

AWS  
re:Invent



**AIM 203 - S**

Take AI/ML from theory to practice  
with Intel technologies on AWS

**Peter Bevan**

Director

Worldwide Sales and Marketing, Intel

AWS  
**re:Invent**

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AIM 203 - S

# Spotlight on: Delivering connected retail with AI

**Richard Potter**

CEO  
Peak

**Tom Summerfield**

Head of Commerce  
Footasylum

# Agenda

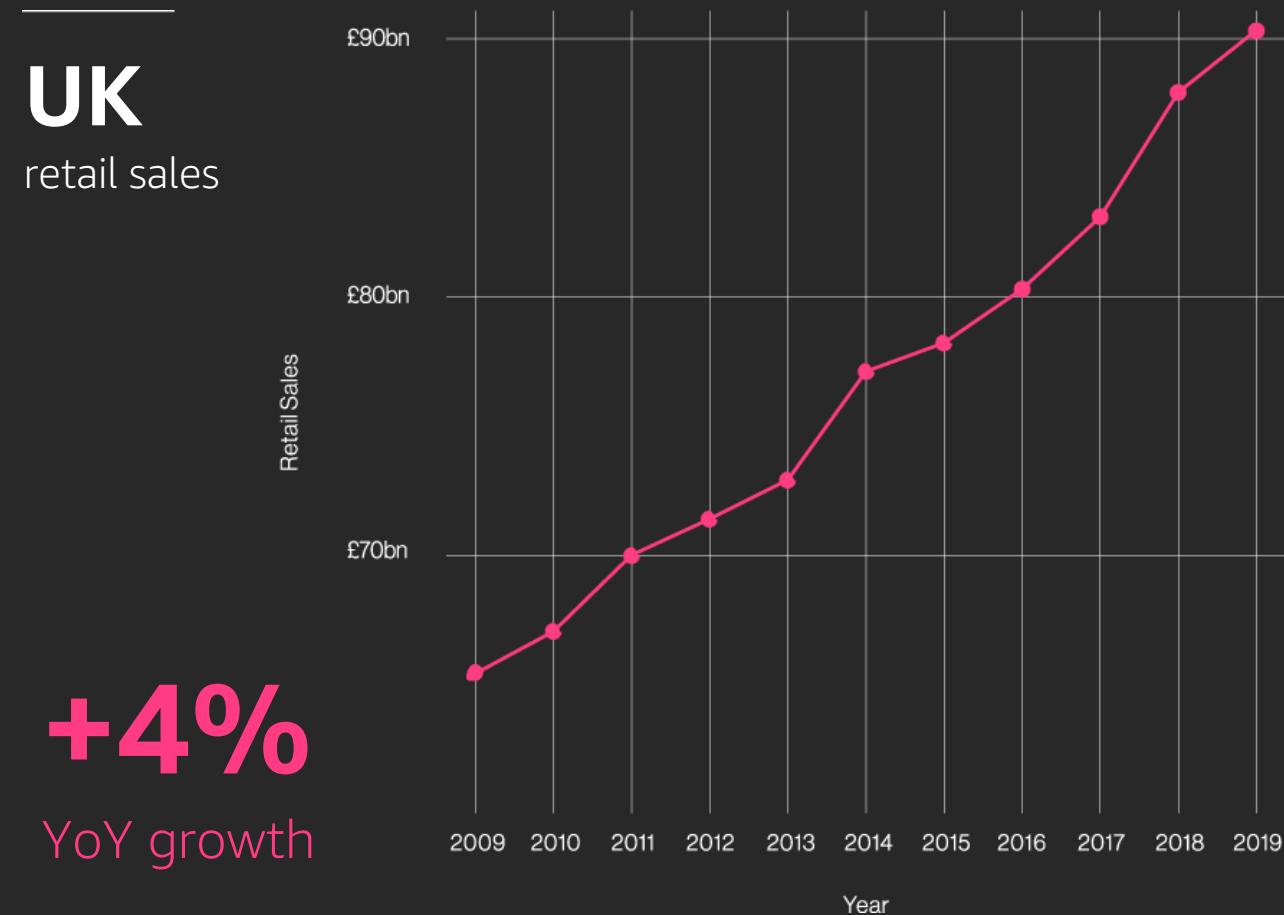
1. Retail landscape
2. Connected retail
3. The AI tech stack for retail
4. AI Infrastructure
5. AI Studio
6. Peak solutions
7. Q&A



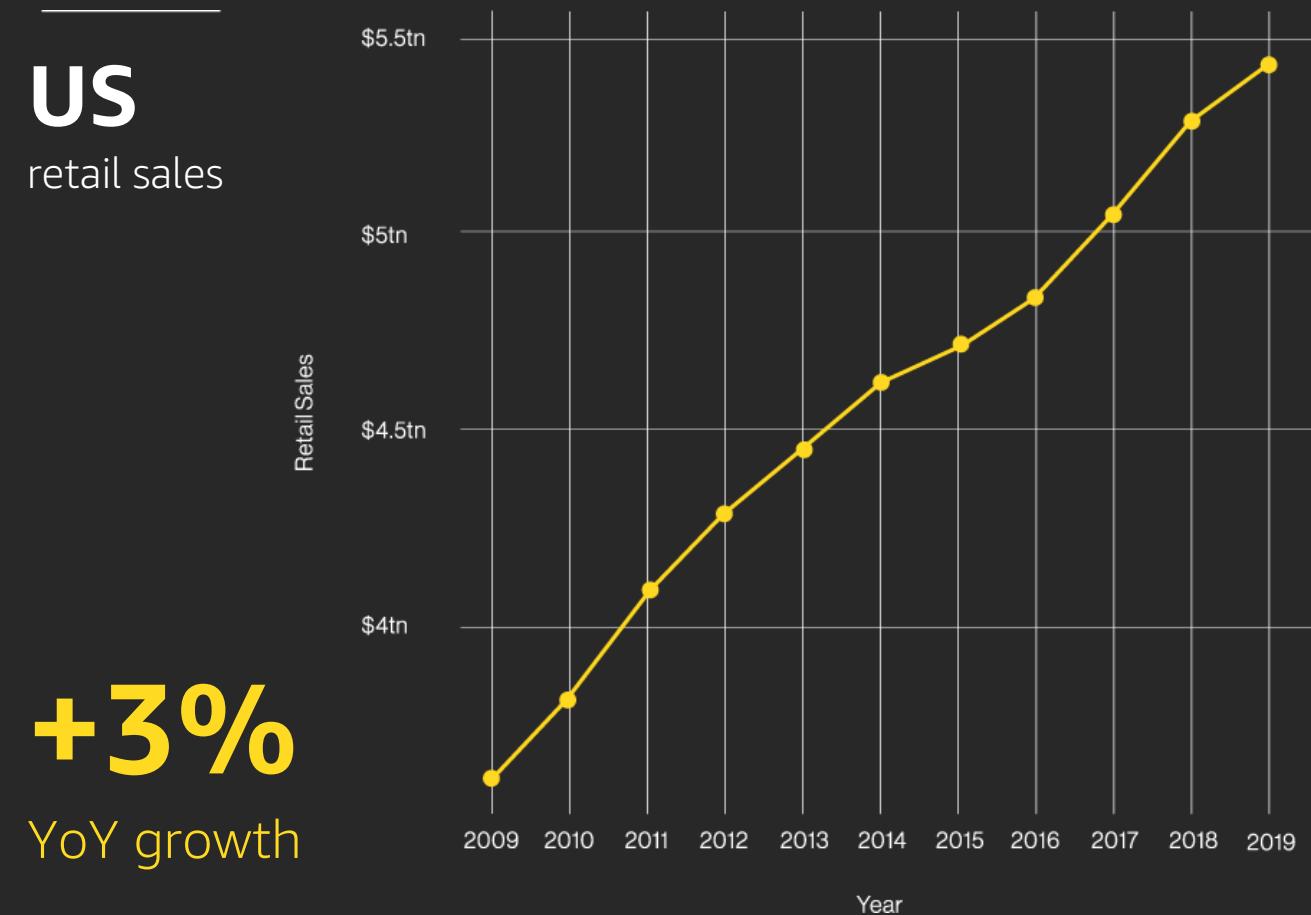
**CLOSING DOWN**

**3**

# It's not all doom and gloom



\*Source: ONS



\*Source: Securities and Exchange Commission (SEC)



businesses  
are growing

**30 %**

faster, with

**50 %**

higher profit  
margins

# FOOTASYLUM



NOVEMBER 9, 2019  
STAPLES CENTER, LA

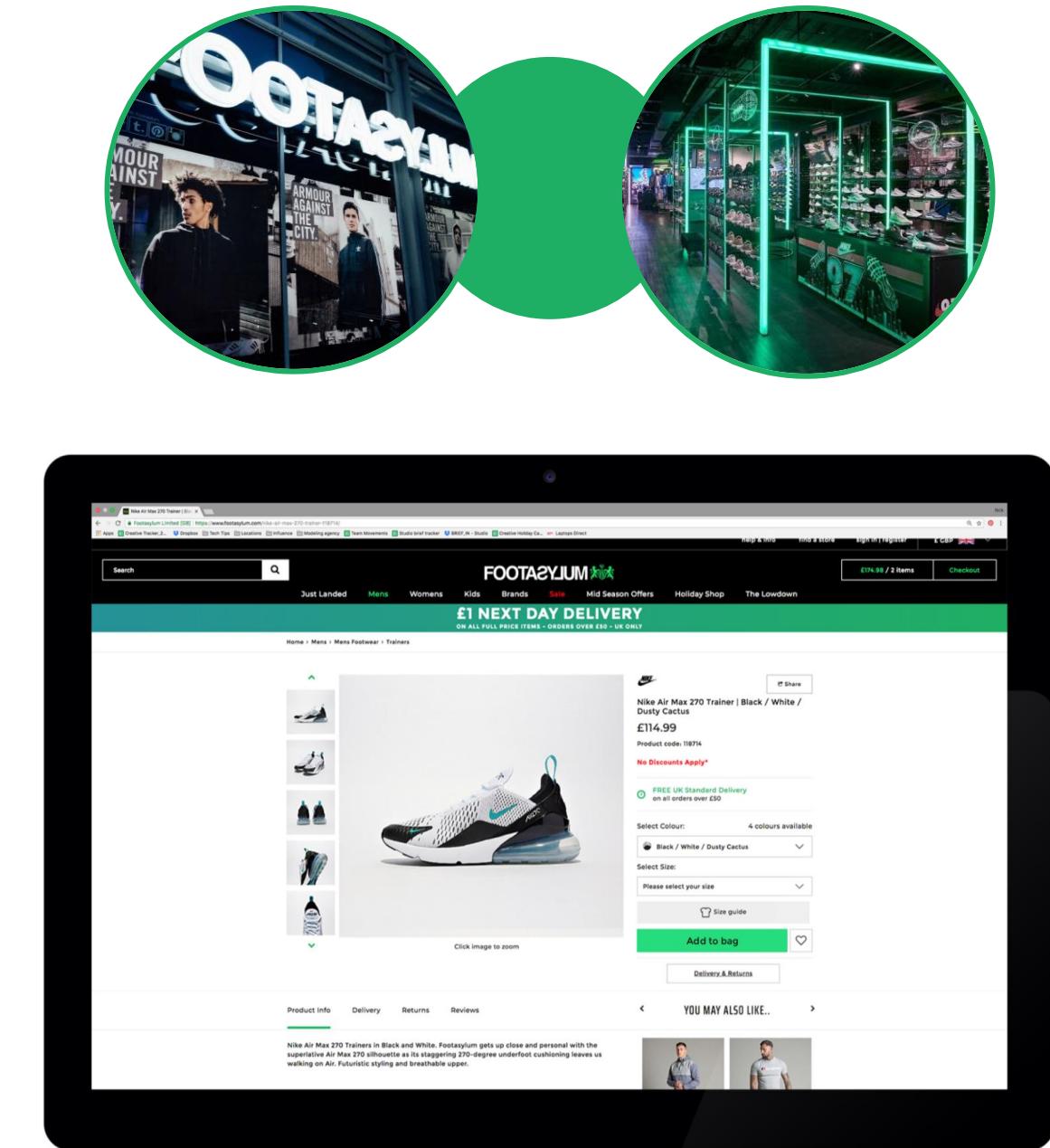
JU  
LOGAN  
PAUL  
NOVEMBER 9, 2019



# We are Footasylum

**Creativity connects our bricks,  
clicks and kicks**

- Through our 60+ stores, website and own brands we're story tellers, intent on pushing boundaries
- We became a part of our consumers' community: urban style leaders who drive trends and do things our own way
- Endorsed by this community of tribes we're young and agile – never straight laced

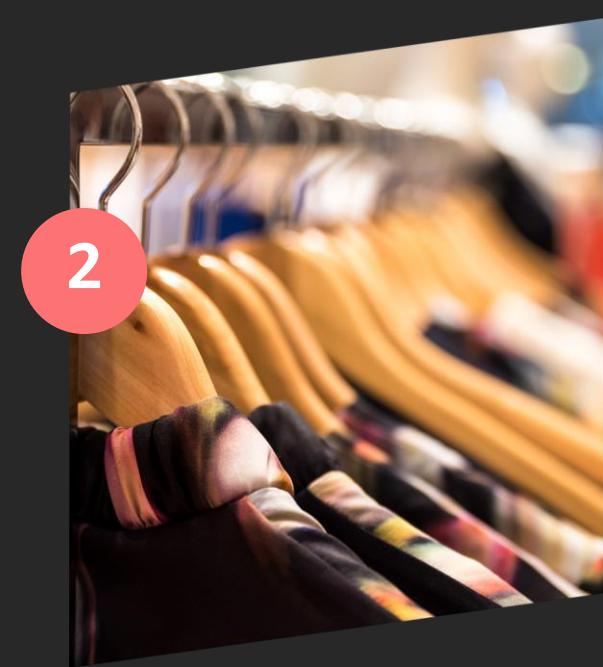


# Retailers need to be better connected

With customers



Context



Convenience



Control

# Retailers need to be better connected

... and internally too

1



Context

2



Convenience

3



Control



Marketing



Merchandising



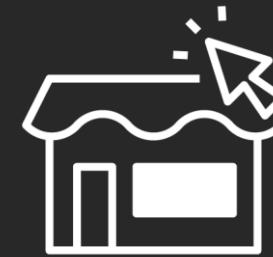
Supply chain

# Connected retail isn't easy



**Understand  
your consumer**

1m+ consumers  
60+ stores



**Understand  
product interactions**

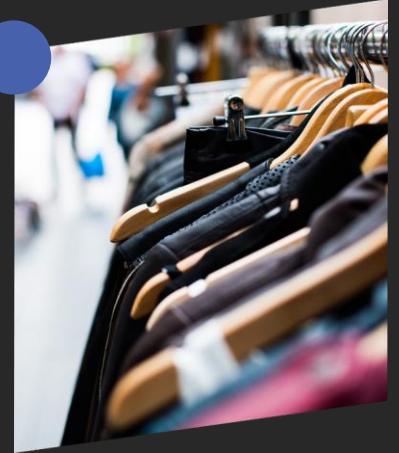
25k products  
3x commerce channels



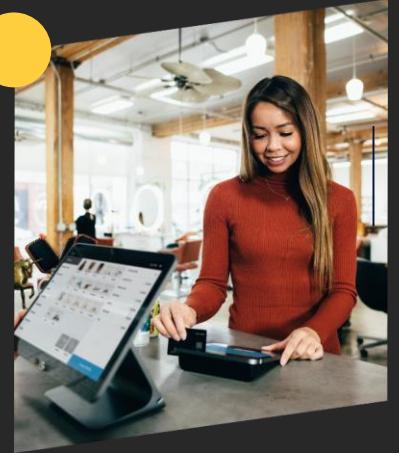
**Ensure  
efficient delivery**

Omnichannel fulfillment

# AI supports connected retail



- Makes sense of data



- Supports the three Cs and puts consumer first



- Connects data, workflows and functions



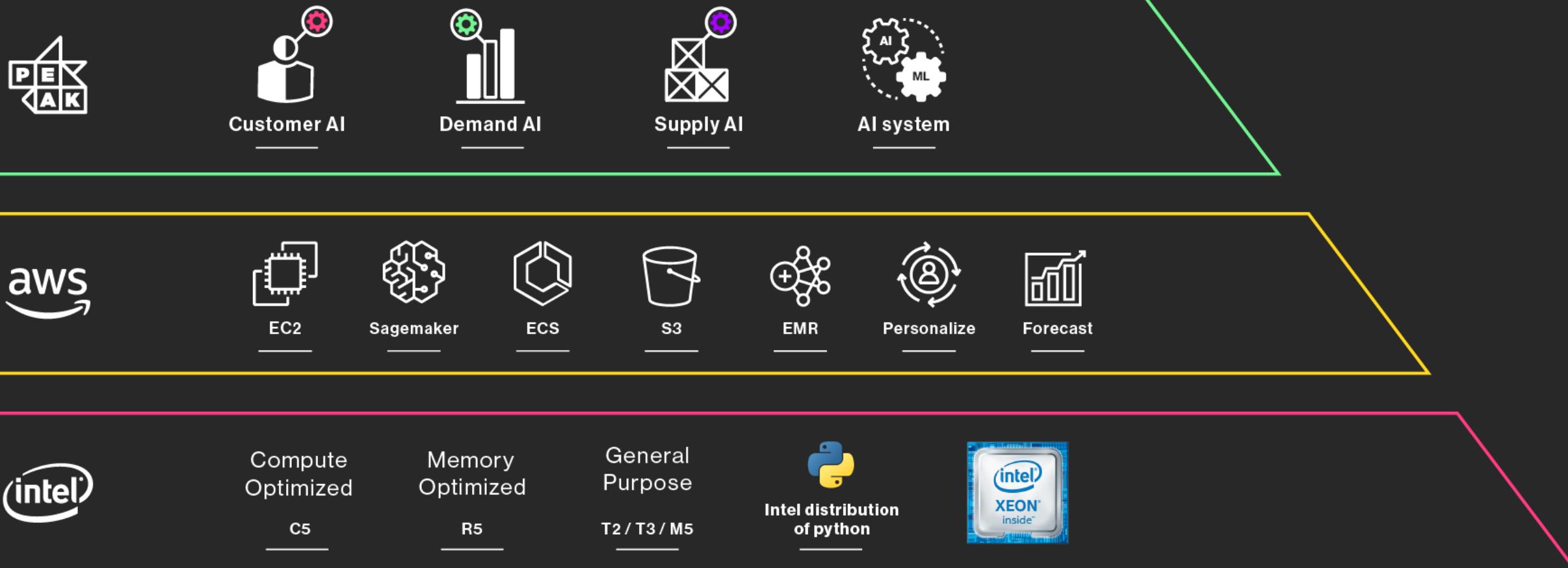
- Optimizes supply and demand



# The AI tech stack for retail

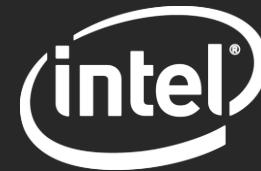
Taking AI from hype to reality

# Built to deliver outcomes



# AI: From hype to reality

Computational  
power



AI System and  
solutions



Scalable cloud  
infrastructure

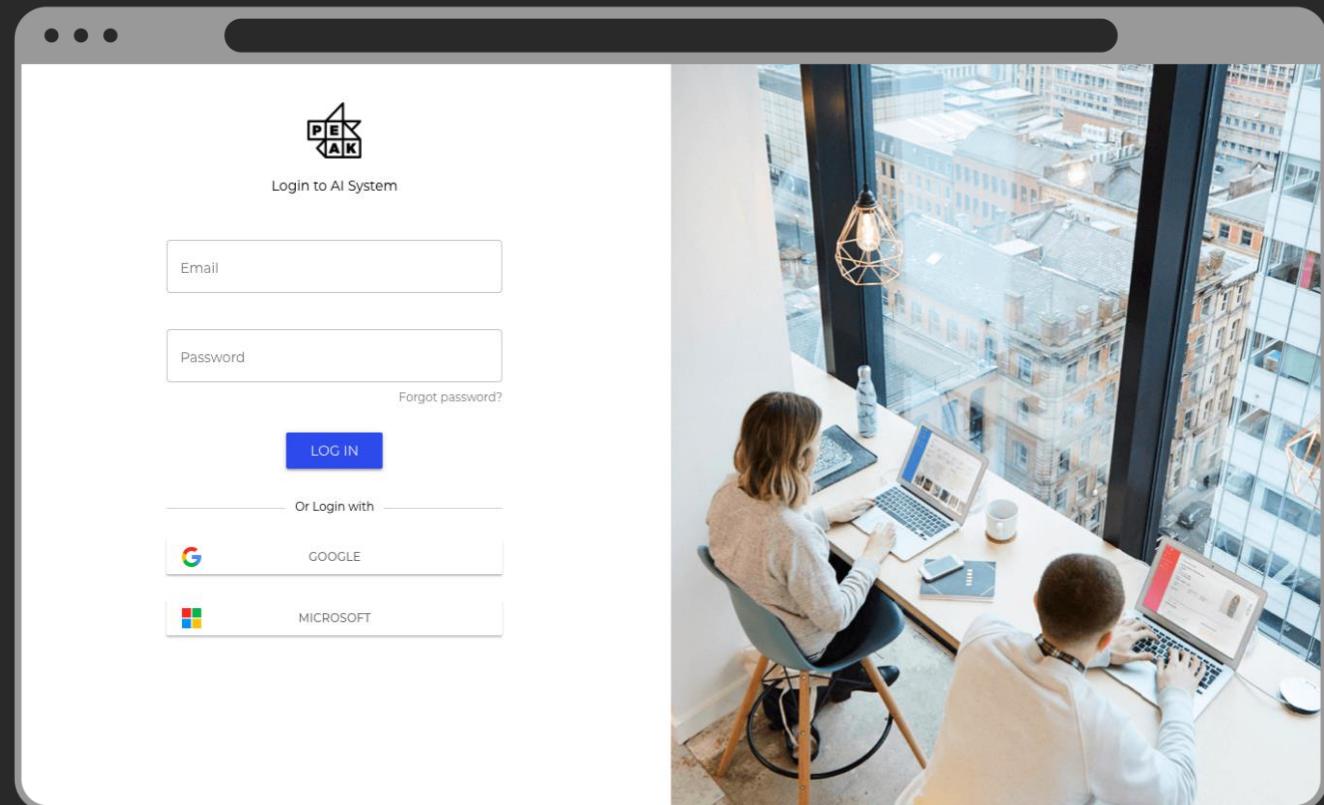
The data to  
operationalize AI

# The Peak AI System

An intelligence layer across the enterprise



The full-stack AI System, built to deliver AI-driven outcomes across an enterprise

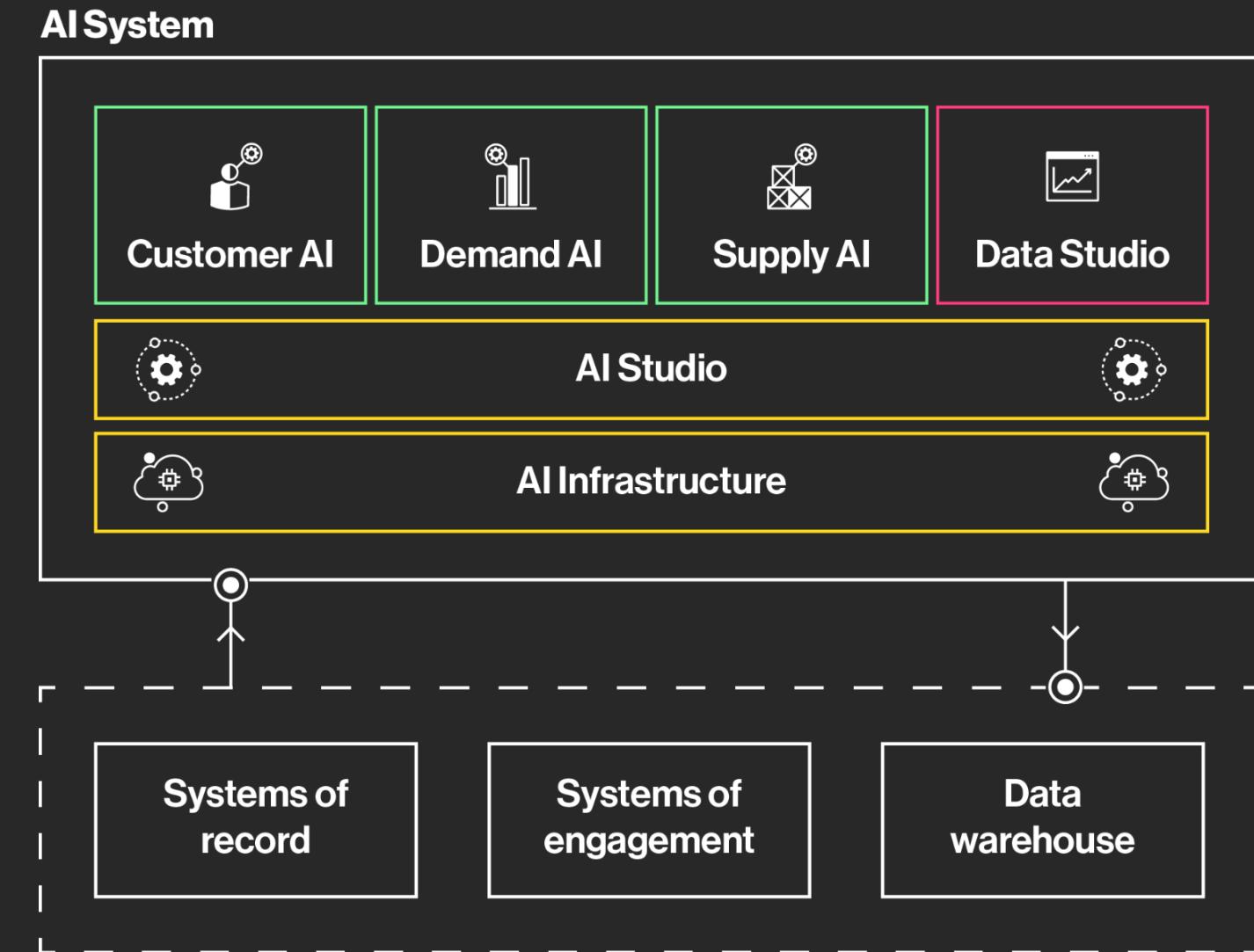


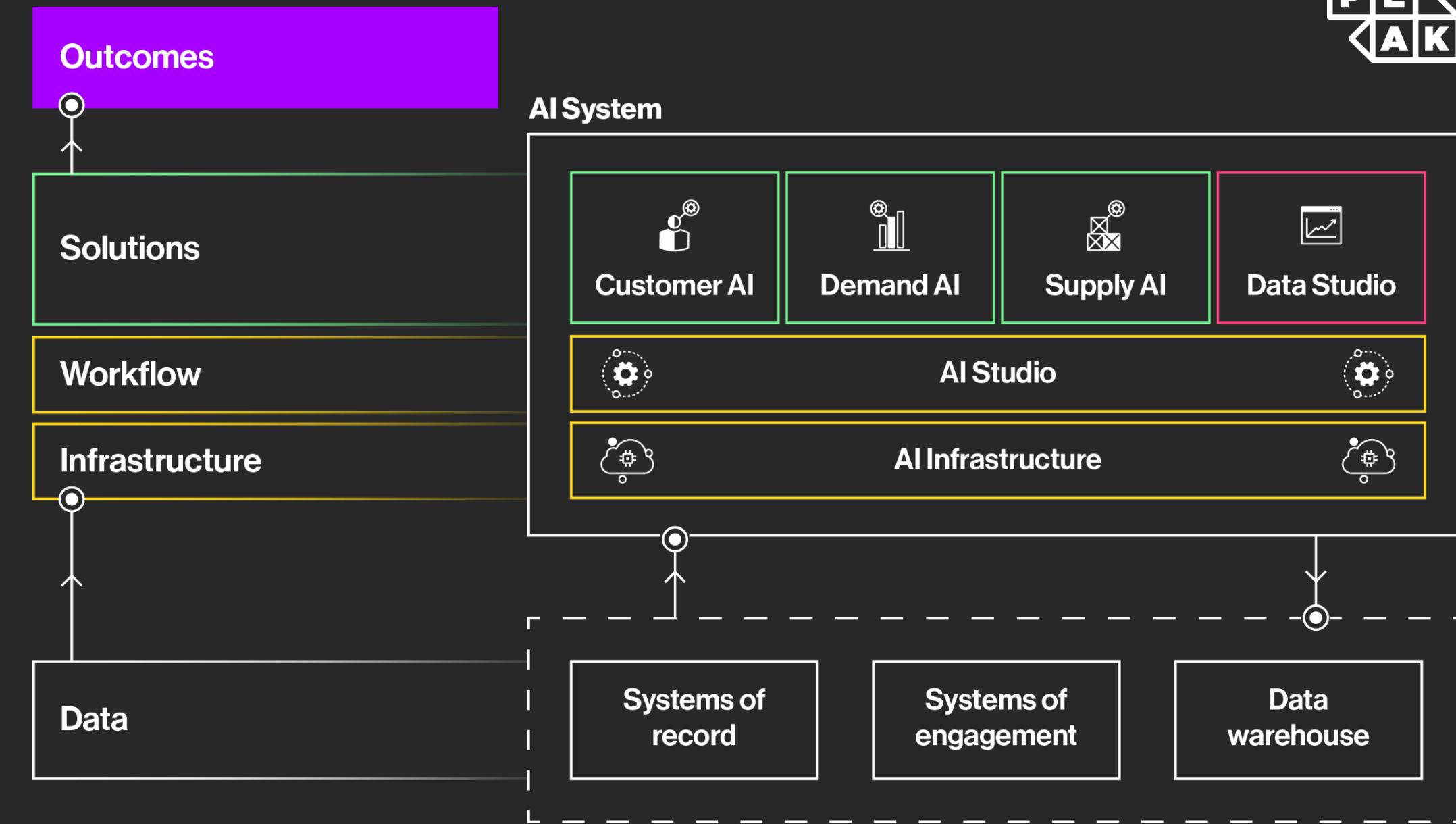
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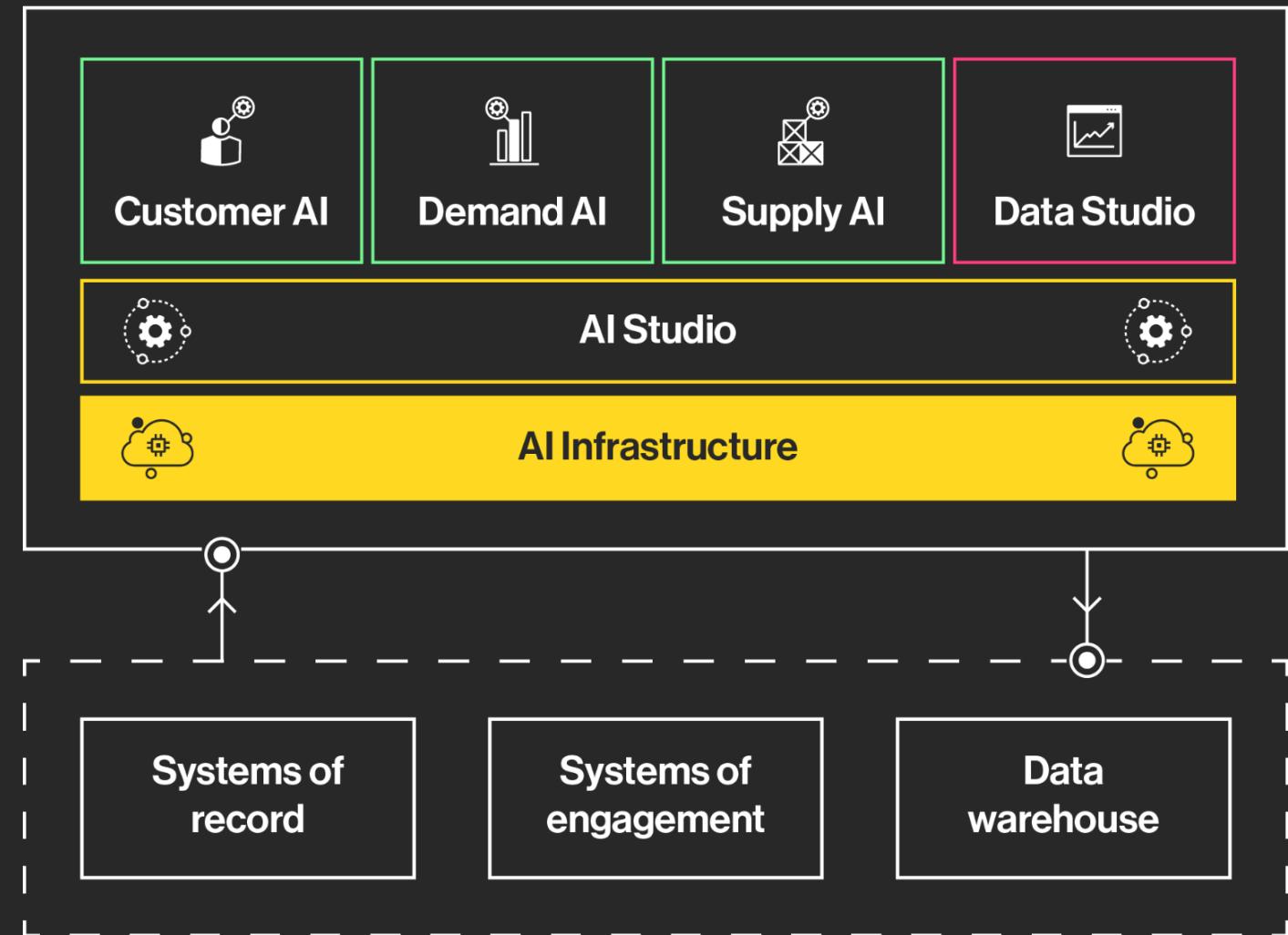




1

Store and unify data in our secure and scalable infrastructure

### AI System

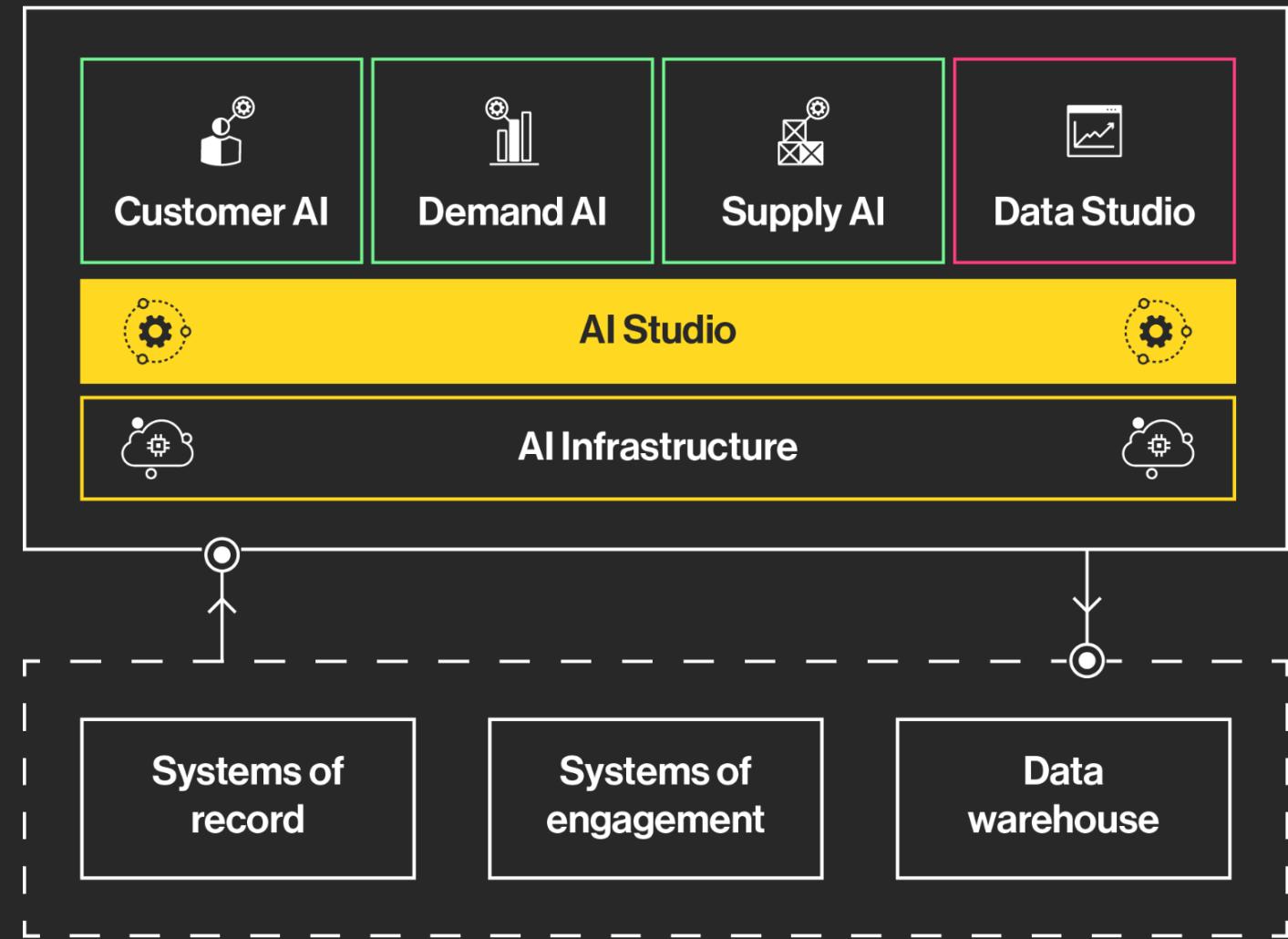




2

Configure AI solutions  
to your business' needs,  
or build custom ones

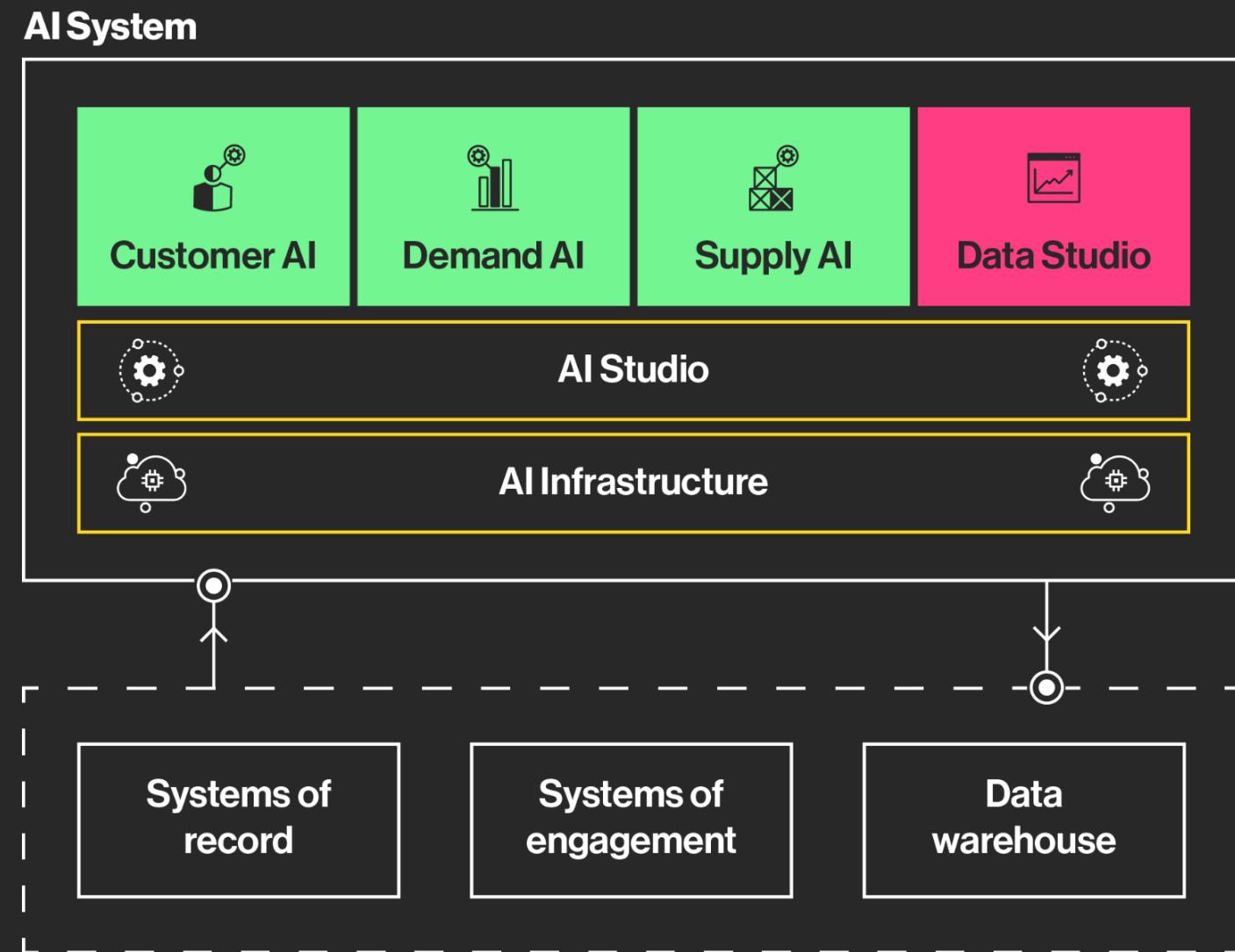
### AI System



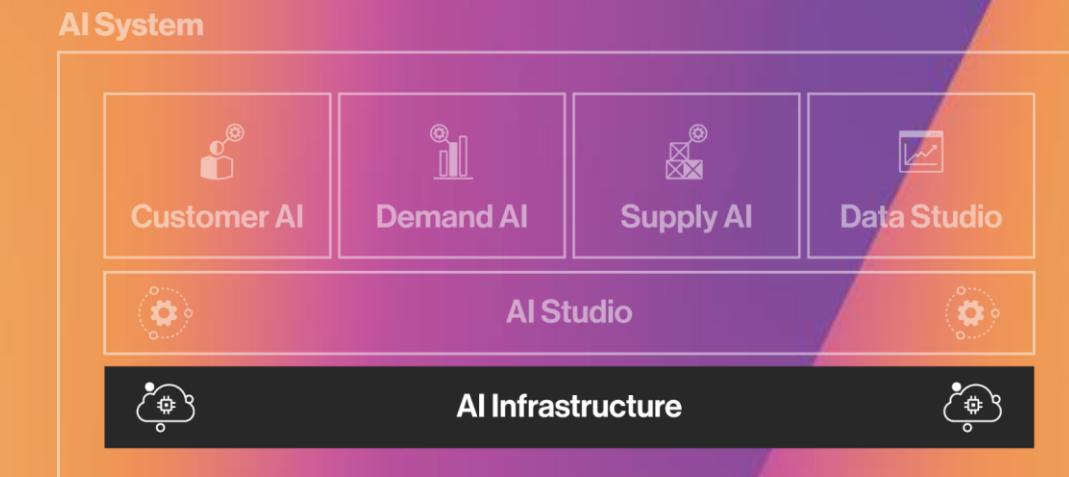


3

Activate Peak solutions, either standalone or interconnected, and send outputs directly into business systems using APIs



# AI Infrastructure



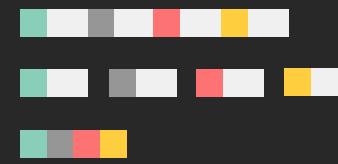
# Seamless integration



Peak's AI Infrastructure allows the AI System to seamlessly integrate with a wide range of connectors.

A screenshot of the Peak AI Infrastructure web interface. The left sidebar includes links for Home, Data Sources (Beta), Data Sources 2.0, Data Management, Workspace, Jobs, Workflow, Outcomes, Webapps, Administration, Audience Centre, and Recommender. The main content area is titled 'Data Sources &gt; Connector Select' and shows a 'Choose Connector' section with a search bar. It is divided into three categories: Database (Ingest via Agent) containing Oracle, SQL Anywhere, PostgreSQL, MySQL, Redshift, and MSSQL; Direct containing API Stream, AdHocUploads, File, Webhook, and BigQuery; and SaaS. Each connector is represented by a small icon and its name.

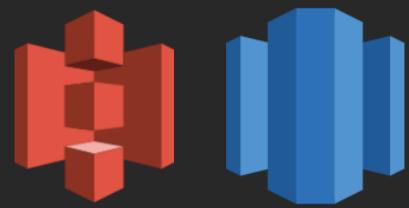
# Data ingestion and processing at scale



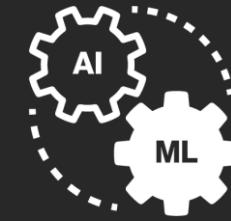
Real time streaming  
of enterprise datasets



Apache Spark on  
EMR for processing

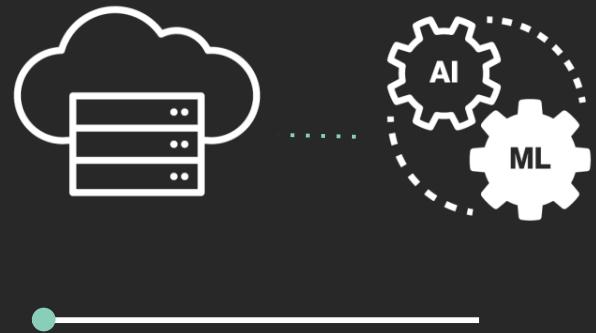


Stored on S3  
and Redshift



Data availability on  
time for multiple  
workflows

# MLOps in a box



Cloud-native,  
built for AI and ML



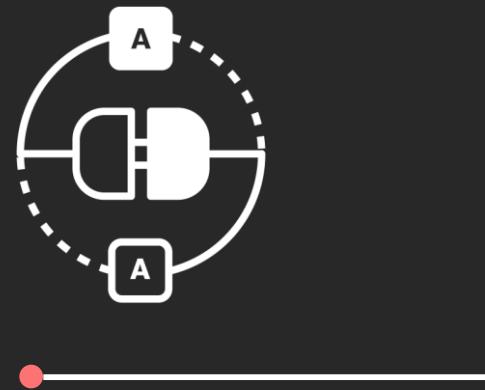
Support for open-source  
tools and frameworks

Several instance types  
to fit various ML use cases

# Enterprise-grade security and control



Enterprise-grade security  
and compliance

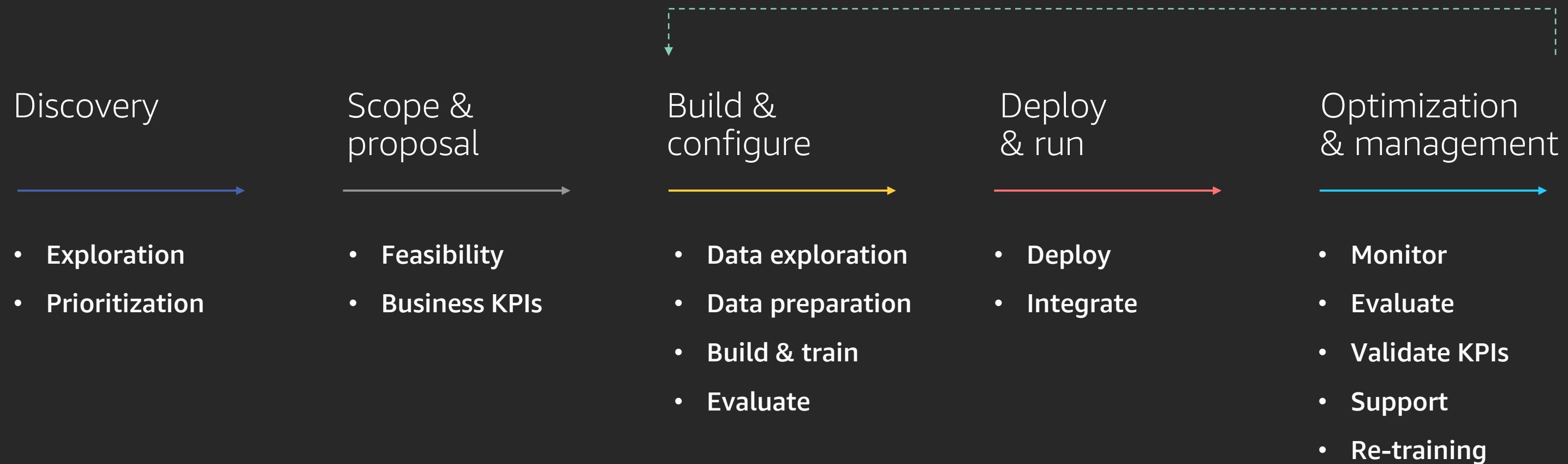


Built-in controls for identity,  
data and network access  
for assets

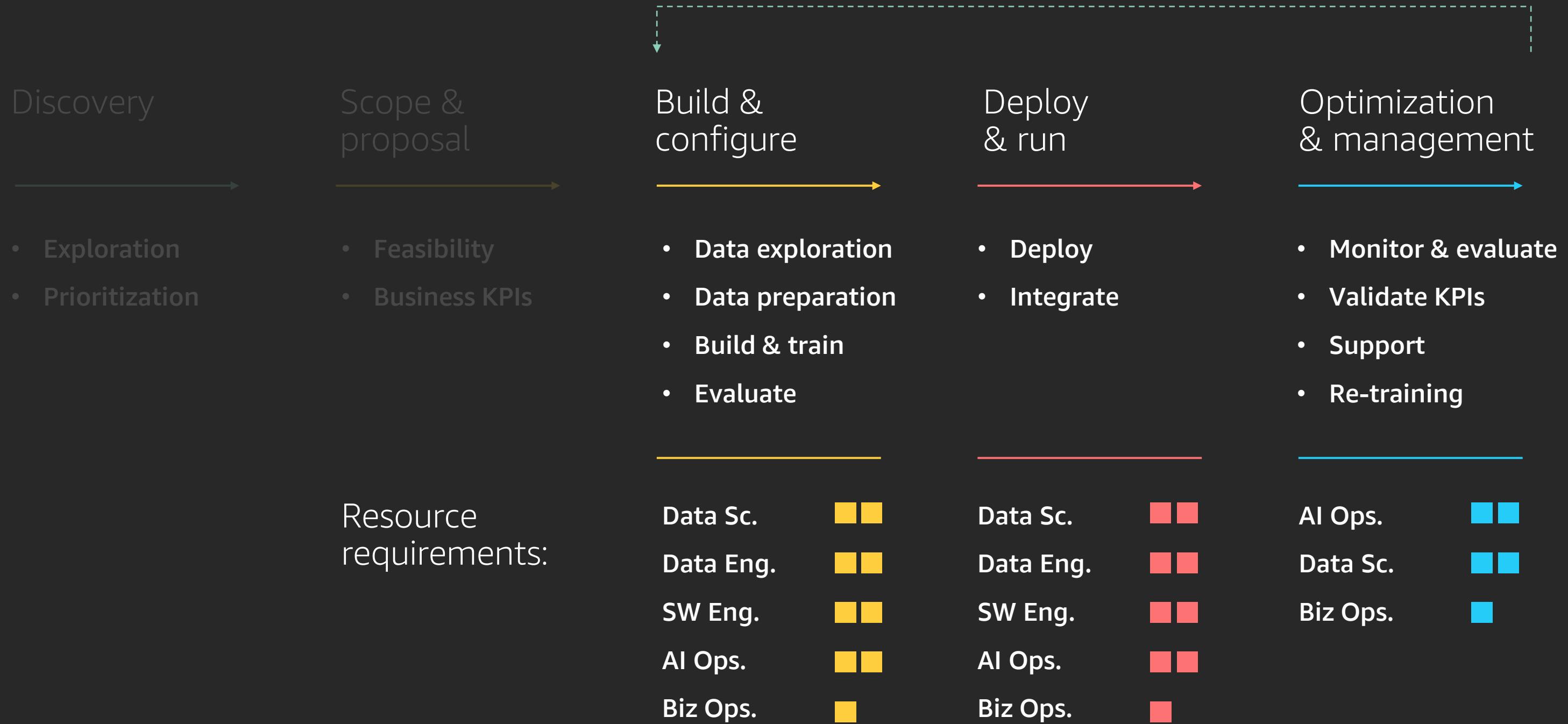


Governance with audit  
trail and resource  
management

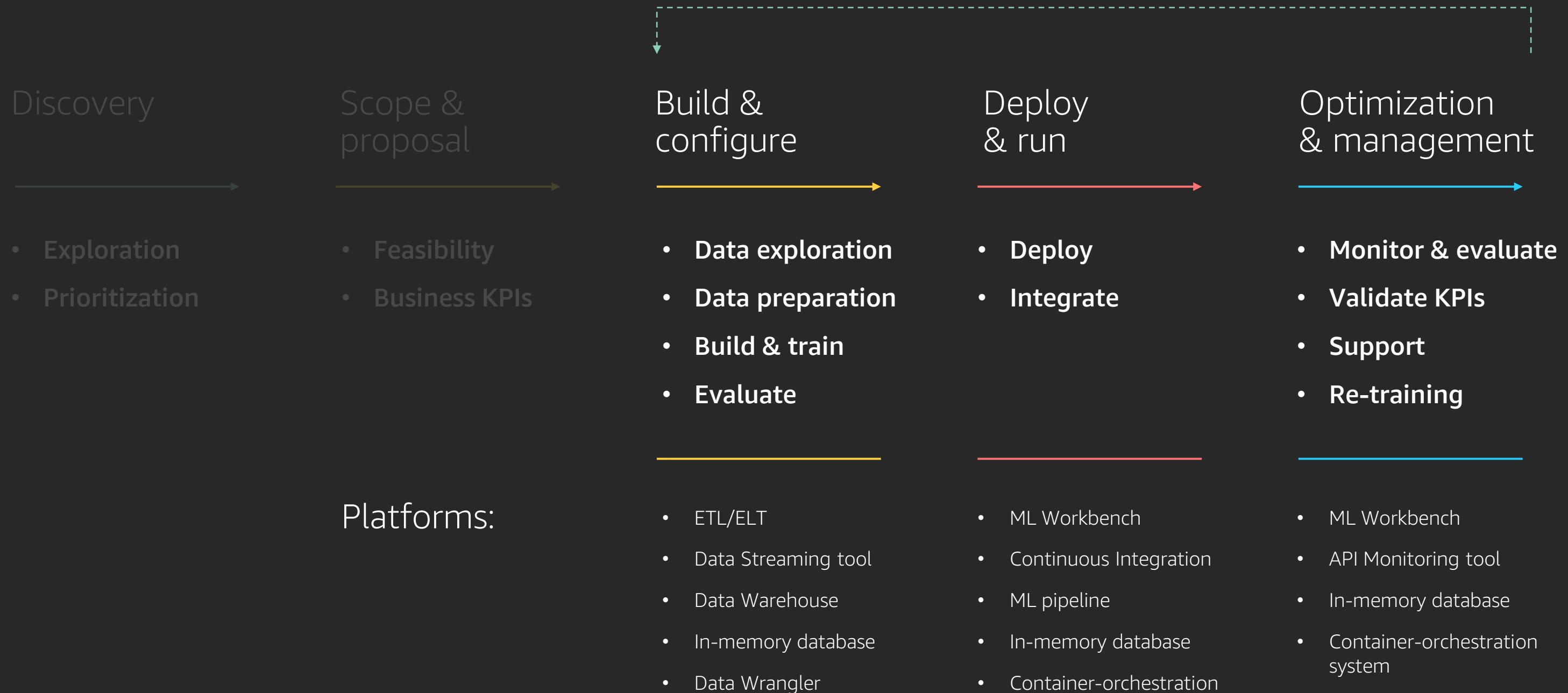
# AI Lifecycle



# Significant resource needed



# Significant technology needed



# ...not with Peak!

Discovery

- Exploration
- Prioritization

Scope & proposal

- Feasibility
- Business KPIs

Build & configure

- Data exploration
- Data preparation
- Build & train
- Evaluate

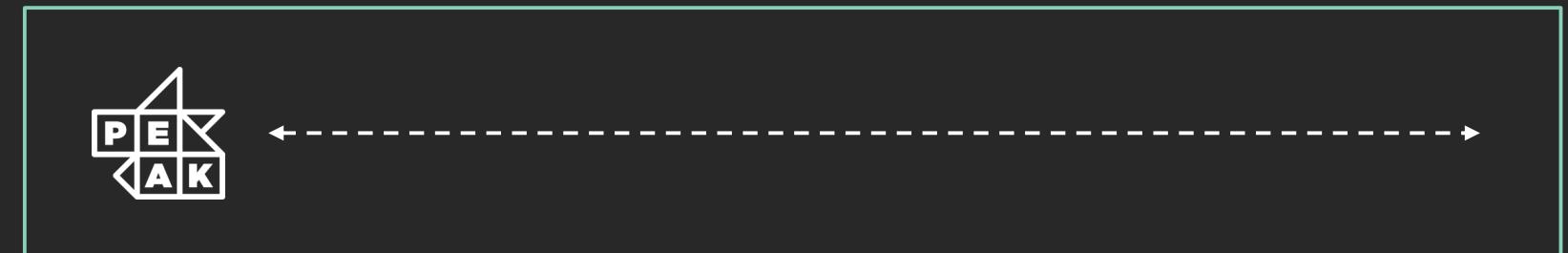
Deploy & run

- Deploy
- Integrate

Optimization & management

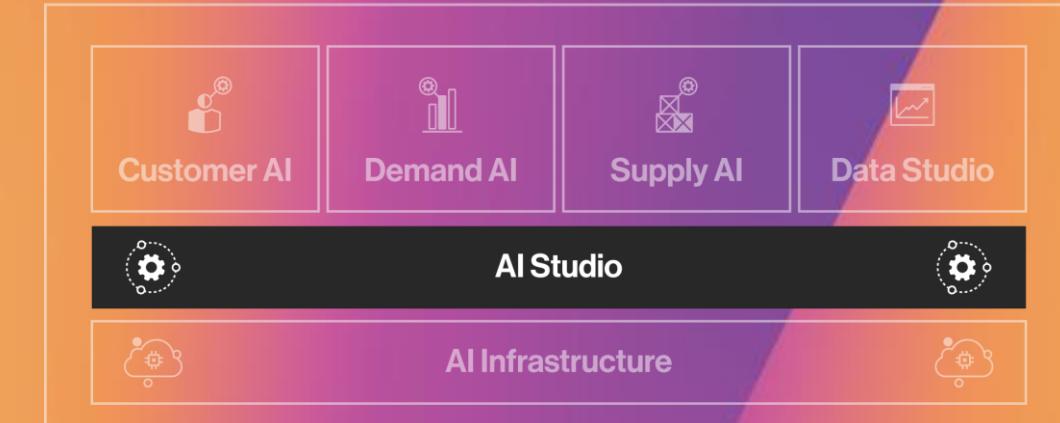
- Monitor & evaluate
- Validate KPIs
- Support
- Re-training

Full stack AI system:

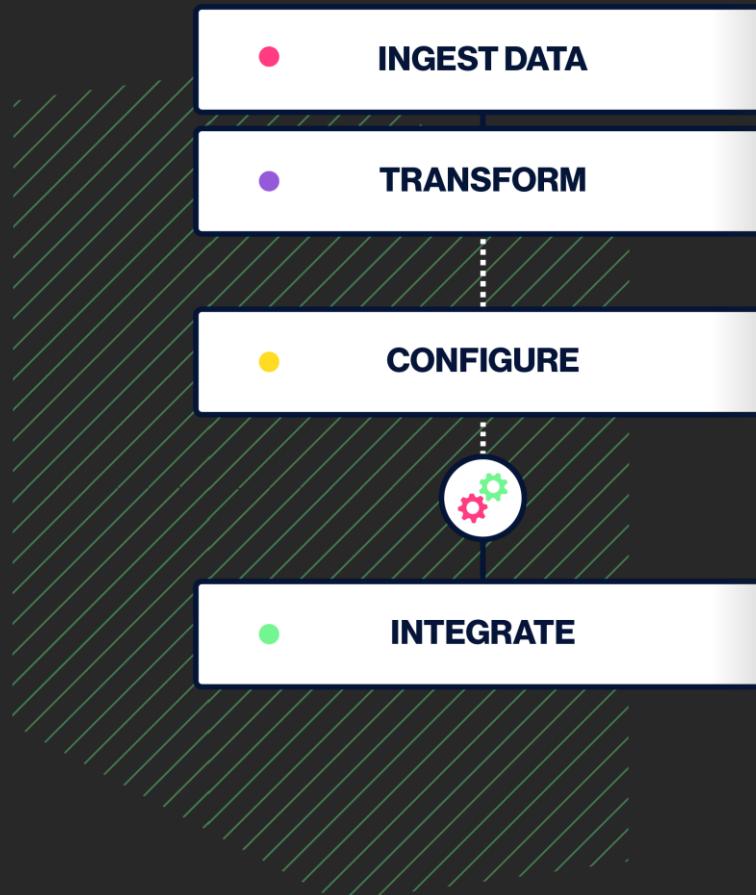
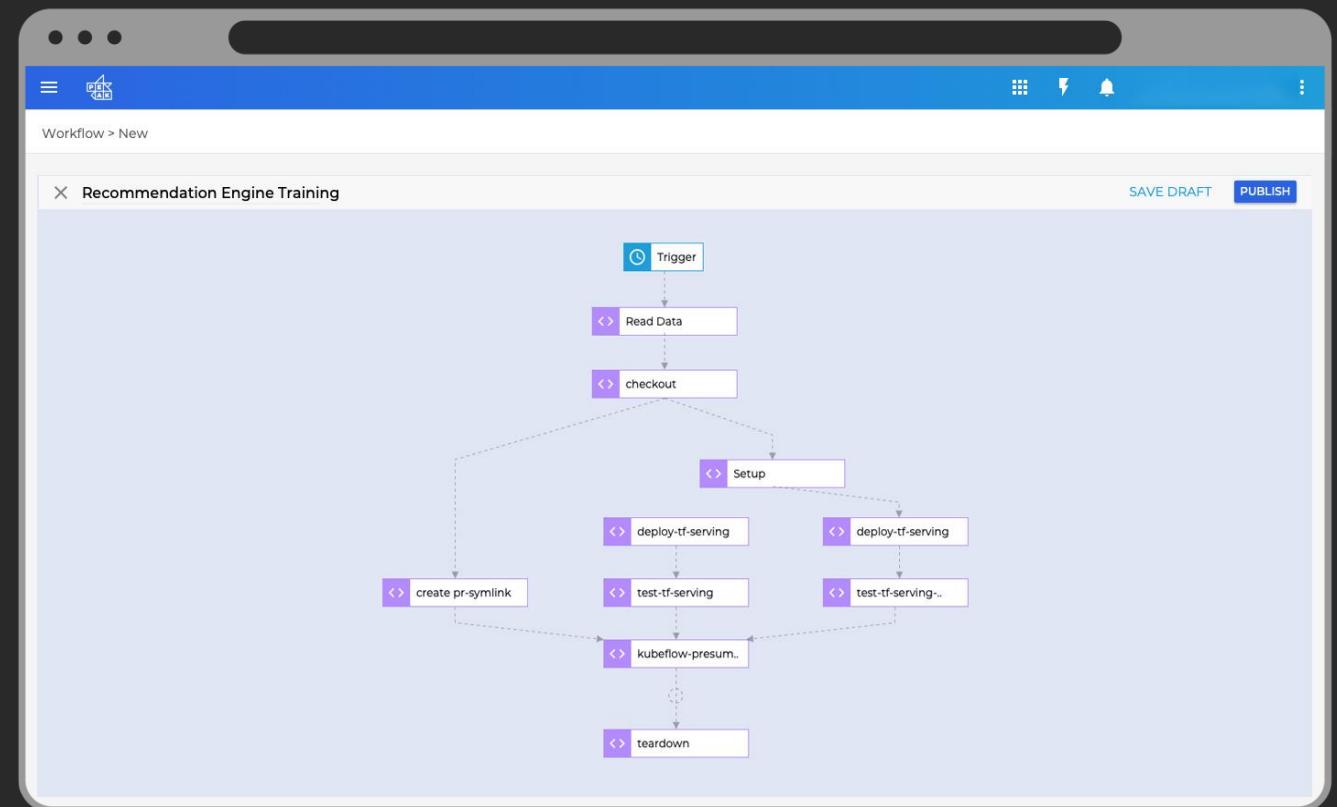


# AI Studio

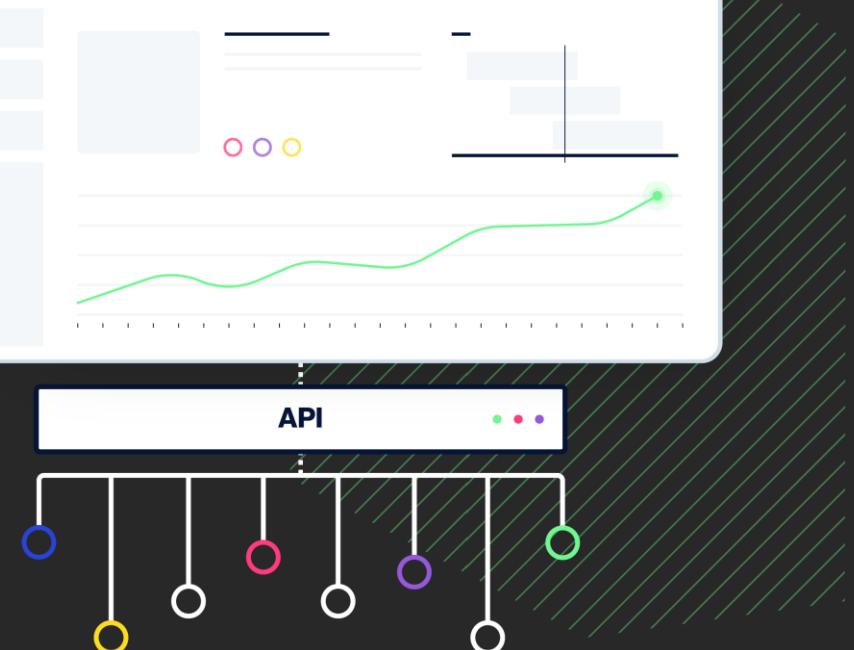
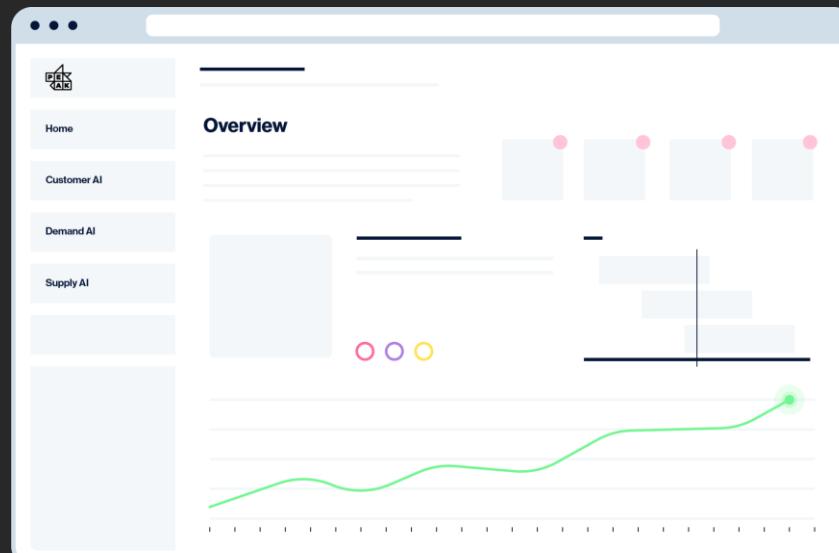
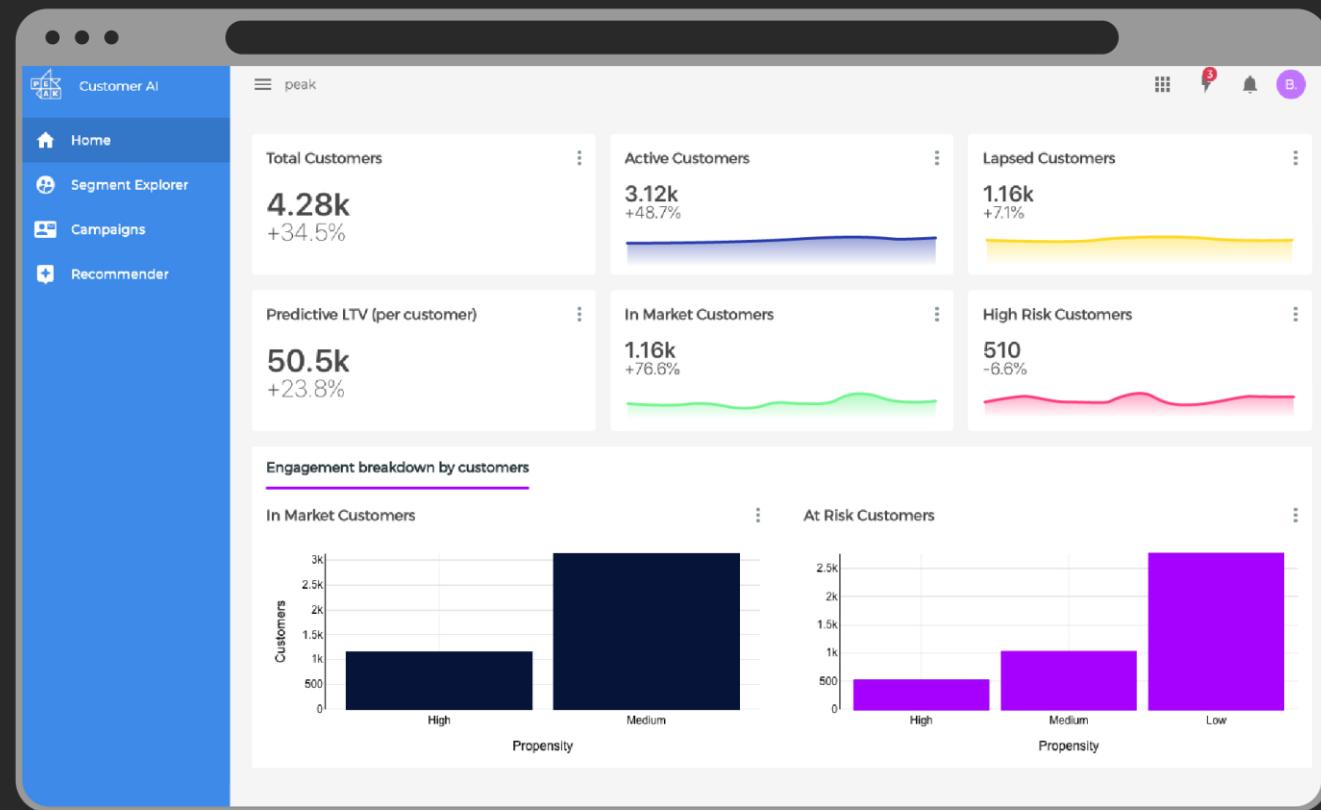
AI System



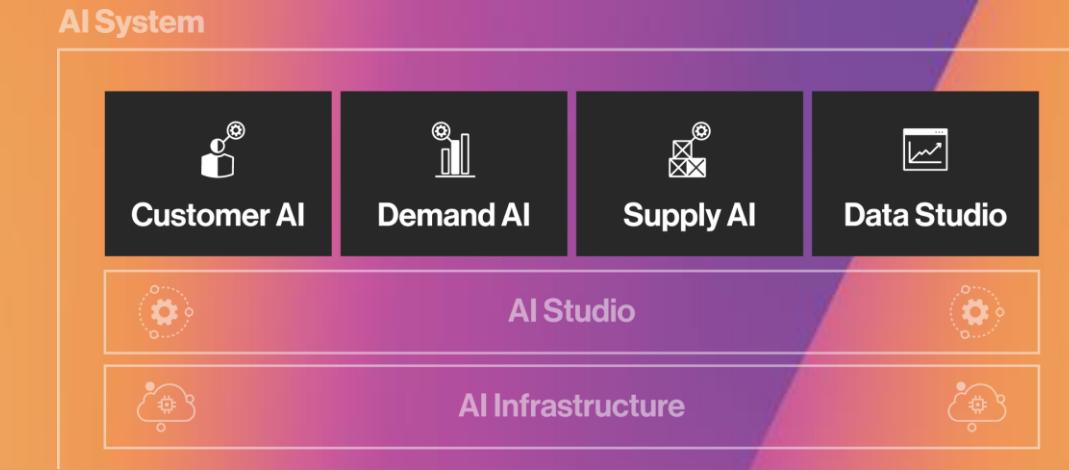
# End-to-end AI workflow



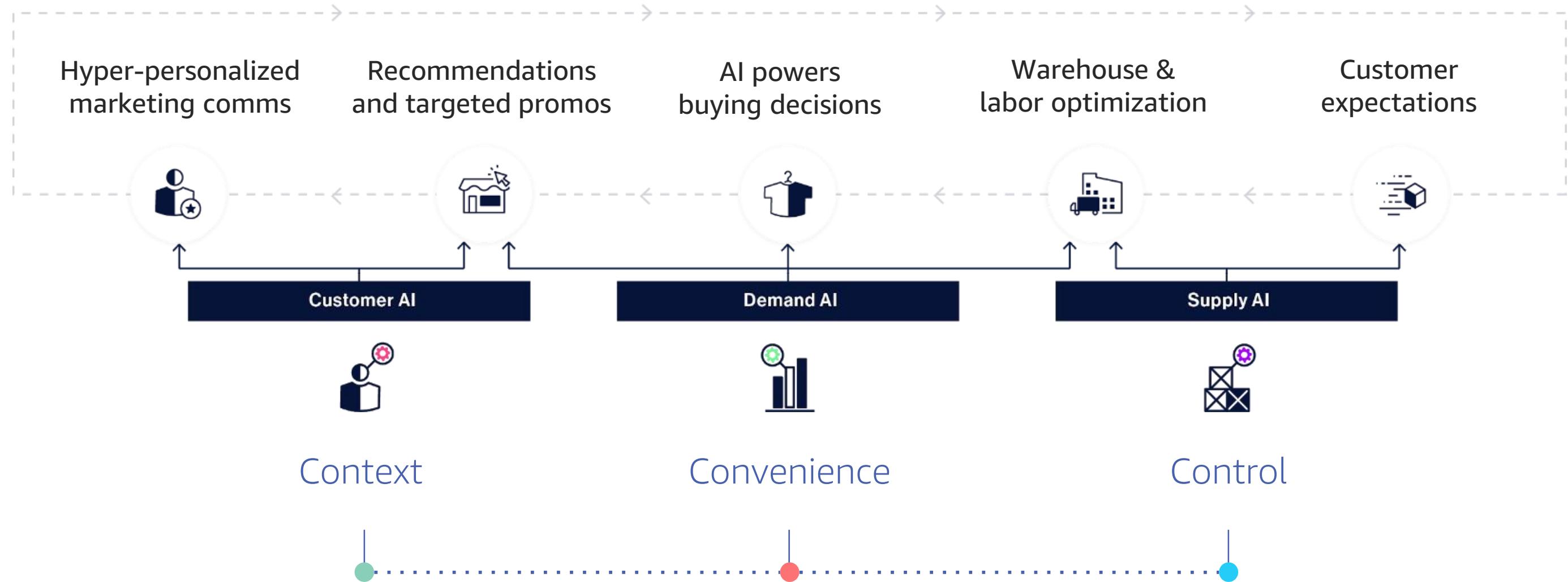
# Customizable UI and integration



# Peak solutions



# Linking ML tech with retail needs



# Customer AI

Get more from your marketing





Rapid time to value

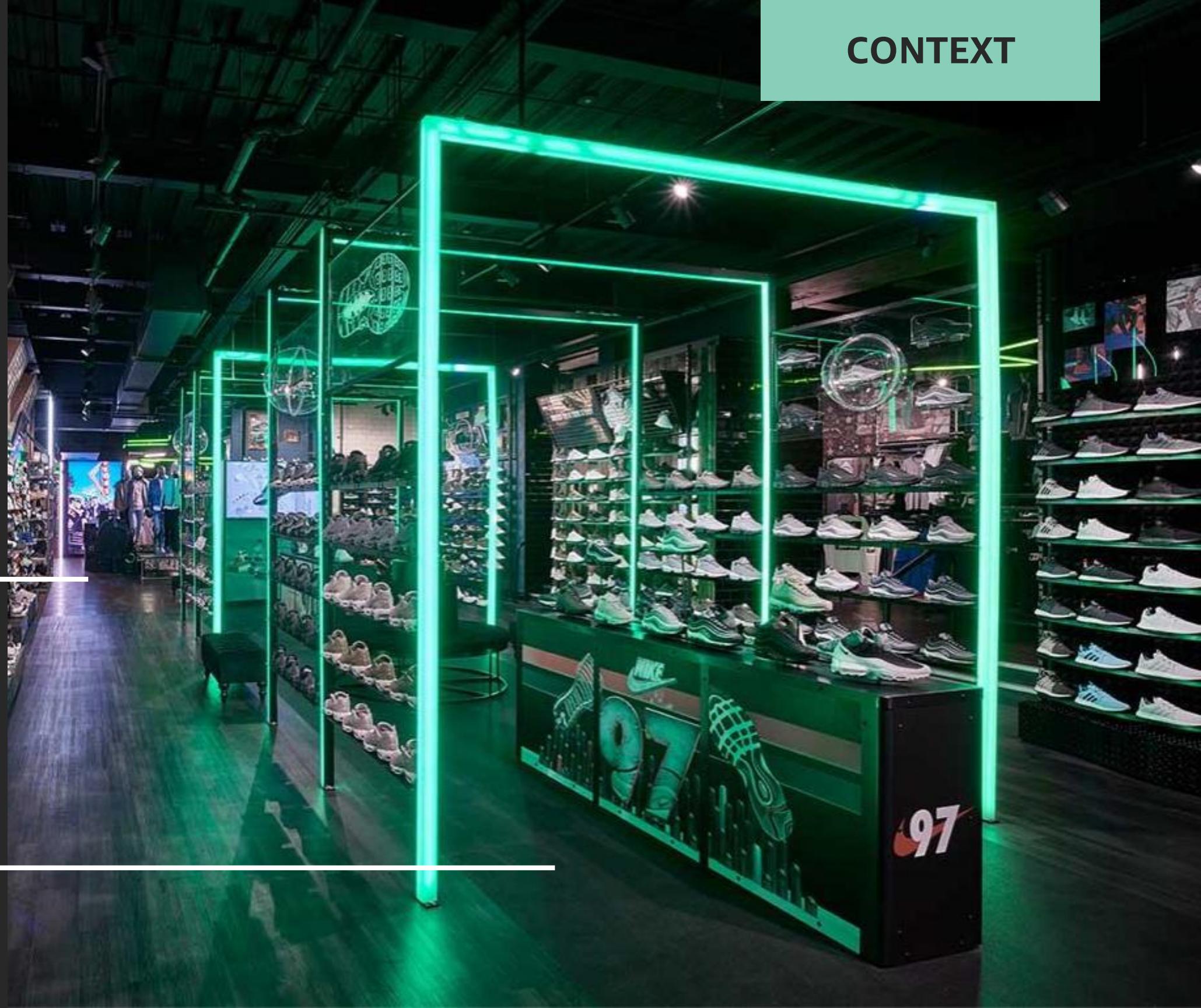
28%

Uplift in email revenue

10X

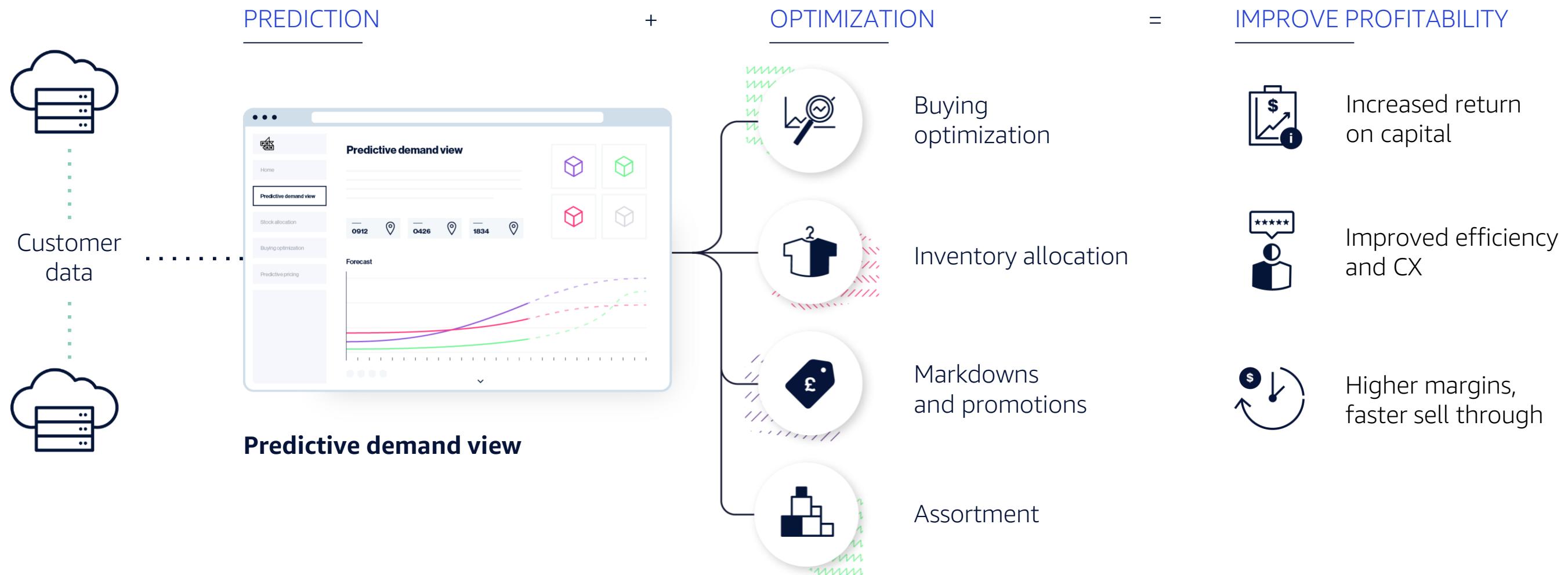
Return on Ad spend (ROAS)

CONTEXT



# Demand AI

AI-driven demand planning and optimization



# Demand AI in practice



Demand modeling  
suggests optimum prices  
for products



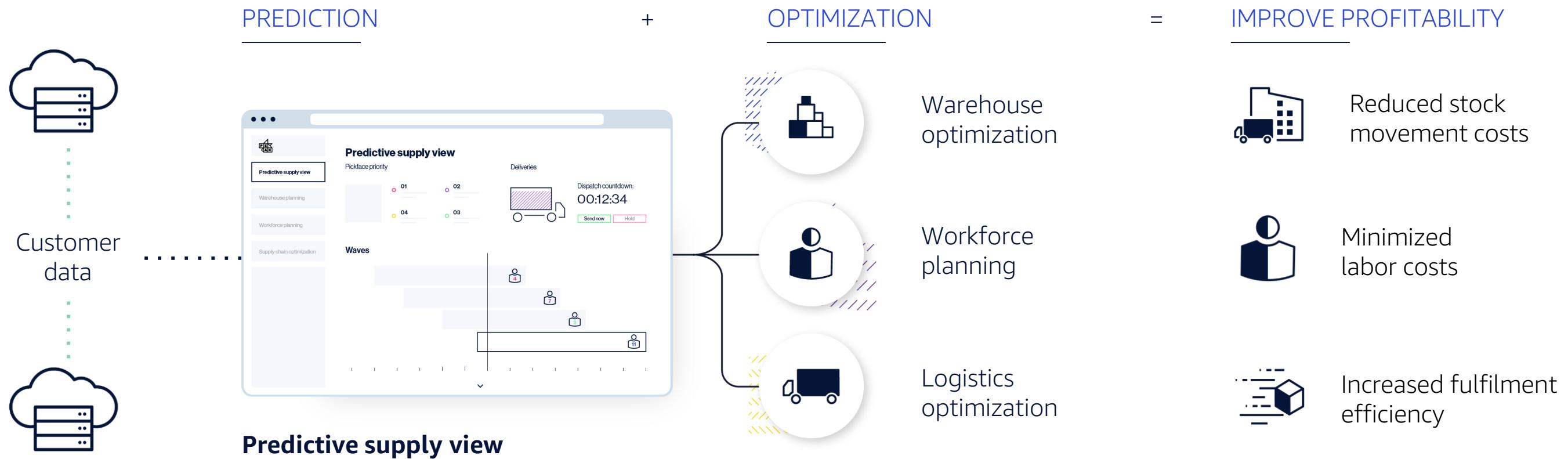
This maximizes margin,  
balancing rate of sale with  
markdown size



Most pricing decisions made  
automatically, increasing time  
for creativity in merchandising

# Supply AI

Fulfill demand at reduced costs



# Supply AI in practice



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AI System determines  
optimum stock levels



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Supply AI connects to  
demand and customer AI



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Stock allocated  
intelligently across pick-  
face and bulk storage

# Delivering connected retail



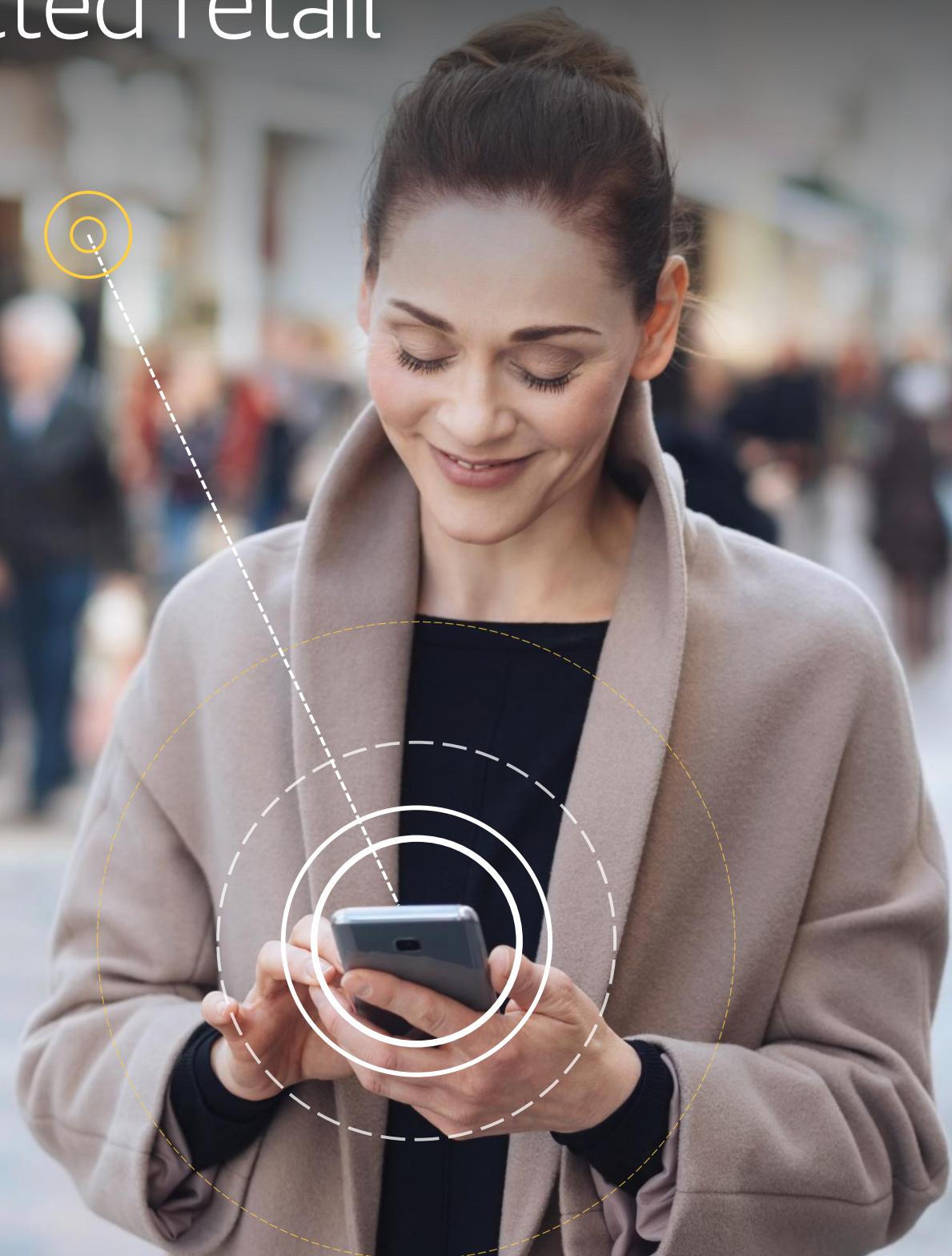
Amazing customer  
experience



Optimizing  
for profit



The future of retail.  
**Driven by AI**





asos

SEVEN  
STORE  
• COM

praetura  
VENTURES

swim!



TyresOnTheDrive  
.com



CarFinance 247

Marshalls

Regit

bruntwood

The  
Economist

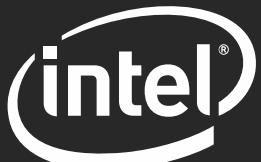
ClearGROW

AstraZeneca

NORTH  
EDGE

cmo  
stores.com™

# The only AI stack



Scalable + Secure + Outcome-focused

**Focused on what's important  
for future-facing retailers.**

Visit us at the Intel stand  
and find out what your AI  
opportunity could be

**Peak.ai/reinvent**





# Q&A



# Thank you!

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