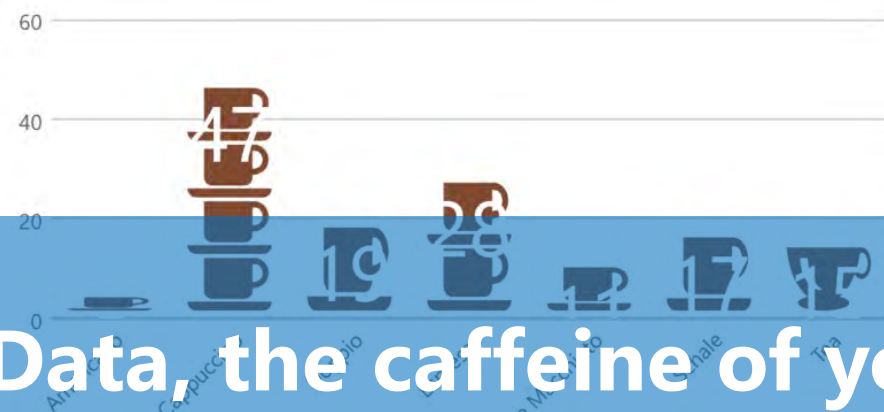
15

Tea Today

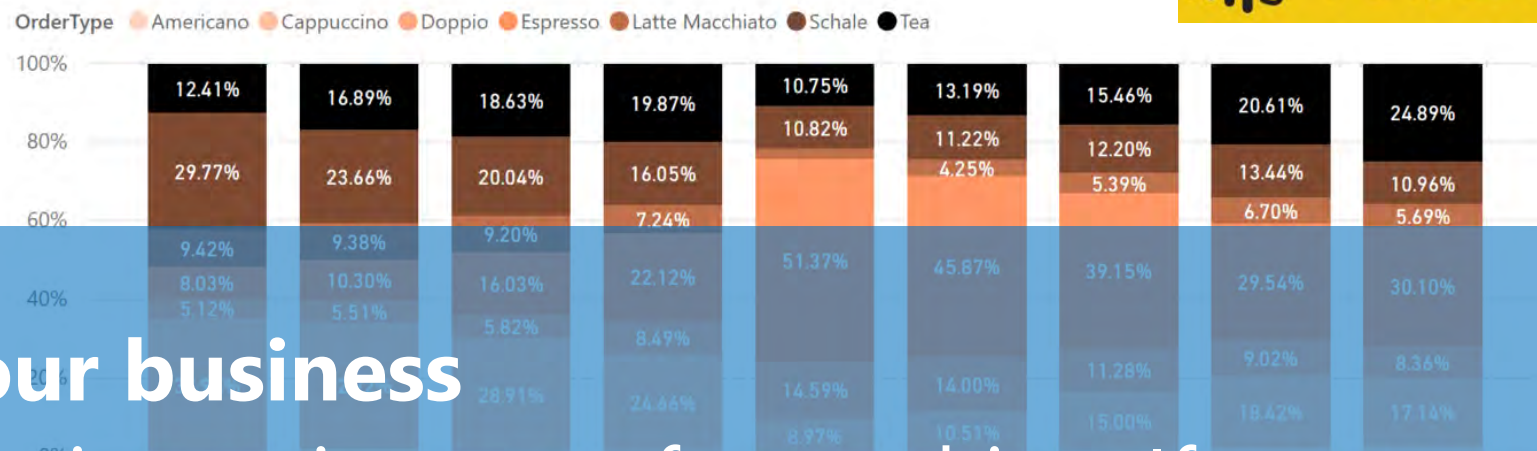
Microsoft



Count of OrderType by OrderType



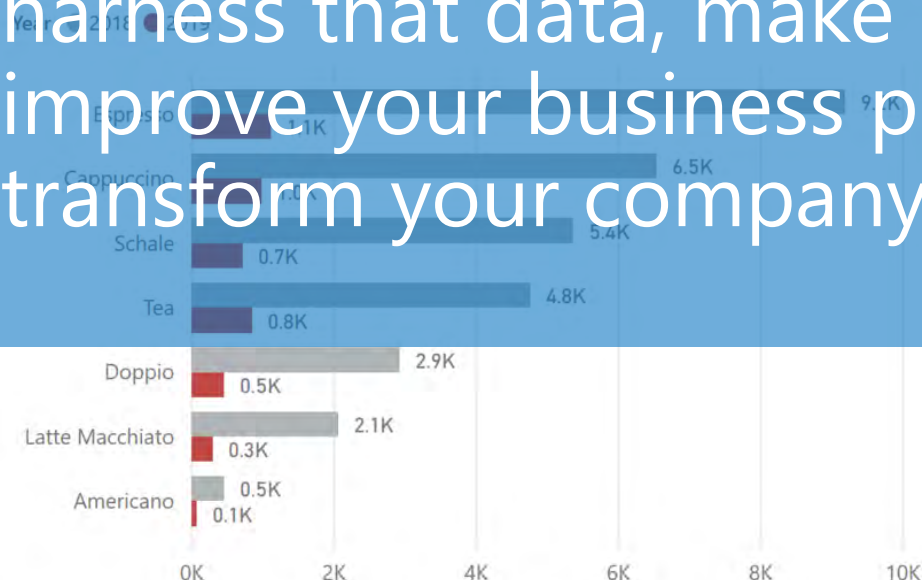
Count of OrderType by HourRange and OrderType



Data, the caffeine of your business

It all starts with data, data is coming out of everything. If you can harness that data, make intelligence out of it, and use it to improve your business processes, you're in a position to transform your company and industry.

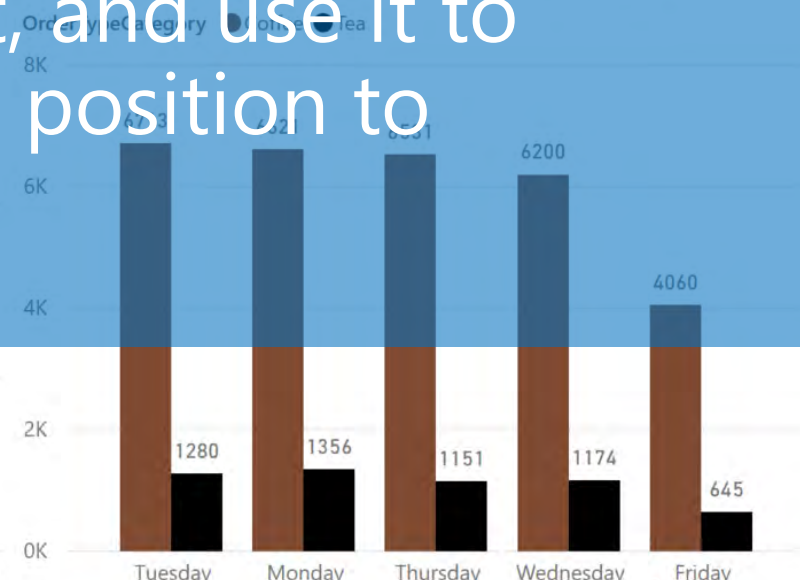
Count of OrderType by OrderType and Year



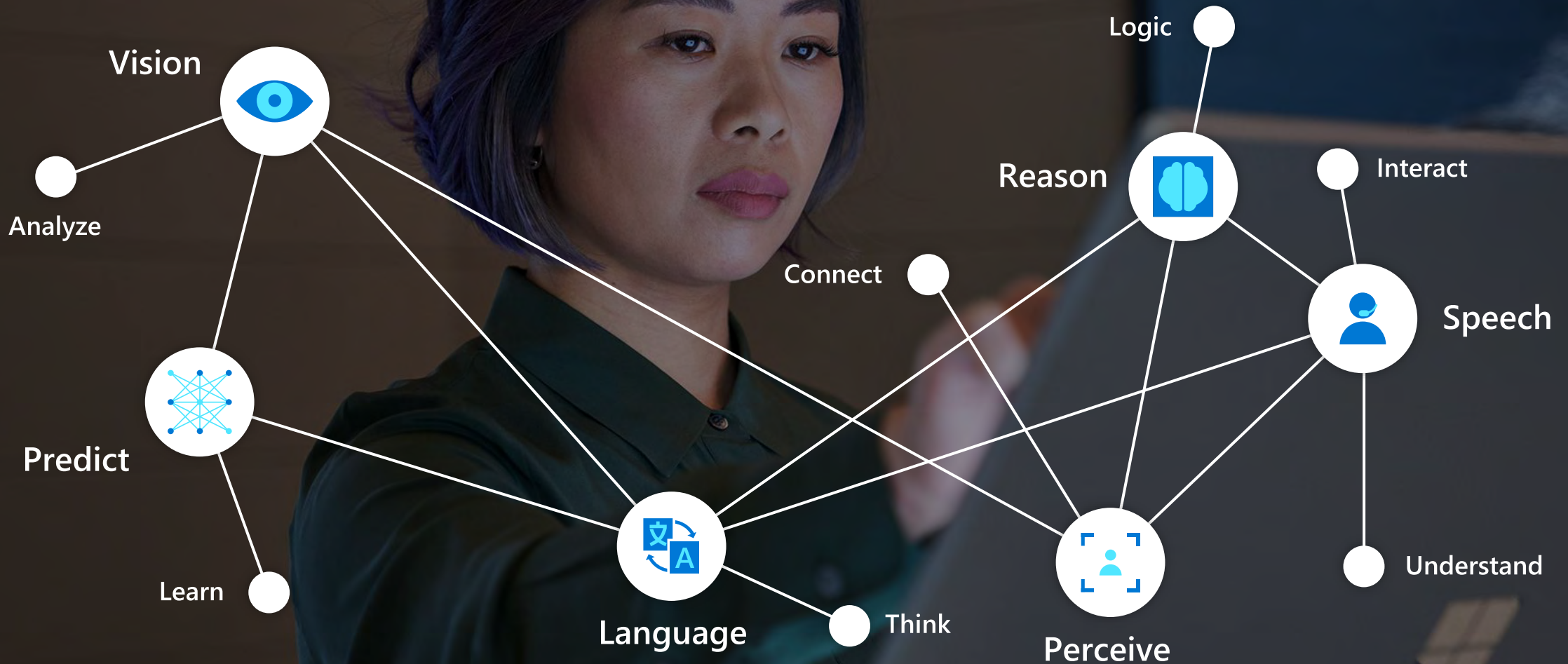
Count of OrderType by Week and Year



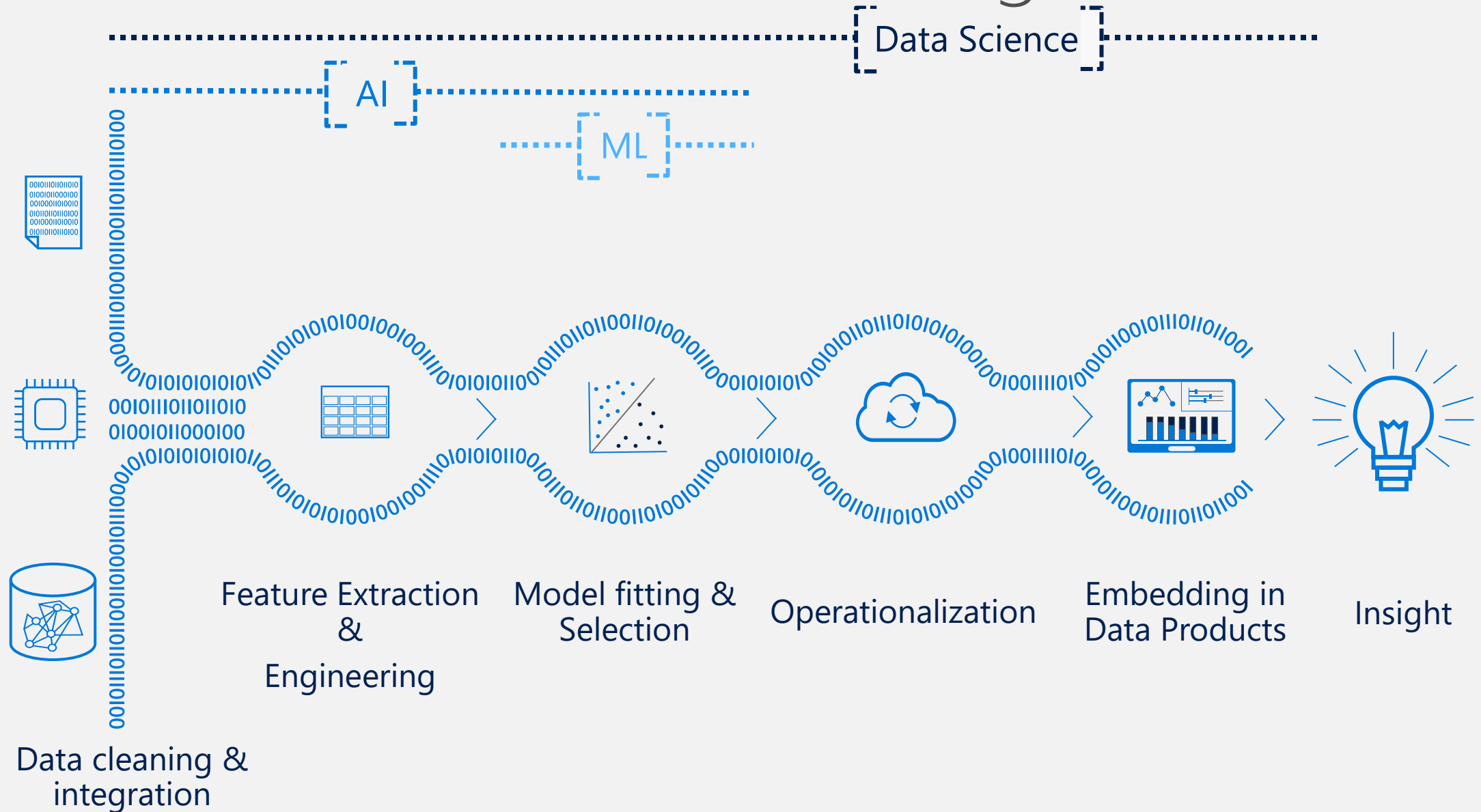
Count of OrderType by WeekdayName and OrderTypeCategory



Humans + artificial intelligence



Data Science, Machine Learning & AI



WHAT?



Explore patterns for AI solutions

New generation of business agents

B2B, B2C, B2E



Person, object, and activity detection

Retail, manufacturing, security



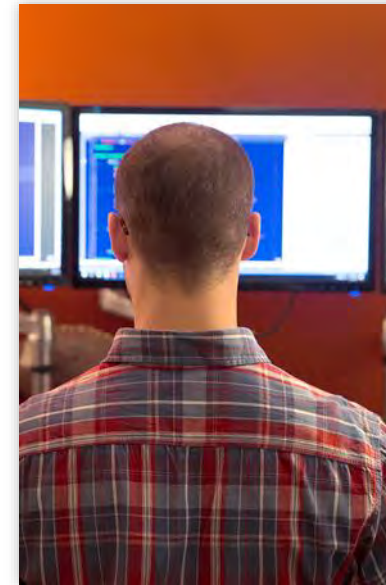
AI assisted professionals

Marketing, legal, financial



Knowledge mining

Documents, video



Autonomous systems

Vehicles, networks, RPA





Try another image

Summary Faces Objects Text

Tableware (50%)



pen (85%)



Objects

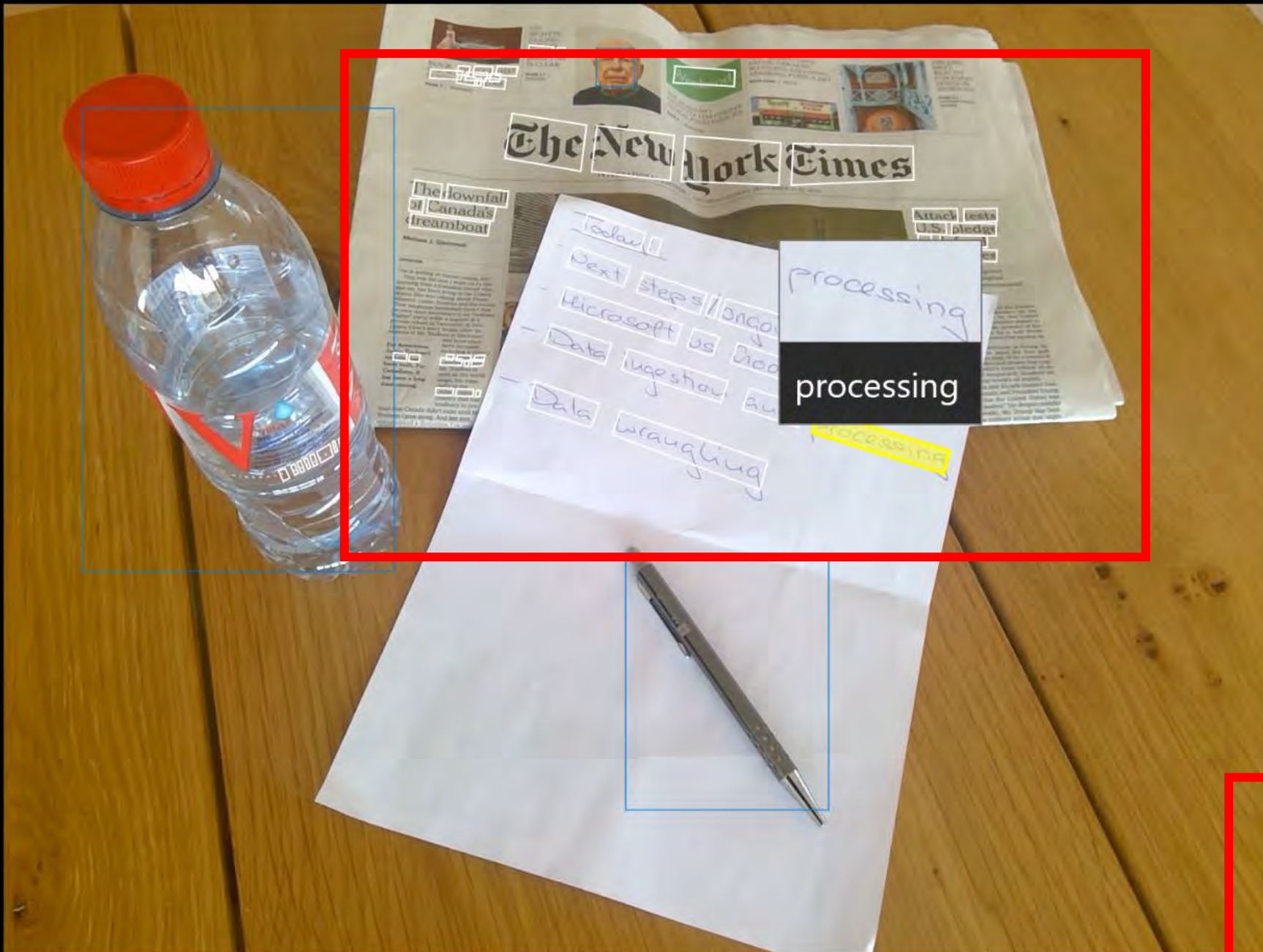


Tableware (50%)



pen (85%)

Brands



Summary Faces Objects Text

Text extracted

SIMON AS
THE HOCK THAT
SNOWS BUILT ON
Weekend
JUST A LOGO
The New york Times
The downfall
Attack tests
U.S. pledge
of Canada's
to defend
dreamboat
Today !
Gulf allies
Next steps / ongoing projects
Microsoft us Google
during has
My trend was
redeering to hope
United Suses, a
Data ingestion and processing
Data wrangling

.....

 Copy text



Example Use Case: Digital Signage



Retail

- Promotion / Upsell



Office / Conference Center

- Corporate Comms
- Begrüssung für Gäste



— NEW!

Franke Touchless: no need to touch the display of the coffee machine

Franke Touchless offers the possibility to

- **Scan** QR code to open web app with your personal device (no installation needed)
- **Select** from available beverage menu and **confirm dispense** on your device

Pre-requisites

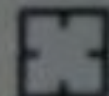
- Connected and centrally managed CM
- “Step-by-step” selection mode



Your benefit: Offer your customers the possibility to use your coffee machine without having to touch the display (e.g. COVID context)



Spanish to English



Transactions

4094

Transaction Count

\$48.20

Average Size

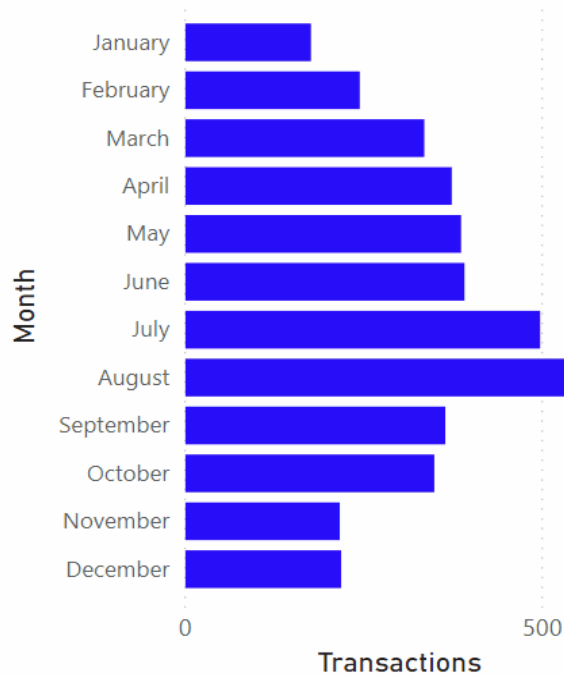
\$39.47K

Revenue

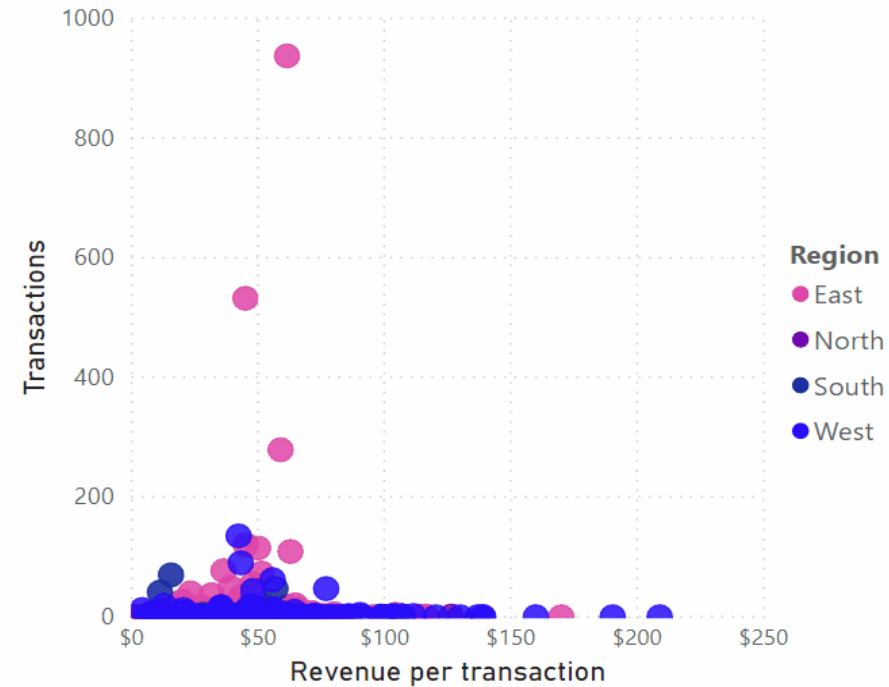
62.53%

Revenue YoY%

Transaction by Date



Transactions by Region and City



- Per visual or page-wide English summarizations of data
- Automatically updated when filtered

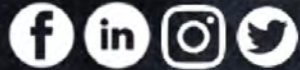
Engaging patients in new ways:

Chatbot





Simplifying Food Waste Management



KITRO bietet Restaurants und Kantinen eine innovative Lösung zur Reduzierung vermeidbarer Lebensmittelabfälle. Damit möchte KITRO dazu beitragen, das wachsende Problem des Lebensmittelmülls zu lösen und Restaurants dabei unterstützen, auf eine effiziente und mühelose Art nachhaltiger zu arbeiten. Die automatische Analyse relevanter Daten ermöglicht neue Erkenntnisse und hilft dabei, Lebensmittelabfälle zu reduzieren und dadurch Kosten zu sparen.

WENIGER ABFALL

Reduzieren Sie ihre vermeidbaren Lebensmittelabfälle um 60%

MEHR GEWINN

Profitieren Sie von einer Erhöhung der Lebensmittel Gewinnmarge von 2-8%



<https://www.kitro.ch/>



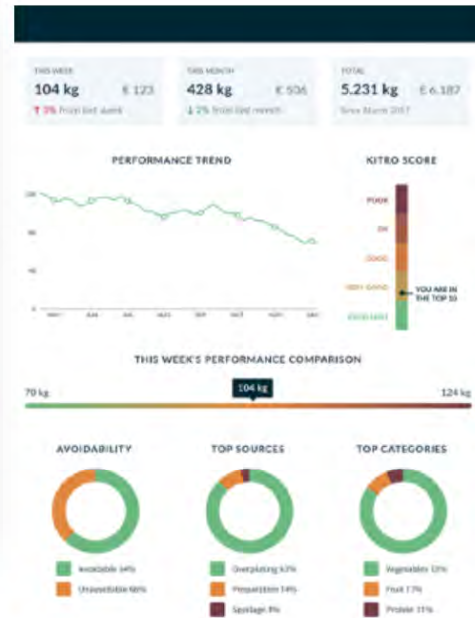
WIE FUNKTIONIERT ES?

Das Produkt besteht aus einem Gerät mit Kamera, welches über dem Müll installiert wird. Die Waage darunter misst das Gewicht. Mit neuester Bilderkennungstechnologie können die Nahrungsmittel automatisch und ohne Zeitverlust gemessen und identifiziert werden.

Die Zutaten und Menus werden zusätzlich mit ihren jeweiligen Kosten verbunden und es wird zwischen vermeidbaren und unvermeidbaren Abfällen unterschieden.



BERICHTE & EVALUIERUNG



Alle zwei Wochen sendet KITRO einen Bericht, welcher die Daten zusammenfasst und die Hauptquellen des Abfalls aufzeigt. Mittels relevanten Empfehlungen und neuen Erkenntnissen können Sie ihren Betrieb effizienter und ressourcenschonender betreiben.

70%

aller gemessenen Abfälle werden erkannt

FALLSTUDIEN

Luxus Hotel Bistro
1 Monat

↓ 41%

vermeidbare Lebensmittelabfälle

↓ 24%

Kostenreduktion

Universitätskantine
3 Monate

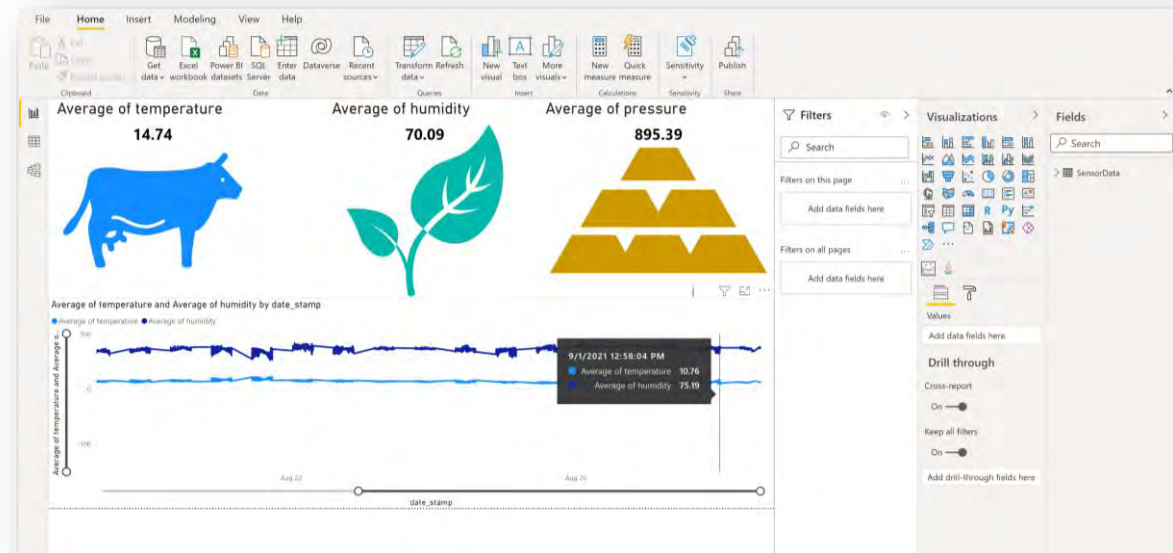
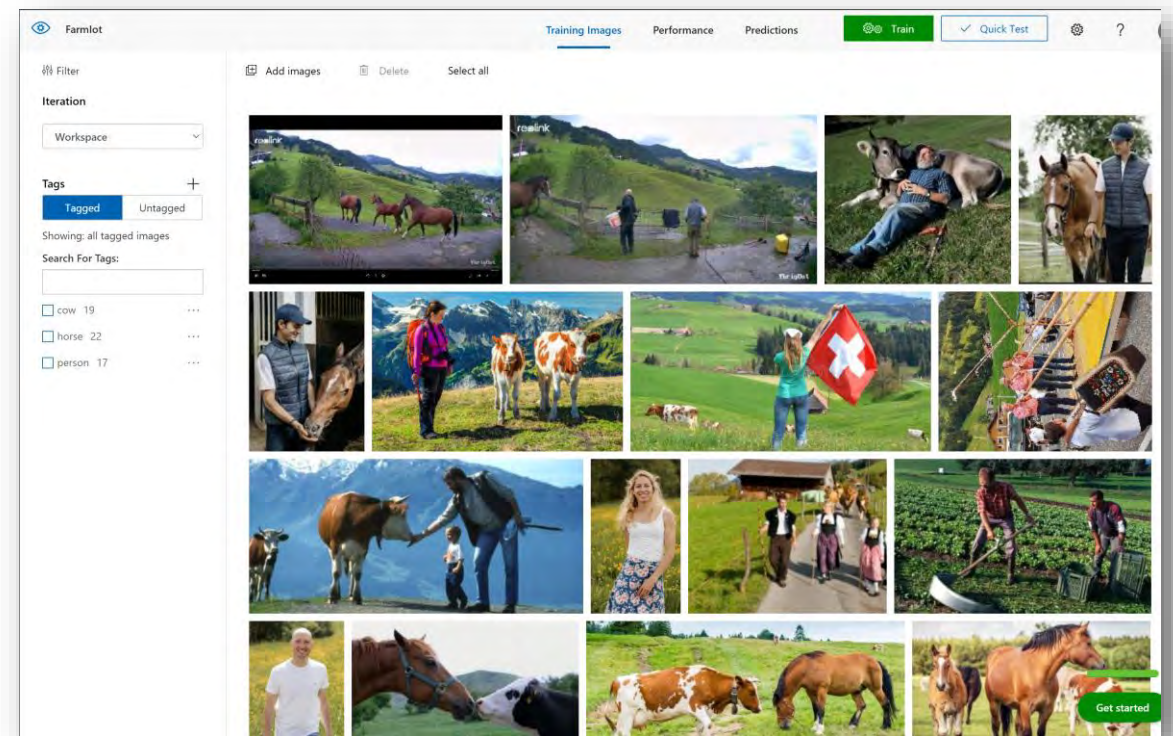
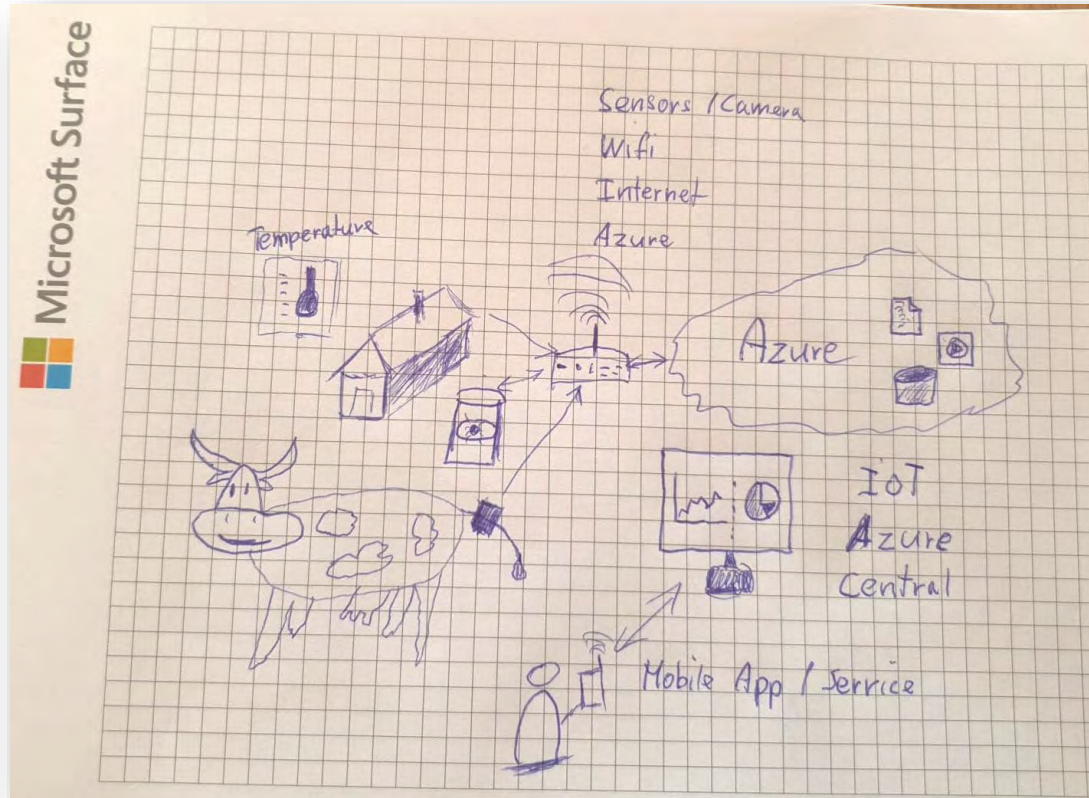
↓ 34%

vermeidbare Lebensmittelabfälle

↓ 50%

Kostenreduktion

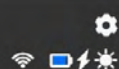
Data Analytics Dashboard IoT Machine Learning / AI



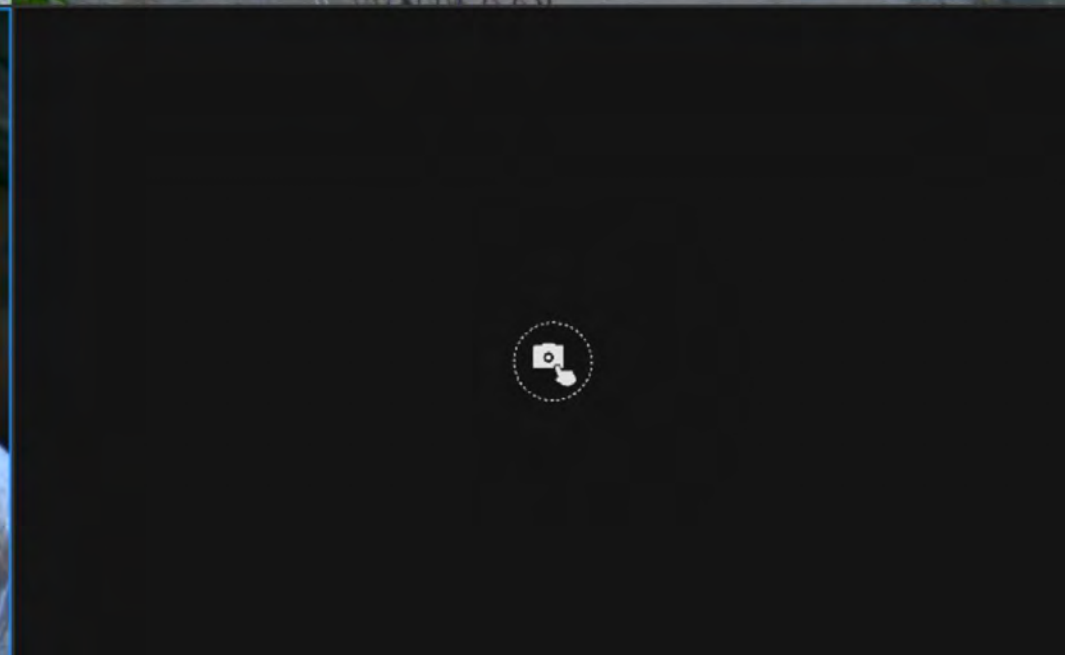
YbrigOne
• Connected



YbrigOut
• Connected



YbrigB
• Connected



Iteration

Workspace

Tags

Tagged

Showing: all untagged

Suggested Tags

Quickly label your untags
with suggested objects

Get suggested

Suggested Objects

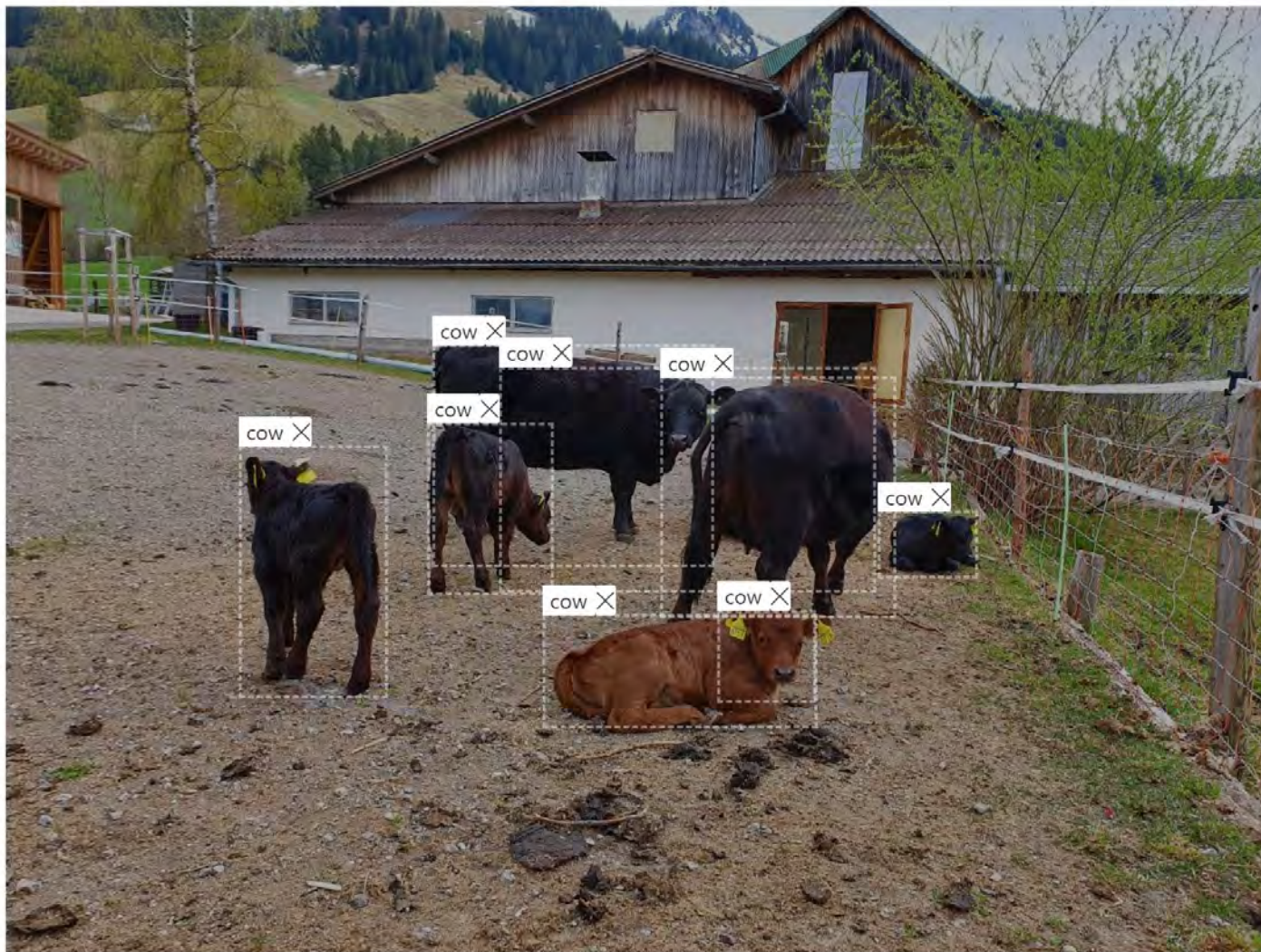
cow (1)

horse (0)

person (0)

Image Detail

Undo Changes

☒ Regions Shown☒ Suggested objects on

My Objects



To create an object, hover and select the region in the image

Suggested Objects

Based on your trained model, we've suggested objects in your images. Click on the objects to modify them.

Only show suggested objects if the probability is above the selected threshold.

Threshold Value: 60%

[Confirm suggested objects](#)

Iteration

Workspace

Tags

Tagged

Showing: all untagged

Suggested Tags

Quickly label your untagged images with suggested objects

Get suggested

Suggested Objects

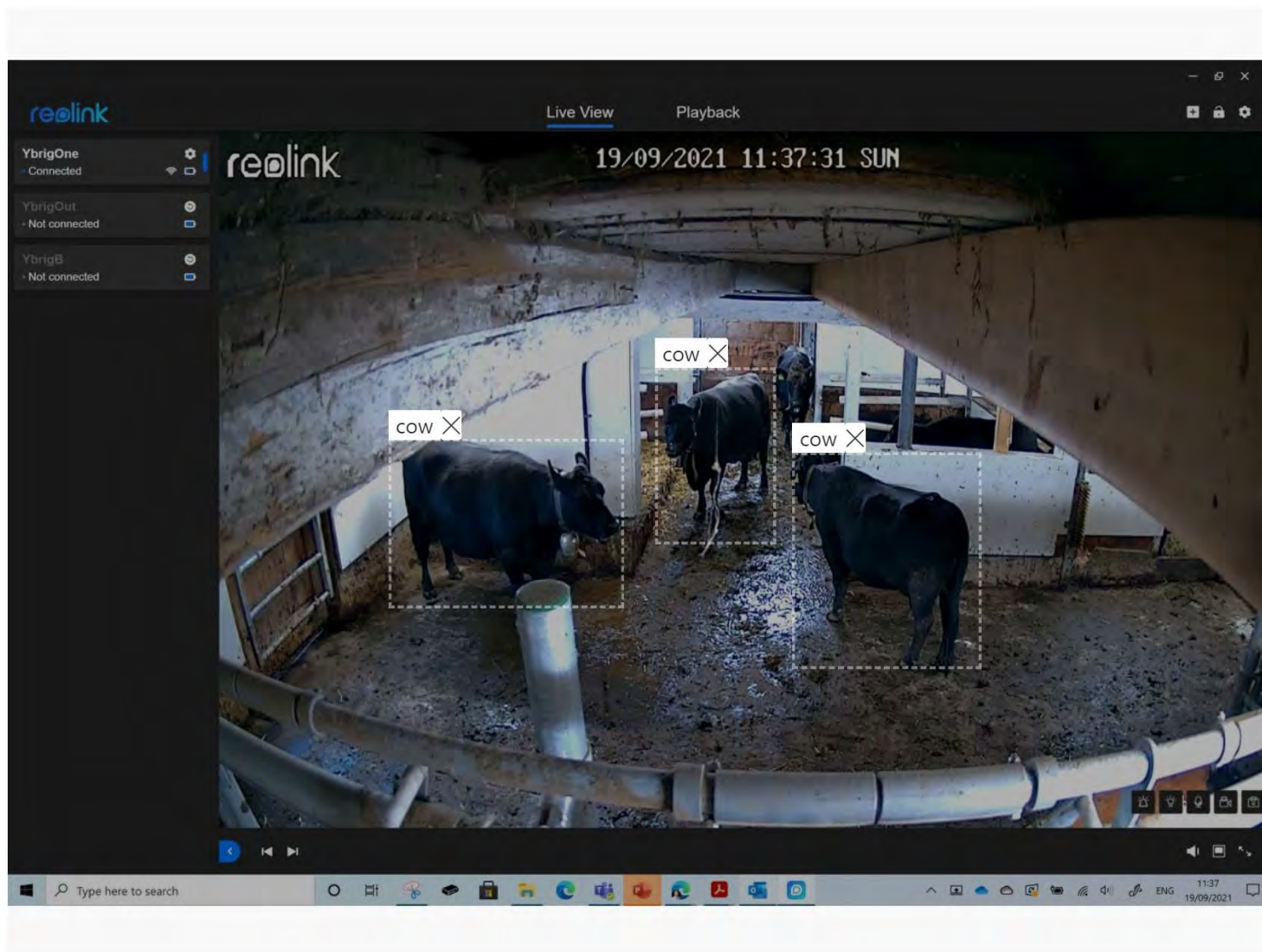
cow (1)

horse (0)

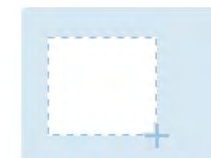
person (0)

Image Detail

Undo Changes

☒ Regions Shown☒ Suggested objects on

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Suggested Tags

Quickly label your untags with suggested objects

Get suggested

Suggested Objects

cow (1)

horse (1)

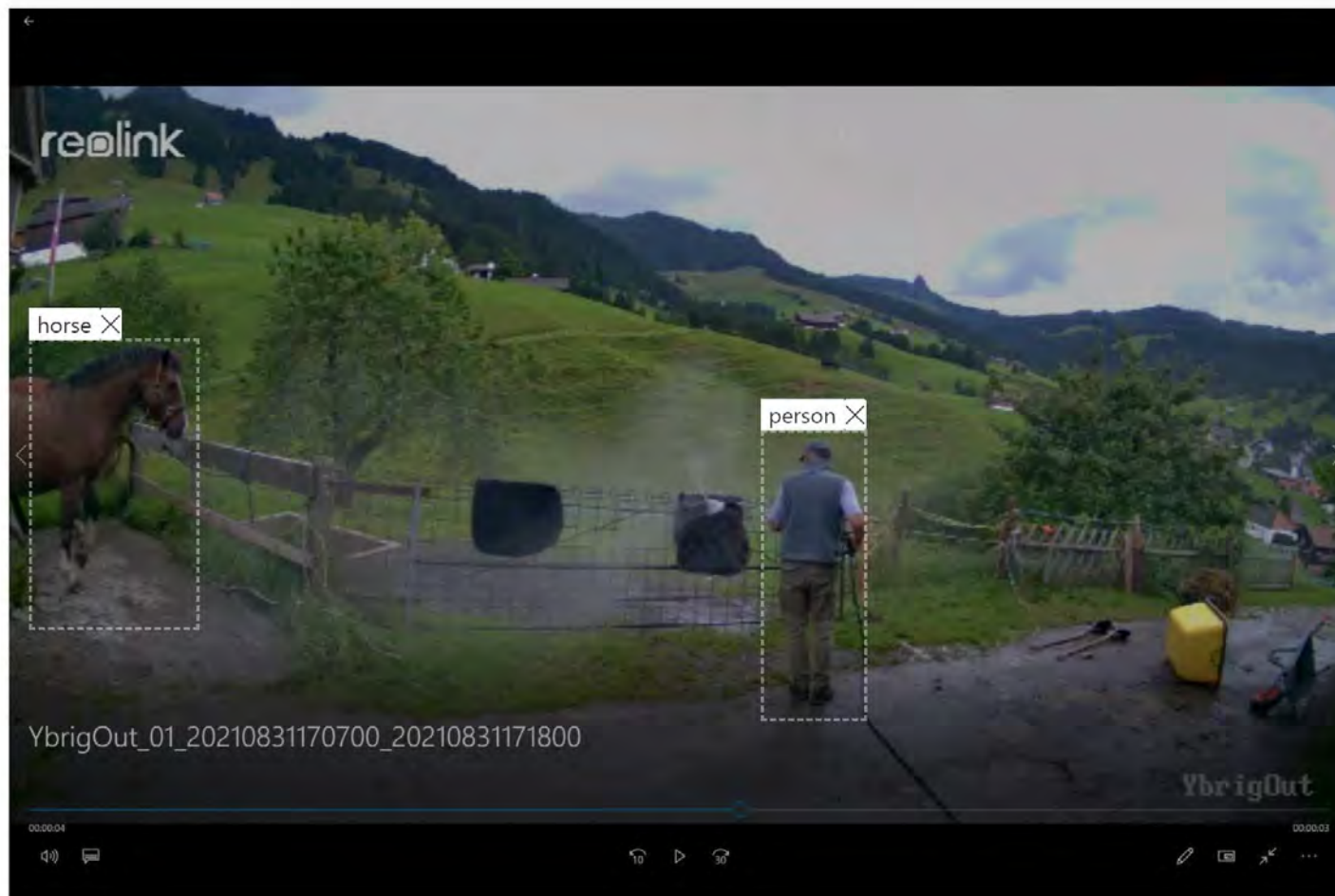
person (1)

Image Detail

Undo Changes

☒ Regions Shown

☒ Suggested objects on



My Objects



To create an object, hover and select the region in the image

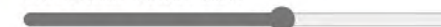
Suggested Objects

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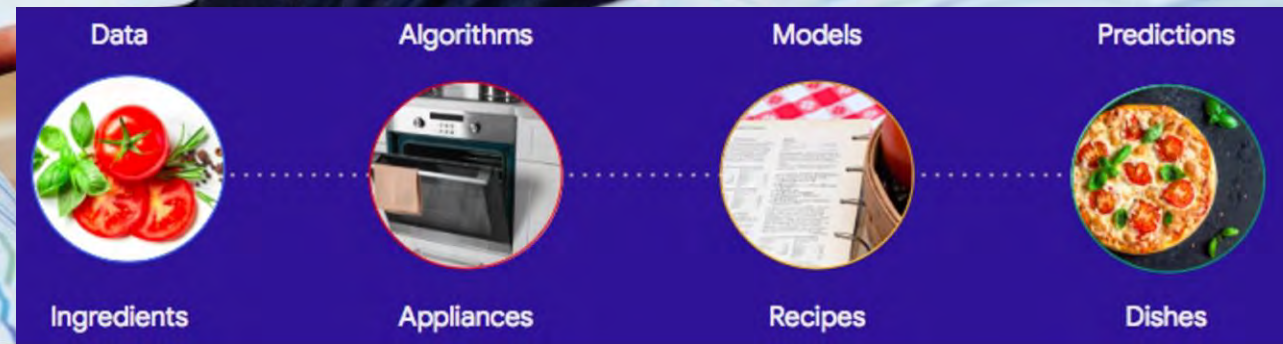


Only show suggested objects if the probability is above the selected threshold.

Threshold Value: 60%



Confirm suggested objects



Wait a minute, AI, ML or Deep Learning?



Data as a strategic asset

Today's data realities



Volume



Variety



Velocity

What **data** do I have?

Break down silos

Is it **trustworthy**?

Can people access the data
needed to make the right decisions?

Democratize access to insights

How can I
enable faster business insights?

Upgrade legacy to cloud

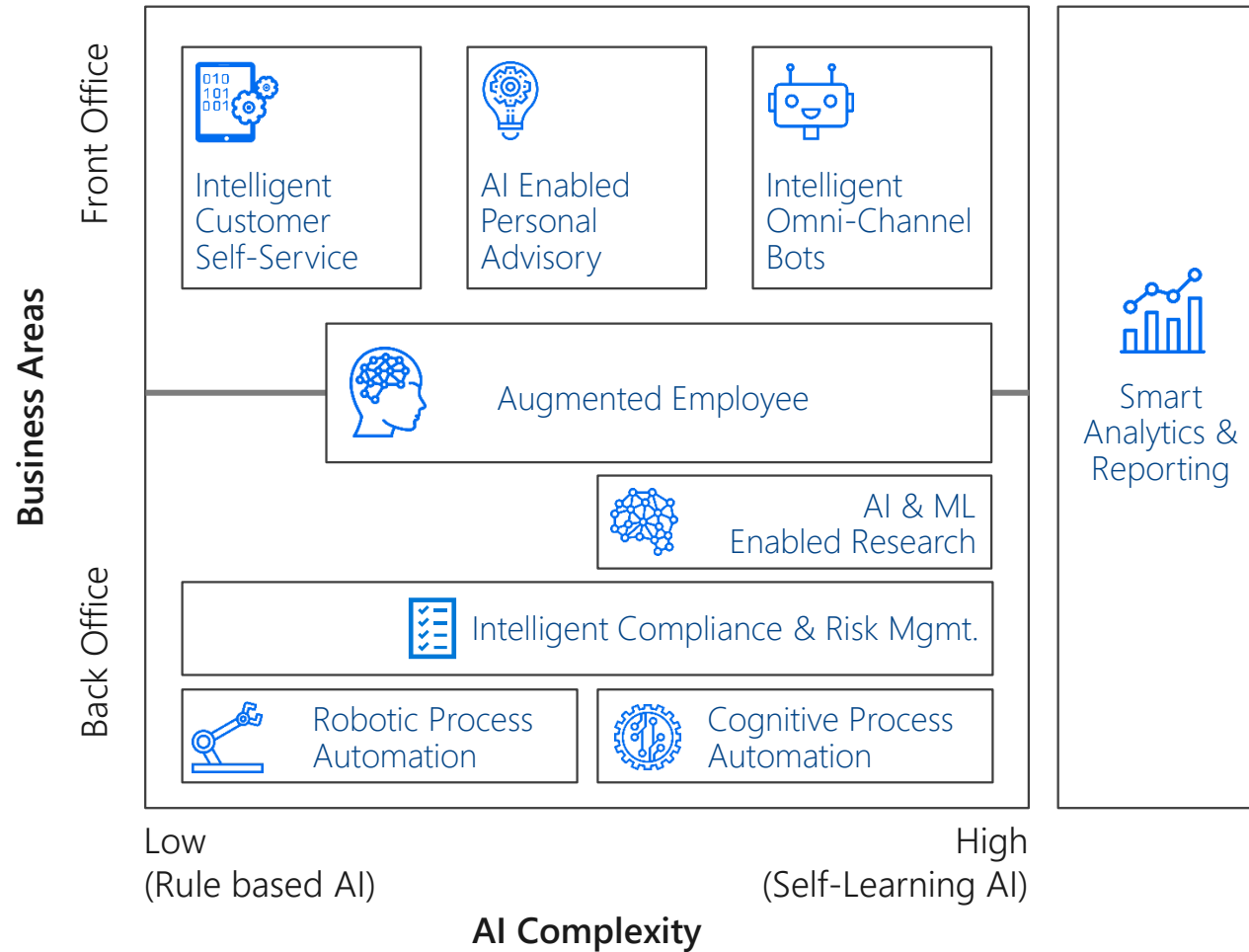
What's my **compliance exposure**?

Ensure data privacy and governance

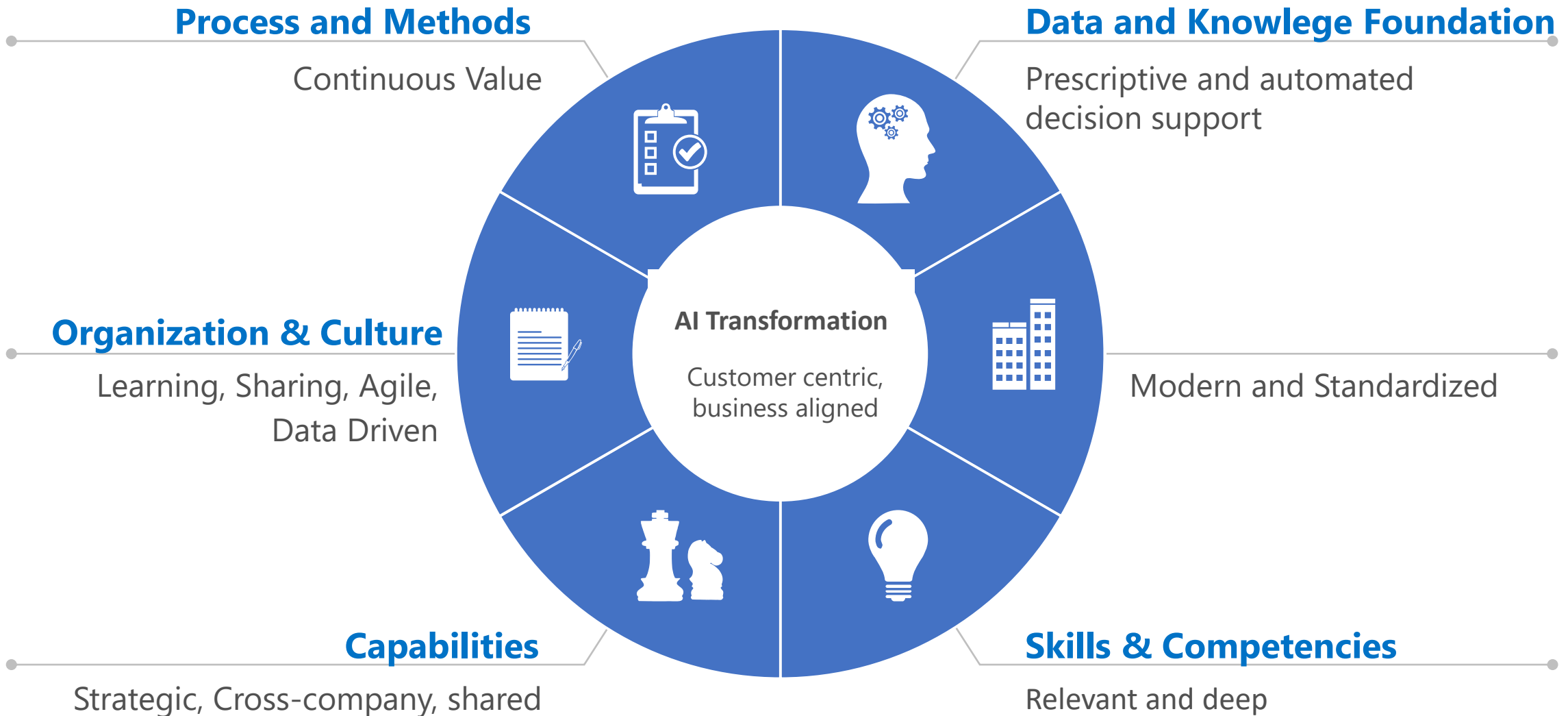
HOW?



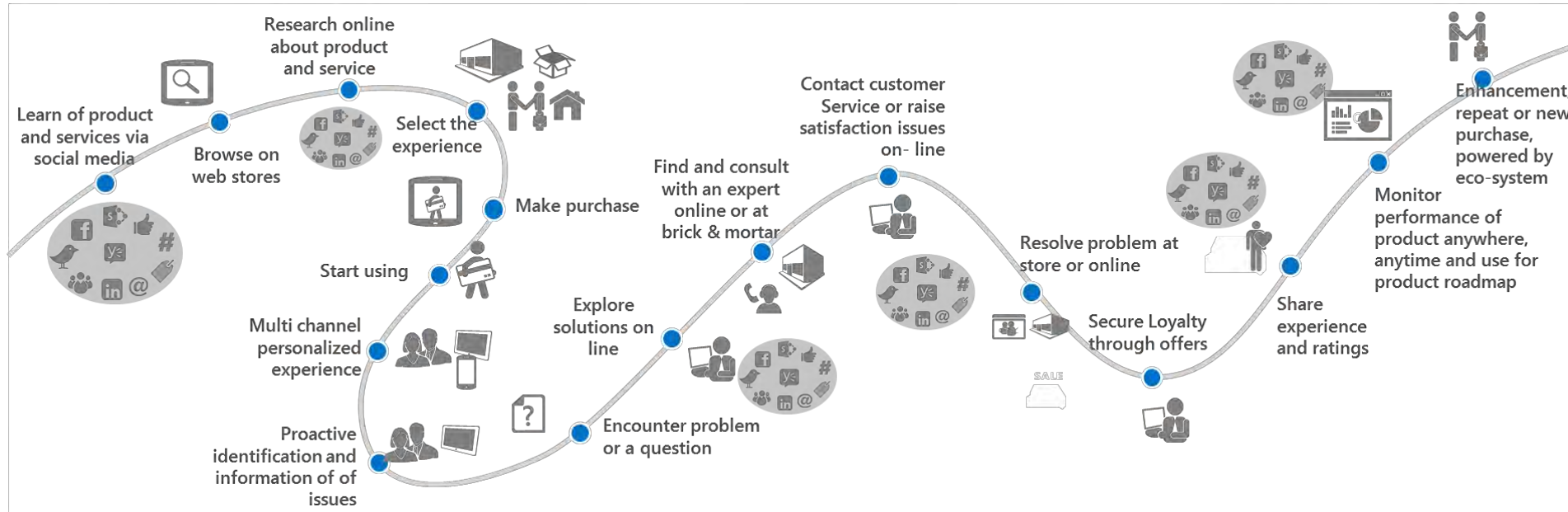
Steps to a Data Driven Company (Example)



Build AI Maturity Capabilities



Customer Experience Journey Map



Digital Hotspots

Pre-Purchase

- Digital presence for products and store awareness
- Omni channel purchase
- Multi channel distribution and interactivity

Purchase

- Omni channel, multi device solution for purchase
- Customer support
- Arranging payment
- Tracking shipment

Post-Purchase

- Social network presence and management
- Receiving customer service
- Resolving problems anywhere
- Continued the experience
- Developing eco-system

Patient experience journey map



DIGITAL HOT SPOTS

Prior to Visit

Seeking healthcare information, remote triage
 Choosing a physician or caregiving facility for treatment
 Appointment scheduling and reminders

Diagnosis and Treatment

Remote interactions with providers
 Accessing and sharing electronic health records (EHR)
 AI-based provider support
 Care team collaboration

Follow-up Care

Filling, refilling, and approving prescriptions
 Remote health monitoring
 Ongoing patient care and plan reminders

TOOLS



Develop faster than ever before with the Microsoft Platform

Power
Platform



Power BI



Power Apps /
AI Builder



Power Automate



Power Virtual Agents

Design & Create
(Low Code)

<https://powerapps.microsoft.com/en-us/>

Sophisticated pretrained models

To simplify solution development



Vision



Speech



Language



Search

Popular frameworks

To build advanced deep learning solutions



Pytorch



TensorFlow



Keras



Onnx

Productive services

To empower data science and development teams



Azure
Databricks



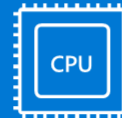
Azure
Machine Learning



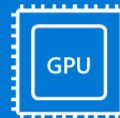
Machine Learning
VMs

Powerful infrastructure

To accelerate deep learning



CPU



GPU



FPGA

Flexible deployment

To deploy and manage models on intelligent cloud and edge



On-premises



Cloud

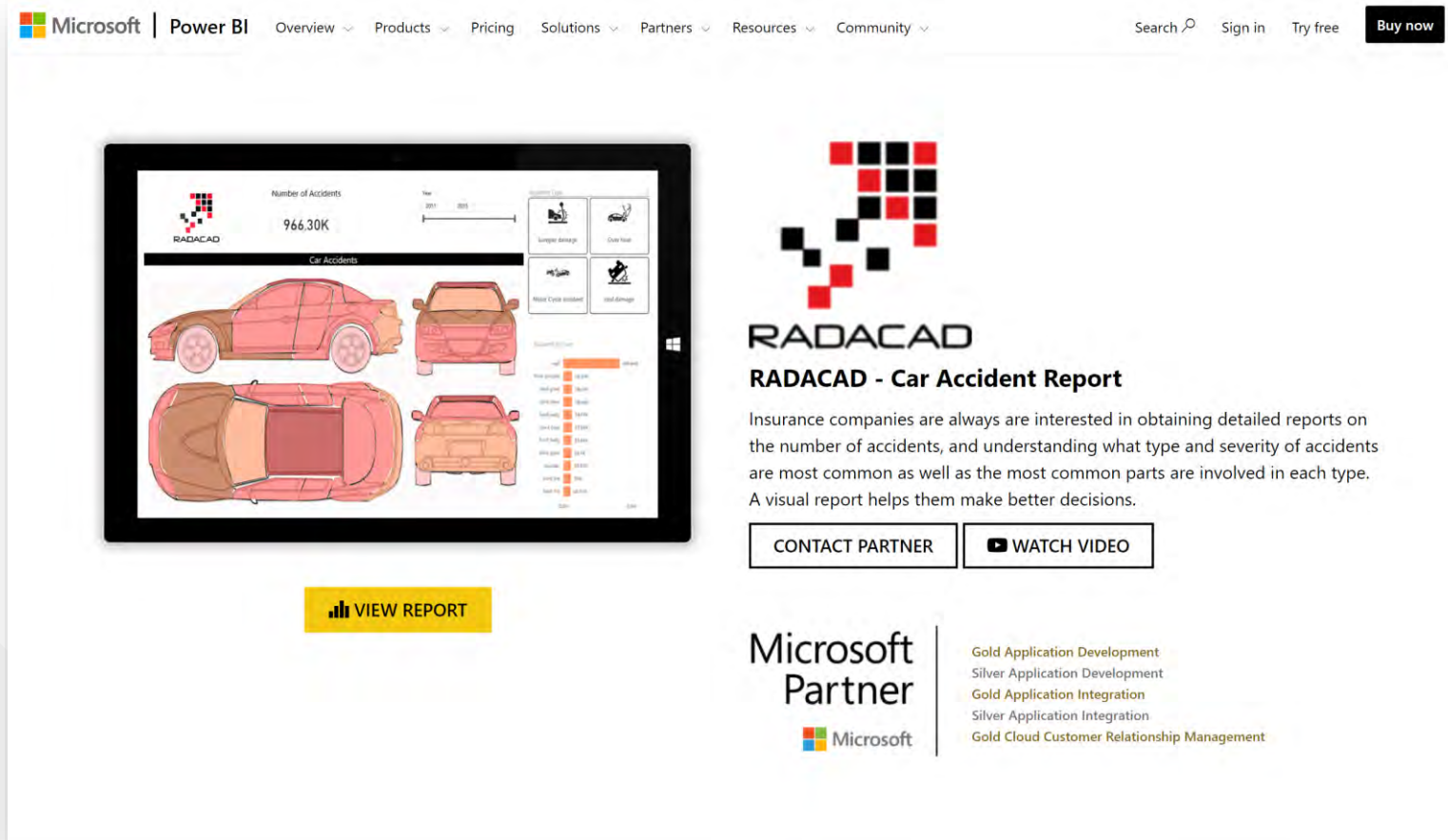


Edge

Pro Developer
(Code First)

Power BI

Discovering the right BI Solution for your Business?



The screenshot displays the Microsoft Power BI website. The navigation bar includes links for Overview, Products, Pricing, Solutions, Partners, Resources, and Community. A search bar, Sign in, Try free, and Buy now buttons are also present. The main content area features a large dashboard titled "RADACAD - Car Accident Report". The dashboard includes a "Number of Accidents" section with a value of 966.30K, a "Car Accidents" section with four car illustrations, and a "RADACAD" logo. Below the dashboard is a "VIEW REPORT" button. To the right of the dashboard is a "CONTACT PARTNER" button and a "WATCH VIDEO" button. At the bottom, the "Microsoft Partner" logo is displayed, along with a list of services: Gold Application Development, Silver Application Development, Gold Application Integration, Silver Application Integration, and Gold Cloud Customer Relationship Management.

Microsoft | Power BI Overview Products Pricing Solutions Partners Resources Community Search Sign in Try free Buy now

RADACAD
RADACAD - Car Accident Report

Insurance companies are always are interested in obtaining detailed reports on the number of accidents, and understanding what type and severity of accidents are most common as well as the most common parts are involved in each type. A visual report helps them make better decisions.

CONTACT PARTNER WATCH VIDEO

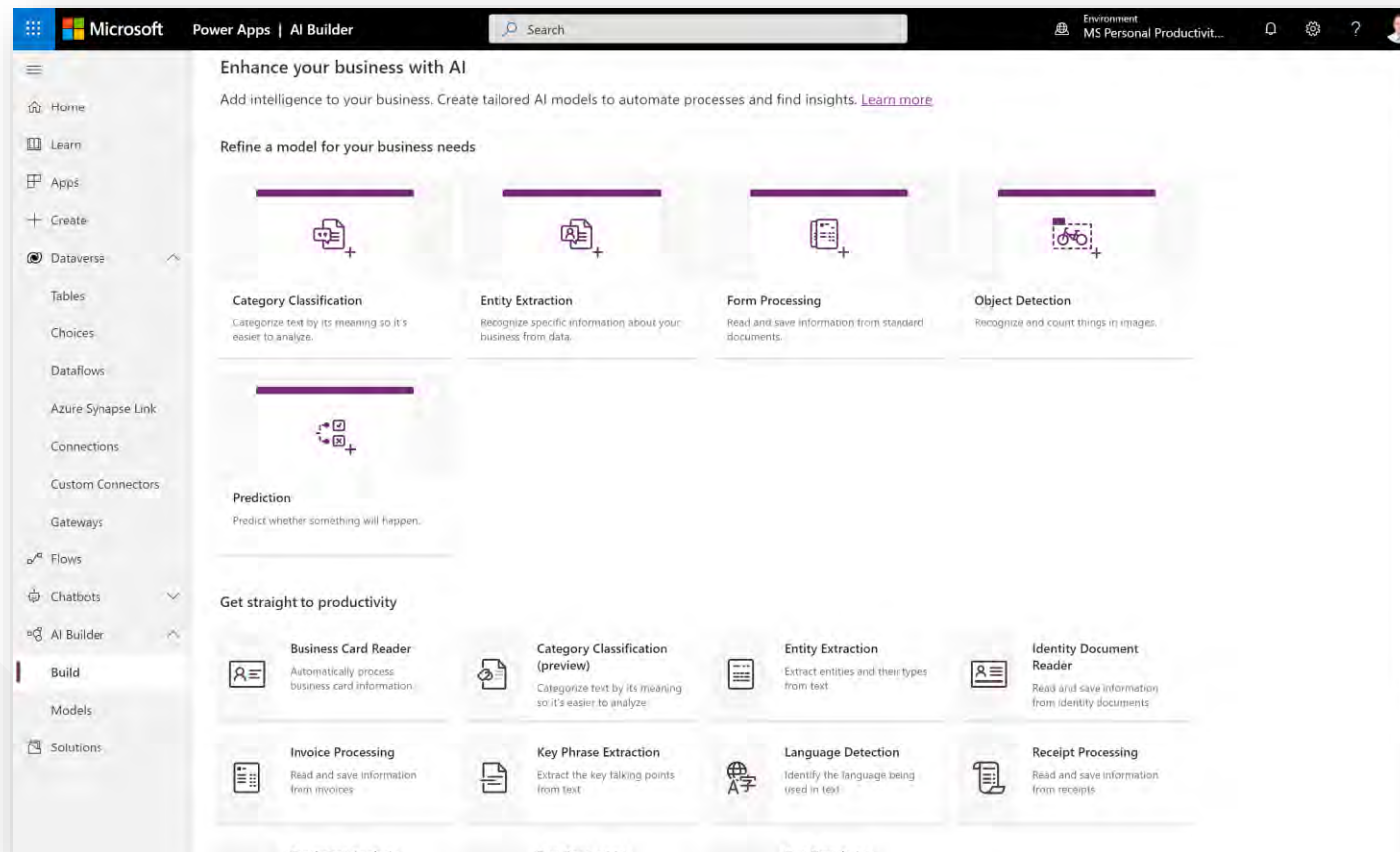
Microsoft Partner

- Gold Application Development
- Silver Application Development
- Gold Application Integration
- Silver Application Integration
- Gold Cloud Customer Relationship Management

[Partner showcase | Microsoft Power BI](#)

Power Platform

Turn great ideas into impactful solutions



[Business Application Platform | Microsoft Power Platform](#)



A.I.

AI is changing how business works across all industries. We created AI Business School to share insights and practical guidance from top executives on how to strategically apply AI in your organization.

<https://www.microsoft.com/en-us/AI/AI-business-school>

Some book recommendations

- 🔖 [Inhaltsverzeichnis](#)
- 🔖 1 Einleitung
- 🔖 2 Digital Business Development – Die Agilität des digitalen Zeitalters managen
- 🔖 3 Start-ups und Unternehmen zu Zeiten der digitalen Disruption
- 🔖 4 Digital Ecosystems
- 🔖 5 Digital Business Innovation Culture – Der Mensch im Fokus
- 🔖 6 Design Thinking – Ein Buzzword, oder steckt doch mehr dahinter?
- 🔖 7 Daten als Treiber der digitalen Transformation
- 🔖 8 Artificial Intelligence und der Einfluss auf das Business
- 🔖 9 Digitale Transformation – Transformation der Unternehmen im digitalen Zeitalter
- 🔖 Stichwortverzeichnis



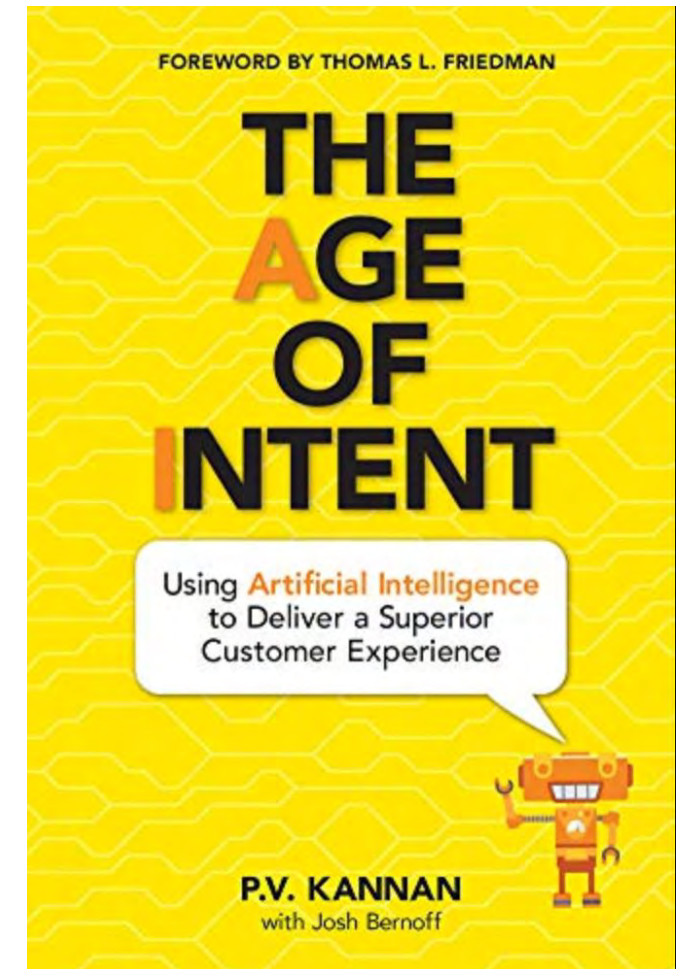
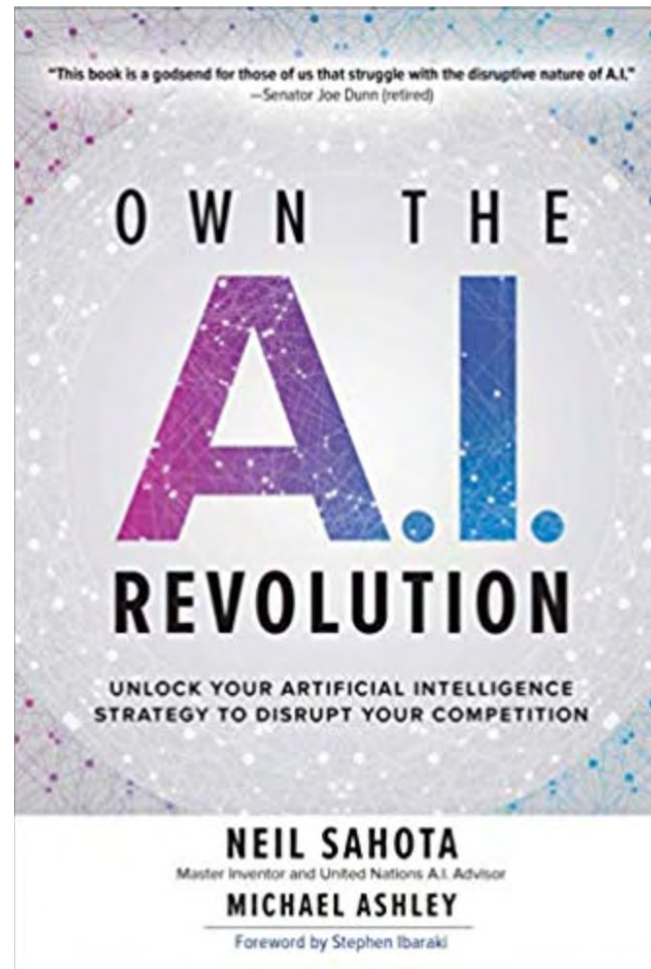
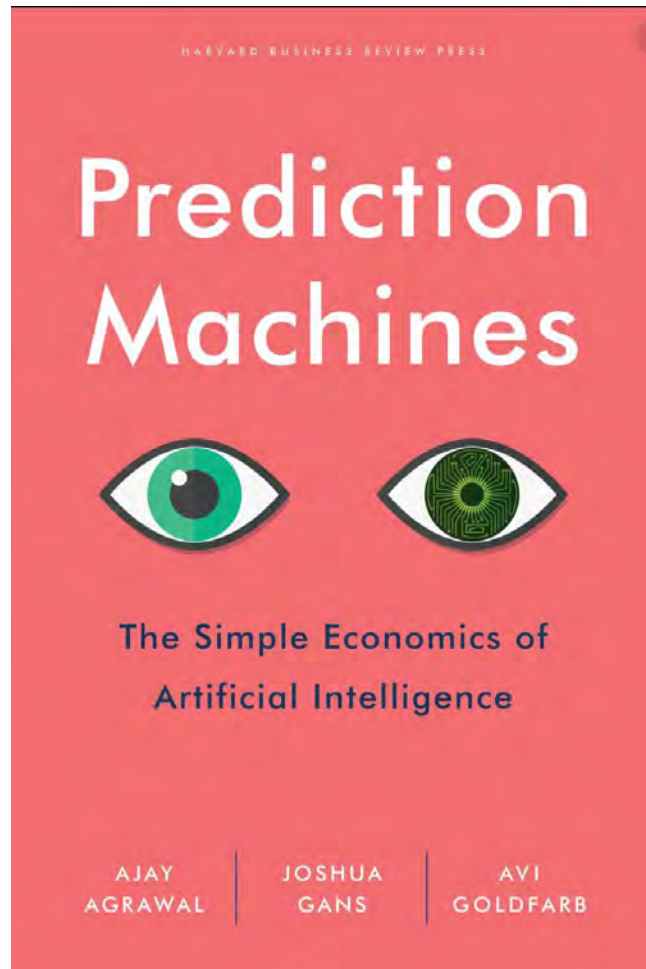
Claudio Mirti

Zusammenfassung

Von autonomen Robotern bis hin zu algorithmischen Nachrichten, von Produktempfehlungen bis hin zur Verarbeitung von Patientendaten, von virtuellen Assistenten bis hin zur Spracherkennung – Artificial Intelligence (AI) gilt weithin als einer der größten technologischen Umbrüche der Neuzeit (wenn nicht gar als der größte), vergleichbar mit vergangenen Veränderungen wie der industriellen Revolution, dem Computerzeitalter und dem Aufkommen des Smartphones. Deshalb ist es umso wichtiger, sich mit dieser Thematik auseinanderzusetzen, um die Anwendungsmöglichkeiten und Zusammenhänge zu verstehen. In diesem Kapitel werden zuerst die Grundlagen zu AI erläutert sowie geklärt, welche Bereiche schon mit dieser Technologie infiziert wurden. Weiter wird erklärt, wie sich AI zusammensetzt und wieso Machine Learning eigentlich die Weiterentwicklung von AI ist. Dies wird mit verschiedenen, bereits existierenden und bekannten Lösungen veranschaulicht. Da wir in einer Welt von Algorithmen leben, sind ethische sowie gesellschaftliche Aspekte im Umgang mit AI-Lösungen wichtig. Darauf wird ebenfalls eingegangen. Anschließend wird gezeigt, welcher Ansatz oder welche Vorgehensweise gewählt werden kann, um AI-Projekte im Unternehmen zu initiieren oder eine stufenweise Annäherung an AI zu ermöglichen.

C. Mirti (✉)
Microsoft, Wallisellen, Schweiz

Some book recommendations





Boston Dynamics



THANK YOU.

Claudio Mirti

