



aws INNOVATE

DATA EDITION

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Building an intelligent insights discovery solution using analytics and ML

Darshit Vora

Senior Startup Solutions Architect, AWS India

Agenda

- Challenges with extracting relevant information
- Addressing the challenge: Extracting and intelligent search
- Deep dive in relevant services – Amazon S3 Data Lake, Amazon Kendra, Amazon Textract & Amazon Comprehend
- Practical perspective: Demo showcase how to build intelligent data discovery solution
- Industry use cases
- Getting started

Organizations want more value from their data



**Growing
Exponentially**



**From new
sources**



**Increasingly
diverse**



**Used by
many people**



**Full of
buried
insights**

Extracting insights from your data is getting harder

Most

data sitting within the organization is **unstructured** (documents, help website, support documentation, and so on)¹

It is proliferating and often scattered and inaccessible

Customer challenges



Inaccurate keyword search



Complex implementation



Manual tuning



Ongoing maintenance

Business impact

INTERNAL CHALLENGES

Lower employee productivity and work duplication

Extensive time
spent finding
answers

Difficult to search
multiple
repositories

Stalled
innovation

Increased risk and liability

Compliance and risk mitigation are difficult when answers
are not easily found within documents

CUSTOMER CHALLENGES

Negative customer interaction and engagement

Websites are
difficult to search

Call center agents are not
able to find answers quickly

Limited access to documents
through self-service bots

What is the solution?

Traditional
search

Intranet Search

it support desk

Your recent searches ▾ Not finding relevant results

SEARCH IN:

Everything (21)
Wiki (17)
Email List Archive (3)
Show more...

REFINE:

CATEGORIES

Service (1)
Team (1)

CREATOR

admin (1)
abcde (1)
it (1)
corp (1)

Displaying results 1 - 10 of 21

IT_Support_Training_Program.Wiki
18px"%)1 Linux desktop * (% style="font-size:13.5px"%)**Afternoon
https://w.co.com/bin/view/IT_Support_Training_Program.Wiki

Com_Support_Wiki.Web
Communication has three different types of support: IT, HR, and Finance. Com sign-in flow>>url:https://w.co.com/bin/view/Com_Support_Wiki.Web
https://w.co.com/bin/view/Com_Support_Wiki.Web

OperationalBestPractices.EventM
as a basic service. It is owned by [https://w.co.com/bin/view/OperationalBestPractices.EventM]
*Dial into both calls: If you're at your desk, dial into both calls. If you're not at your desk, dial into both calls.
<https://w.co.com/bin/view/OperationalBestPractices.EventM>

Corp_Wiki_Pending.Web
Light~", sans-serif; font-size:9pt; height:1.2em; vertical-align:top;">Videoconference **desk** issues from Reg
https://w.co.com/bin/view/Corp_Wiki_Pending.Web

RESULTS PAGE

Where is the it support desk?

Kendra's suggested answer

1st floor

... our IT help **desk**, deskside, which are located all around our buildings and open for **support** at most hours. The one in **Seattle** is on the **1st floor** and is open from 12:30 to 5 p.m. daily.

WEB | <https://w.organization.com/bin/view/ILDRTEST/1st-floor>

What is Kendra's suggested answer? [Info](#)

Frequently asked questions

[Where do I get IT help?](#)

[What are the IT support hours?](#)

[Where can I get IT help corporate campus?](#)

What are frequently asked questions? [Info](#)

Intelligent
search

Data value chain



COLLECT

STORE

REFINE

DISCOVER

OPTIMISE

CONSUME

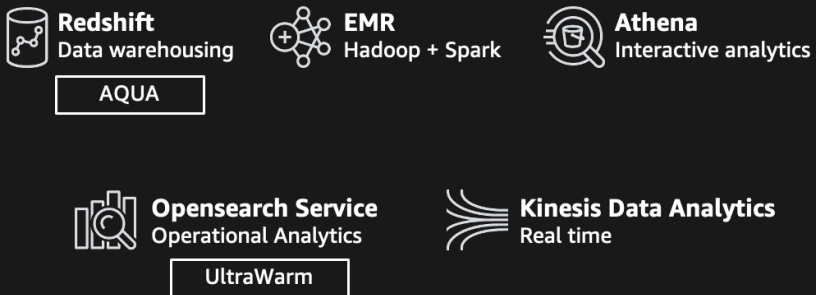
AWS Analytics and AI Services

Broad and deep portfolio, purpose-built for builders

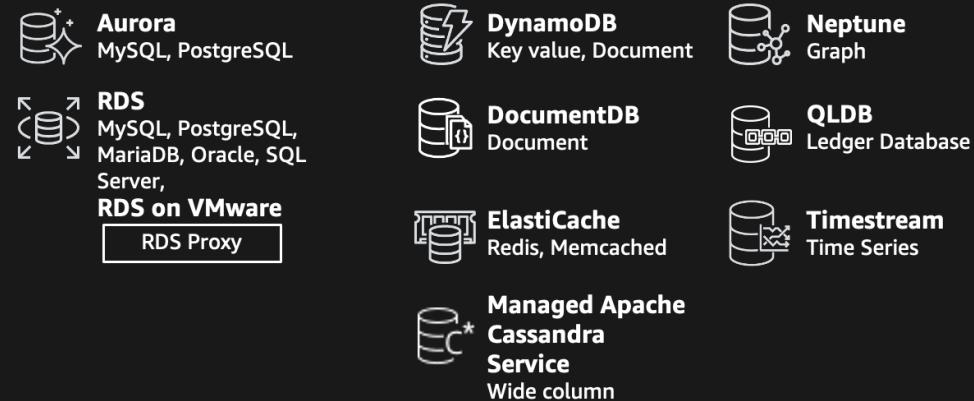
Business Intelligence & Machine Learning



Analytics



Databases



Blockchain



Data Lake

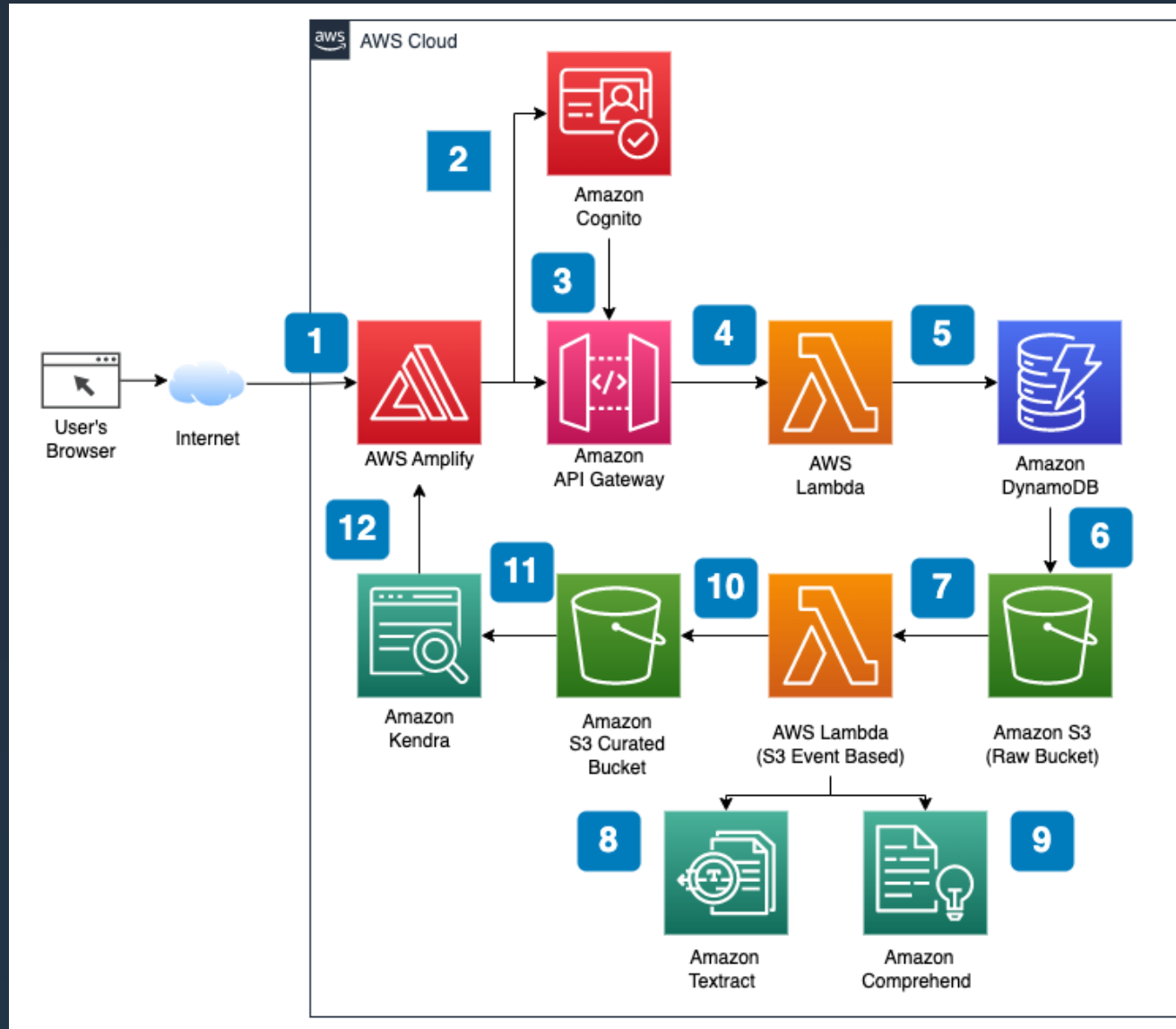


Data Movement

Database Migration Service | Snowball | Snowmobile | Kinesis Data Firehose | Kinesis Data Streams | Managed Streaming for Kafka



Architecture



Find more accurate answers with Amazon Kendra

EASY TO FIND WHAT YOU ARE LOOKING FOR



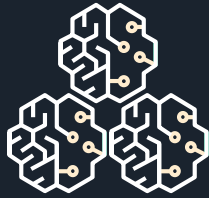
Natural language queries

Intuitive search within unstructured content



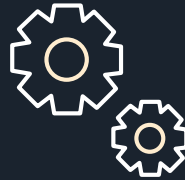
NLU and machine learning (ML) core

Instant answers
FAQ matching
Document ranking



Broad domain expertise

Pre-trained for 14 domains and industries



Continuous improvement

Incrementally learns from user feedback

QUICK SETUP



Accelerators

Native and partner connectors
Automate ingestion with custom metadata enrichment
No-/low-code UI builder

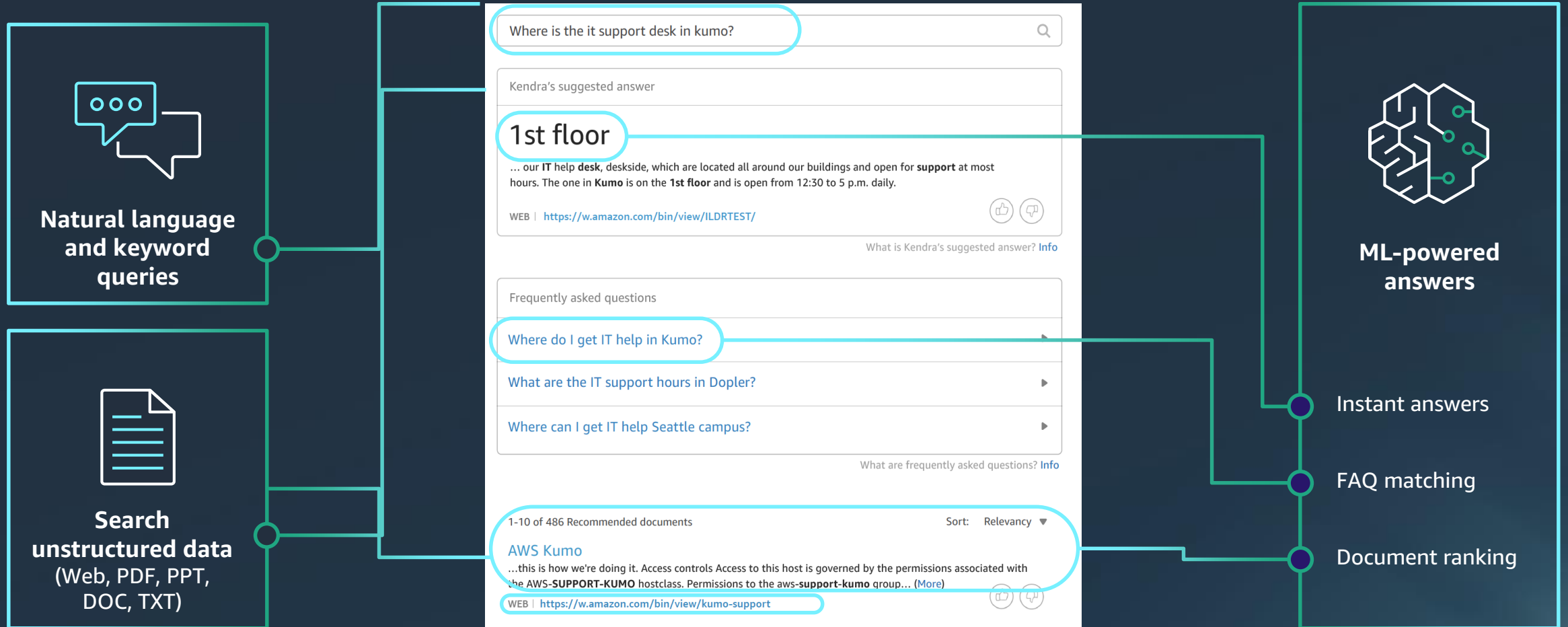
SECURE



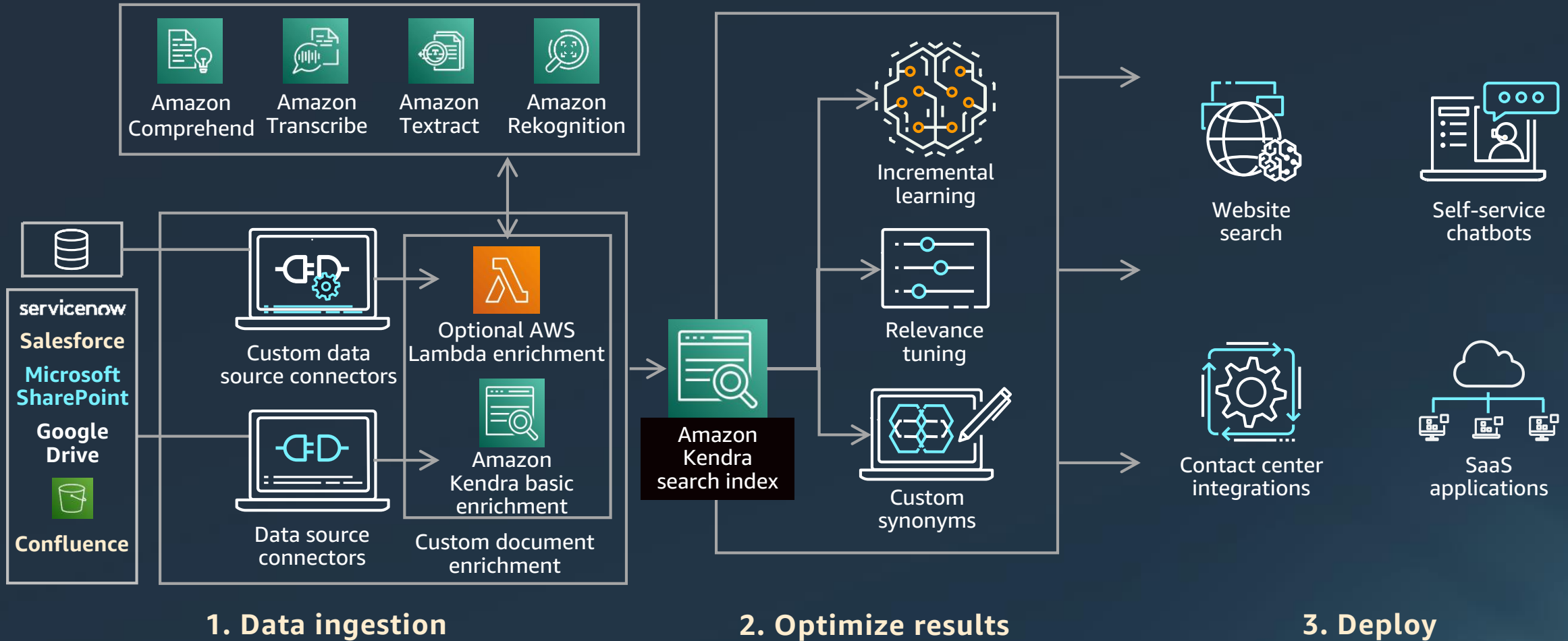
Secure search

Encrypted in transit and at rest
Token-based access control
AWS IAM Identity Center integration

Better experience through better answers



Building an intelligent search application with Amazon Kendra



Demo – Intelligent search platform

Building an intelligent search application with Amazon Kendra

Vast array of USE CASES across different business functions, or verticals

EMPLOYEE EXPERIENCE

Intranet portal

Centralized search

Department focused

R&D

Compliance/risk mitigation

HR

IT

Legal



CUSTOMER SERVICE

Call center agent assist

Self-service virtual agents/bots

Website search



EMBEDDED SEARCH

ISV/SaaS applications

CMS

CRM

Productivity apps

Getting started

- Amazon Kendra Workshop – <https://catalog.us-east-1.prod.workshops.aws/v2/workshops/df64824d-abbe-4b0d-8b31-8752bceabade/>
- Amazon Comprehend - <https://catalog.us-east-1.prod.workshops.aws/workshops/c2af04b2-54ab-4b3d-be73-c7dd39074b20/en-US>
- Amazon Textract Workshop - <https://catalog.us-east-1.prod.workshops.aws/workshops/f76c7a73-2080-4670-bd1d-db26a6259142/>
- Serverless Data Lake - <https://catalog.us-east-1.prod.workshops.aws/workshops/ea7ddf16-5e0a-4ec7-b54e-5cadf3028b78/en-US>
- Blog - <https://aws.amazon.com/blogs/machine-learning/augment-search-with-metadata-by-chaining-amazon-textract-amazon-comprehend-and-amazon-kendra/>

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.

- Maximizing business value with data: 6 essential data-driven use cases for leaders
- The ultimate guide to developing an end-to-end data strategy
- 5 key elements of a data-driven culture
- A builder's guide to AWS analytics services
- ... and more!



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

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Thank you!

