

The background is a vibrant, multi-colored gradient. It features a diagonal split between a blue-purple gradient on the left and a yellow-orange gradient on the right. The text 'AWS re:Invent' is positioned on the left side, with 'AWS' in a smaller font above 're:Invent'.

AWS  
re:Invent

TRH202

# Personalizing customer experiences in Travel and Hospitality

## **Massimo Morin**

Head WW BD,  
Travel & Airlines

Amazon Web Services

## **Praveen Sharma**

VP, Digital Products  
and Analytics

United Airlines

## **Kim Jon Yoon**

CEO Business Group

Yanolja

## **Srihari Thotapalli**

Global Head  
of Analytics

Hyatt Hotels

Welcome





SEE SOMETHING NEW, EVERY DAY.

TAKE A LOOK



All -

Prime Video Stream movies & TV shows

Deliver to Irina Cambridge 02141

Buy Again Your Pickup Location Browsing History Massimo's Amazon.com Today's Deals Gift Cards Whole Foods

EN Hello, Massimo Account & Lists Orders Prime Cart

Upgrade and save

20% off a new 4K Fire TV streaming media player

trade-in



**Hi, Massimo**  
Customer since 2002

Recommendations for you

Your Orders	Electronics
Movies & TV	Computers & Accessories

Recently viewed

Tue, Feb 12

[Edit your browsing history](#)

Reminder: \$12 credit

Restaurants you love, delivered to your door. Get \$12 off your first order.

[Browse Restaurants](#)

Looking for a gift?

Find personalized gift ideas and view your friends' Wish Lists.

[Check out the Gift Finder](#)

See how Alzheimer's disease affects the brain. Take our Brain Tour.

[alz.org/brain](http://alz.org/brain)

Ad feedback

Video: Recommended for you

Agatha Christie's The ABC Murders - Season 1

Whole Foods Market

Amazon Smart Plug

# Most comprehensive ML/AI services



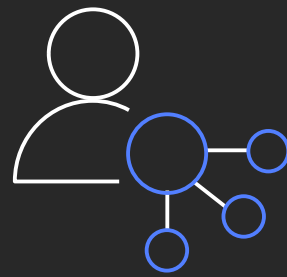
## ML services

Build, train, and  
deploy ML fast



## AI services

Easily add  
intelligence to  
your applications



## Frameworks

Choice and  
flexibility with  
broadest  
framework  
support



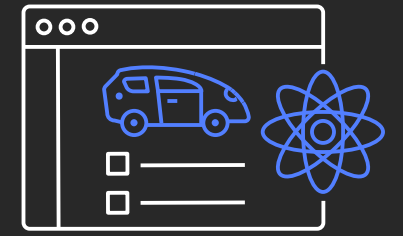
## Compute

Fastest and  
lowest-cost  
compute options



## Analytics & security

Comprehensive  
capabilities,  
no compromise



## Learning tools

Get deep on  
ML with AWS  
DeepRacer  
and AWS  
DeepLens

# Amazon Personalize

Real-time personalization and recommendation, based on the same technology used at Amazon.com

[Get started with Amazon Personalize](#)

UNITED



yanolja

HYATT

**UNITED**



# Personalizing customer experiences in Travel and Hospitality





**4,900** flights per day to **355** airports across **5** continents



In 2018, **1.7m** flights carried **158m** passengers



United operates more than **1300** mainline and Express aircraft



United has the world's most comprehensive route network, including **7 U.S. mainland hubs** providing service to **193 countries**



A STAR ALLIANCE MEMBER 

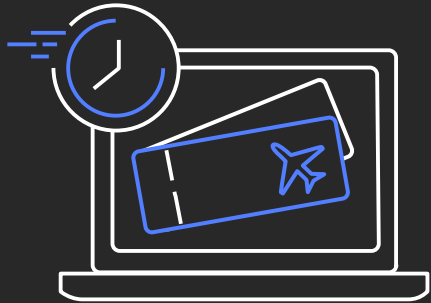
# Humanizing and contextualizing customer interactions on our digital channels is a top priority



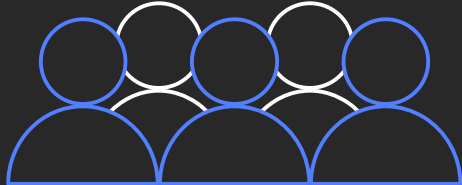
Over 1 billion digital visits a year and growing by 10%



82% of check-ins are on United digital properties



United digital sells 71 tickets per minute



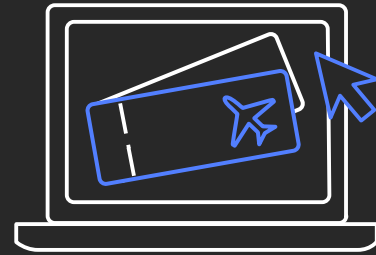
3 out of 5 travelers rely on the mobile app for day-of-travel activities



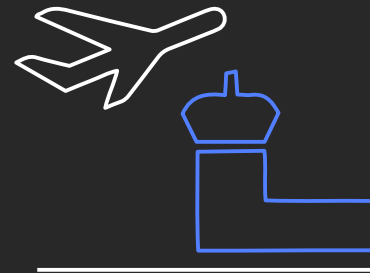
We leverage machine learning across our customers' travel journey to create more personalized experiences



Inspire



Book



Airport



Onboard



Post-travel

Driving engagement  
through one-on-one  
game formats

The screenshot shows a mobile app interface for 'Mile Play'. At the top, there is a blue header with a back arrow on the left, the text 'Mile Play' in the center, and a home icon on the right. Below the header, the main content area has a dark blue background with faint airplane icons and dashed lines. The text 'Ready. Set. Earn.' is prominently displayed. Below this, it says 'Book and take a trip 1 time by June 11, 2019 to get 2,500 bonus award miles.' and '39 days left'. A white horizontal bar separates this from the bottom section, which has a white background. In the center of this bar is a grey circle with a white airplane icon. Below this bar, the text 'Note: May take up to 72 hours to reflect progress' is shown. Underneath is the section header 'How to participate' in bold. At the bottom, there is a single list item: a radio button followed by the text 'Book and take a trip\*'. The radio button is currently unselected.

Mile Play

Ready. Set. Earn.

Book and take a trip **1** time by  
June 11, 2019  
to get **2,500** bonus award miles.

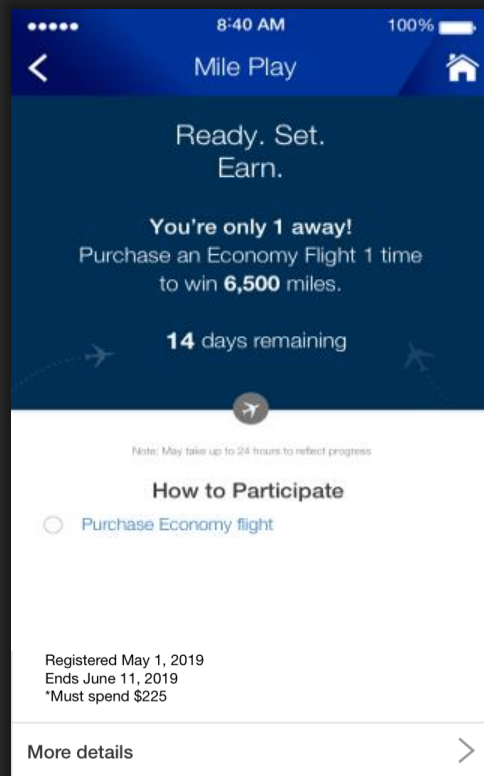
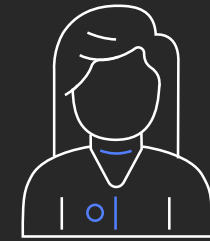
**39** days left

Note: May take up to 72 hours to reflect progress

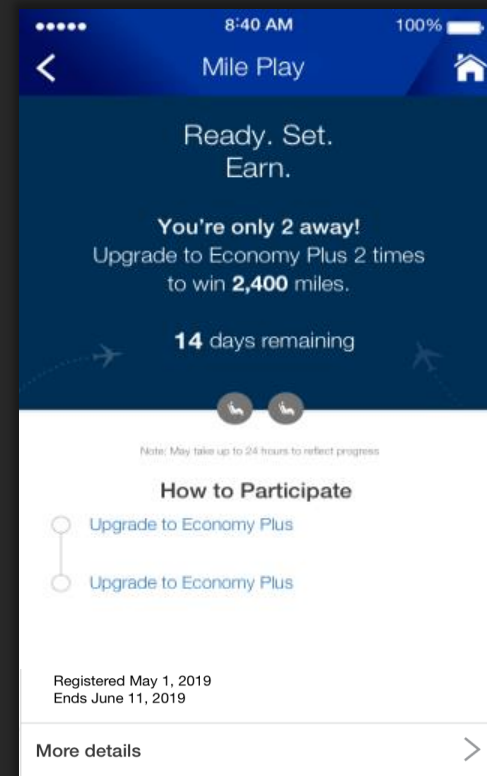
**How to participate**

Book and take a trip\*

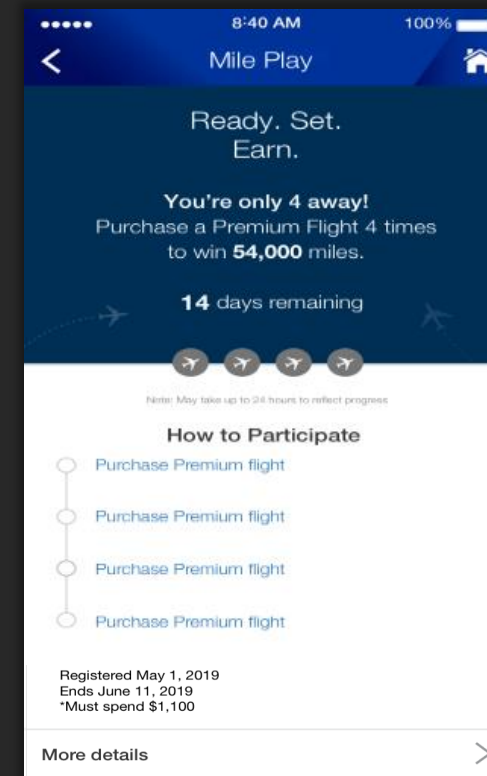
# Driving engagement through one-on-one game formats



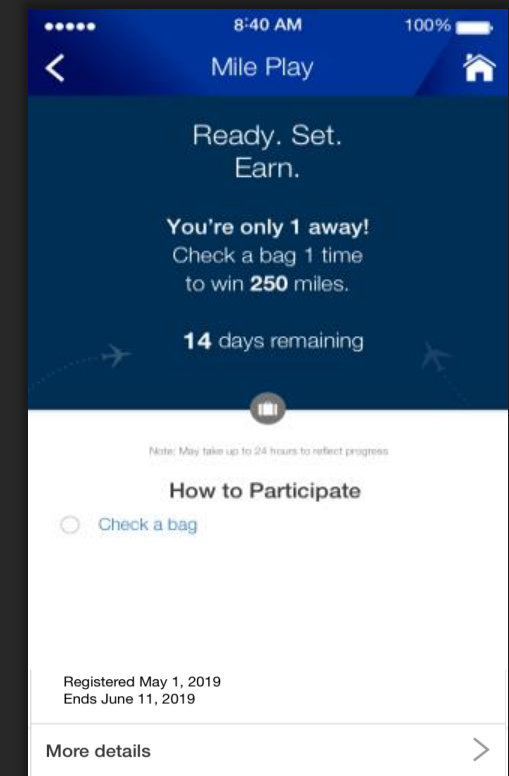
1 Economy flight  
6,500 bonus miles



2 Economy Plus upgrades  
2,400 bonus miles

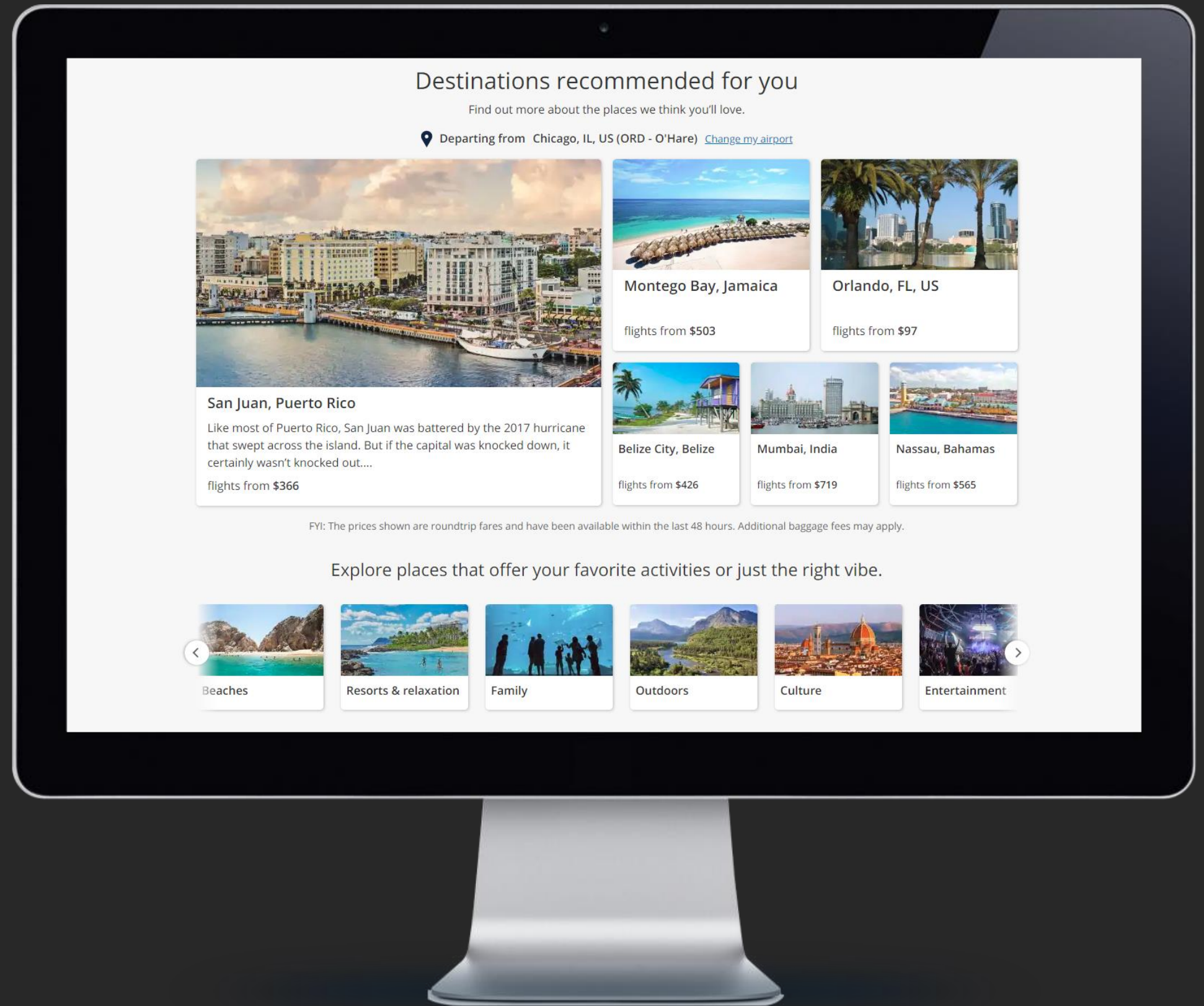


4 Premium flights  
54,000 bonus miles

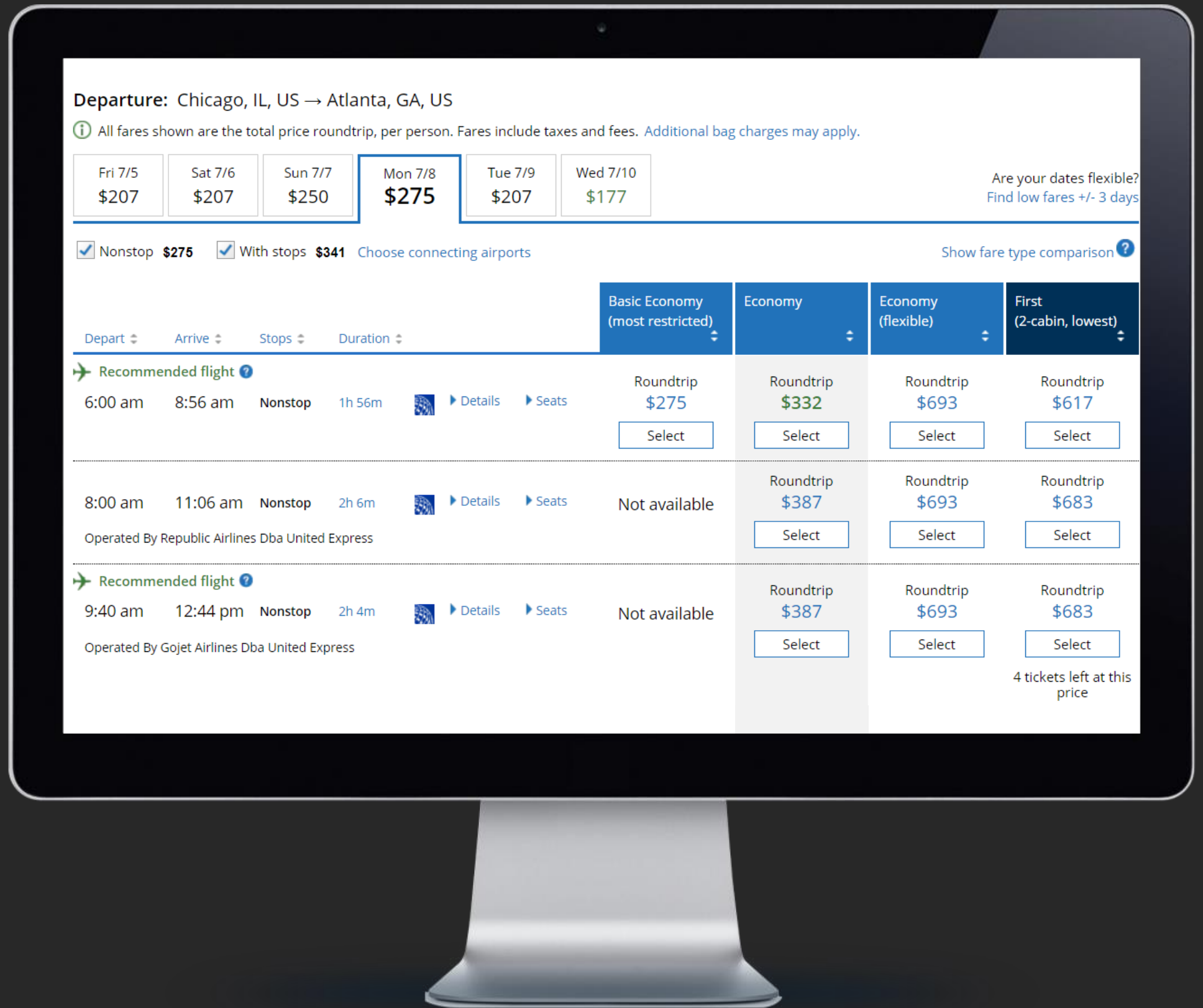


1 checked bag  
250 bonus miles

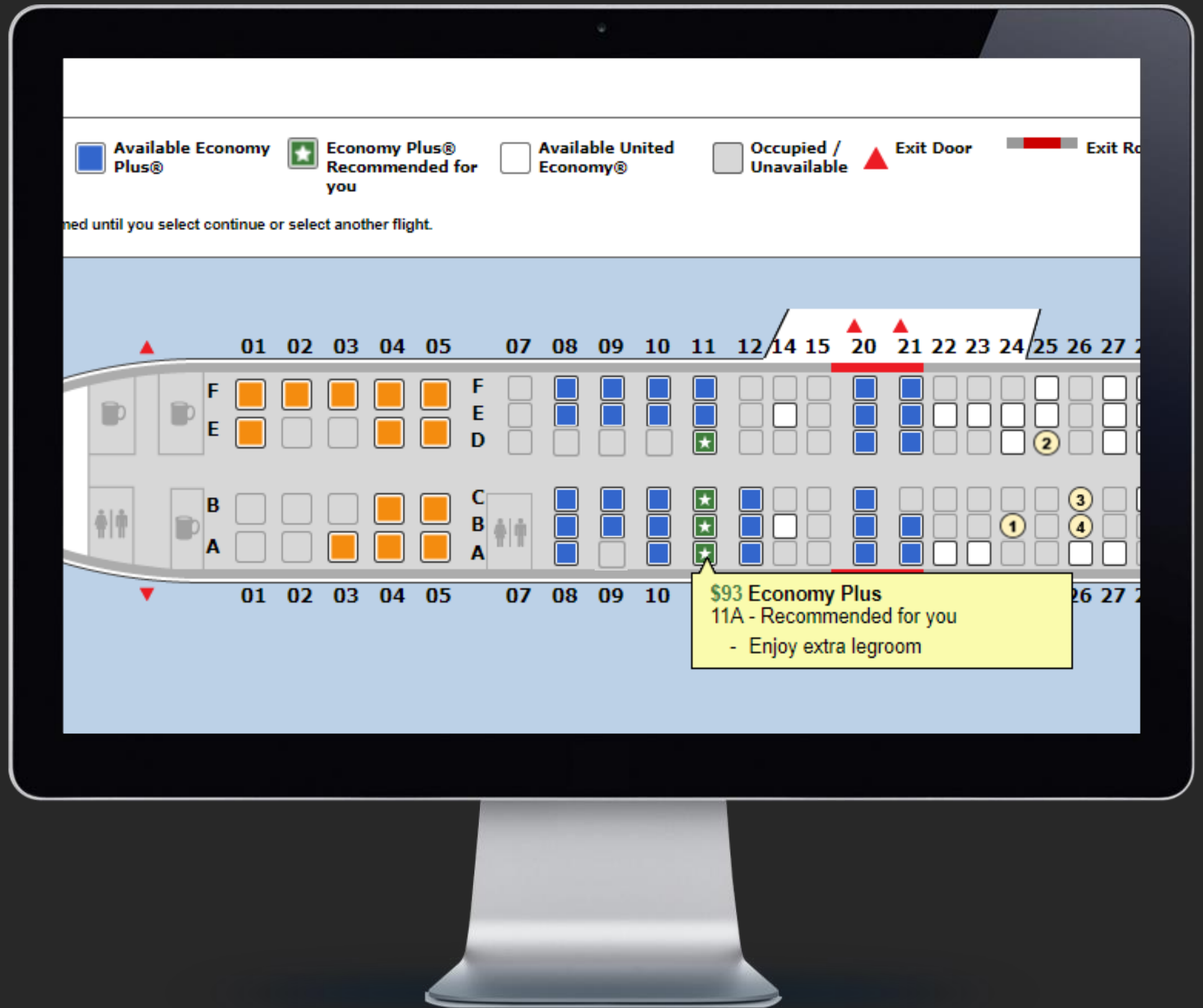
Enabling customers to explore by activity or destination



Curating flight recommendations based on travel patterns



Enabling a better travel experience through seat recommendations





Serving customers relevant products and content at the right time



2:44 [Signal] [Wi-Fi] [Battery]

Reservation Details

Frequent Flyer: ---  
Seat(s): 32A, ---

Contact information  
Email, Mobile phone

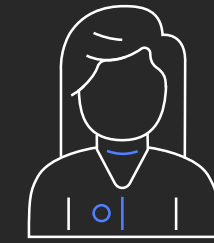
Upgrade to an Economy Plus® seat  
From \$9 per person

Travel made easier with Premier Access®  
From \$20 per person

Other options

Change seats

Edit frequent flyer details



AT&T LTE 10:47 AM [Signal] [Wi-Fi] [Battery 59%]

Reservation Details

Enjoy our premium cabin Upgrade  
From \$139 per person

Switch to another Flight  
From \$75 per person

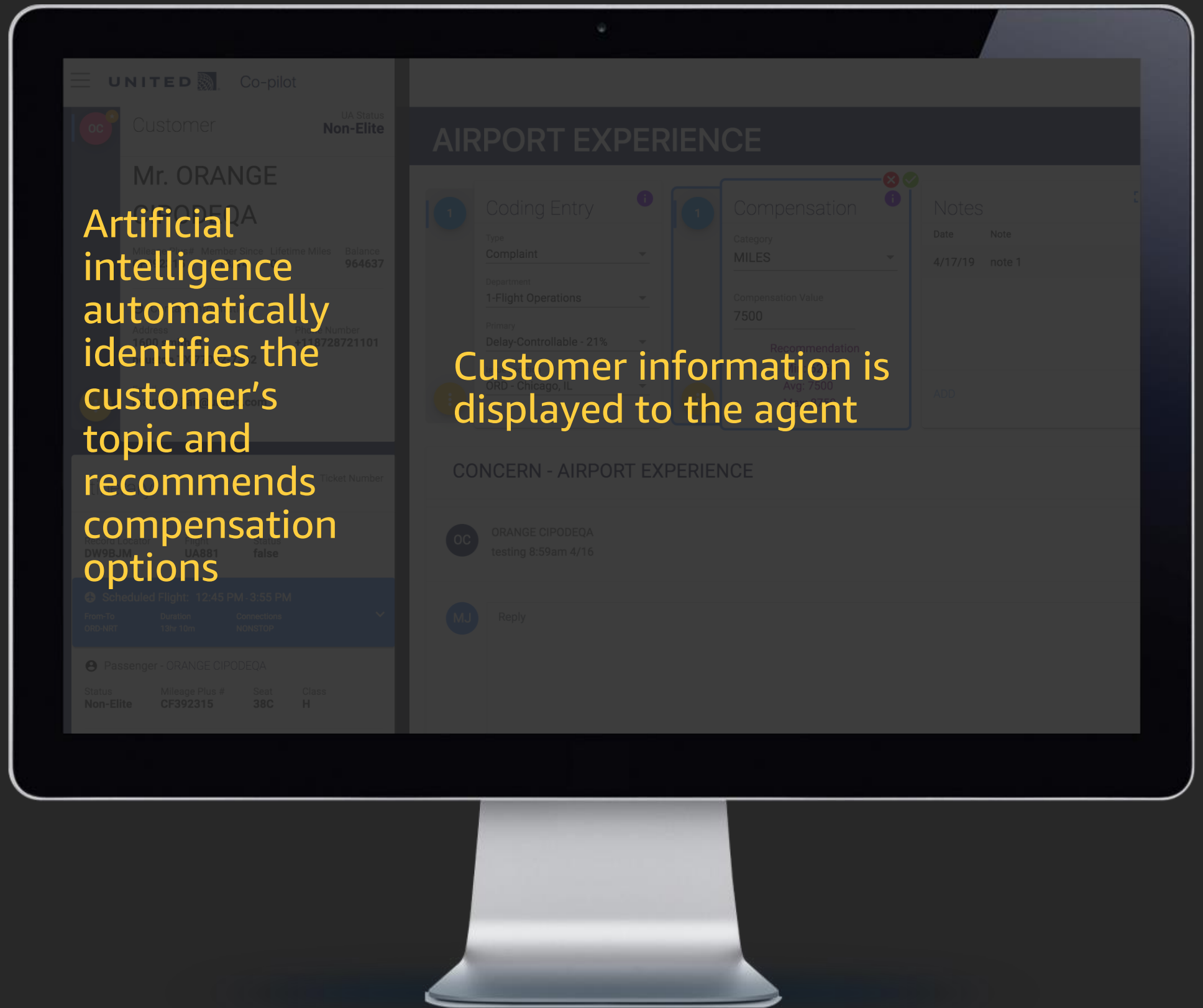
Travel made easier with Premier Access®  
From \$66 per person

Upgrade to an Economy Plus® seat  
From \$59 per person

Responding to customers quickly drives customer satisfaction

Artificial intelligence automatically identifies the customer's topic and recommends compensation options

Customer information is displayed to the agent



# Empowering our employees to personalize the customer airport experience

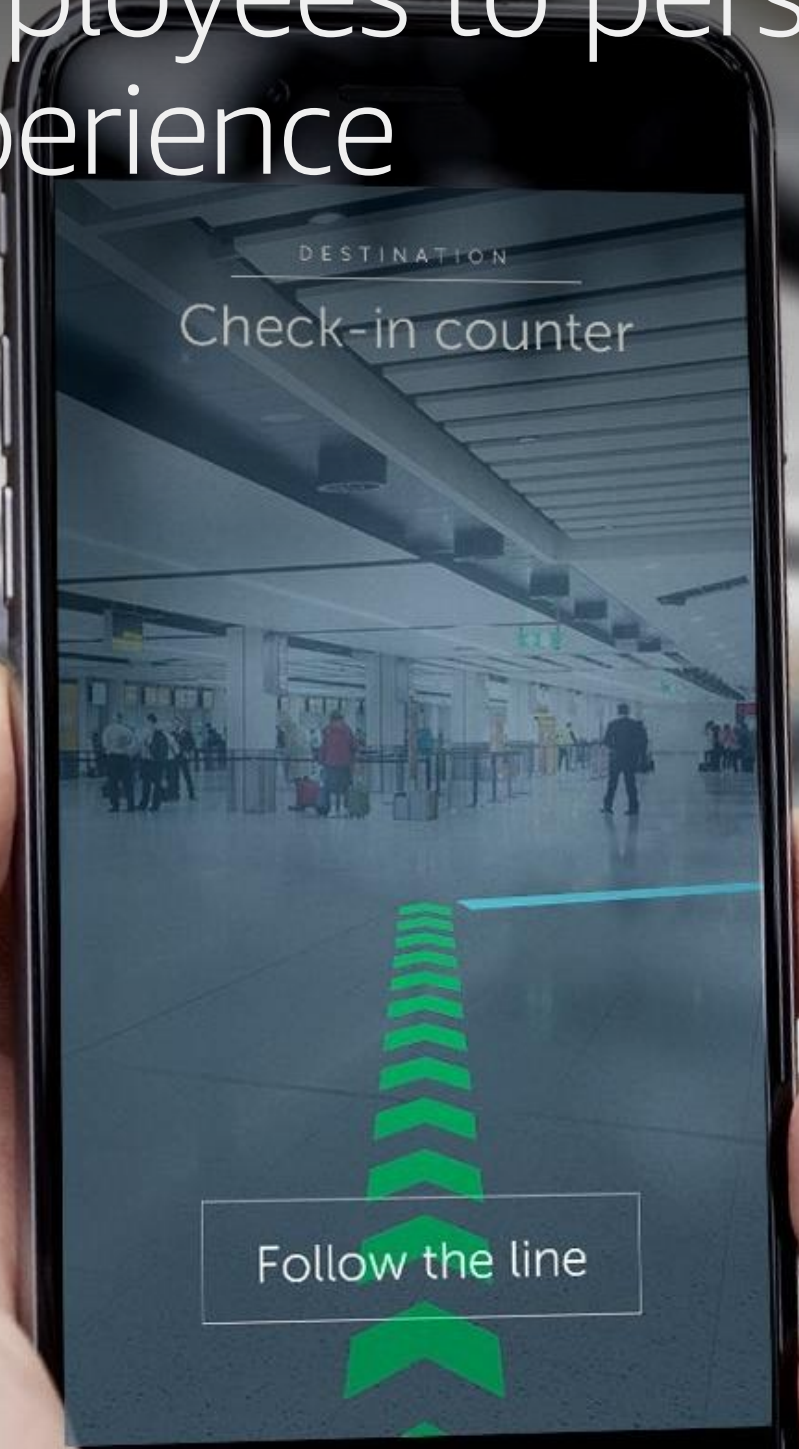
"I want to provide a personalized customer experience"

**Customer location**

United Customer Service

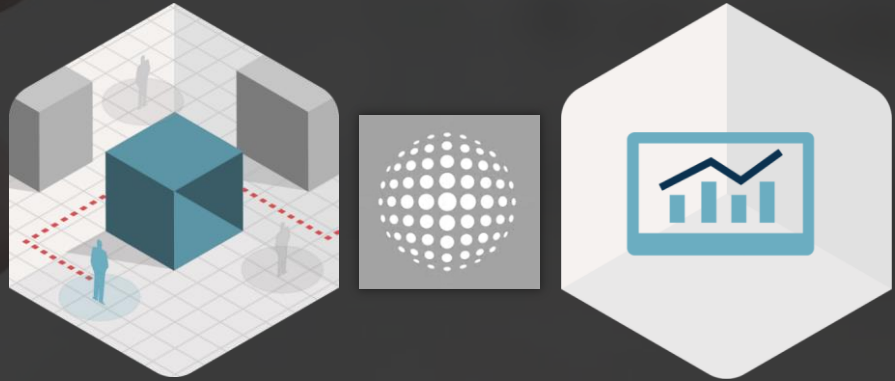
United customer

"I want to know that someone is looking out for me"



Using micro location capabilities, we will locate our Global Services customers in real time to:

- Deliver proactive and prioritized meet and assists
- Make up-to-the-minute accurate operational decisions
- Understand their airport journey to optimize our service model





# Personalizing customer experiences in Travel and Hospitality

# Content



**Yanolja business  
introduction**



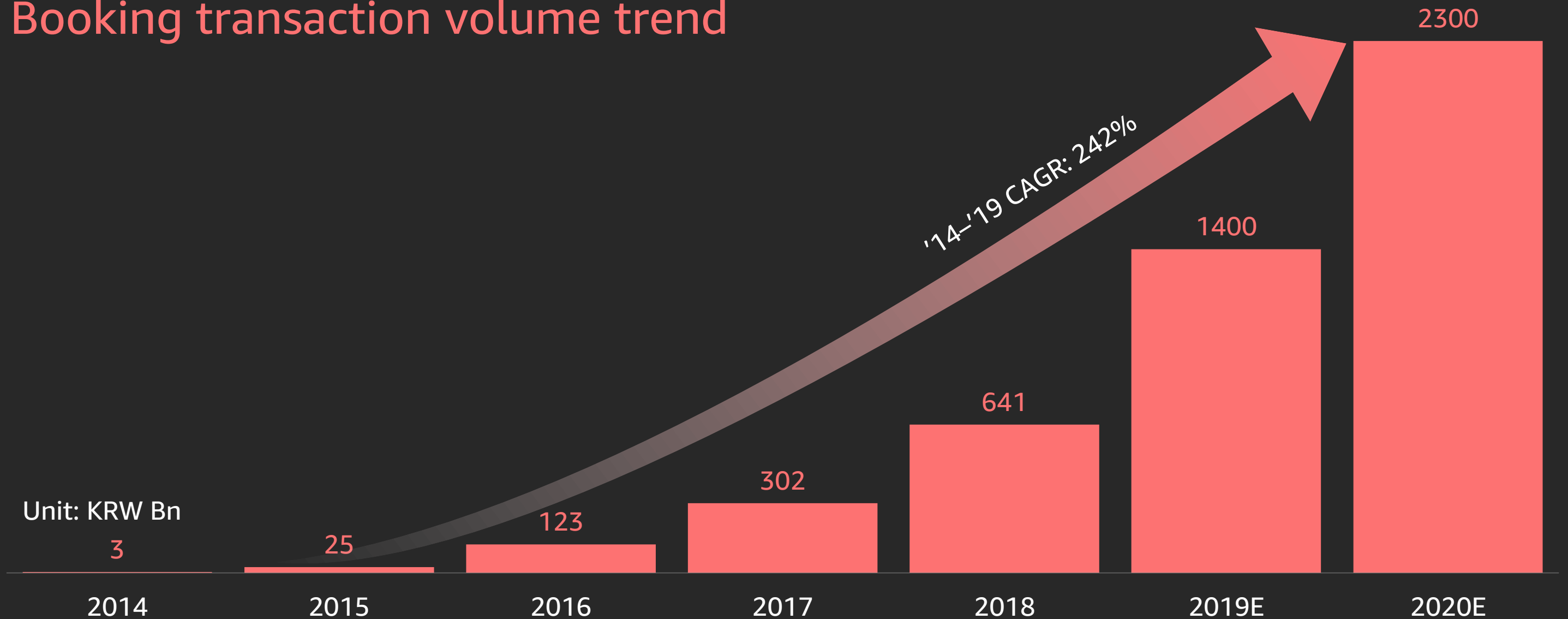
Collecting real-time  
data through  
system integration



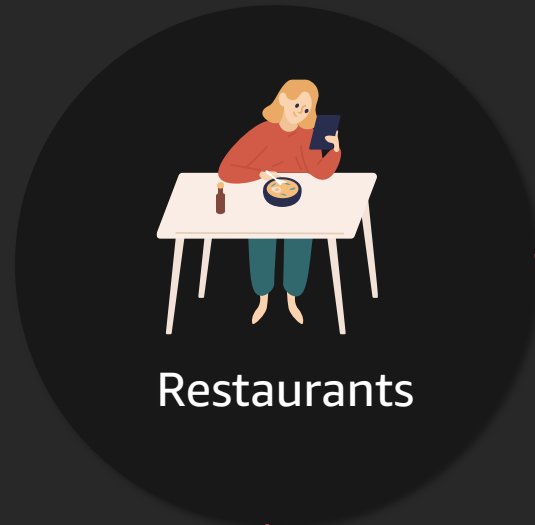
Yanolja cases  
for personalized  
guest experience

Yanolja is the fastest-growing, No.1 OTA for accommodation and leisure activity categories in Korea

## Booking transaction volume trend



# In addition to accommodation and leisure activities, Yanolja has expanded its booking service to restaurants and transportation

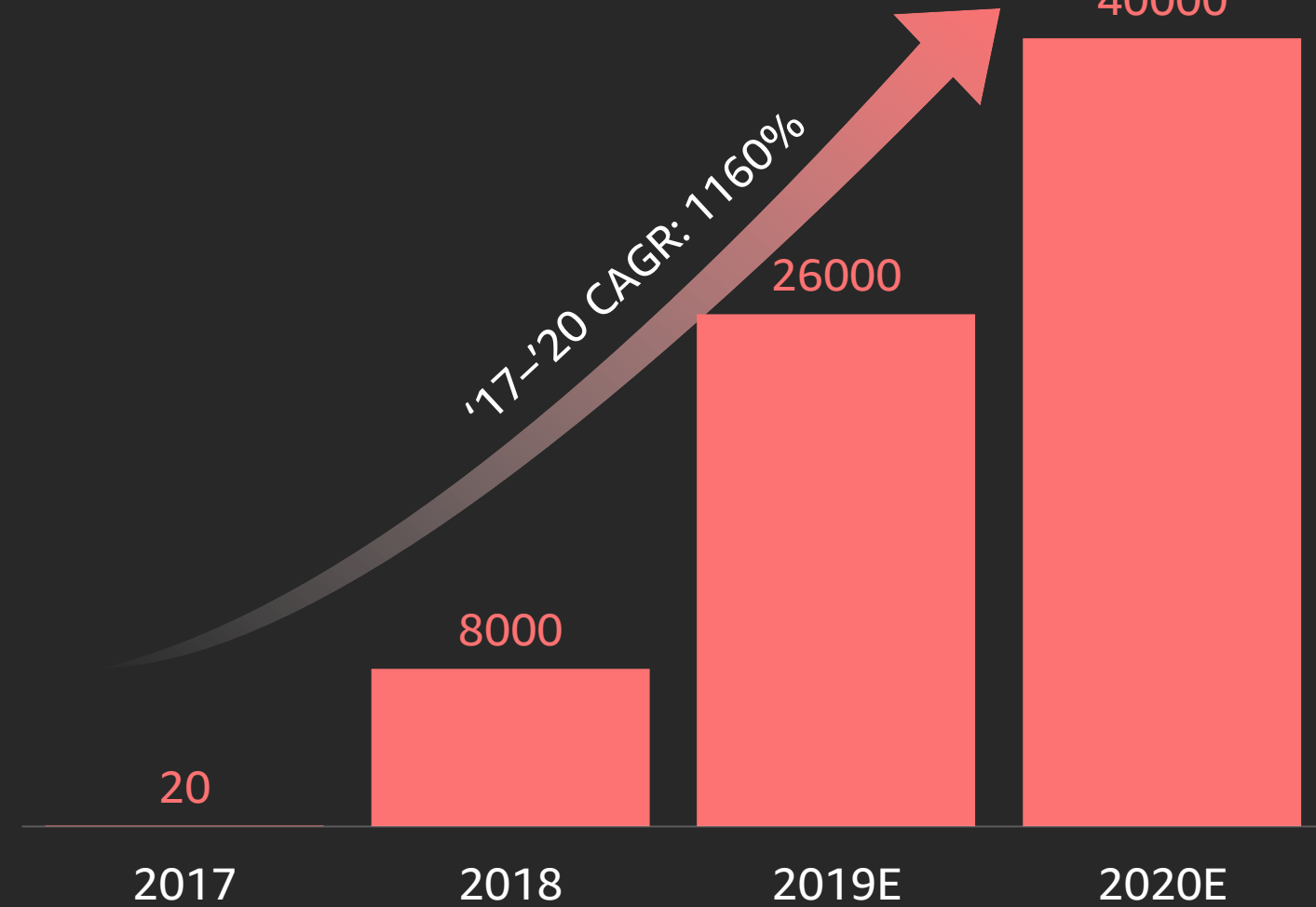
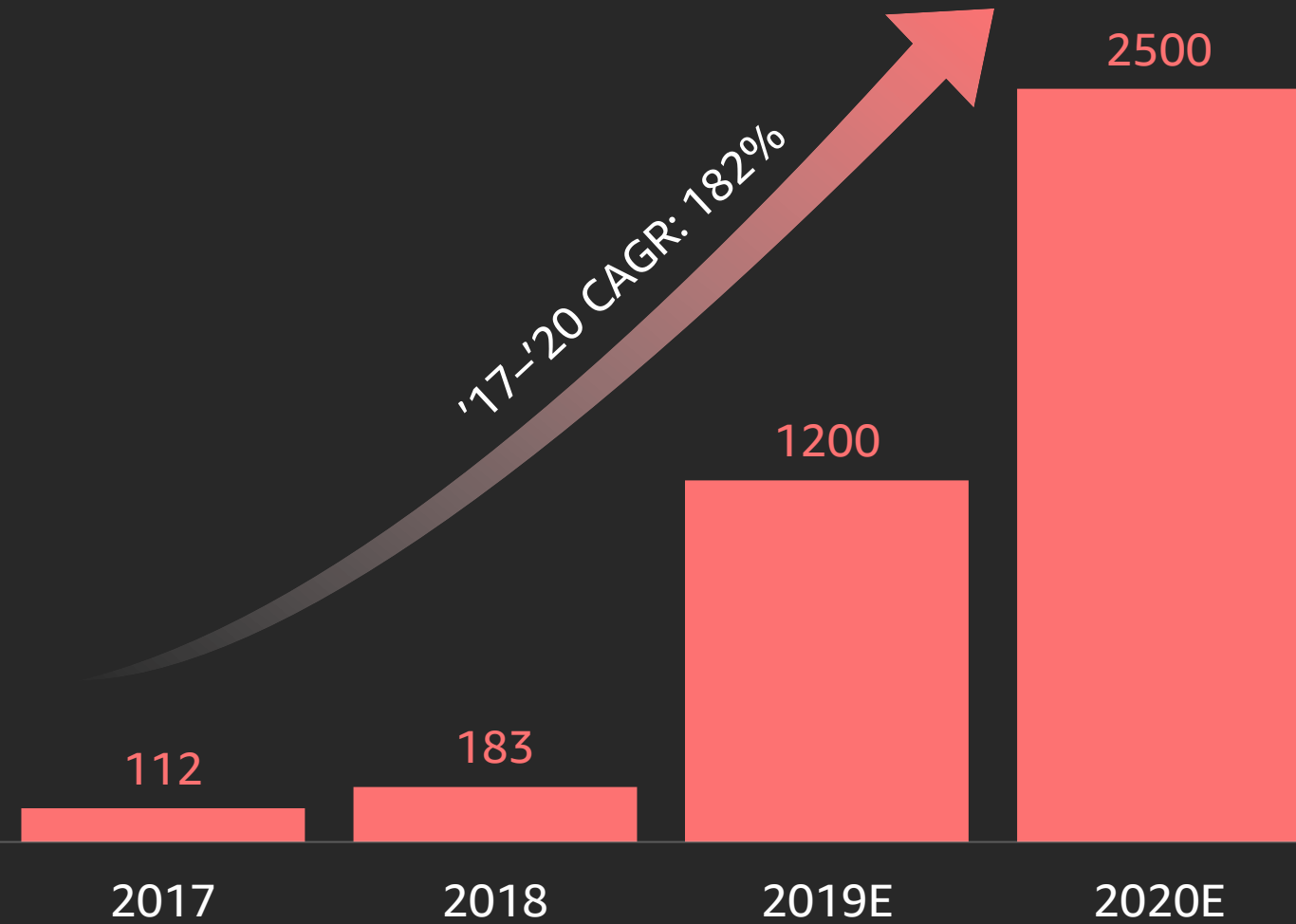


Yanolja is the No.1 cloud-based PMS provider in the world as well as one of the largest franchised hotel chains in Korea and SEA

# of hotel properties franchised by Yanolja in Korea & Southeast Asia



# of hotels using PMS provided by Yanolja in 160 countries





# Content



Yanolja business  
introduction



Collecting real-time  
data through  
system integration

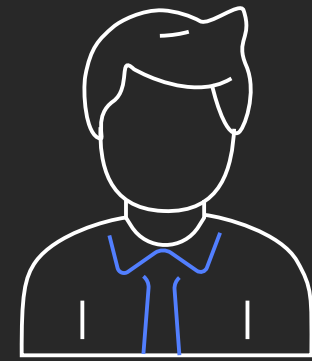


Yanolja cases  
for personalized  
guest experience

Value chain of Hospitality industry under existing technology is segmented into many pieces



Hotel

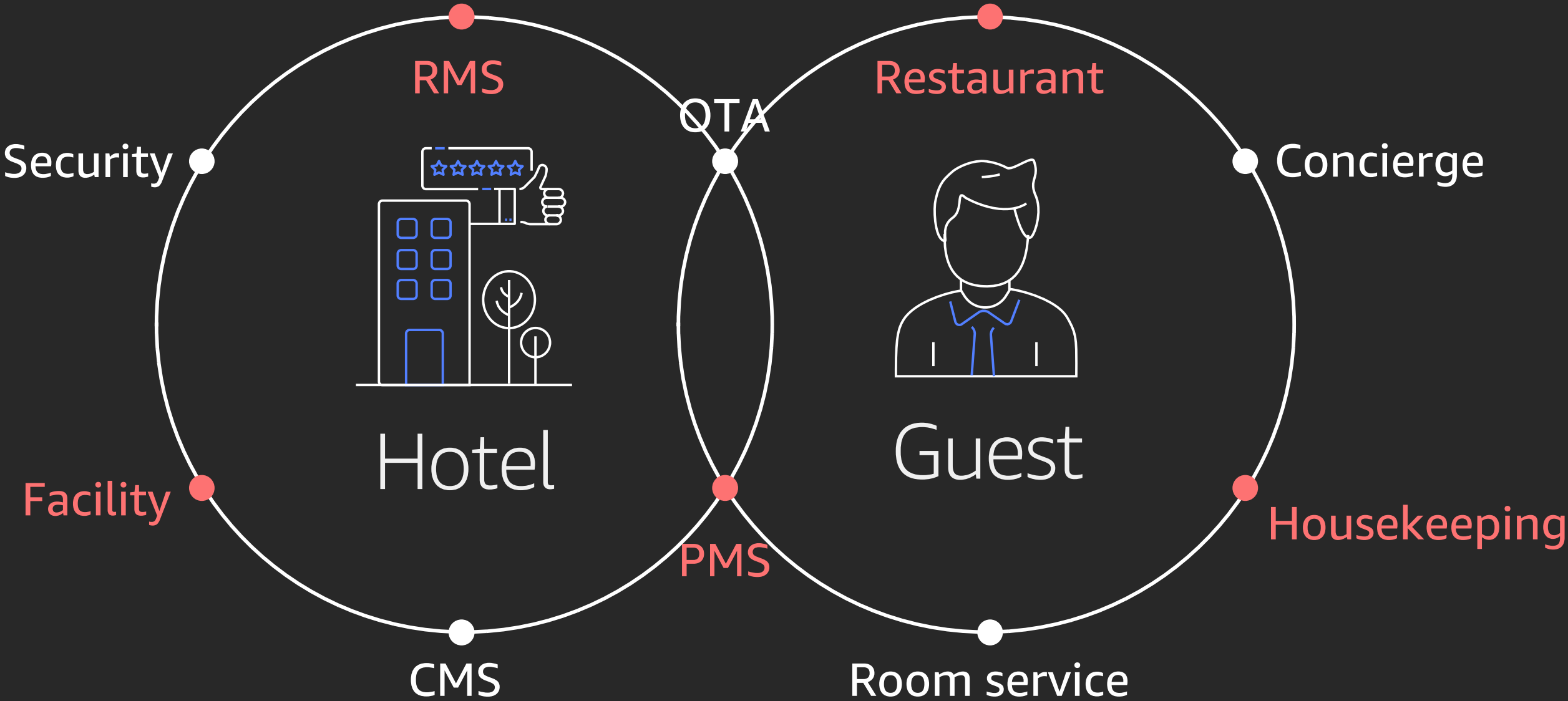


Guest

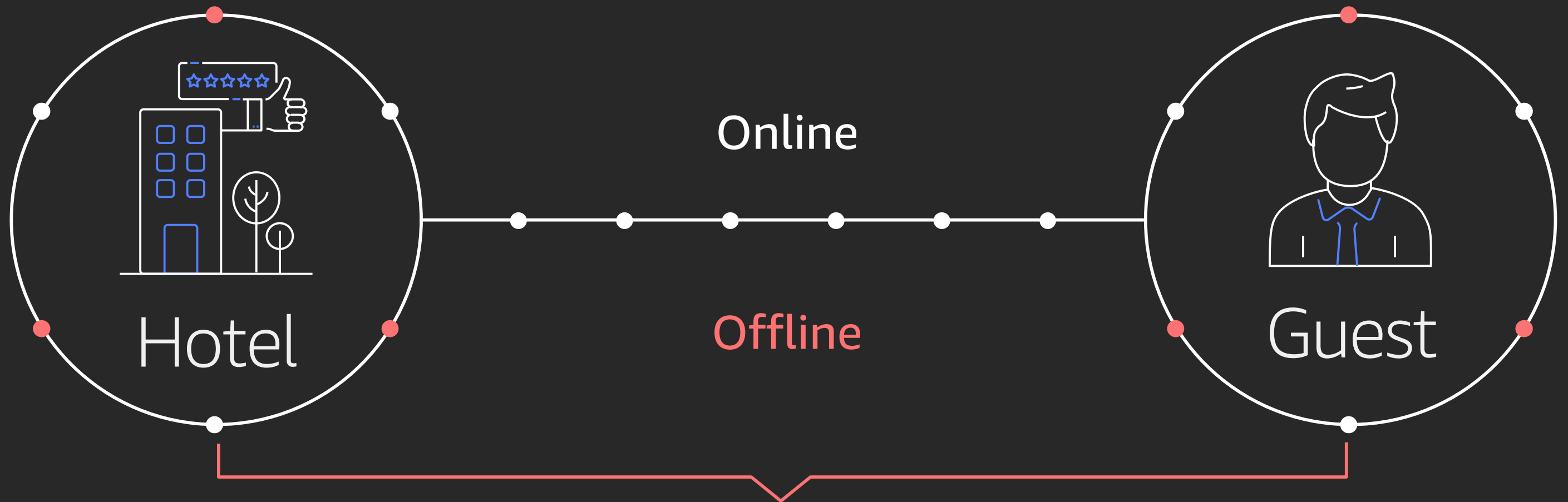


Segmented Hospitality value chain

In particular, there has been a disconnect between online and offline segments of the current value chain

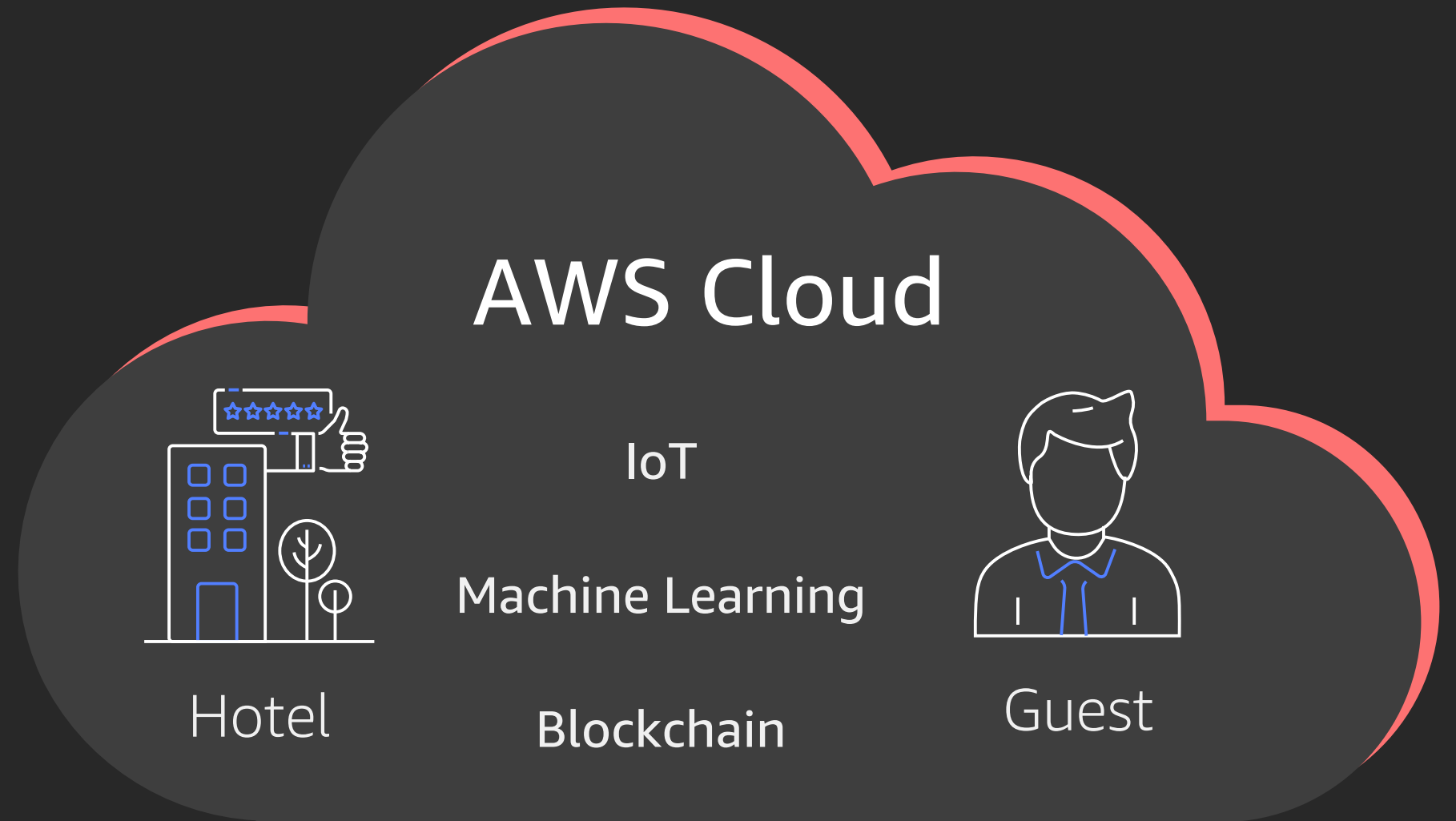


Integrating the full system in real time through existing technology is very difficult, resulting in high cost



Connecting all the contacts is incredibly expensive

Thus, AWS Cloud is necessary to integrate online and offline processes across value chain for collecting real-time data in a reliable manner



# Fully integrated and connected intelligence through AWS Cloud can enhance user experience and operational efficiency

Collected data of guest and hotel

Expected result and use cases

Collecting guest preference data for each touch point in real time

+

Collecting hotel manager's operation data for each process



Providing personalized offers customized for each touch point

Maximizing operational efficiency for each operation process

# Content



Yanolja business  
introduction



Collecting real-time  
data through  
system integration



Yanolja cases  
for personalized  
guest experience

## Yanolja case 1:

Hotel automation  
solution for better  
user experience

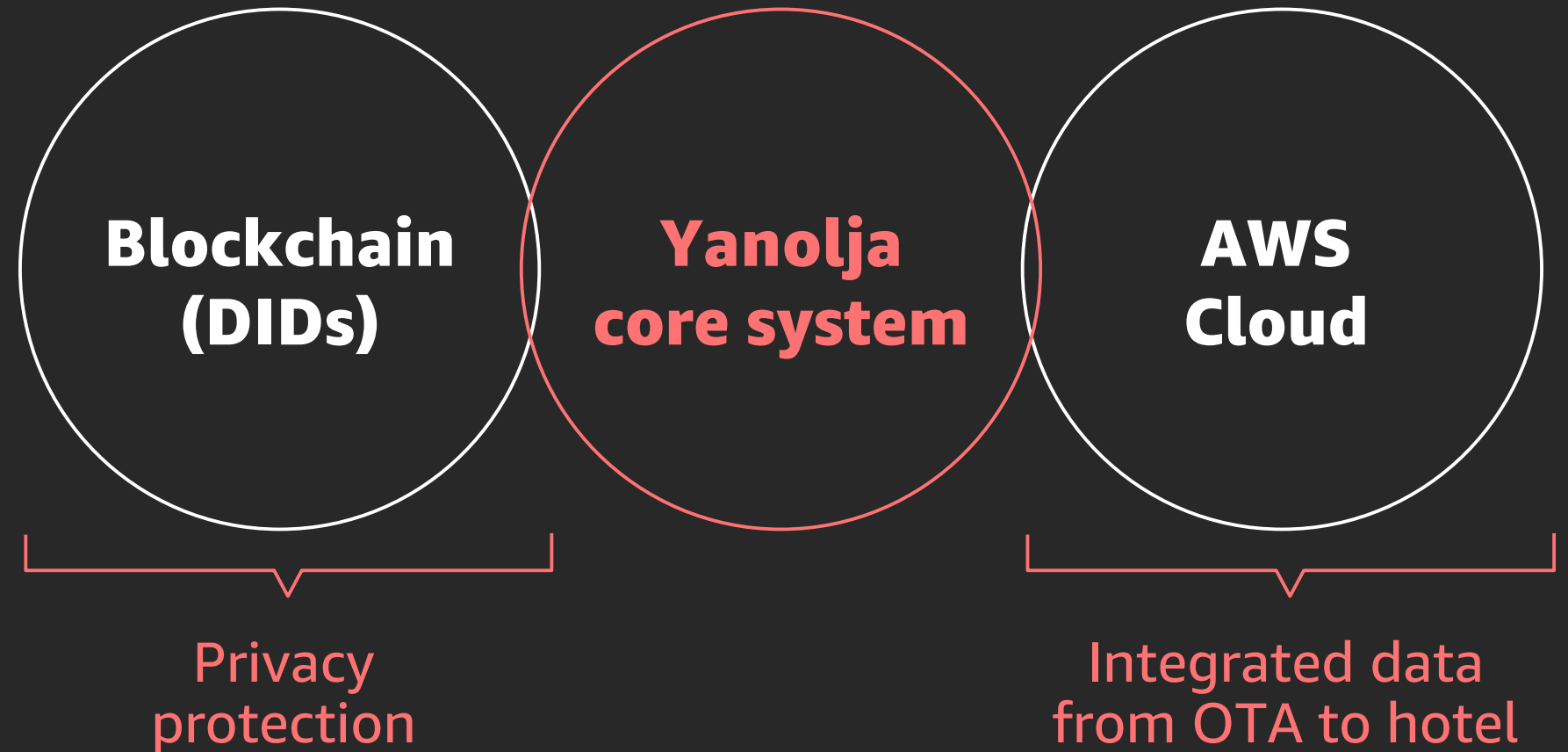
A computer monitor with a black bezel and a silver stand. The screen is white and displays the logo 'Y FLUX' in a teal color. The 'Y' is a simple block letter, 'FLUX' is in a sans-serif font, and the 'X' is composed of two intersecting lines.

Y FLUX



## Yanolja case 1:

Blockchain unified  
pass and reservation  
system based on AWS  
Cloud can improve  
customer satisfaction



## Yanolja case 1:

Blockchain unified pass and reservation system based on AWS Cloud can improve customer satisfaction



## Yanolja case 1:

Blockchain unified  
pass and reservation  
system based on AWS  
Cloud can improve  
customer satisfaction

25%

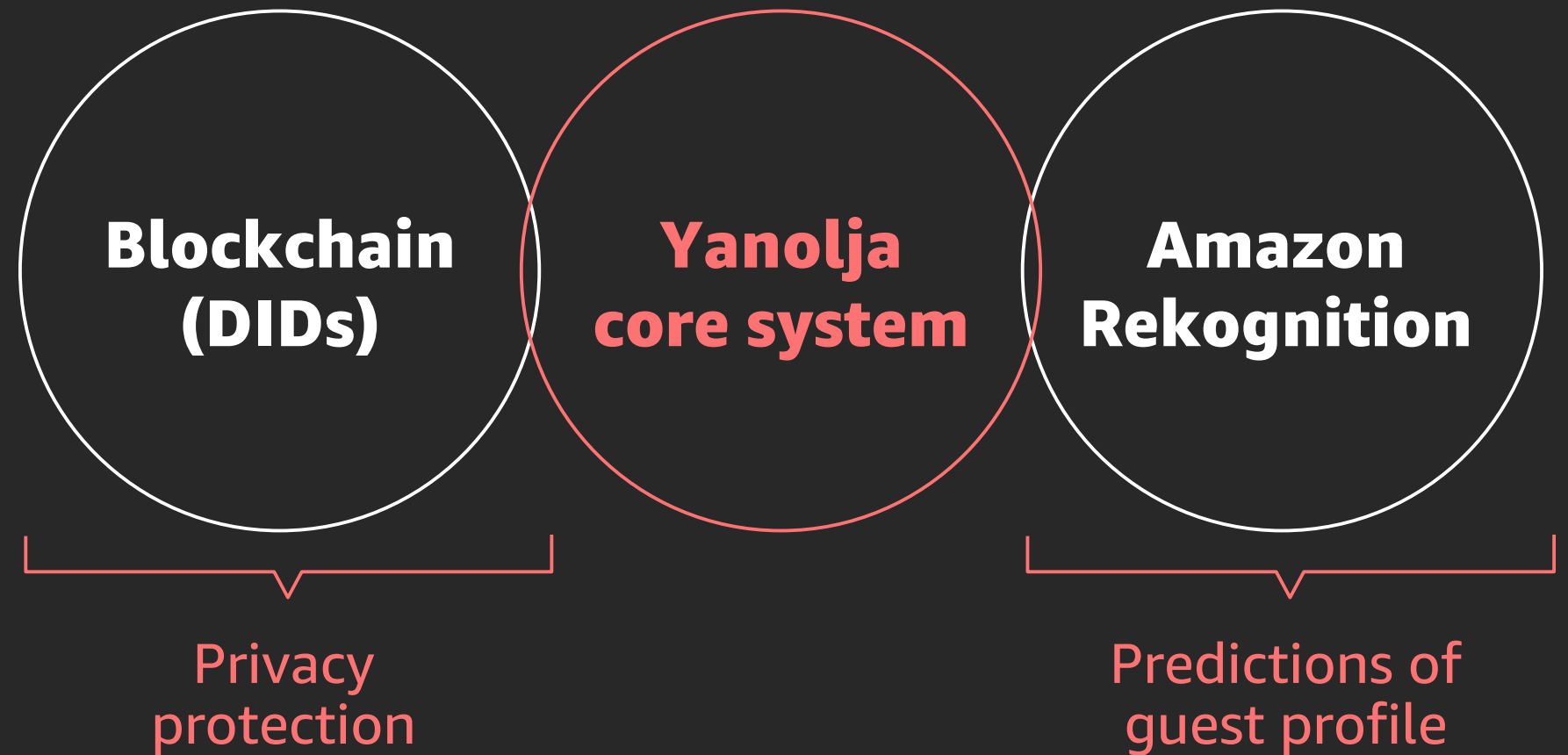


Customer  
satisfaction



## Yanolja case 2:

User identification through Amazon Rekognition and blockchain (DIDs) improves occupancy rate and revenue with higher customer retention rate



## Yanolja case 2:

User identification through Amazon Rekognition and blockchain (DIDs) improves occupancy rate and revenue with higher customer retention rate



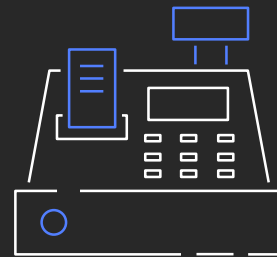
## Yanolja case 2:

User identification through Amazon Rekognition and blockchain (DIDs) improves occupancy rate and revenue with higher customer retention rate

38%



Amount  
of sales



32%

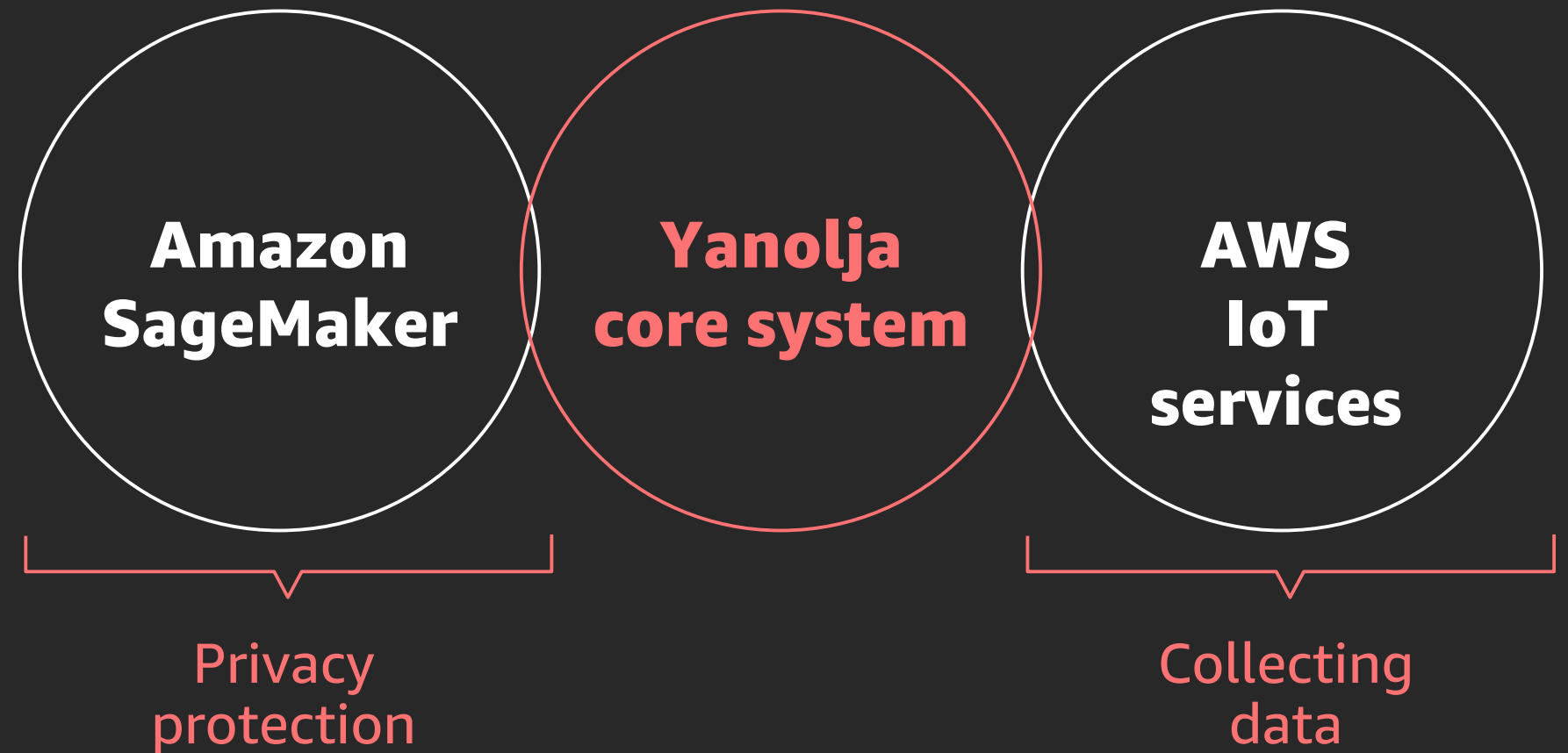


Number of  
reservations



## Yanolja case 3:

Prediction of guest personalization through AWS IoT services and Amazon EMR enhances customer convenience and reduces amenity and operational costs



## Yanolja case 3:

Prediction of guest personalization through AWS IoT services and Amazon EMR enhances customer convenience and reduces amenity and operational costs





## Yanolja case 3:

Prediction of guest personalization through AWS IoT services and Amazon EMR enhances customer convenience and reduces amenity and operational costs

Amenity  
cost



**\$950**

(per 50 rooms)

Inventory  
management  
cost

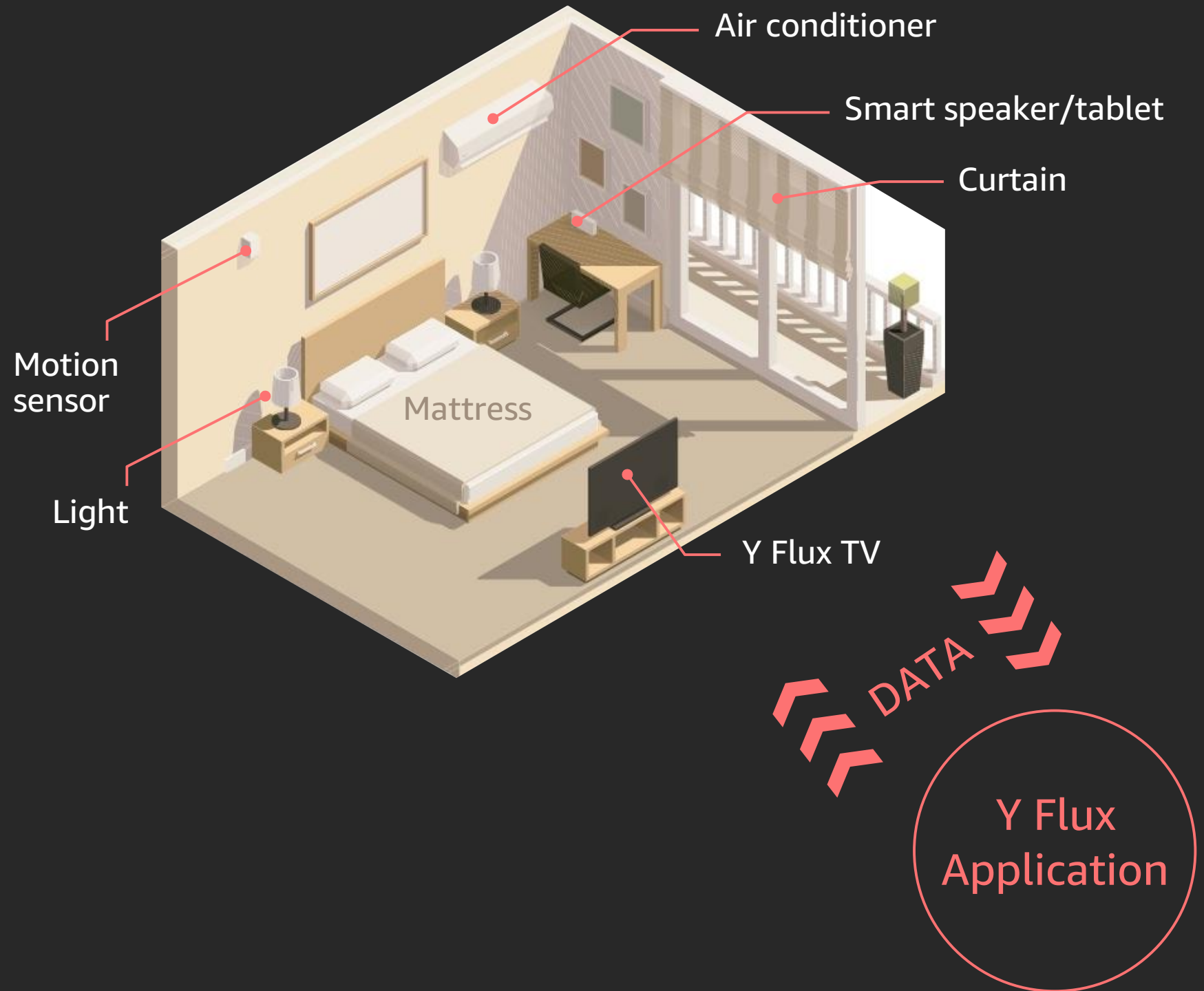


**\$1K**

(per 50 rooms)

## Yanolja case 4:

Prediction of guest preference through AWS IoT services, AWS AppSync, AWS Glue, Amazon Athena, and Amazon EMR is necessary for setting up appropriate in-room conditions in advance



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Prediction of guest preference through AWS IoT services, AWS AppSync, AWS Glue, Amazon Athena, and Amazon EMR is necessary for setting up appropriate in-room conditions in advance



## Yanolja case 4:

Prediction of guest preference through AWS IoT services, AWS AppSync, AWS Glue, Amazon Athena, and Amazon EMR is necessary for setting up appropriate in-room conditions in advance

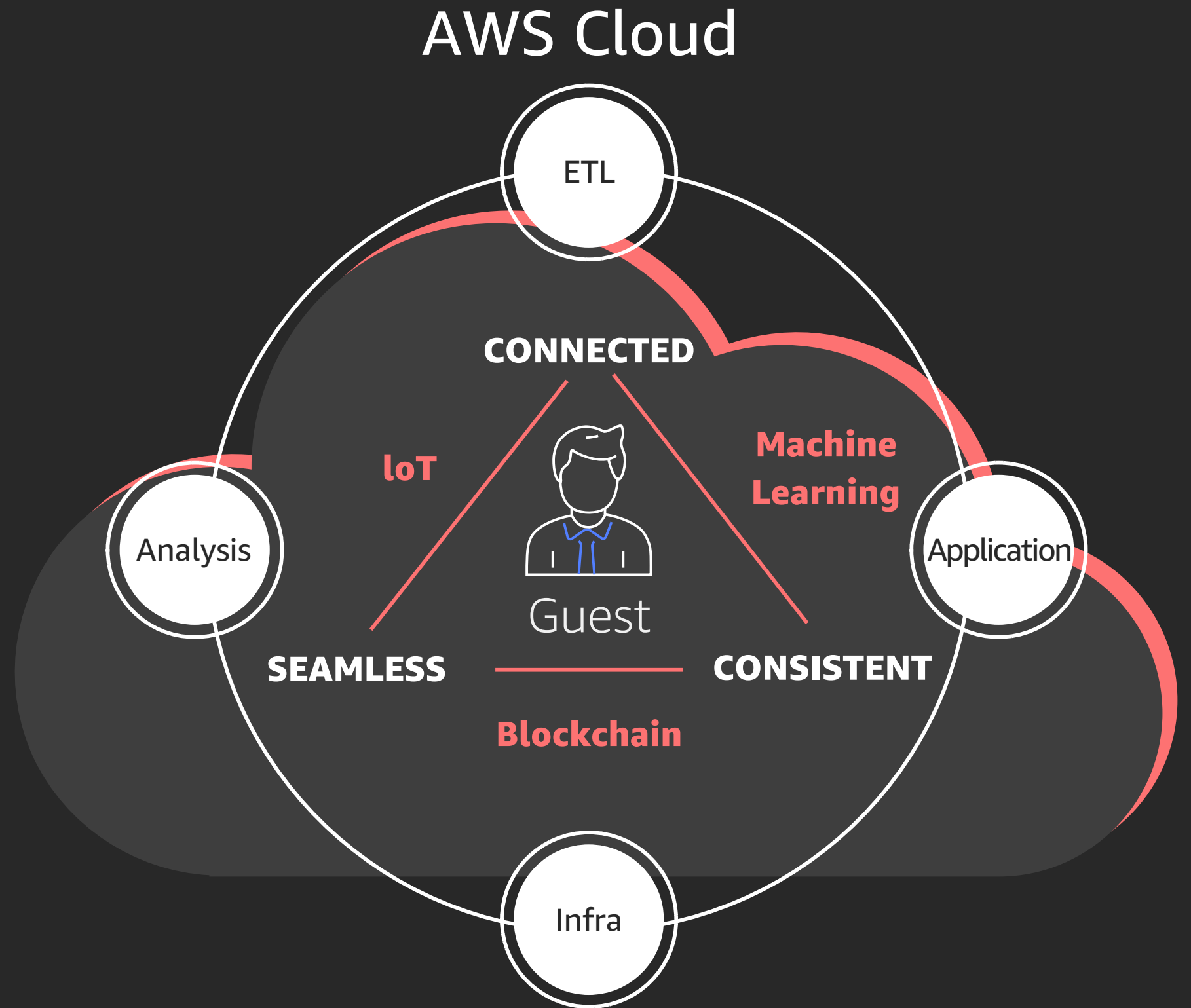
Customer  
operational cost



**\$6K**

(per 50 rooms)

Through AWS Cloud, the fully integrated and connected solution in real time will enhance user experience in the Hospitality industry



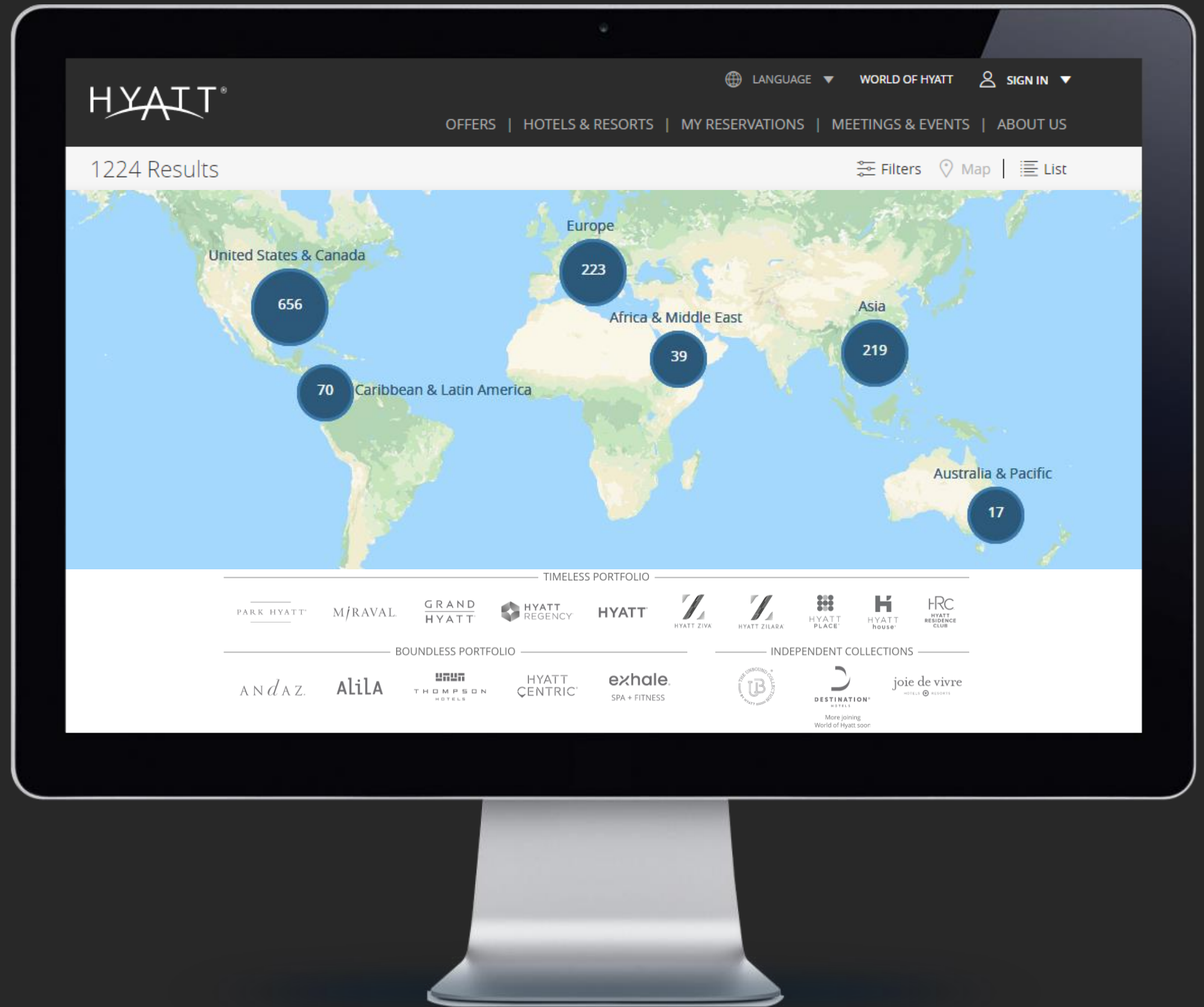
The Hyatt logo is displayed in a white rectangular box. It features the word "HYATT" in a dark blue, sans-serif font. A red curved line arches under the letters "Y", "A", and "T". To the left of the text are three vertical bars of different colors: red, yellow, and teal.

# Personalizing customer experiences in Travel and Hospitality

# Company Purpose

We **care** for people so they can be their best.

# Company overview





# My team and customers

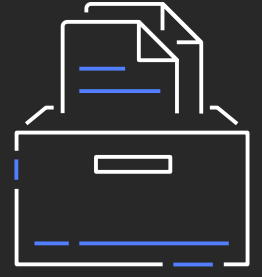
## Team



Business intelligence

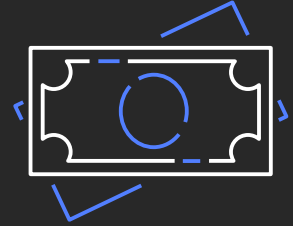


Data science

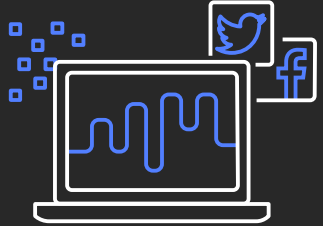


Data engineering

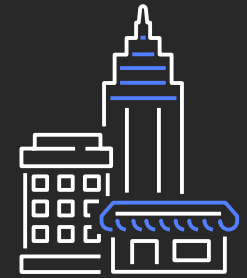
## Customers



Sales



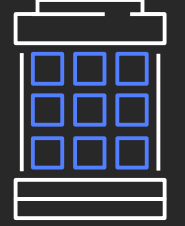
Marketing



Real estate

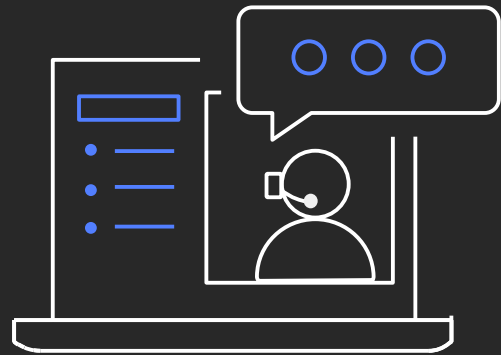


Finance



Hotel operations

# Business challenges



Personalizing  
guest experience



Differentiating Hyatt  
from competition



Dynamic business  
environment

High competition

Long sales cycles

Complex customer journeys

# Personalization

Hyatt delivers unique guest experience with AWS

The Hyatt logo, featuring the word "HYATT" in a white, serif font with a white swoosh underneath that starts under the 'H' and ends under the 'T'.

+

The AWS logo, featuring the word "aws" in a white, lowercase, sans-serif font with a white arrow underneath that starts under the 'a' and ends under the 's'.

## Challenge

How do we advance care and create personal connections with our guests at scale?

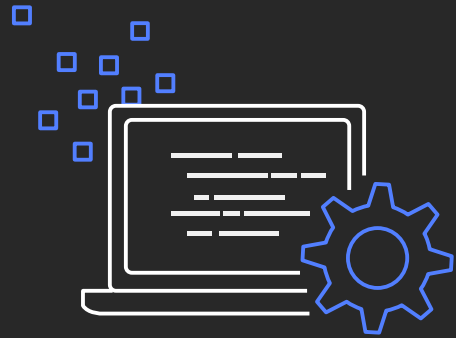
## Solutions

Data and Analytics plays a key role  
AWS helps us scale

## Benefits

Lifetime Value  
Room Upsell and Addons  
Property Recommendation

# Journey to AWS



## Technical limitations

Slow time-to-market

Lack of advanced data-science tools

Scalability

Speed to introduce new servers  
and services



## Improvements with AWS

Self-service analytics

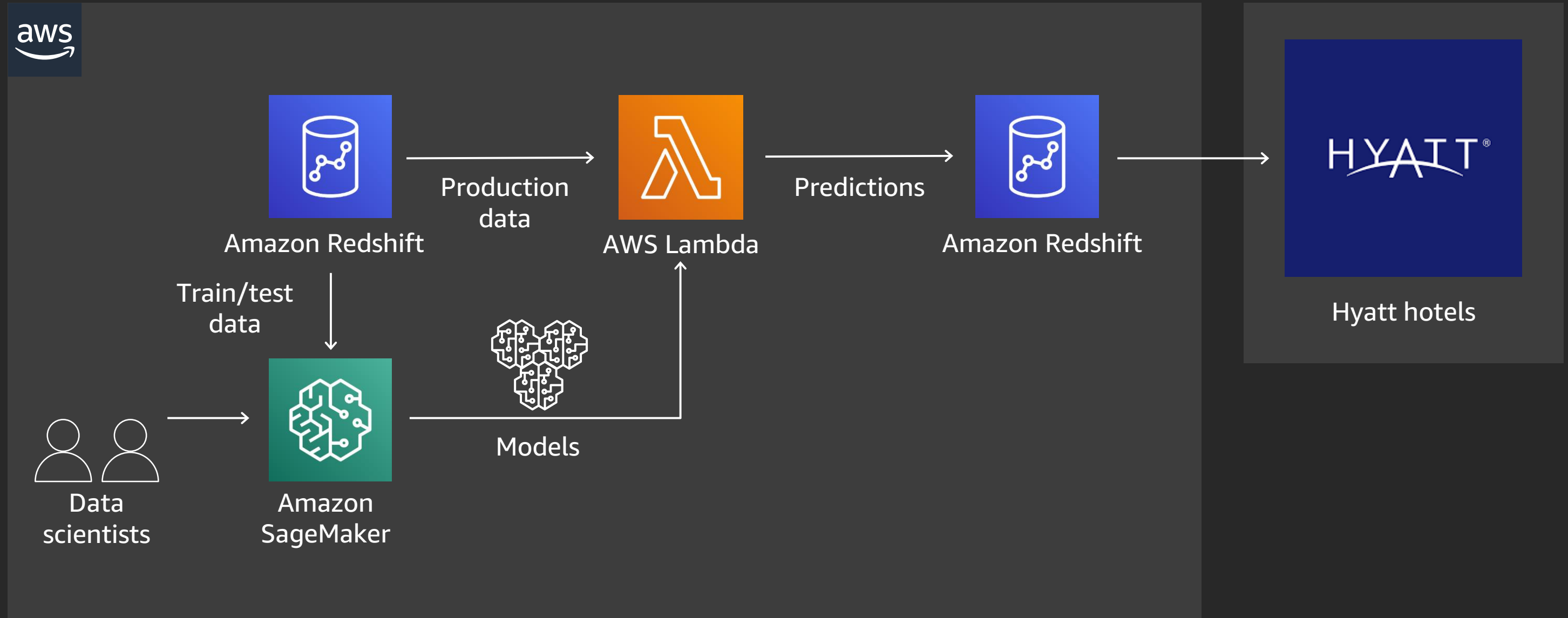
Streamlined deployment of models  
and pipelines

Much better tools

Zero downtime

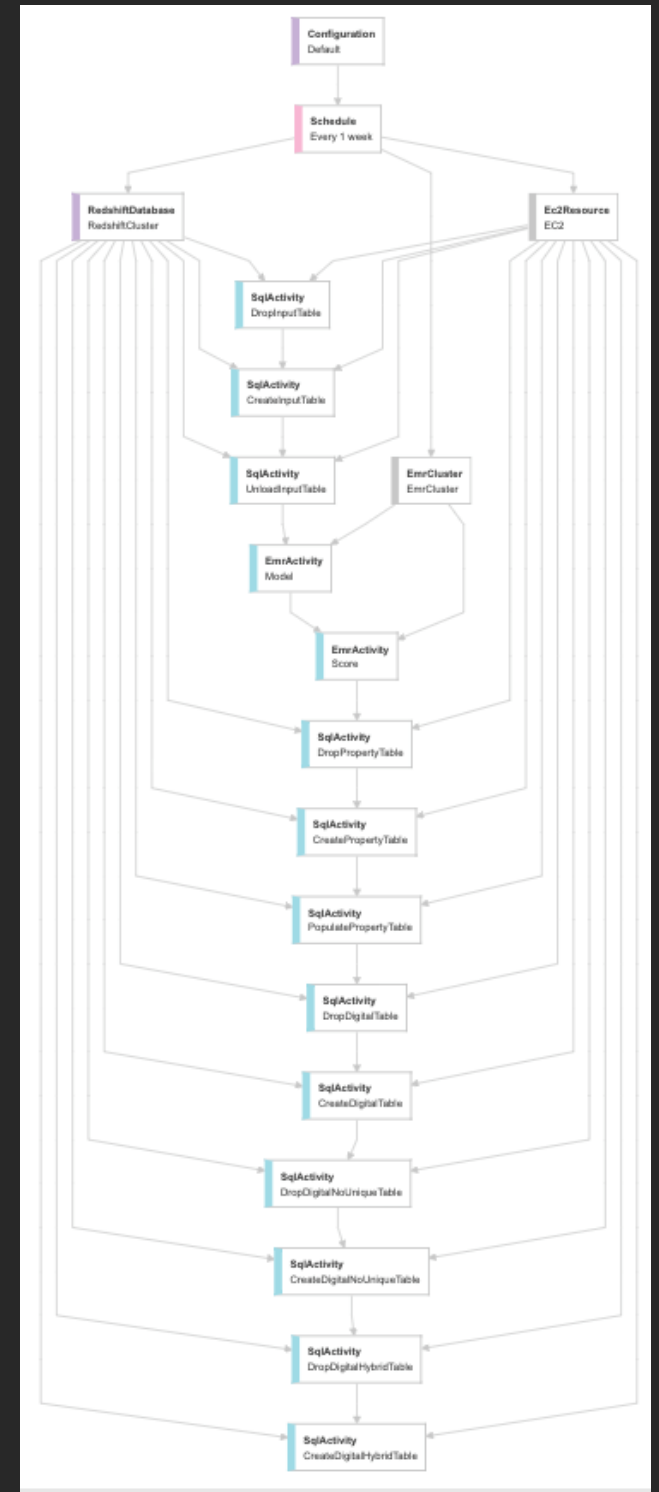
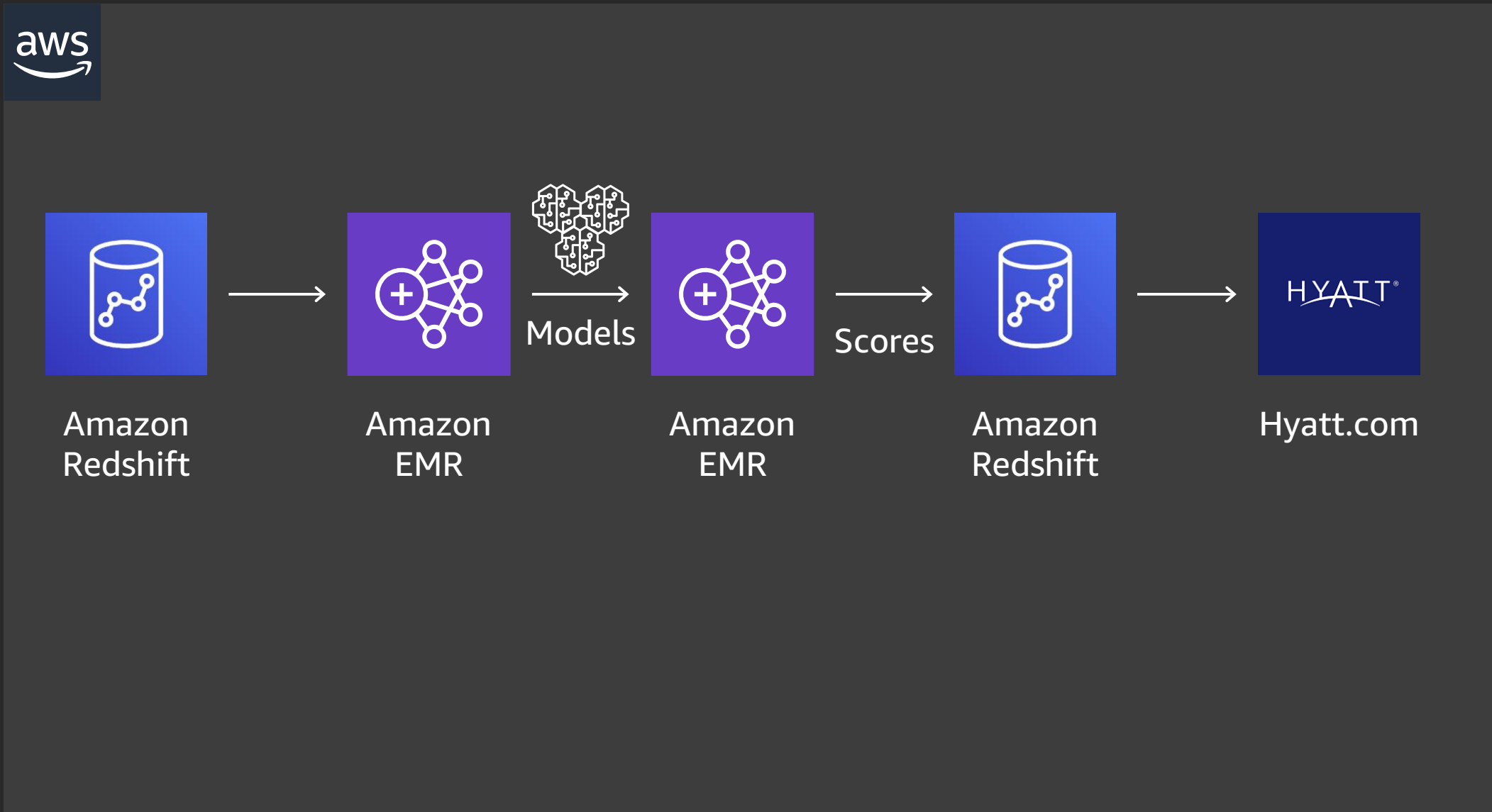
# AWS work and solution

Pipeline to generate lifetime value, room upsell, and add-ons



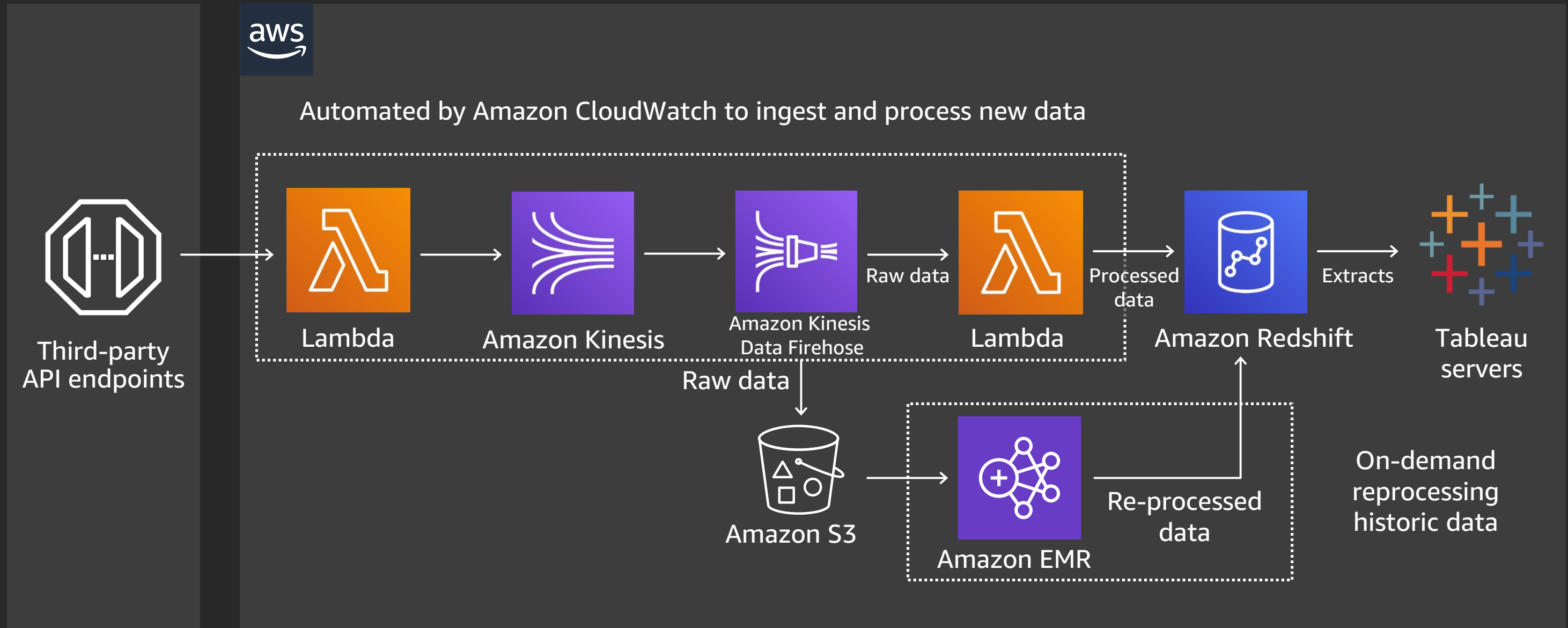
# AWS work and solution

Pipeline to generate property recommendation



# AWS work and solution

Pipeline to display hotel operation data on 3D heatmap



# Transformative business results

## Personalized room upsell and add-ons

Brought incremental revenue of US  
\$40MM in the first 6 months of 2019





Transformative  
business results

Personalized property  
recommendation

Increased guest satisfaction of  
most loyal guests

Try "CDG"

Wed, Sep 18

Thu, Sep 19

FIND HOTELS

## EARN UP TO TRIPLE POINTS

Members can start earning around the world with their second qualifying stay from September 15 to December 15 with Bonus Journeys.

LEARN MORE



Earn up to 10 free nights at Hyatt hotels with the World of Hyatt Credit Card.

LEARN MORE

## GO SOMEWHERE *new*



Hyatt Regency  
Chicago

[VIEW HOTEL >](#)



Hyatt Regency  
Fukuoka

[VIEW HOTEL >](#)



Chicago

[VIEW HOTELS >](#)



Hyatt Place Chicago /  
Downtown-The Loop

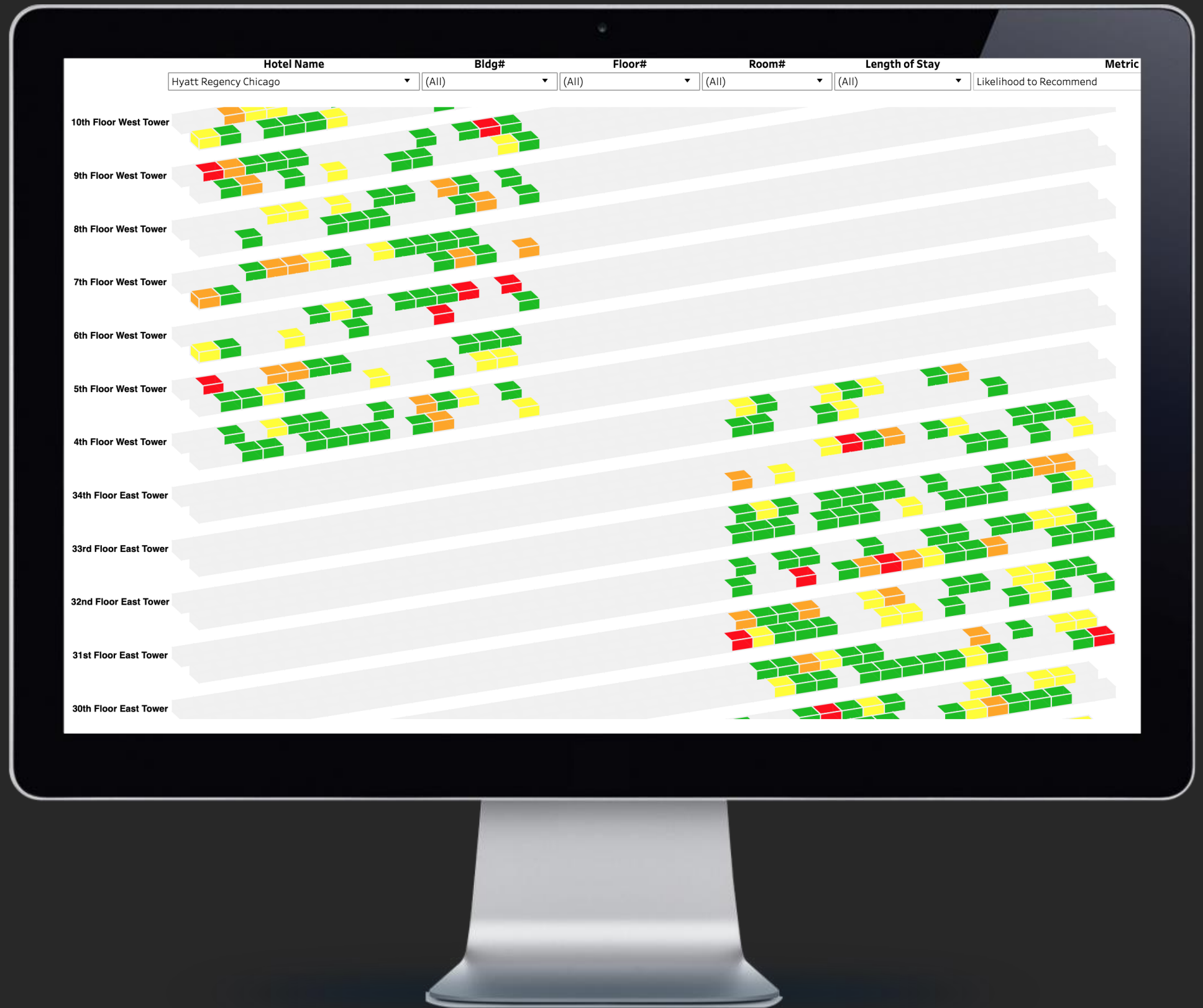
[VIEW HOTEL >](#)

THE BENEFITS OF BOOKING ON *hyatt.com*

# Transformative business results

## 3D heatmap

Improved stay experience  
through personalized  
hotel operations



# Thank you!



Please complete the session survey in the mobile app.