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# Democratizing Insights: Scaling machine learning beyond the data scientist

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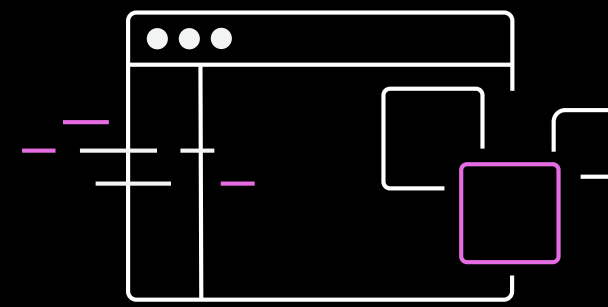
# Modern data platforms driving new usecases



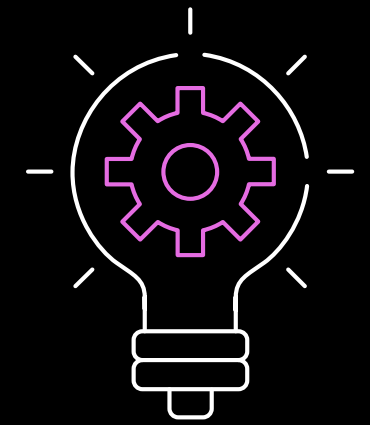
Transform  
customer experience



Improve business  
operations



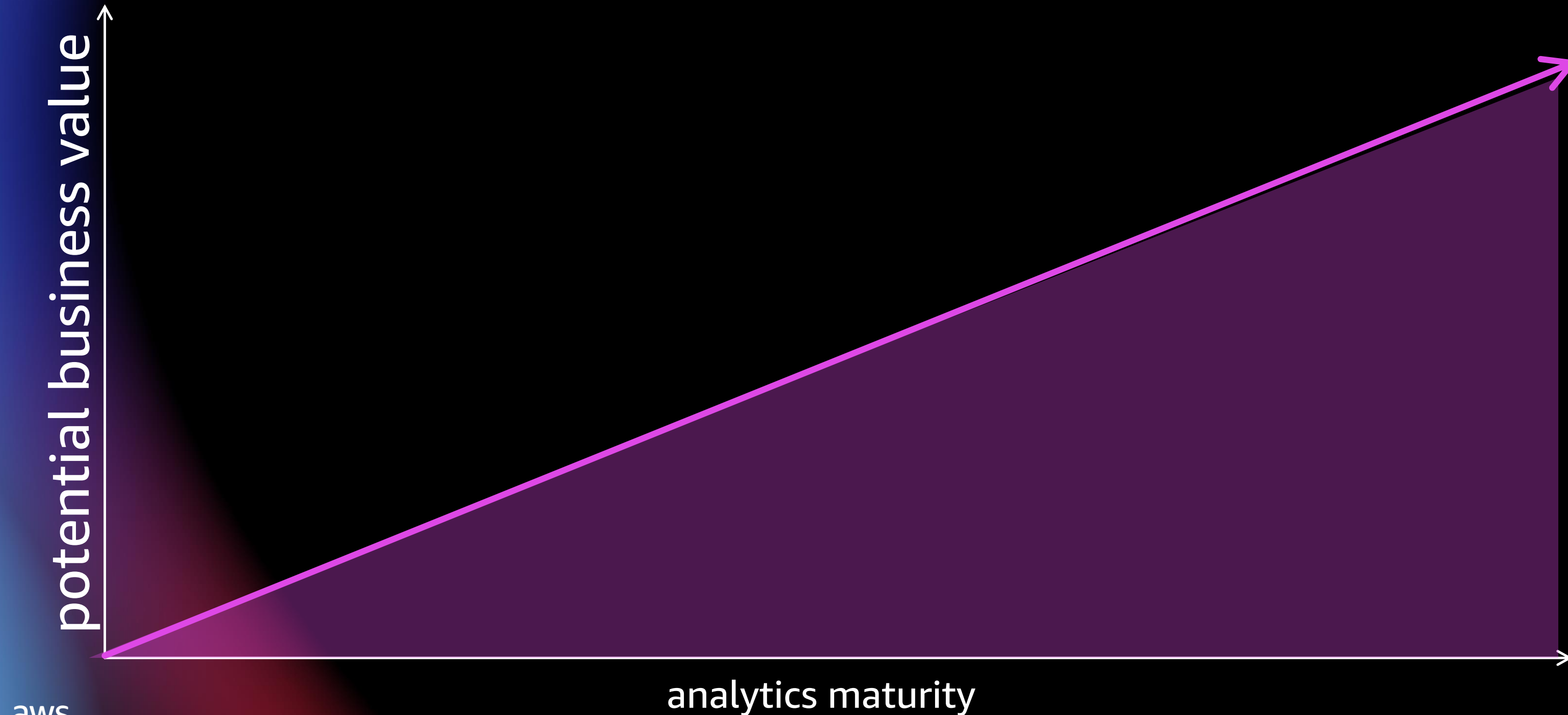
Better and faster  
decision-making



Innovate product  
or service

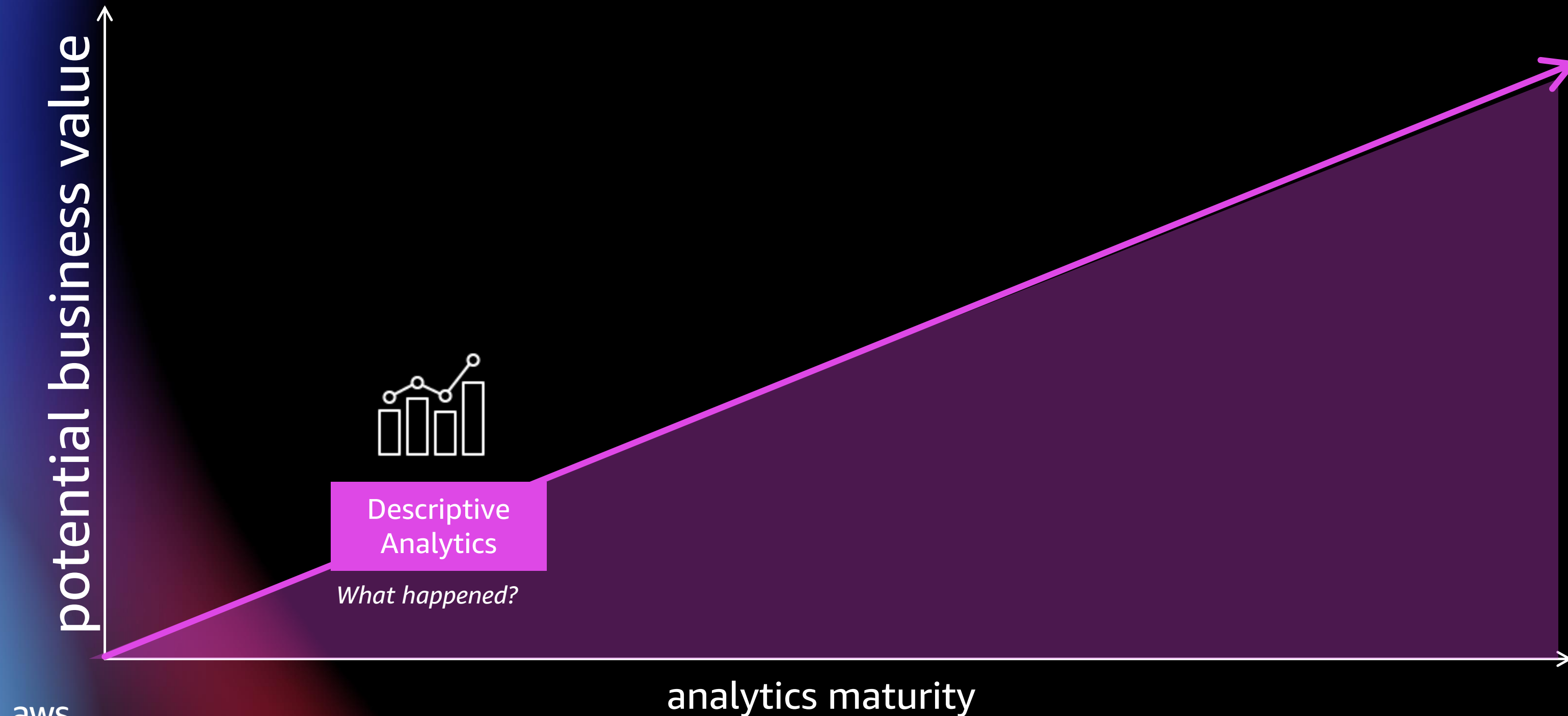
# Data platform capabilities

## MATURITY MODEL



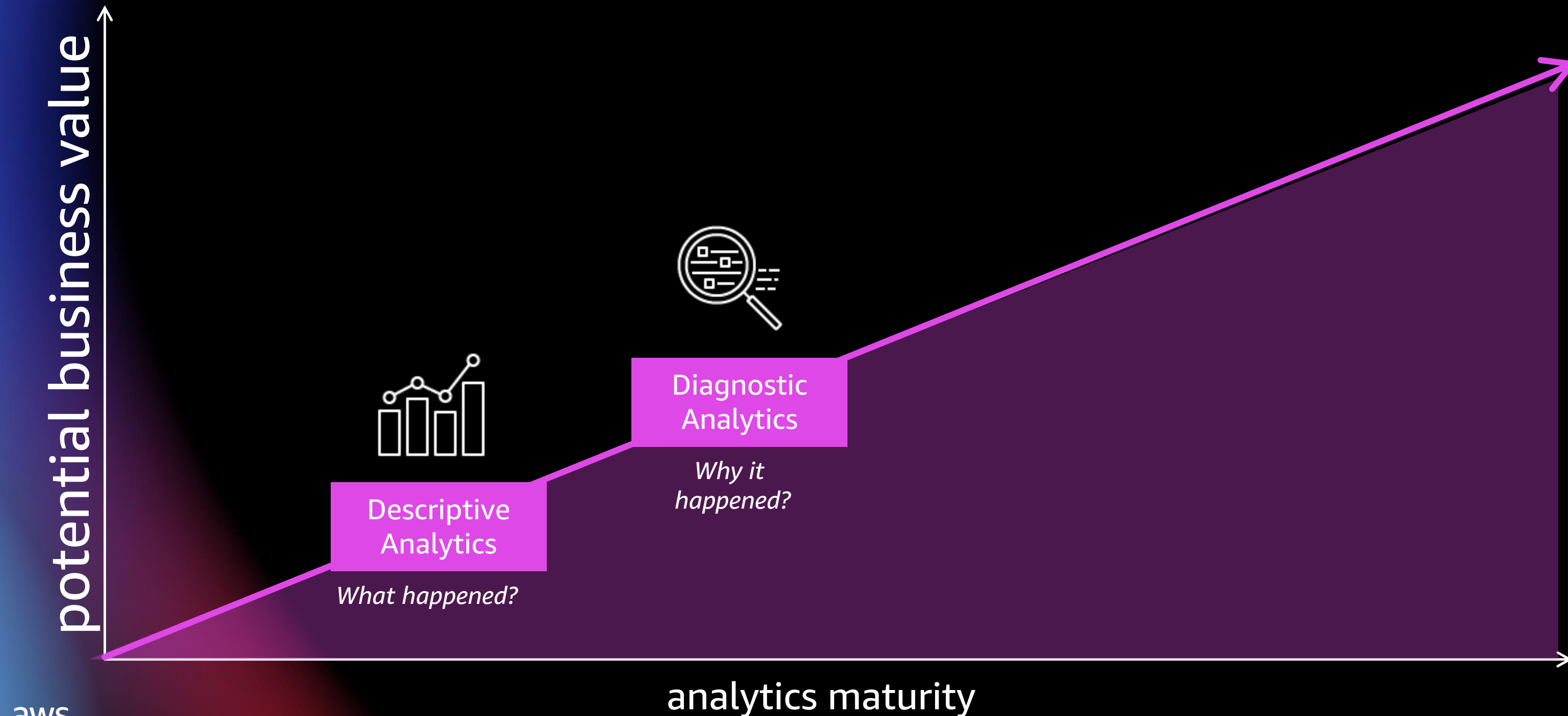
# Data platform capabilities

## MATURITY MODEL



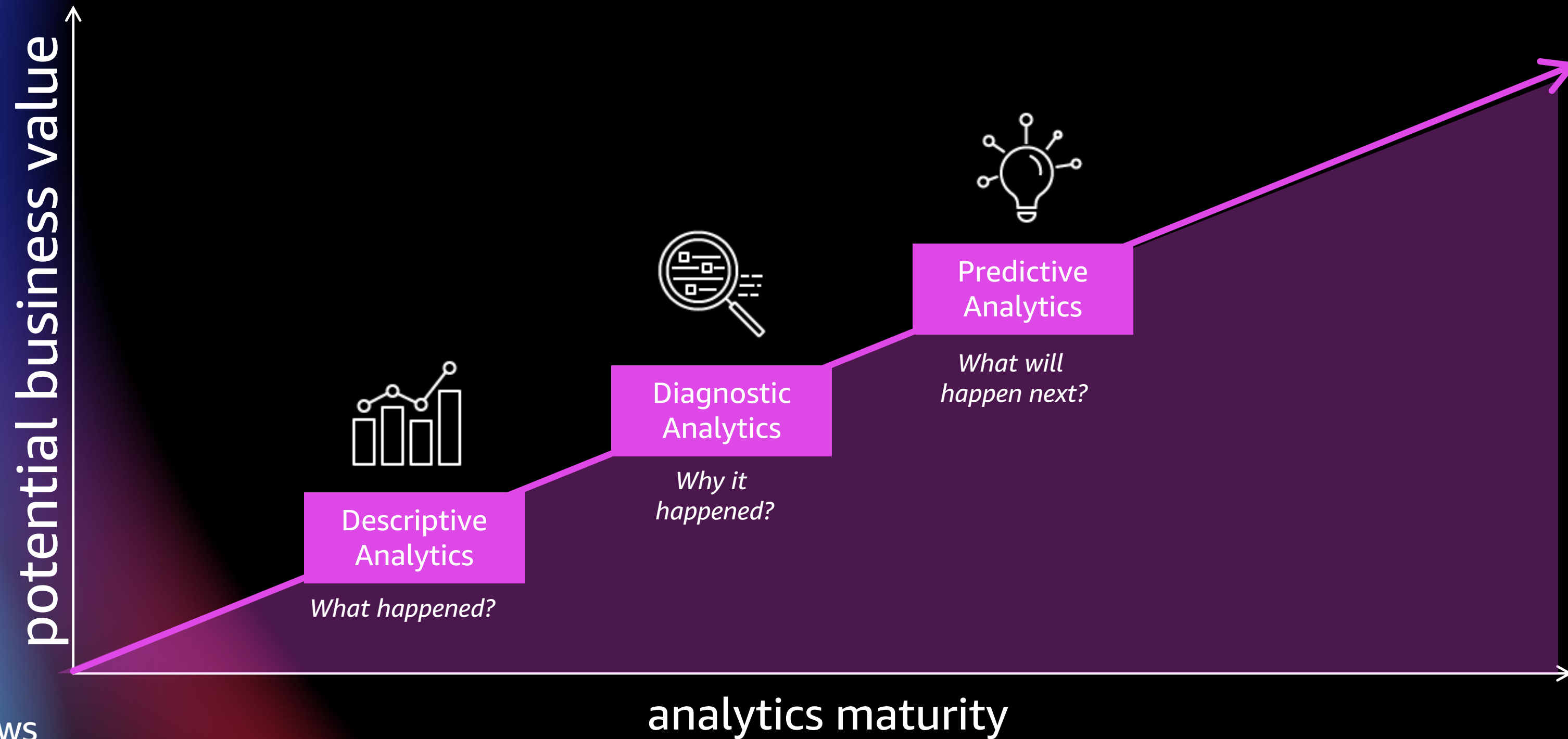
# Data platform capabilities

## MATURITY MODEL



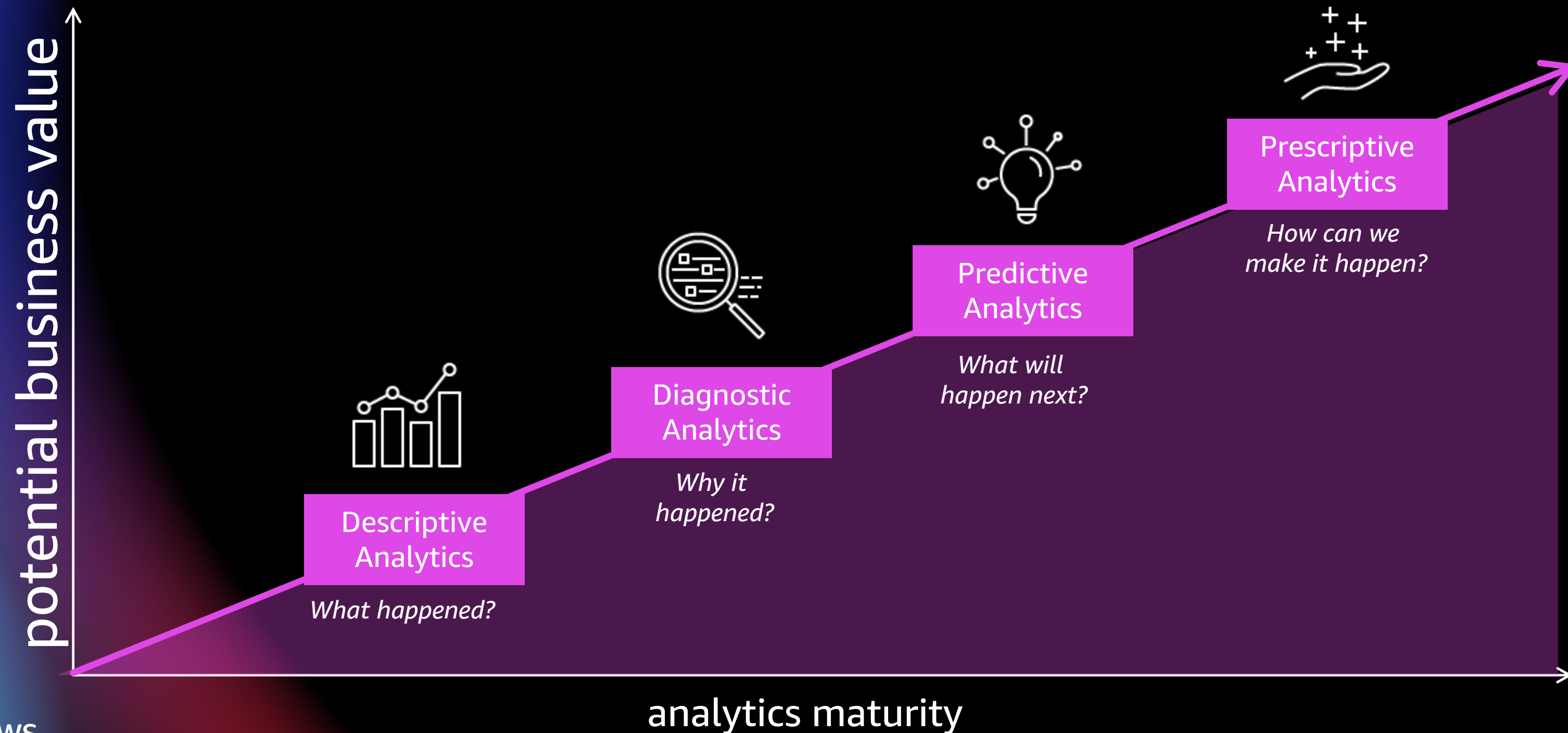
# Data platform capabilities

## MATURITY MODEL



# Data platform capabilities

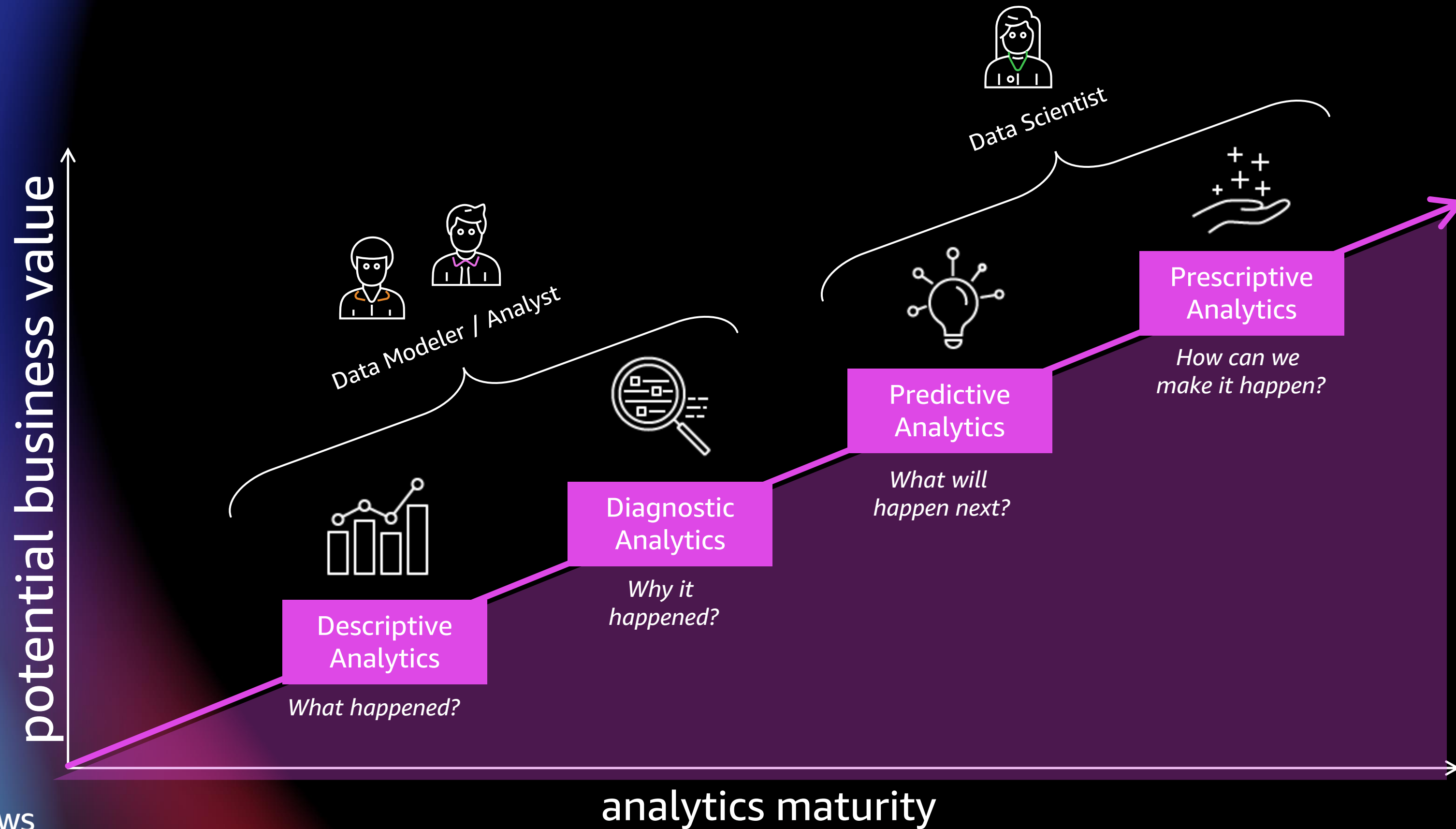
## MATURITY MODEL





# Data platform capabilities

## MATURITY MODEL

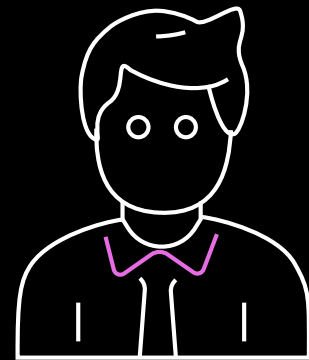


# Data platform personas



## DATA ENGINEER / MODELLER

**Cleanses and curates data for descriptive and diagnostic analysis. Serves historical data for predictive and prescriptive analysis**



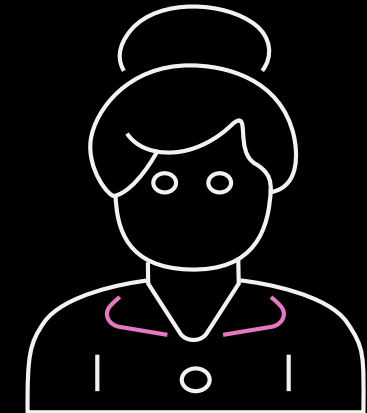
## DATA ANALYST

**Answers questions and provides data for descriptive and diagnostic analysis**



## DATA SCIENTIST

**Uses Scientific methods and algorithms to run predictive and prescriptive analysis.**

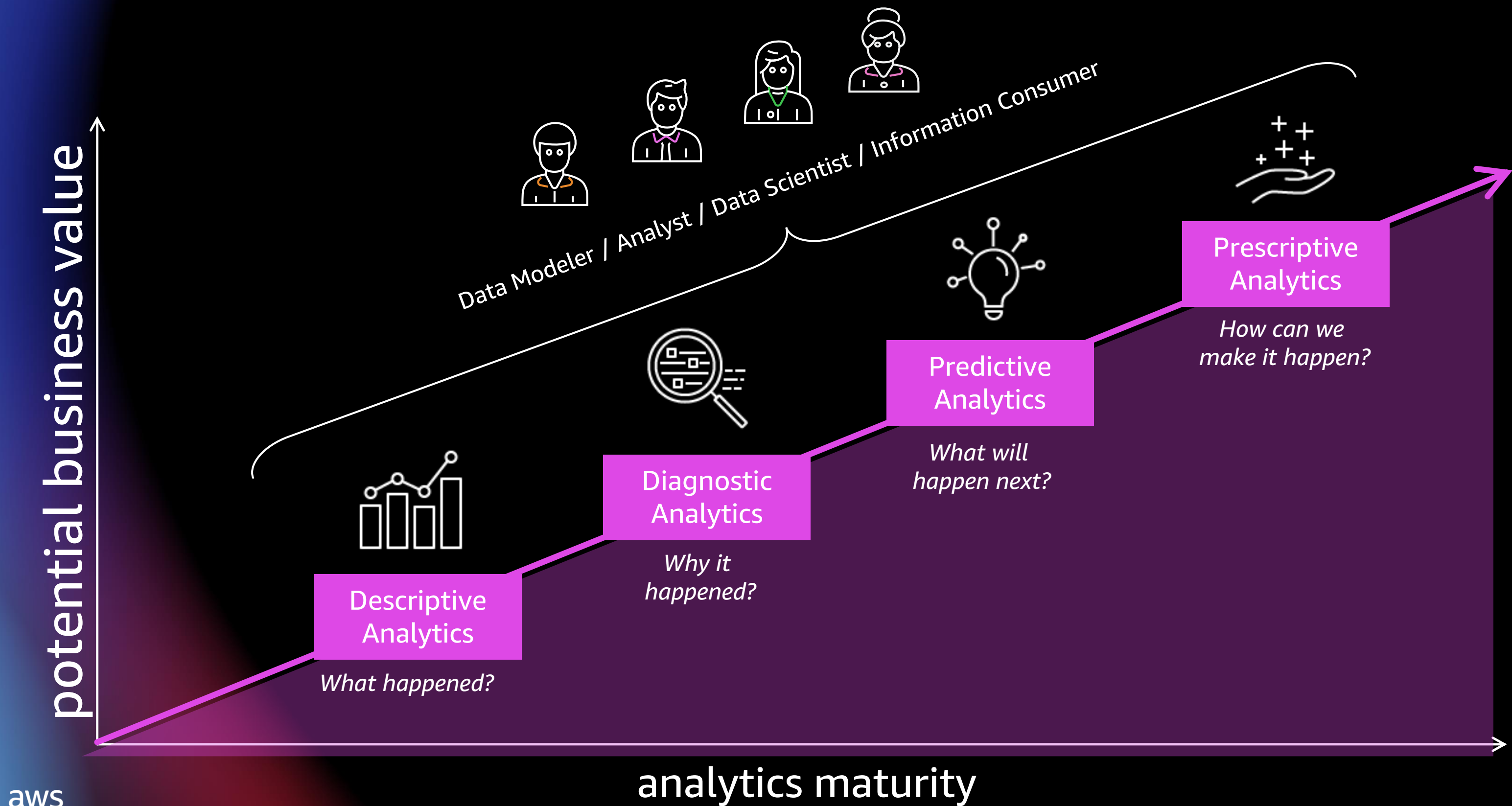


## INFORMATION CONSUMER

**Typically a Business Person -Bridges the gap between the insight and decision**

# Data platform capabilities

## MATURITY MODEL



# Trends which are driving change



**Cloud**



**Low / No  
Code**



**Augmented  
analytics**

# The most complete family of purpose-built data services

## Business Intelligence & Machine Learning

**Amazon QuickSight**  
Visualizations

**AWS Data Exchange**  
Data exchange

**Amazon SageMaker**  
ML

**Amazon Comprehend**  
NLP

**Amazon Transcribe**  
Speech-to-text

**Amazon Textract**  
Extract text

**Amazon Personalize**  
Recommendation

**Amazon Forecast**  
Forecasts

**Amazon Translate**  
Translation

**Amazon CodeGuru**  
Code reviews

**Amazon Kendra**  
Enterprise search

+Many more

## Analytics

## Databases

## Blockchain

**Amazon Redshift**  
Data warehousing

**Amazon EMR**  
Hadoop + Spark

**Amazon Athena**  
Interactive analytics

**Amazon Aurora**  
MySQL, PostgreSQL

**Amazon DynamoDB**  
Key value, Document

**Amazon DocumentDB**  
Document

**Amazon ElastiCache**  
Redis, Memcached

**Amazon Keyspaces (For Apache Cassandra)**  
Wide column

**Amazon Neptune**  
Graph

**Amazon QLDB**  
Ledger Database

**Amazon Timestream**  
Time Series

**Managed Blockchain**

**Amazon OpenSearch Service**  
Operational Analytics

**Amazon Kinesis Data Analytics**  
Real time

**Amazon RDS**  
MySQL, PostgreSQL, MariaDB, Oracle, SQL Server, RDS on VMware

**Blockchain Templates**

## Data Lake

**Amazon Simple Storage Service (Amazon S3)**  
/Amazon S3 Glacier

**AWS Lake Formation**  
Data Lakes

**AWS Glue**  
ETL & Data Catalog

## Data Movement

AWS Data Migration Service | AWS Snowball | AWS Snowmobile | Amazon Kinesis Data Firehose | Amazon Kinesis Data Streams | Amazon Managed Streaming for Apache Kafka (Amazon MSK)



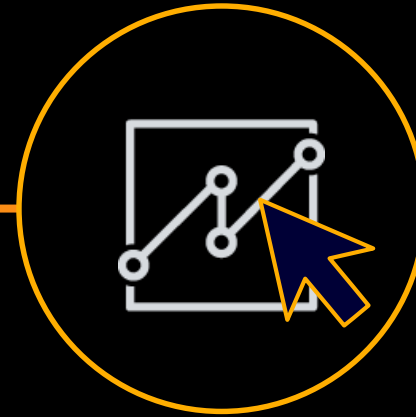
# 3 tools to mature your analytics capability

## AMAZON REDSHIFT ML



**Amazon Redshift ML** makes it possible for users to create, train, and deploy machine learning (ML) models using familiar SQL commands

## AMAZON QUICKSIGHT Q



**Amazon QuickSight Q** is a machine learning powered capability that uses natural language processing to answer your business questions instantly

## AMAZON QUICKSIGHT ML



**Amazon QuickSight ML** is a machine learning powered capability that uses natural language processing to answer your business questions instantly

# DEMO



# Recap

- There are 4 capabilities of a modern data strategy combining analytics and AI/ML
  - Descriptive, diagnostic, predictive and prescriptive analytics
- Skills is one of the biggest challenges to scaling ML initiatives in organizations
- A new breed of tools can help you to integrate ML throughout your entire organization – with minimal upskill required
- Demo - 3 AWS tools which can supercharge your machine learning journey



# 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.

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# Thank you for attending AWS Innovate – Data Edition

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# Thank you!