



INNOVATE

DATA EDITION

Building a smarter, faster business
with a modern data strategy

Olivier Klein

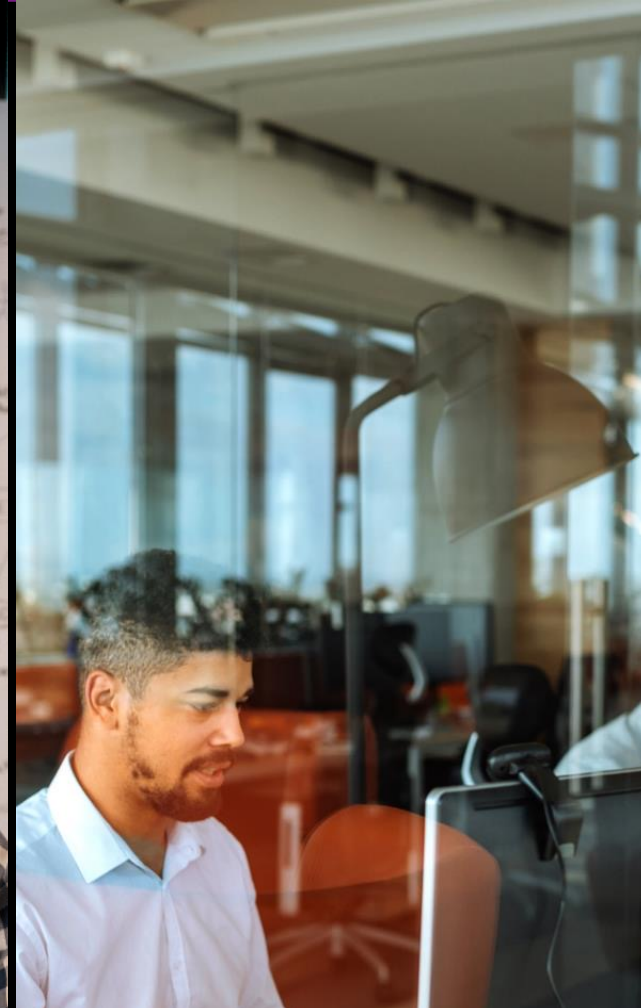
Chief Technologist Asia-Pacific
Amazon Web Services



Transform customer
experience



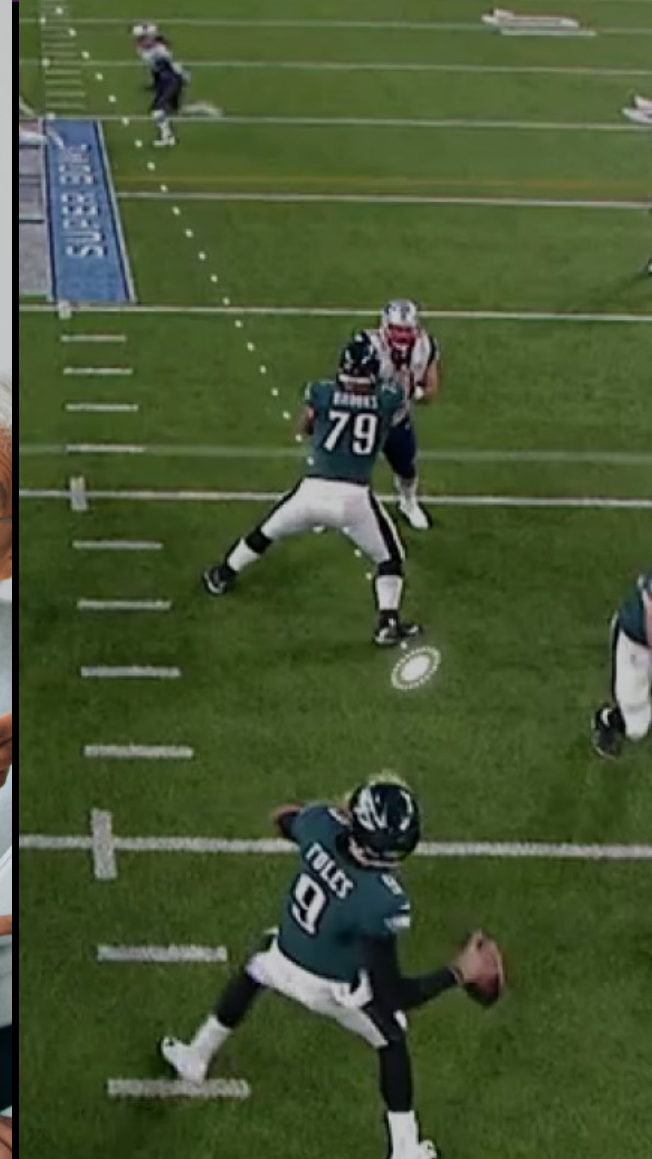
Improve business
operations



Better and faster
decision-making



Innovation



Intuit®

CONVOY

 Cerner®



Improve Operations:

Demand and financial forecasting
Process automation and optimization
Supply chain optimization
Fraud detection
Anomaly detection

Marketing Optimization:

Customer 360
Improve targeting
Better understand performance
Churn analysis

Customer Experience:

Personalization & Recommendations
Contact Center intelligence
Customer-insight driven product development

Application development:

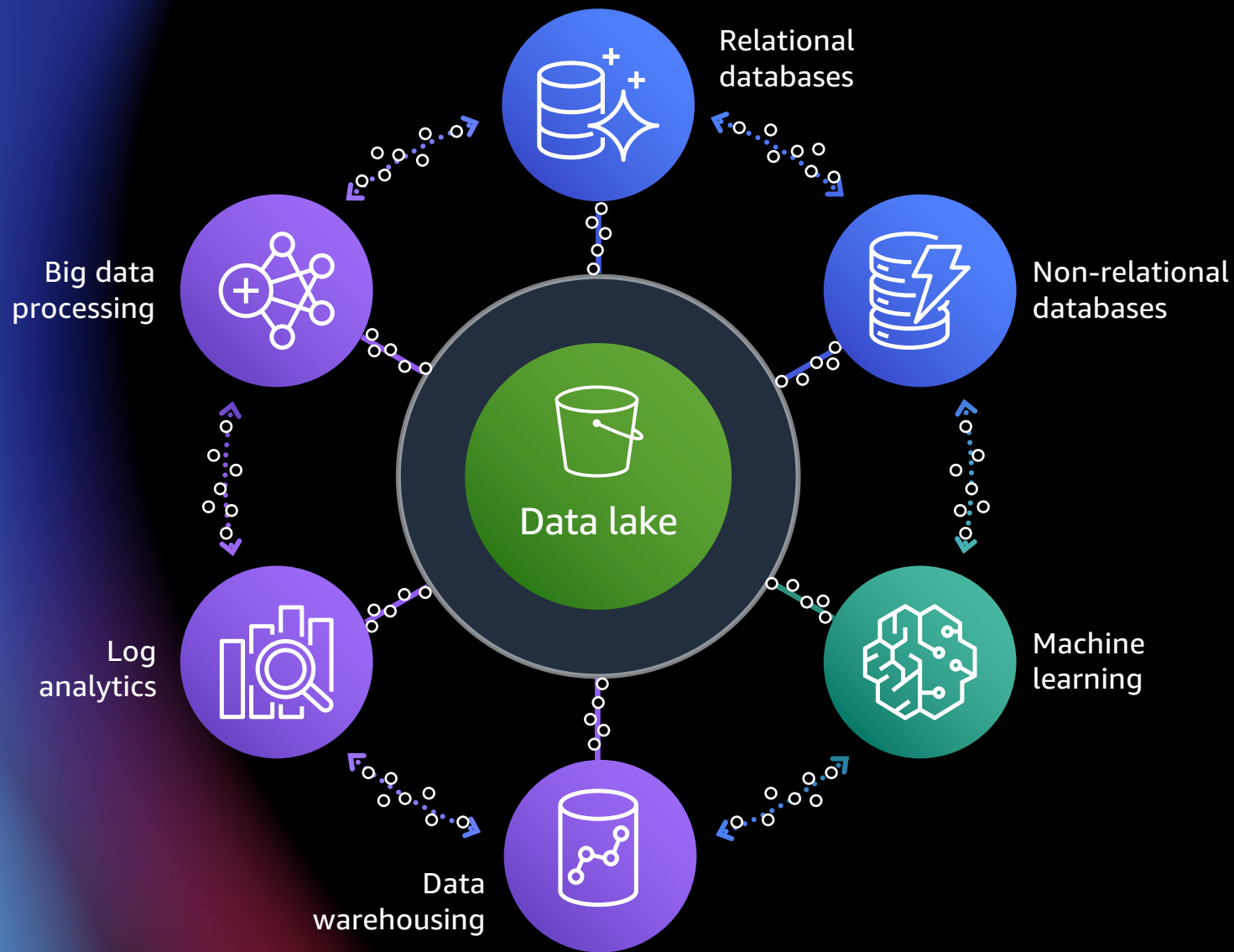
Data-based applications
Dev operations

Work backwards from business outcomes

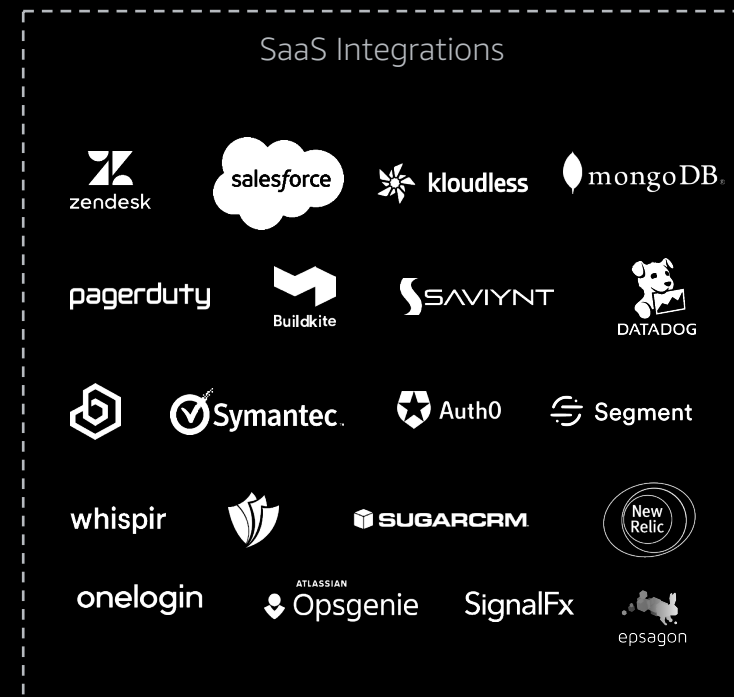
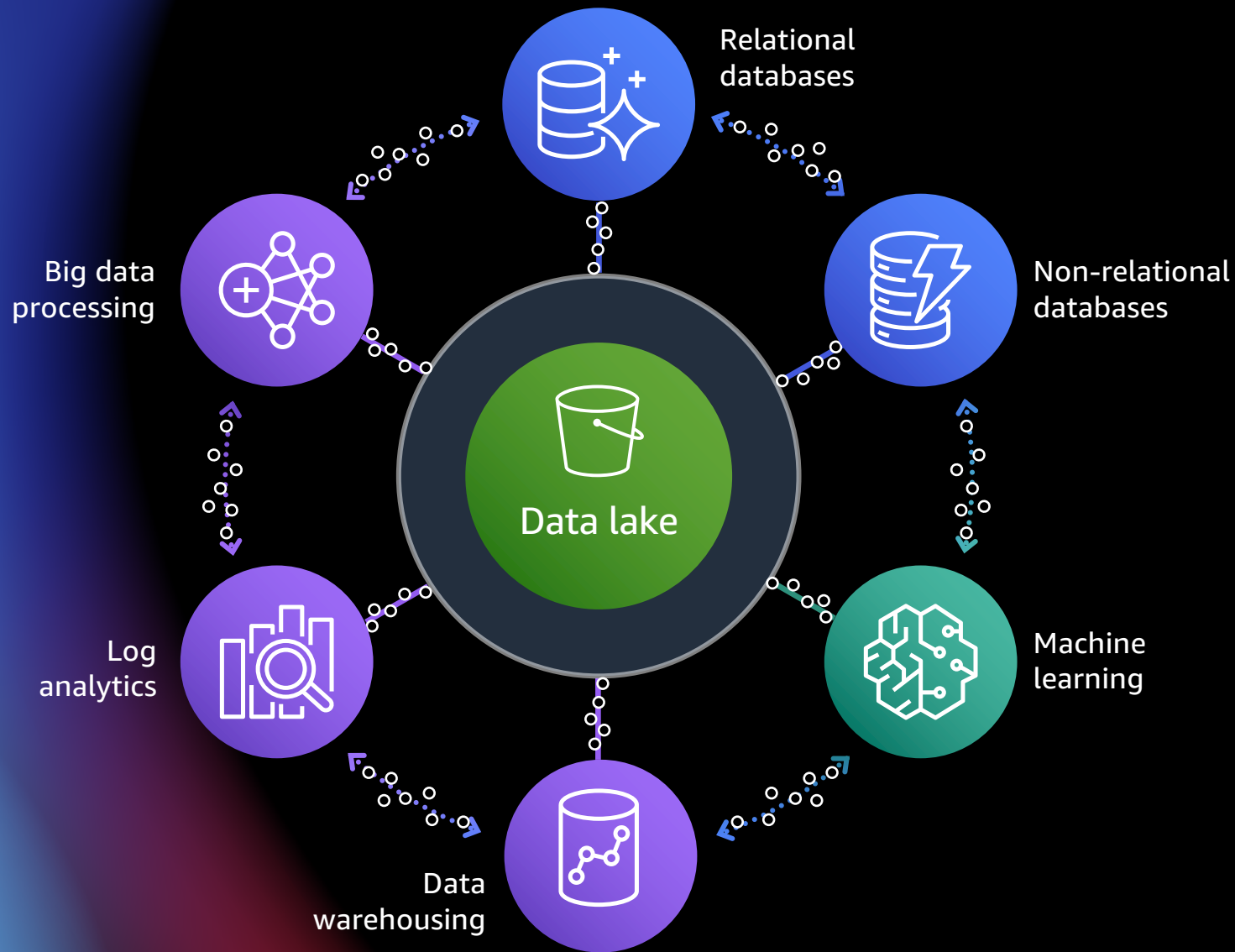
**Work backwards from
business outcomes**

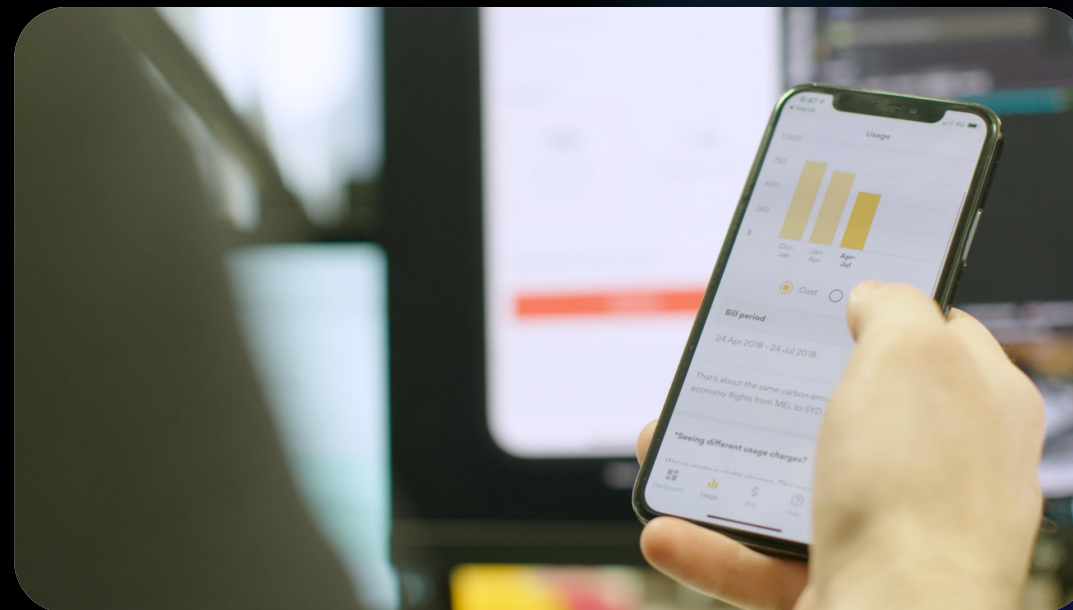


**Have data strategy that doesn't
throw data away**



**Lake house
approach for
cost-effective
storage of
versatile data**

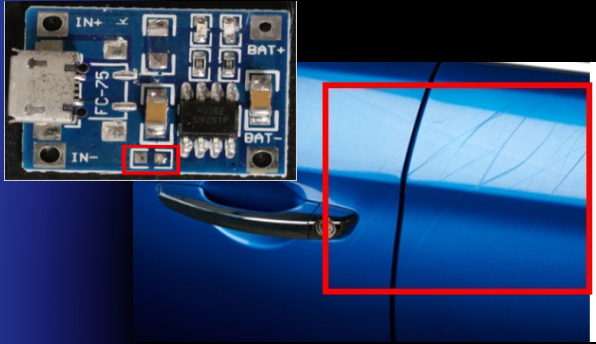




Data improves customer experiences

**Data comes in many
forms and shapes**

Democratize Computer Vision



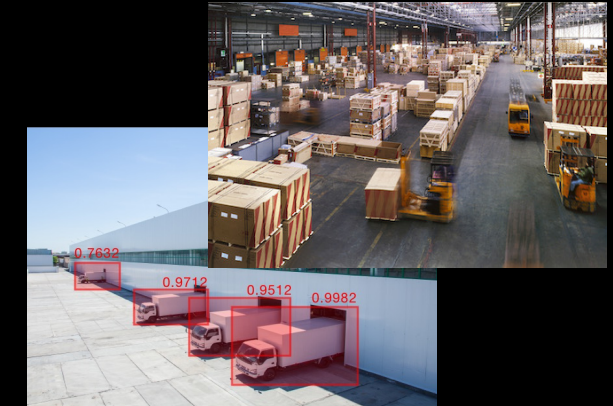
Manufacturing quality control



Reimagined retail insights



Workplace safety and social distancing monitoring



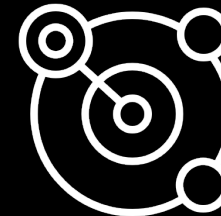
Supply chain efficiency



AWS Panorama Appliance & SDK

CV at the edge on-site with existing IP cameras

Bring your own model or use plenty of CV apps from partners



Amazon Lookout for Vision

Spot defects and anomalies using computer vision

No ML experience required – start building a model with as few as 30 images



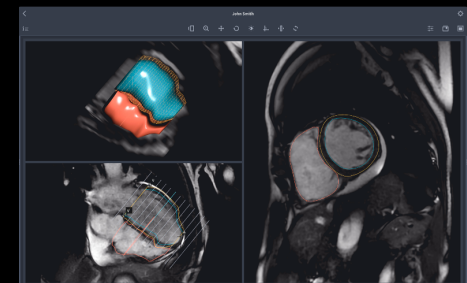
Moderna Therapeutics is using AWS **Machine Learning to automate their lab and manufacturing processes**, making it even faster for them to develop mRNA vaccines and bring them to market.



Using AWS ML, GE Healthcare developed a model that can **learn from thousands of medical scans to detect anomalies** more accurately and efficiently, allowing radiologists to prioritize patients needing immediate attention.

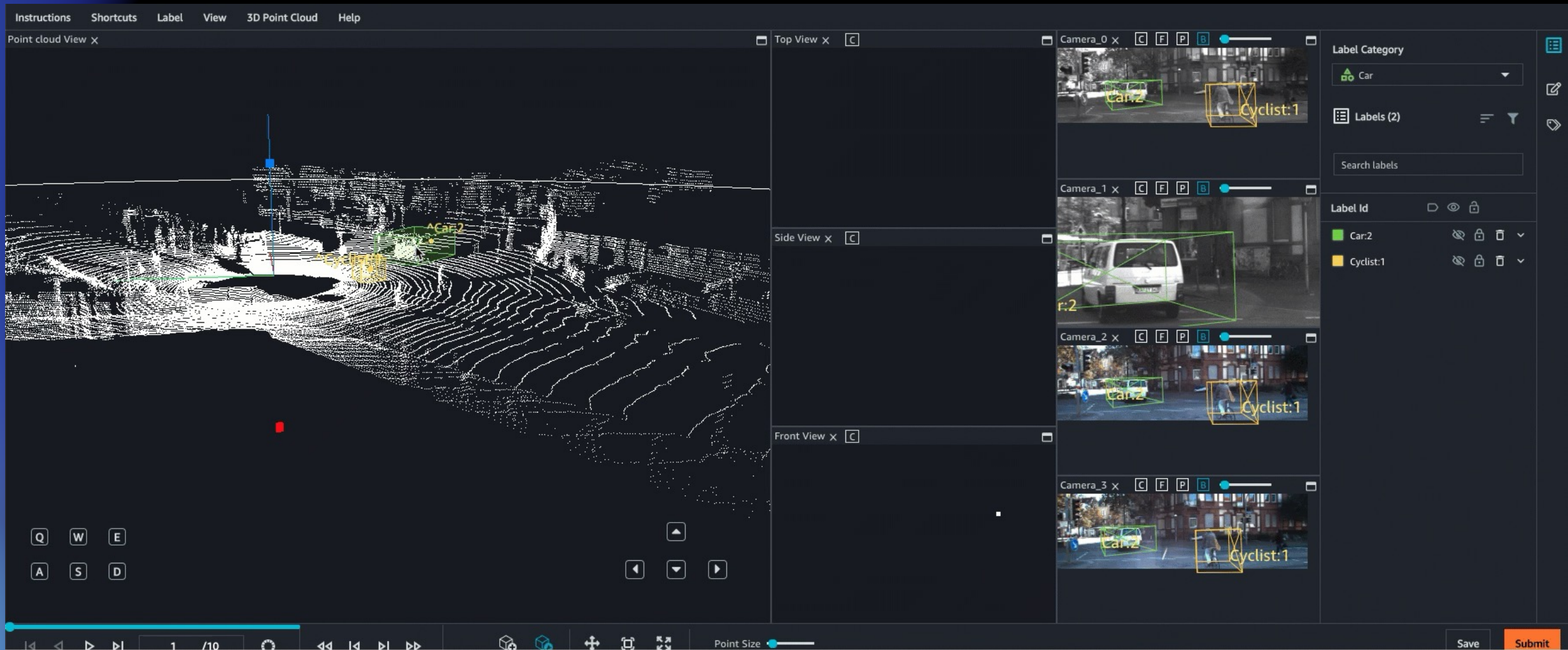


X-Ray analysis



MRI scans analysis

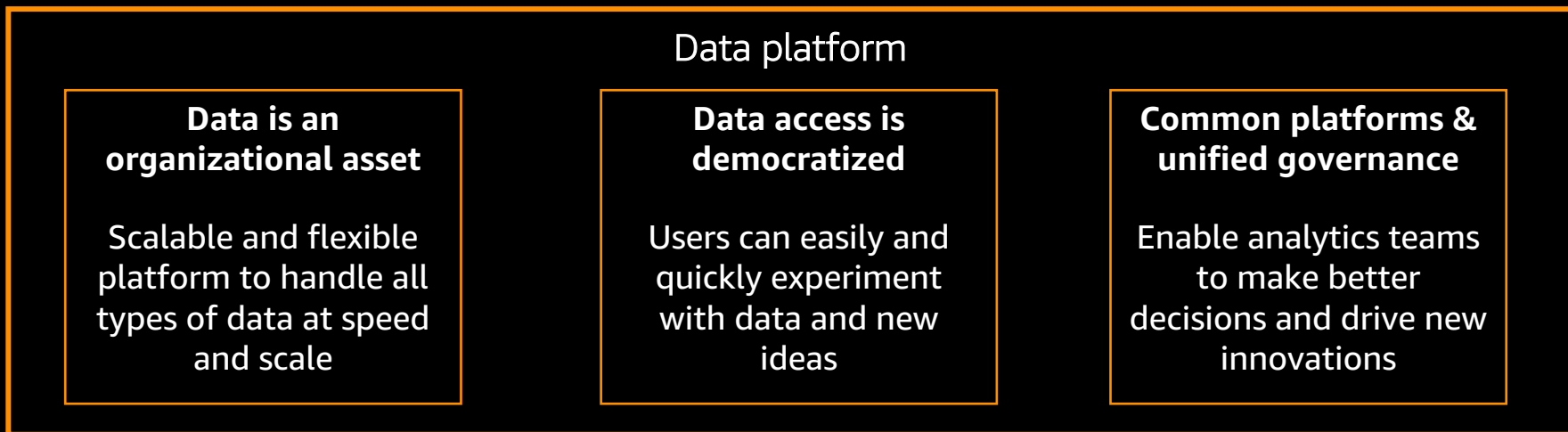
Sensorfusion with Amazon Sagemaker



**Data analytics and driving
insights should not be
limited to technologists**



Data



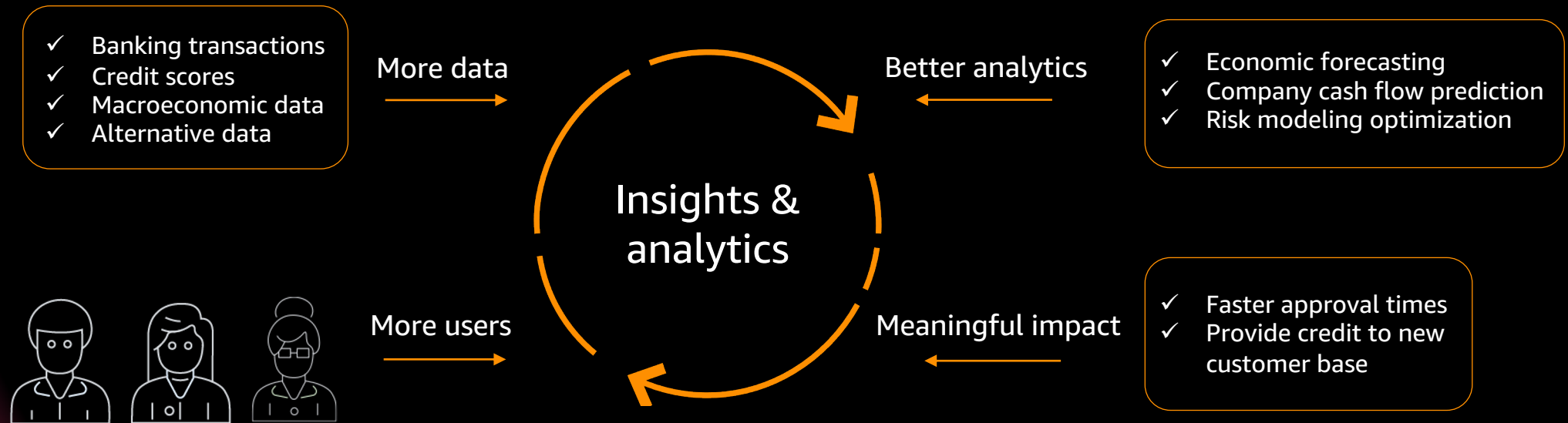
Business outcomes



AWS data lake

Analytics flywheel example

Example business use case:
Credit decisioning



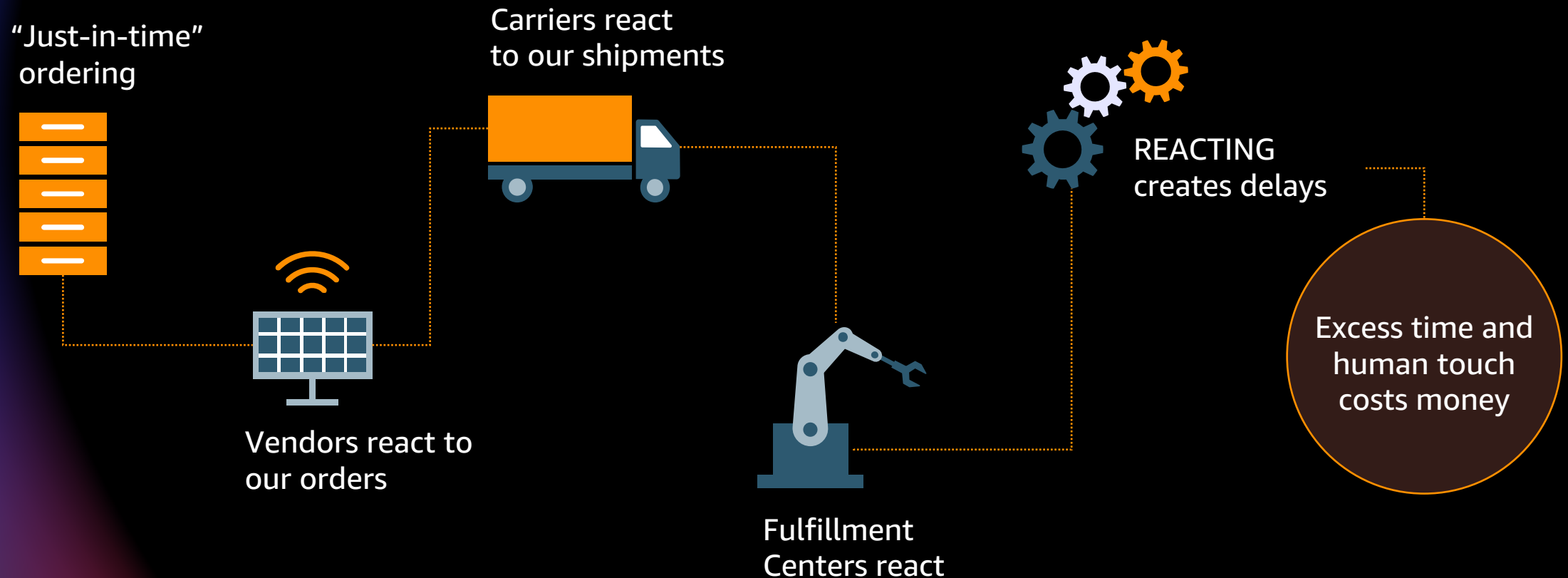
**Digital and physical
worlds are merging**

Connectivity generates additional data points

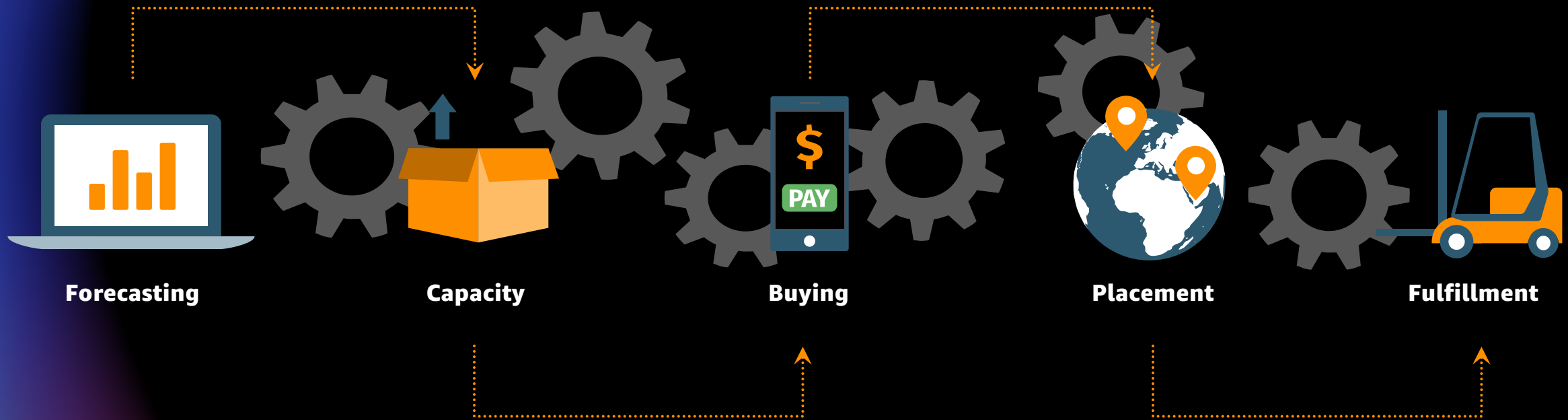


**Predict the future for
better and more
streamlined experiences**

Traditional Supply Chain Flow



Amazon's Supply Chain – Automation End-to-End



Demand forecasting
for over **400MM**
products daily

Amazon – **Over 99%** of
inventory is ordered
automatically

Adjust for regional
demand by
redistribution of items
in the network

Forecasting at Amazon.com

Using machine learning to solve complex forecasting problems

15x Improvement
in accuracy
Use of deep learning

Traditional statistical methods

Use of Machine Learning

Use of deep learning

1995

2000

2007

2010

2015

2020



High price
variability



Regional vs
national
demand



Slow
moving
products



New
products



Highly
seasonal
products

In closing

- Build a data strategy based on business outcomes
- Data takes many forms and shapes – physical and digital worlds are merging
- Don't limit analytics and machine learning to your technology teams
- Use the power of AI/ML in conjunction with data to streamline business and improve experiences

Visit the AWS Data Resource Hub

Dive deeper with these resources, get inspired and learn how you can use data to make better decisions and innovate faster.

- Building a winning data strategy
- The new leadership mindset for data & analytics
- Harness data to reinvent your organization
- Put your data to work with a modern analytics approach
- Breaking free from on-premises database constraints
- Cloud storage adoption: From cost optimization to agility & innovation
- A strategic playbook for data, analytics, and machine learning
- ... and more!



<https://tinyurl.com/aws-data-resource>


Visit resource hub



AWS Training and Certification

Empower your teams with comprehensive training

By building skills with AWS Training and Certification, businesses and individuals can see the bigger picture understanding the reasoning behind every data point. As training progresses and teams become data-fluent, previously hidden insights come into view.



Build data skills to
unlock any insight

Leverage free digital training

Learn how to harness the world's most valuable resource: data. Access digital and virtual instructor-led courses on data analytics and databases built by the experts at AWS and start your learning journey to become data-driven.

[Take a digital course »](#)



Get certified

Earn industry-recognized credibility and set tangible goals for success with industry-recognized certifications, like *AWS Certified Data Analytics – Specialty*.

[Learn more »](#)



Ramp-up your skills

Deep dive into new topics and focus on knowledge gaps at your own pace with the *AWS Ramp-Up Guide: Database* and *AWS Ramp-Up Guide: Data Analytics*. With a wide range of whitepapers, blog posts, videos, webinars and peer resources available for data professionals to leverage for independent learning.

[Download ramp-up guides »](#)

Thank you for attending AWS Innovate – Data Edition

We hope you found it interesting! A kind reminder to **complete the survey**.
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