

# aws INNOVATE

DATA EDITION

23 August, 2022

# Customer 360 in retail with AWS

Pierre Semaan

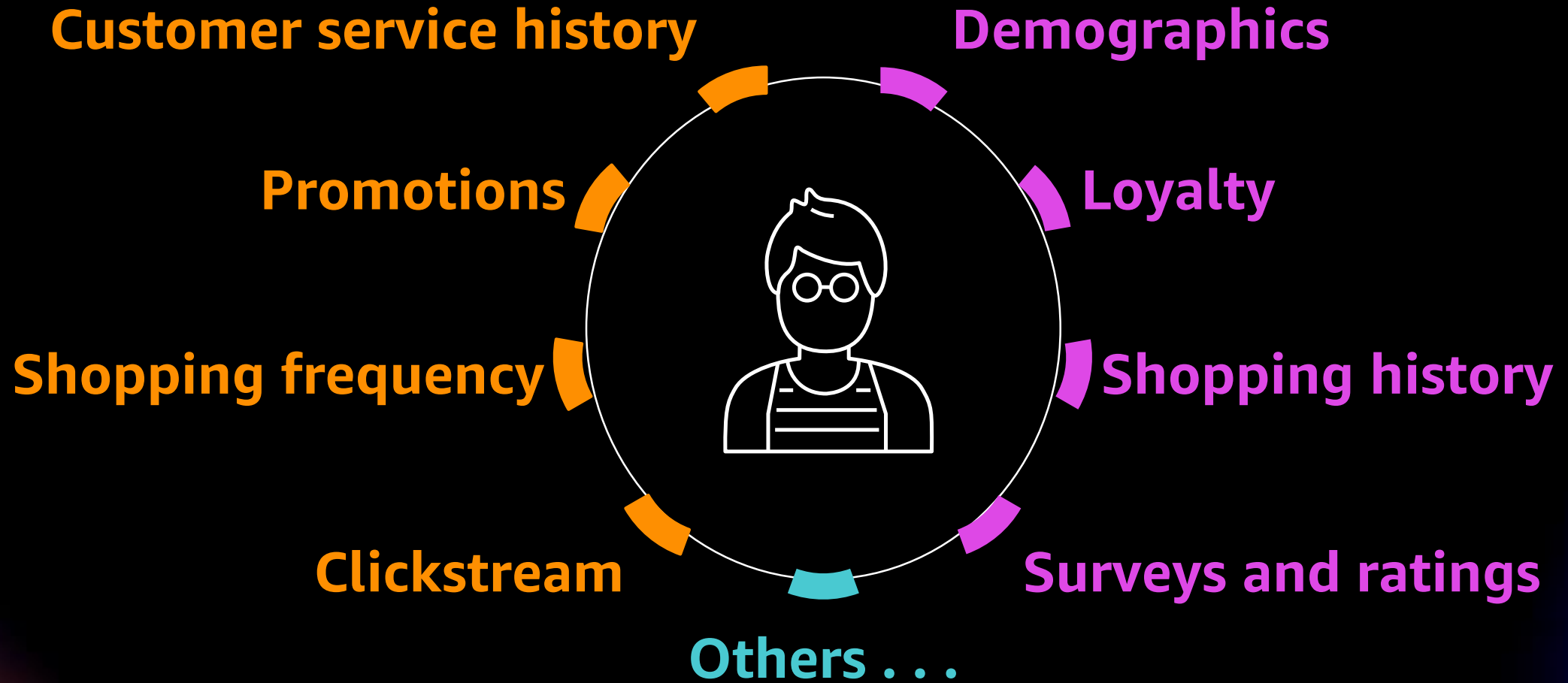
Head of SMB Solutions, Asia Pacific and Japan  
Amazon Web Services



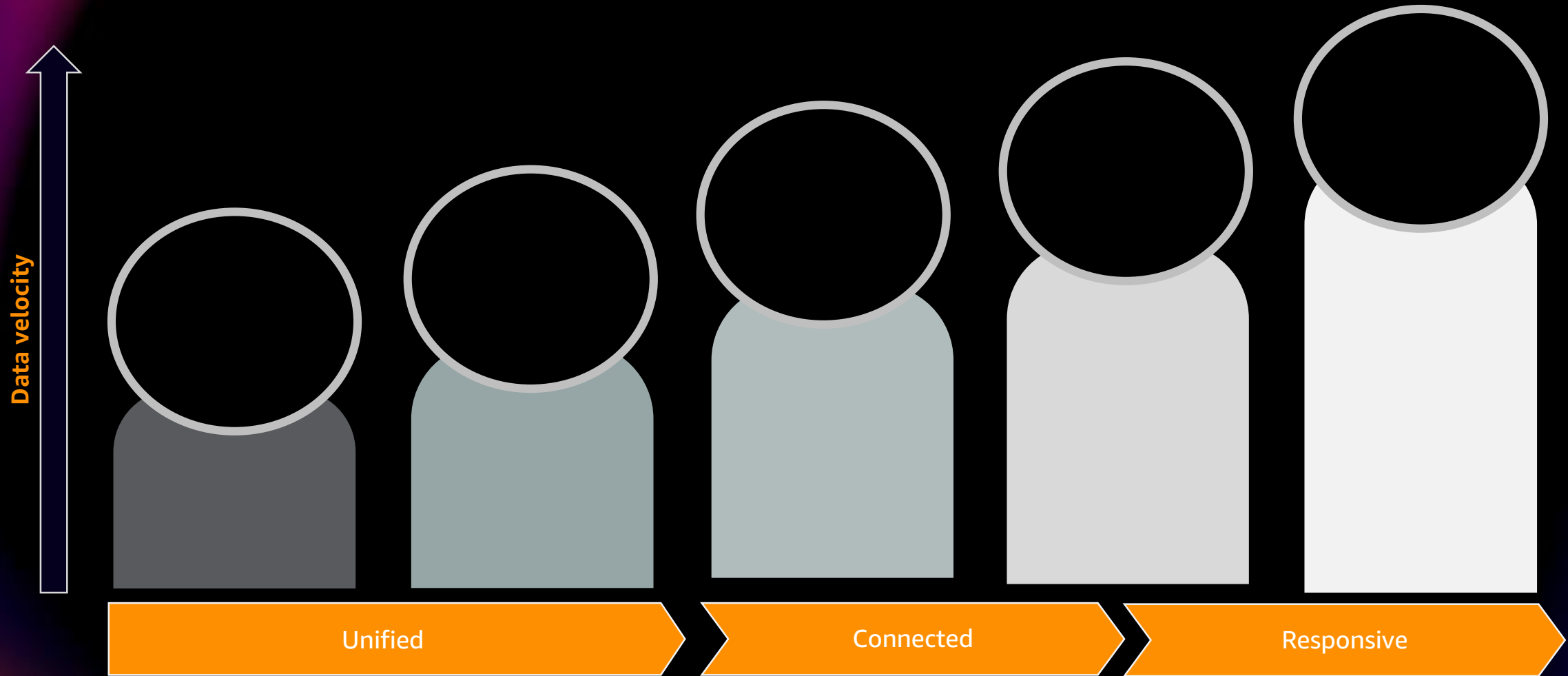
# Agenda

- **What** is Customer 360
- **Why** Customer 360
- The **challenge** in Retail
- **How** to get to Customer 360
- Amazon AppFlow
- Summary and next steps

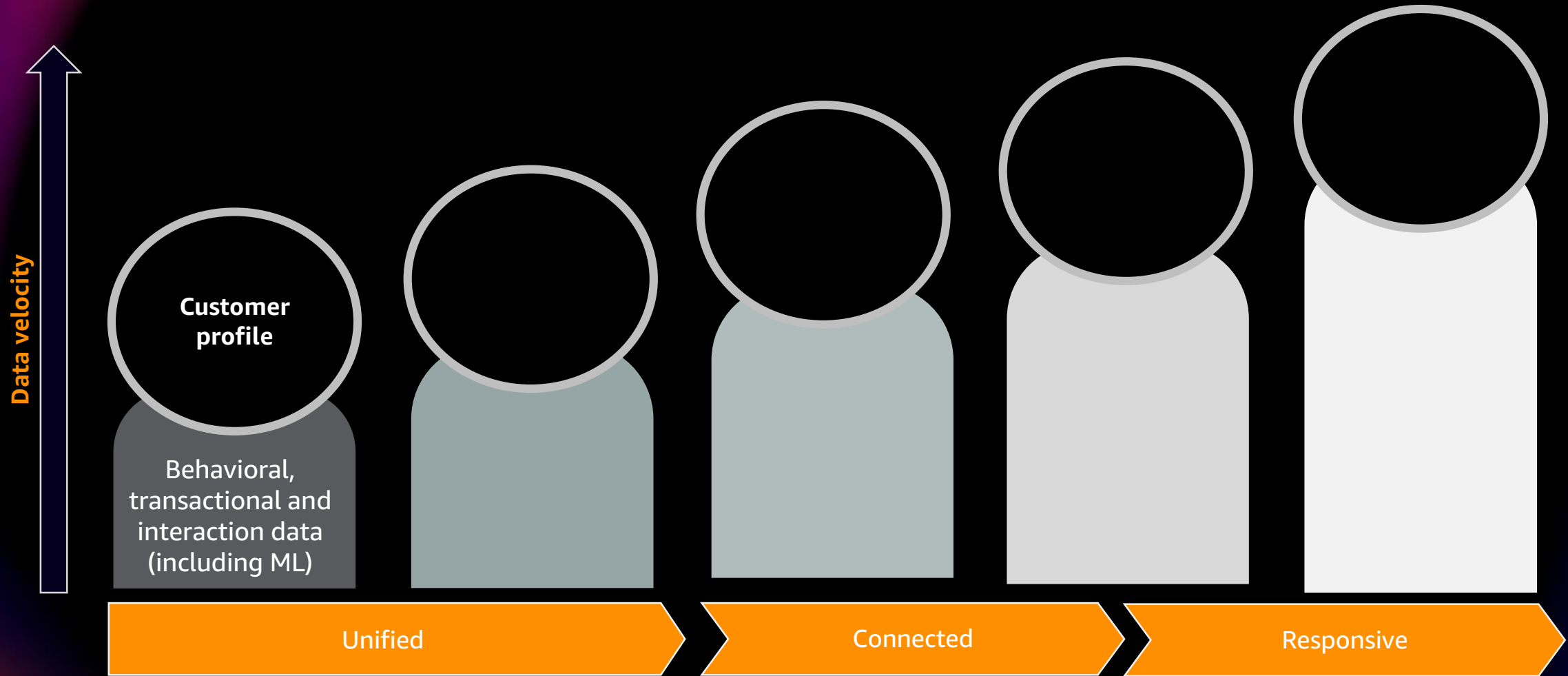
# What is Customer 360



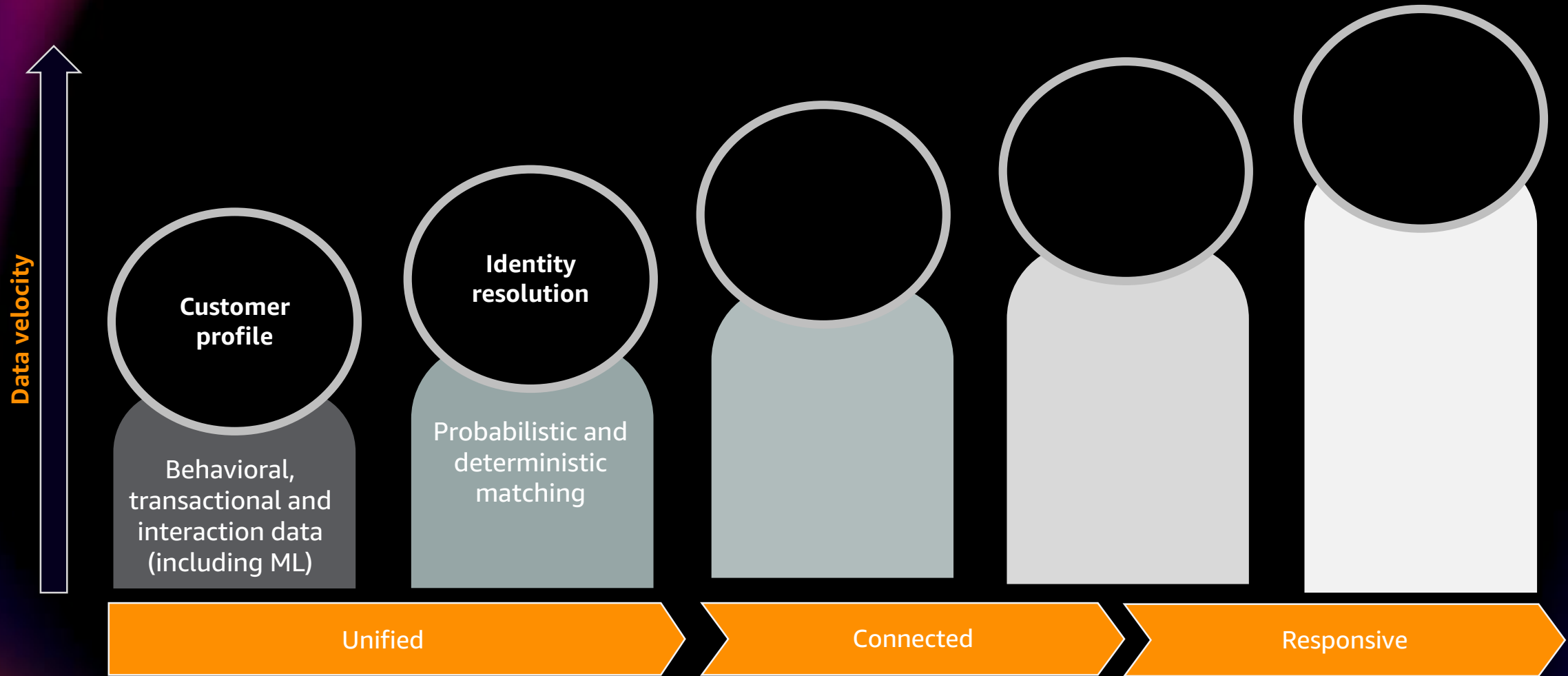
# Maturity Curve of Customer 360



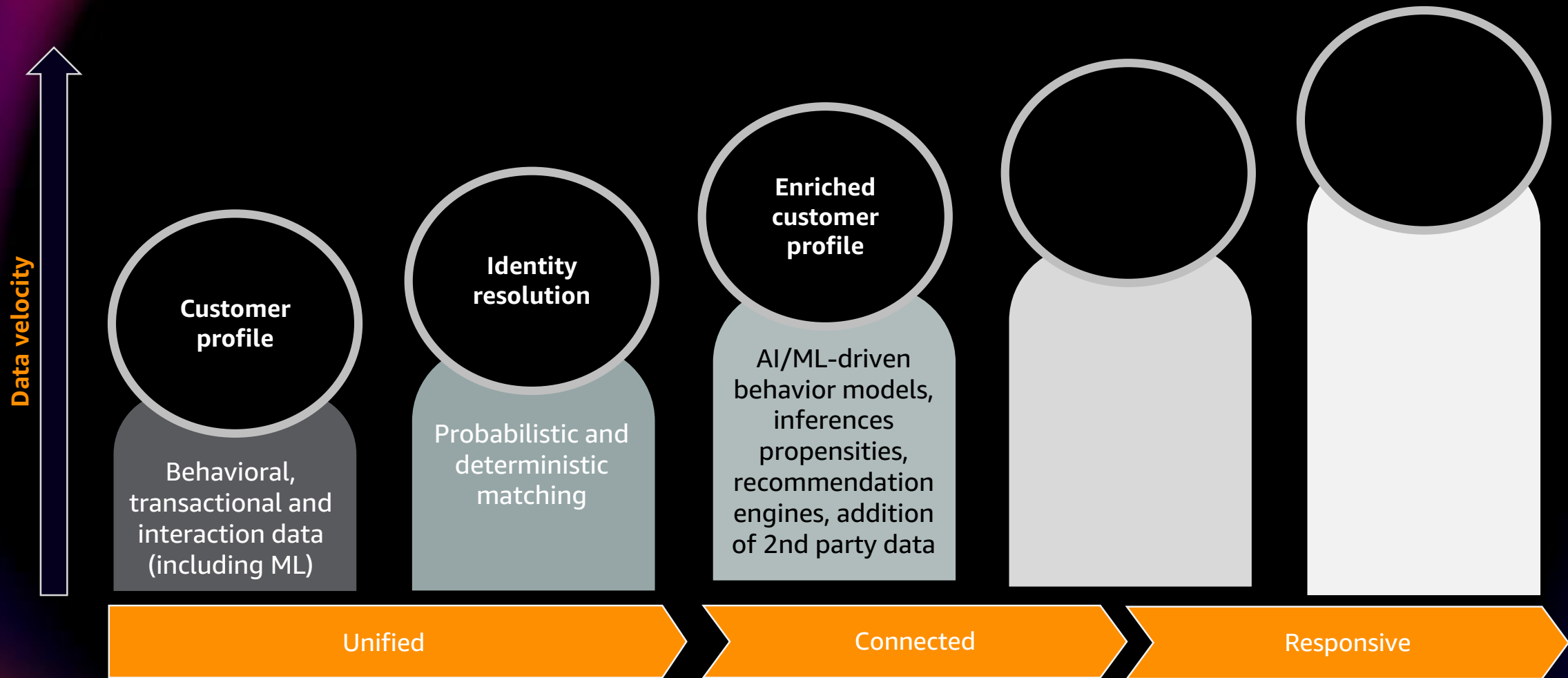
# Maturity Curve of Customer 360



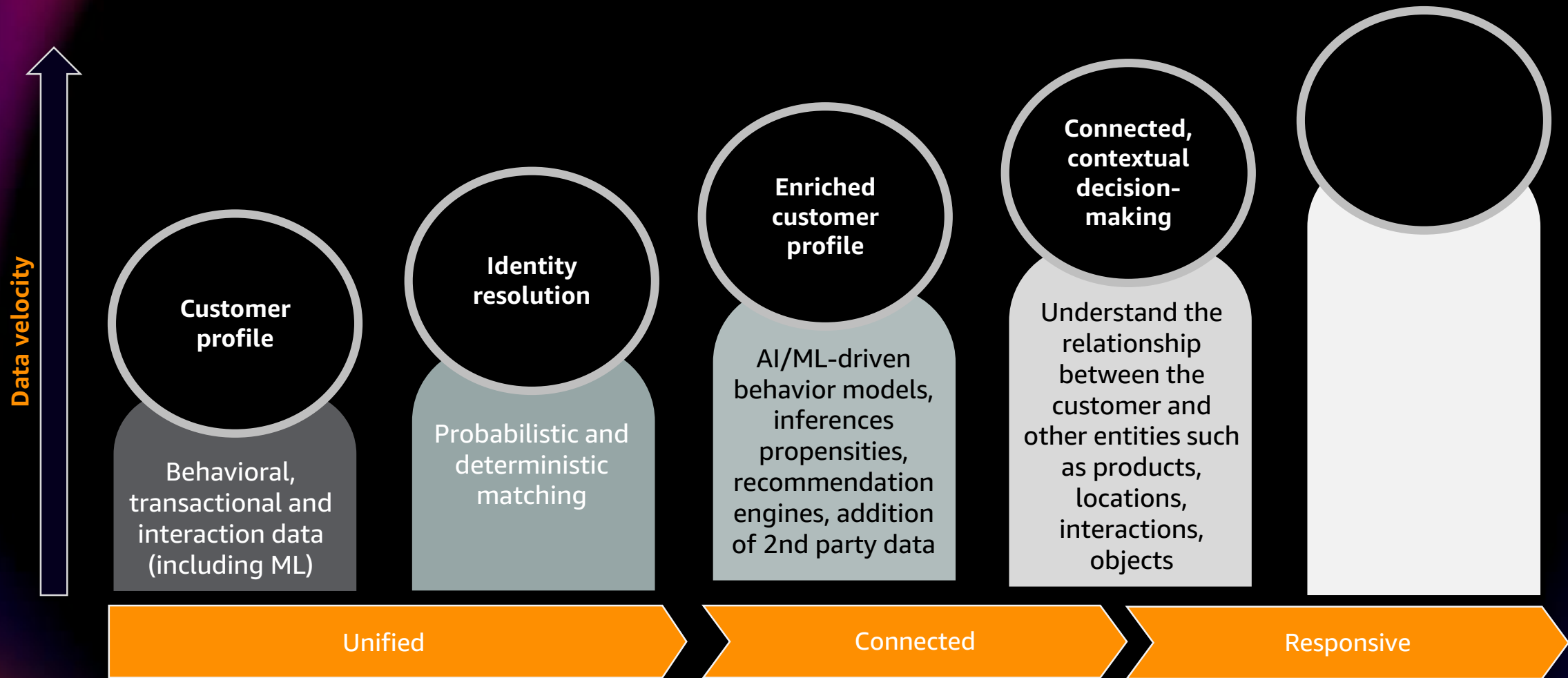
# Maturity Curve of Customer 360



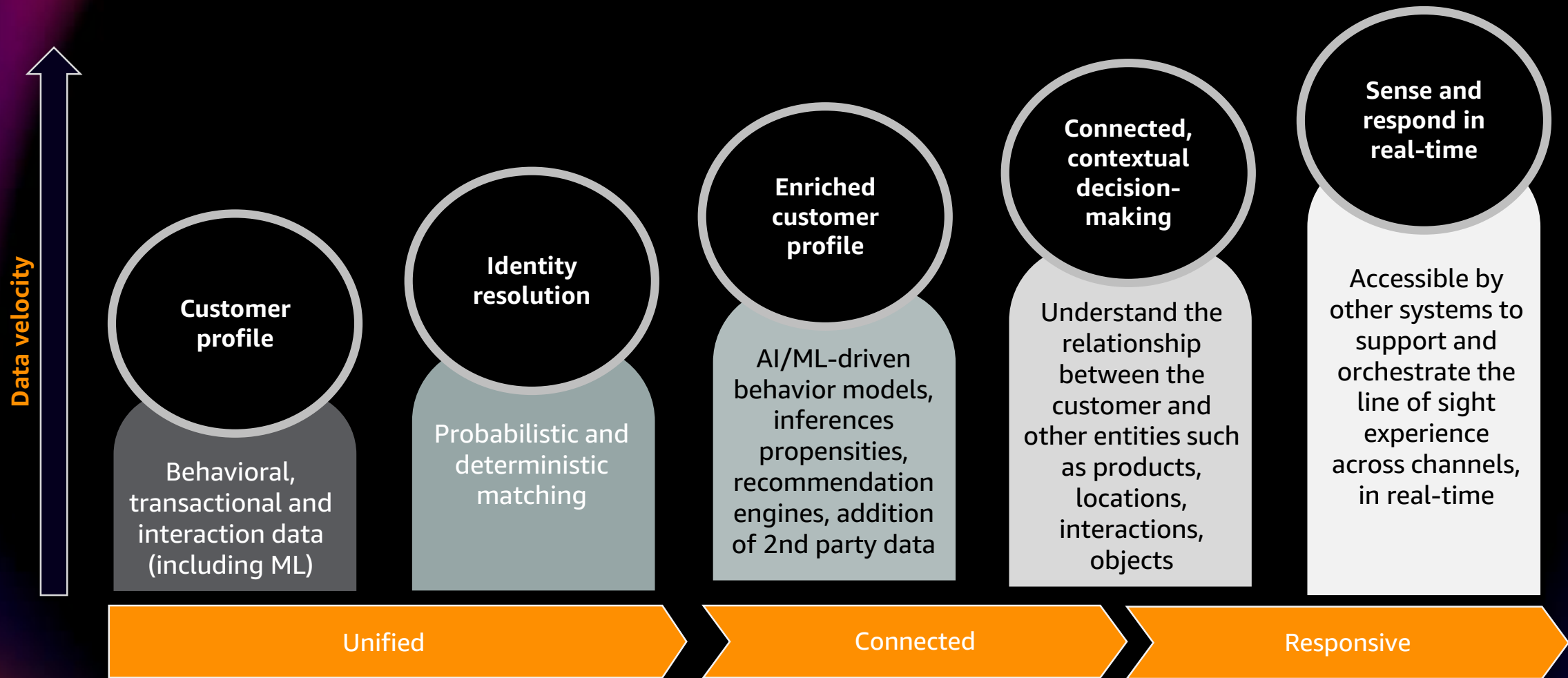
# Maturity Curve of Customer 360



# Maturity Curve of Customer 360



# Maturity Curve of Customer 360



# WHY Customer 360 in Retail

# Key retail business drivers

Do you have all the insights needed to drive your business?



---

The right product,  
price, and place



---

Increase customer  
Lifetime value



---

Lower costs to  
Increase margins



---

Innovate &  
accelerate  
outcomes

# Significant business value from Customer 360

## Business performance

Reduction in cost to  
resolve request

Increase in customer  
lifetime value

Faster time to  
market

Improvement in NPS  
rating

## Operational efficiency

Reduction in time  
spent on data  
preparation

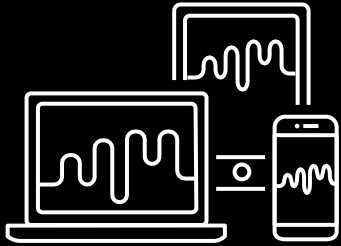
Reduction in time to  
complete ad-hoc  
analysis

Reduction in time  
to deliver insights

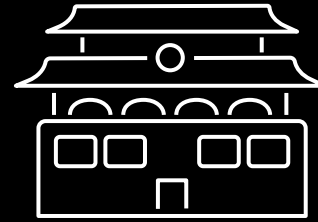
Reduction in time to  
resolve customer  
cases

# The challenges

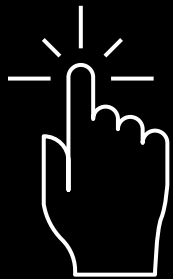
# Four forces converging that make it harder to know your customer



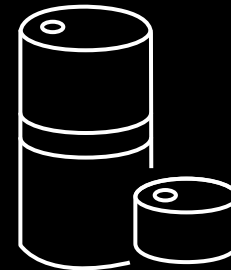
New online activities



Countries with  
general data  
protection laws



App tracking with  
Apples IDFA Tracking  
Transparency



Data sources  
containing customer  
insights and  
engagement

# How to create a golden primary record

Attribute
Firstname
Lastname
Email
Phone

# How to create a golden primary record

Attribute	Loyalty systems
Firstname	Shirley
Lastname	
Email	s.rodriguez@ email.com
Phone	555-0199

# How to create a golden primary record

Attribute	Loyalty systems	E-Commerce systems
Firstname	Shirley	Shirl
Lastname	Rodriguez	Rodriguez
Email		s.rodriguez@email.com
Phone	555-0199	555-0199

# How to create a golden primary record

Attribute	Loyalty systems	E-Commerce systems	Survey systems
Firstname	Shirley	Shirl	
Lastname	Rodriguez	Rodriguez	Rodriguez
Email		s.rodriguez@email.com	
Phone	555-0199	555-0199	+1 555-0199

# How to create a golden primary record

Attribute	Loyalty systems	E-Commerce systems	Survey systems	Customer service
Firstname	Shirley	Shirl		Shirley
Lastname	Rodriguez	Rodriguez	Rodriguez	Rodriguez
Email		s.rodriguez@email.com		rodriguez@email.com
Phone	555-0199	555-0199	+1 555-0199	

# How to create a golden primary record

Attribute	Loyalty systems	E-Commerce systems	Survey systems	Customer service	Golden record
Firstname	Shirley	Shirl		Shirley	Shirley
Lastname	Rodriguez	Rodriguez	Rodriguez	Rodriguez	Shirley
Email		s.rodriguez@email.com		rodriguez@email.com	s.rodriguez@email.com
Phone	555-0199	555-0199	+1 555-0199		01 555-0199

# HOW to get to Customer 360

# Design principles for Customer 360

**Own Your  
Data**

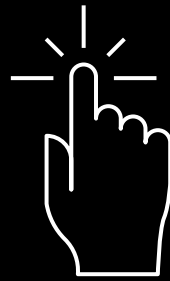
**1P data  
+  
Partnerships  
+  
3P Tech**

**Remove  
Black-Box  
Intelligence**

**Build out  
your  
Information  
Metabolism**

# Customer 360 data platform on AWS

## Outcome



CDP



MDM



DMP



Marketing  
automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images



Video



Email

# Customer 360 data platform on AWS

Accelerate issue  
resolution

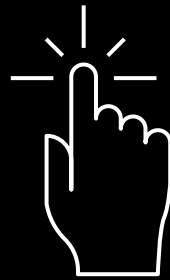
Identify potential  
churn customers

Personalized offers

Proactive customer  
support

Anomaly detection

Personalized content



CDP



MDM



DMP



Marketing  
automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images



Video



Email

# Customer 360 data platform on AWS

Accelerate issue  
resolution

Identify potential  
churn customers

Personalized offers

Proactive customer  
support

Anomaly detection

Personalized content

**Integration at scale**

**Personalization**

**Preference  
management**



CDP



MDM



DMP



Marketing  
automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images

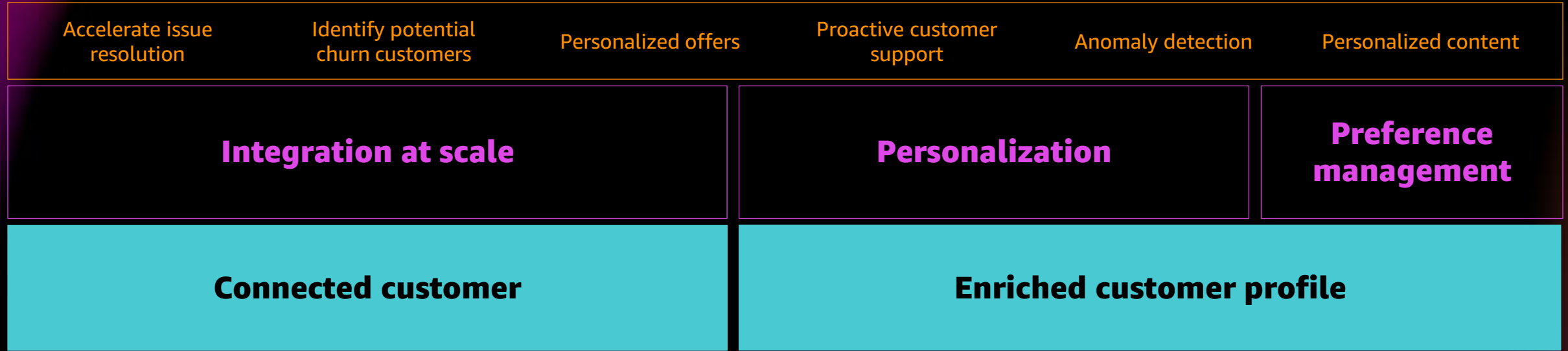


Video



Email

# Customer 360 data platform on AWS



CDP



MDM



DMP



Marketing  
automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images

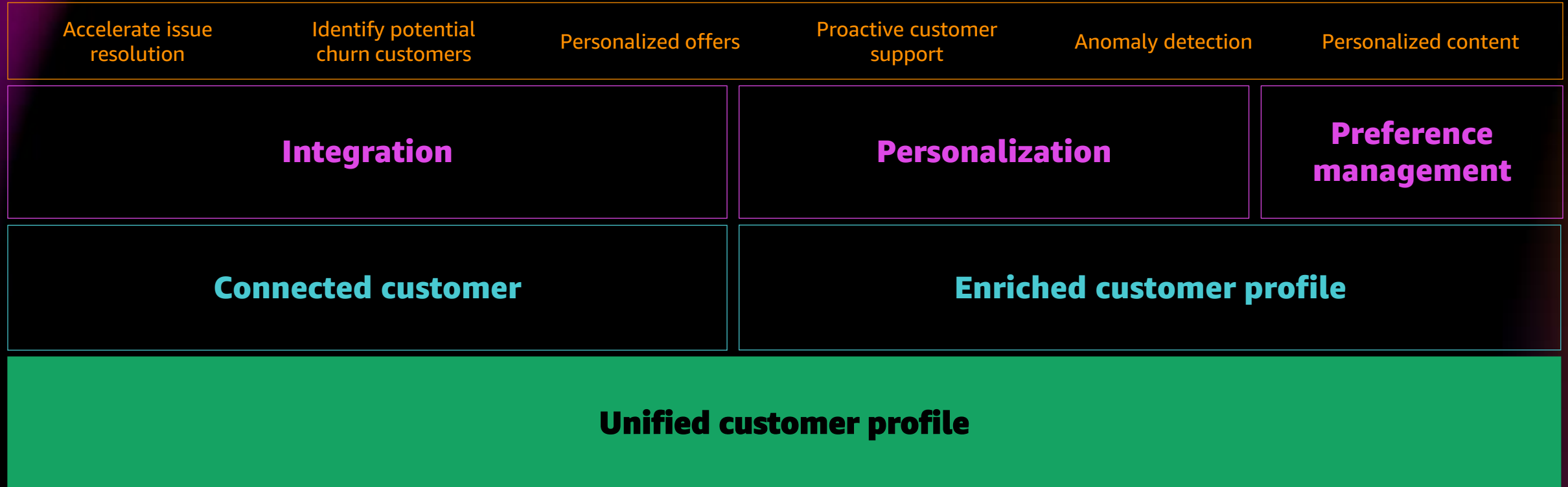


Video



Email

# Customer 360 data platform on AWS



CDP



MDM



DMP



Marketing  
automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images

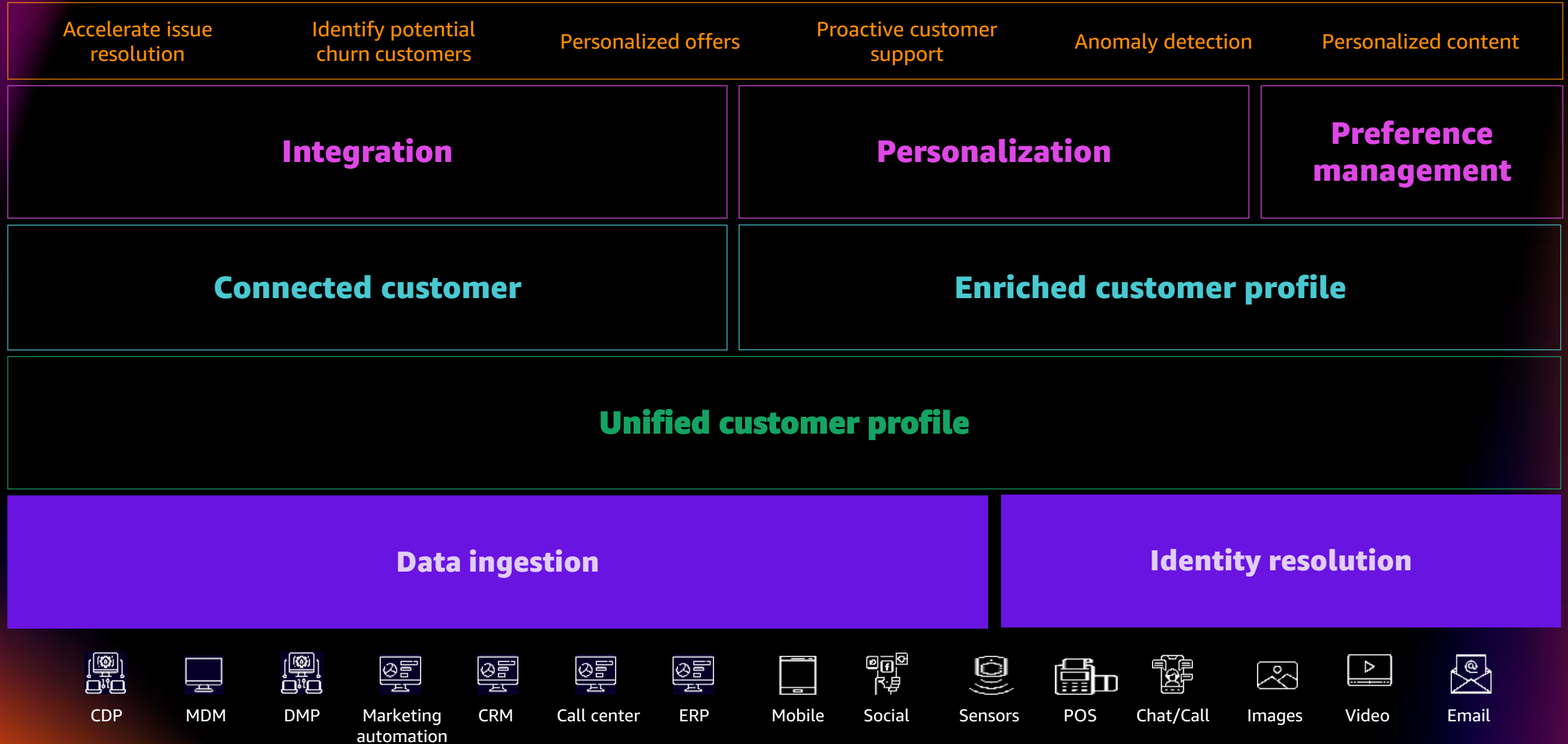


Video

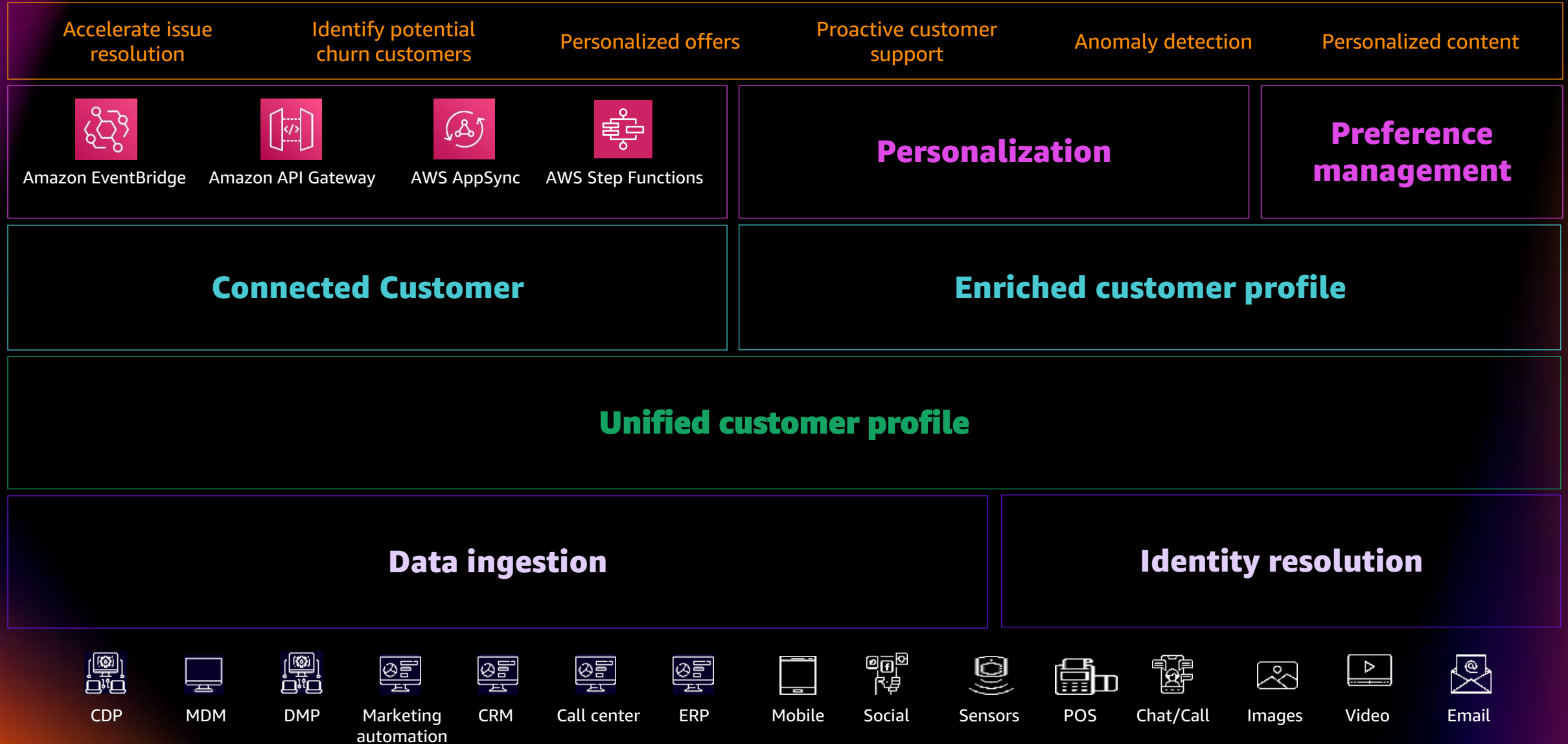


Email

# Customer 360 data platform on AWS



# Customer 360 data platform on AWS



# Customer 360 data platform on AWS

Accelerate issue  
resolution

Identify potential  
churn customers

Personalized offers

Proactive customer  
support

Anomaly detection

Personalized content



Amazon EventBridge



Amazon API Gateway



AWS AppSync



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Pinpoint

**Preference  
management**

**Connected customer**

**Enriched customer profile**

**Unified customer profile**

**Data ingestion**

**Identity resolution**



CDP



MDM



DMP



Marketing  
automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images



Video



Email

# Customer 360 data platform on AWS

Accelerate issue  
resolution

Identify potential  
churn customers

Personalized offers

Proactive customer  
support

Anomaly detection

Personalized content



Amazon EventBridge



Amazon API Gateway



AWS AppSync



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Pinpoint



Amazon Redshift



Amazon Macie

**Connected customer**

**Enriched customer profile**

**Unified customer profile**

**Data ingestion**

**Identity resolution**



CDP



MDM



DMP



Marketing  
automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images



Video



Email

# Customer 360 data platform on AWS

Accelerate issue  
resolution

Identify potential  
churn customers

Personalized offers

Proactive customer  
support

Anomaly detection

Personalized content



Amazon EventBridge



Amazon API Gateway



AWS AppSync



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Pinpoint



Amazon Redshift



Amazon Macie



Amazon Neptune



AWS Data Pipeline



AWS Step Functions

**Enriched customer profile**

**Unified customer profile**

**Data ingestion**

**Identity resolution**



CDP



MDM



DMP



Marketing  
automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images



Video



Email

# Customer 360 data platform on AWS

Accelerate issue resolution

Identify potential churn customers

Personalized offers

Proactive customer support

Anomaly detection

Personalized content



Amazon EventBridge



Amazon API Gateway



AWS AppSync



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Pinpoint



Amazon Redshift



Amazon Macie



Amazon Neptune



AWS Data Pipeline



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Comprehend

Unified customer profile

Data ingestion

Identity resolution



CDP



MDM



DMP



Marketing automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images



Video



Email



# Customer 360 data platform on AWS

Accelerate issue  
resolution

Identify potential  
churn customers

Personalized offers

Proactive customer  
support

Anomaly detection

Personalized content



Amazon EventBridge



Amazon API Gateway



AWS AppSync



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Pinpoint



Amazon Redshift



Amazon Macie



Amazon Neptune



AWS Data Pipeline



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Comprehend



Amazon Simple  
Storage Service  
(Amazon S3)



AWS Lake Formation



AWS Step Functions



AWS Lambda



Amazon DynamoDB



Amazon Redshift



Amazon Athena



Amazon Kinesis  
Data Firehose

## Data ingestion

## Identity resolution



CDP



MDM



DMP



Marketing  
automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images



Video



Email

# Customer 360 data platform on AWS

Accelerate issue  
resolution

Identify potential  
churn customers

Personalized offers

Proactive customer  
support

Anomaly detection

Personalized content



Amazon EventBridge



Amazon API Gateway



AWS AppSync



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Pinpoint



Amazon Redshift



Amazon Macie



Amazon Neptune



AWS Data Pipeline



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Comprehend



Amazon Simple  
Storage Service  
(Amazon S3)



AWS Lake Formation



AWS Step Functions



AWS Lambda



Amazon DynamoDB



Amazon Redshift



Amazon Athena



Amazon Kinesis  
Data Firehose



Amazon AppFlow



Amazon Kinesis  
Data Streams



Amazon Managed Streaming  
for Apache Kafka



Amazon  
Timestream



AWS Transfer Family

## Identity resolution



CDP



MDM



DMP



Marketing  
automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images



Video



Email



# Customer 360 data platform on AWS

Accelerate issue resolution

Identify potential churn customers

Personalized offers

Proactive customer support

Anomaly detection

Personalized content



Amazon EventBridge



Amazon API Gateway



AWS AppSync



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Pinpoint



Amazon Redshift



Amazon Macie



Amazon Neptune



AWS Data Pipeline



AWS Step Functions



Amazon Personalize



Amazon SageMaker



Amazon Comprehend



Amazon Simple Storage Service (Amazon S3)



AWS Lake Formation



AWS Step Functions



AWS Lambda



Amazon DynamoDB



Amazon Redshift



Amazon Athena



Amazon Kinesis Data Firehose



Amazon AppFlow



Amazon Kinesis Data Streams



Amazon Managed Streaming for Apache Kafka



Amazon Timestream



AWS Transfer Family



Amazon Neptune



Amazon SageMaker



Amazon EMR



CDP



MDM



DMP



Marketing automation



CRM



Call center



ERP



Mobile



Social



Sensors



POS



Chat/Call



Images

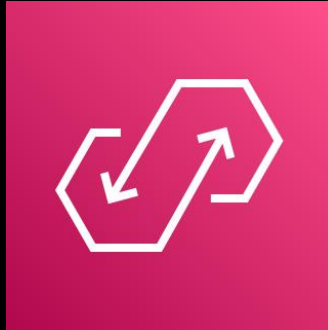


Video



Email

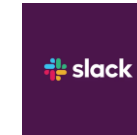




## Amazon AppFlow

An AWS service that delivers secure bi-directional data flow between SaaS applications and AWS Services at an industrial scale - in minutes, without coding.

# Top SaaS and AWS services supported by Amazon AppFlow



 Enabled for Private Flows

<https://aws.amazon.com/appflow/integrations/>


# Amazon AppFlow in 5 easy steps

1. **Select source & destination; login**
2. Specify flow trigger
3. Map fields from source to destination
4. Add optional filters, validation, transformation
5. Activate flow or run it at the click of a button

Configure flow

**Source details** [Info](#)

Source name

 **Salesforce**  
Salesforce is a customer relationship management (CRM) solution that provides a single, shar... ▼


Choose Salesforce connection [Info](#)

*Select connection* ▼


↓

**Destination details** [Info](#)

Destination name

 **Amazon S3**  
Amazon Simple Storage Service (Amazon S3) is a service that provides object storage throug... ▼

Bucket details

*Choose an S3 bucket* ▼ *Enter bucket prefix - optional* 

▶ **Additional settings**

# Amazon AppFlow in 5 easy steps

1. Select source & destination; login
2. **Specify flow trigger**
3. Map fields from source to destination
4. Add optional filters, validation, transformation
5. Activate flow or run it at the click of a button

**Flow trigger** [Info](#)

Choose how to trigger the flow

Trigger a flow by an event, run on a schedule, or run manually by choosing the Run flow button.

☒ **Run on demand**  
Flow will run immediately when you trigger it.

☐ **Run flow on schedule**  
Flow will run at specified times.

☐ **Run flow on event**  
Flow will run when an event occurs.

**i** Your flow will run when you choose the Run flow button on the Flow details page.

# Amazon AppFlow in 5 easy steps

1. Select source & destination; login
2. Specify flow trigger
3. Map fields from source to destination
4. Add optional filters, validation, transformation
5. Activate flow or run it at the click of a button

**Mapped fields (0/35)** [Select all 35 mappings](#)

[Add formula](#) [Modify values](#) [Remove selected mappings](#)

*Filter fields by name or formula*

< 1 2 3 4 >

<input type="checkbox"/>	Source field name ▾	Destination field name ▾	Formula ▾	Data modifications ▾
<input type="checkbox"/>	Activity ID →	Id	-	-
<input type="checkbox"/>	Account ID →	AccountId	-	-
<input type="checkbox"/>	Name ID →	WhoId	-	-
<input type="checkbox"/>	Related To ID →	WhatId	-	-
<input type="checkbox"/>	Subject →	Subject	-	-
<input type="checkbox"/>	Task →	IsTask	-	-
<input type="checkbox"/>	Date →	ActivityDate	-	-
<input type="checkbox"/>	Time →	ActivityDateTime	-	-
<input type="checkbox"/>	Assigned To ID →	OwnerId	-	-
<input type="checkbox"/>	Status →	Status	-	-

► Additional settings

# Amazon AppFlow in 5 easy steps

1. Select source & destination; login
2. Specify flow trigger
3. Map fields from source to destination
4. Add optional filters, validation, transformation
5. Activate flow or run it at the click of a button

▼ Filter 1

Remove

Field name

Condition

Criteria 1

Select field n... ▼

▼ Validations - optional

Add validations to your data fields, and specify what action to take if invalid data is found.

Field name

Condition

Action

Select field na... ▼

Select condition ▼

Select action ▼

Remove

Add validation

Modify values

×

Modification

Choose modification ▲

Mask values

All values display as asterisks (\*) in the destination.

Truncate text values

All text values are truncated by the number of characters entered in the destination.

# Amazon AppFlow in 5 easy steps

1. Select source & destination; login
2. Specify flow trigger
3. Map fields from source to destination
4. Add optional filters, validation, transformation
5. **Activate flow or run it at the click of a button**

The screenshot displays the Amazon AppFlow console interface for a flow named 'S3-SF-Test'. At the top, a green banner indicates 'S3-SF-Test successfully created'. Below this, the breadcrumb navigation shows 'Amazon AppFlow > Flows > S3-SF-Test'. The flow name 'S3-SF-Test' is prominently displayed, accompanied by an 'Actions' dropdown menu and a 'Run flow' button. A 'Flow setup' section is visible, followed by a 'Flow details' section. This section contains a table with the following information:

Flow name <u>S3-SF-Test</u>	Source name Salesforce	Destination name Amazon S3	Status ✔ Active
Flow description -	Source object or event ActivityHistory	Destination bucket <a href="https://s3.console.aws.amazon.com/s3/buckets/appflow-ux-">https://s3.console.aws.amazon.com/s3/buckets/appflow-ux-</a>	Trigger On demand
AWS KMS key <u>AWS managed key</u>	Source connection Salesforce-appflow-demo-account <a href="#">Select another connection</a>		Last run -

At the bottom of the 'Flow details' section, there is an 'Additional settings' link.

# Summary and next steps

# Summary and next steps

- **What** is Customer 360
- **Why** Customer 360
- The **challenge** in Retail
- **How** to get to Customer 360
  - Design principles
  - Architecture
  - Amazon AppFlow

# Visit the AWS Data resource hub

A modern data strategy can help you manage, act on, and react to your data so you can make better decisions, respond faster, and uncover new opportunities. Dive deeper with these resources today.

- Harness data to reinvent your organization
- In unpredictable times, a data strategy is key
- Make data a strategic asset
- Rewiring your culture to be data-driven
- Put your data to work with a modern analytics approach
- ... and more!



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

[Visit resource hub](#)

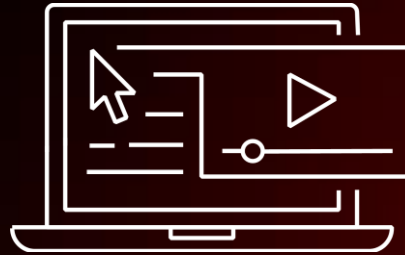
# AWS Training and Certification for Data and Analytics



## **AWS Data & Analytics FREE Training Resources**

Discover how to harness data, one of the world's most valuable resources, and innovate at scale.

<https://bit.ly/3Ntlhy7>



## **AWS Data Analytics Learning Plan**

This learning plan expose you to the fastest way to get answers from all your data to all your users. It can also help prepare you for the AWS Certified Data Analytics - Specialty certification exam.

<https://bit.ly/3wBVjD1>



## **AWS Certified Data Analytics - Specialty**

Earning AWS Certified Data Analytics – Specialty validates expertise in using AWS data lakes and analytics services.

<https://go.aws/3lwF0RR>

# Thank you for attending AWS Innovate – Data Edition

We hope you found it interesting! A kind reminder to **complete the survey**.  
Let us know what you thought of today's event and how we can improve the event experience for you in the future.



[aws-apj-marketing@amazon.com](mailto:aws-apj-marketing@amazon.com)



[twitter.com/AWSCloud](https://twitter.com/AWSCloud)



[facebook.com/AmazonWebServices](https://facebook.com/AmazonWebServices)



[youtube.com/user/AmazonWebServices](https://youtube.com/user/AmazonWebServices)



[slideshare.net/AmazonWebServices](https://slideshare.net/AmazonWebServices)



[twitch.tv/aws](https://twitch.tv/aws)

# Thank you!