



AI & Machine Learning

Find accurate information faster with intelligent search

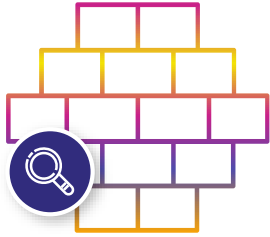
Vikas Shah

Solution Architect, AWS

What is Intelligent Search?

Challenges with delivering great search

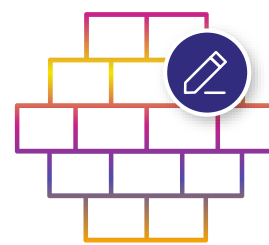
Inaccurate keyword search



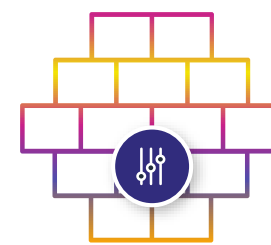
Scattered content repositories



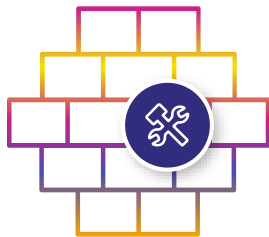
Unstructured data



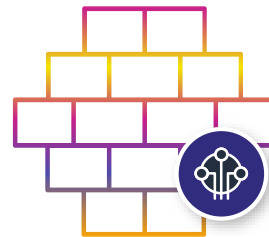
Manual tuning



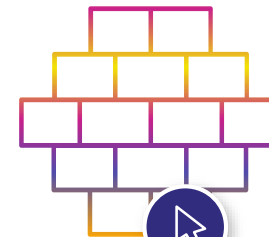
Ongoing maintenance



Keeping content up-to-date



Suboptimal user experience



How does Amazon Kendra solve these challenges?

EASY TO FIND WHAT YOU ARE LOOKING FOR



Natural language queries

Contextual search in unstructured content



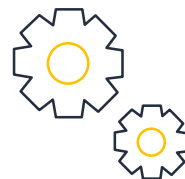
NLU & machine learning core

Reading comprehension
FAQ matching
Document ranking



Broad domain expertise

Pre-trained for 14 domains and industries



Continuous improvement

Incrementally learns from user feedback

QUICK SETUP



Accelerators

Automate ingestion with custom metadata enrichment
No/Low Code UI Builder
Native & partner connectors

SECURE



Secure search

Encrypted in transit & rest
Token-based access control
AWS SSO integration

Use cases of intelligent search



ACCELERATE RESEARCH AND DEVELOPMENT

Finding relevant information in highly technical research and engineering documents



MINIMIZE REGULATORY AND COMPLIANCE RISKS

Enhancing regulatory intelligence, correspondence, and access to up-to-date compliance data



BOOST CONTACT CENTER EFFICIENCY

Assist call center agents with answering questions quickly and accurately, in call centers and through chatbots (without bot training)



ENHANCE CUSTOMER SEARCH EXPERIENCES

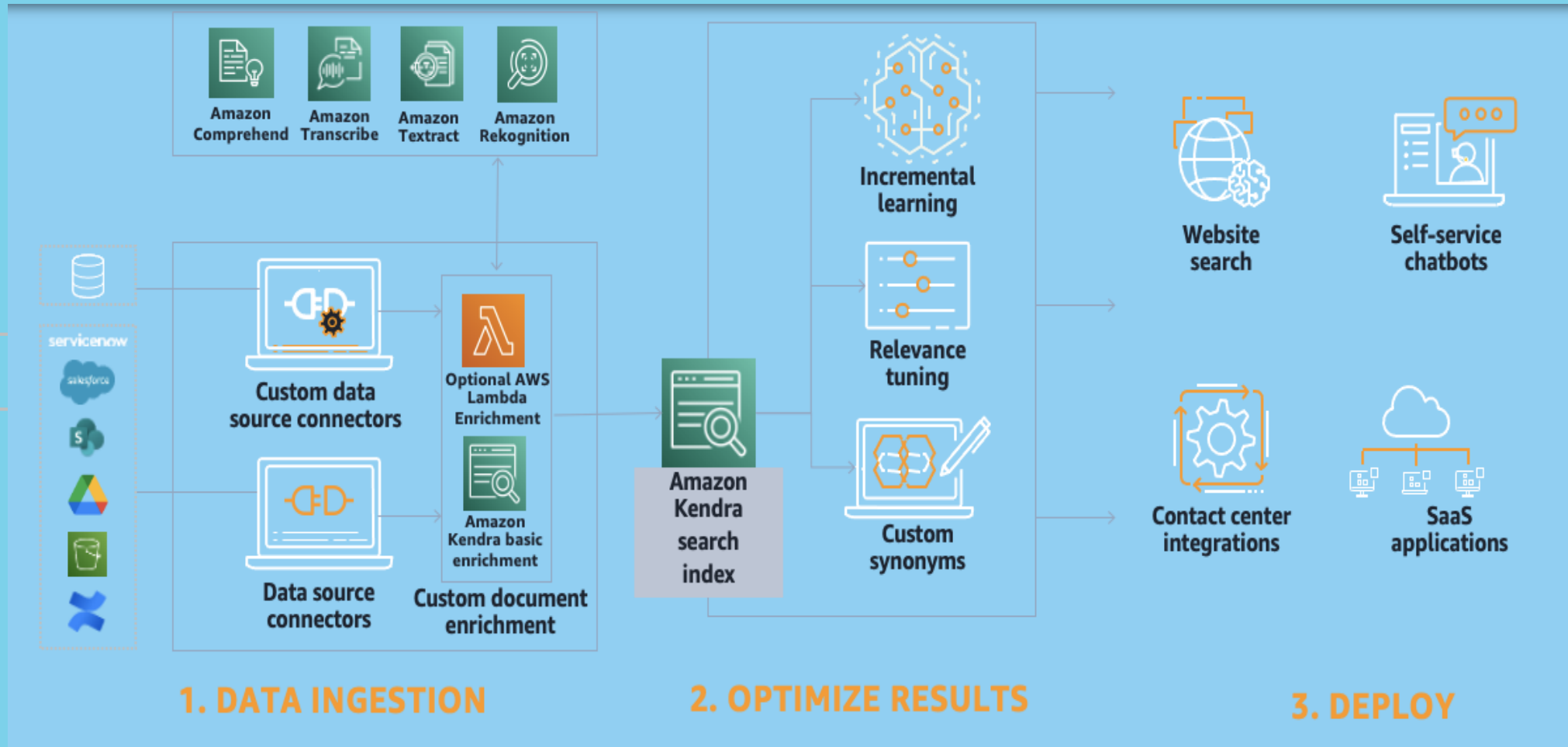
Create interactions that delight, and give customers the answers they're looking for, whether it's a product search, return policy details, or a news article



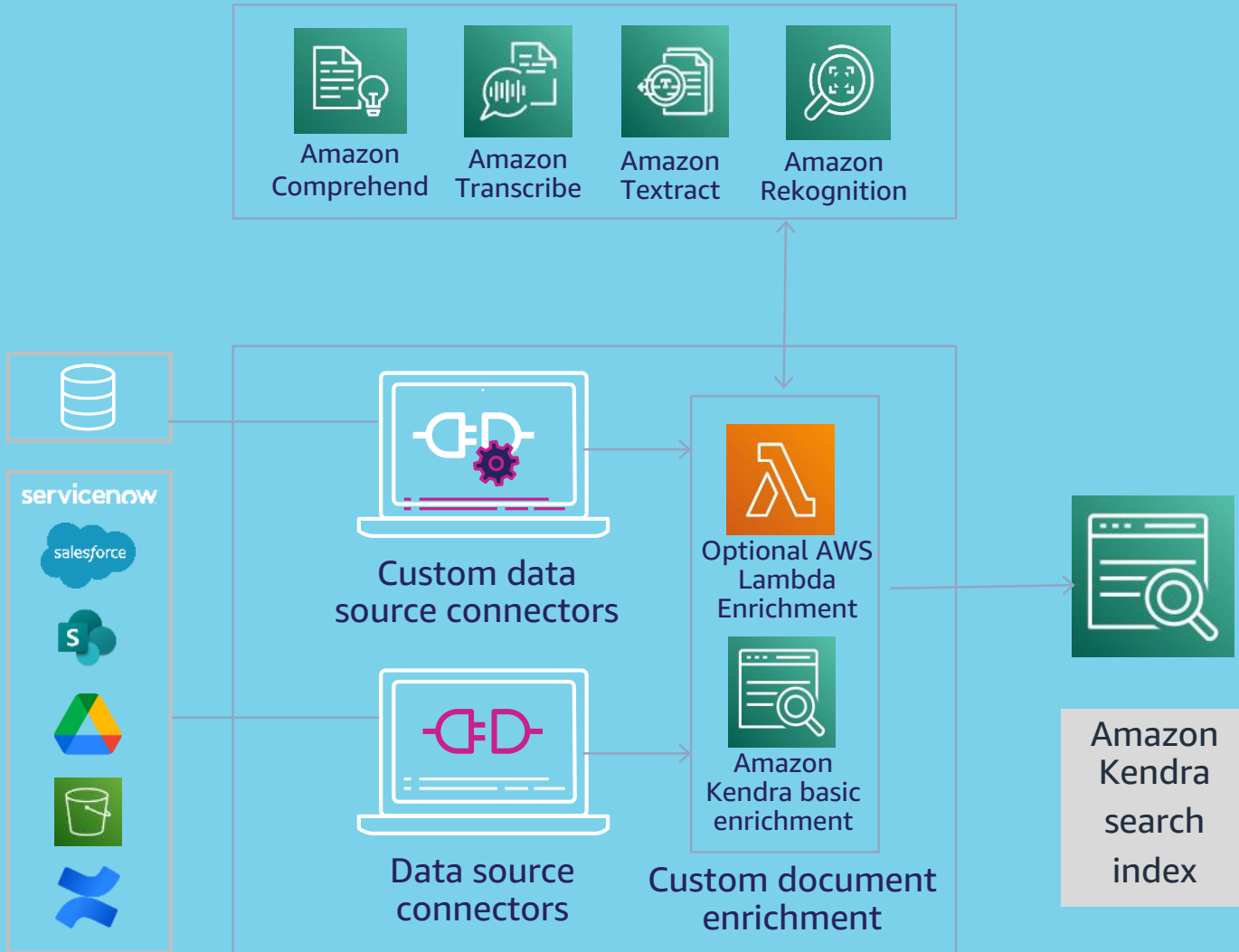
INCREASE EMPLOYEE PRODUCTIVITY

Create a unified search and discovery experience to equip employees with the information they need to do their jobs

Building an intelligent search application



Custom document enrichment



1/DATA INGESTION

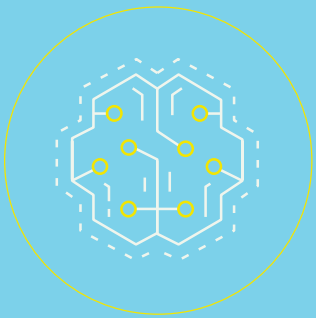
Add rich metadata during data ingestion to enhance the accuracy and search experience

Basic enrichment (such as metadata based on a document directory) is built into the Amazon Kendra console

AWS Lambda functions allow for custom metadata creation through natural language processing (NLP), automatic speech recognition (ASR), optical character recognition (OCR), and so on.

Tune search relevance

2. OPTIMIZE RESULTS



Incremental learning
(out of the box)

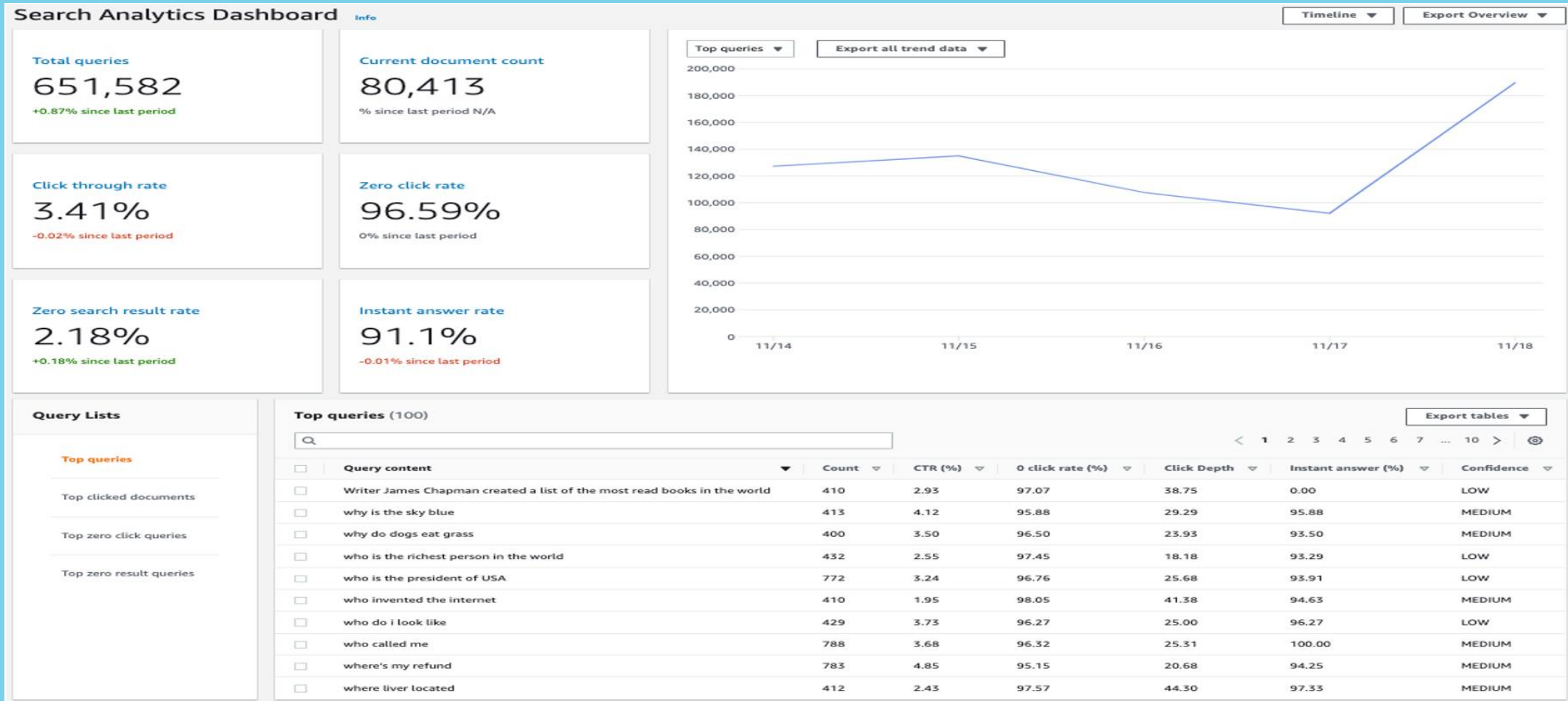
- ✓ Learns from user interactions
- ✓ Re-ranks preferred documents
- ✓ No need for ML expertise



Tuning, content boosting,
and synonyms

- ✓ Boost based on data sources, authors, or document freshness
- ✓ Tune at the entire index or query level
- ✓ Define domain-specific or business-related synonyms

Amazon Kendra Analytics Dashboard



Amazon Kendra Experience Builder



what is Kendra?

Filter search results

Kendra suggested answers

[What is Amazon Kendra? - Amazon Kendra](#)

AWS Documentation Amazon Kendra Developer Guide Benefits of Amazon Kendra Amazon Kendra Developer Edition Amazon Kendra Enterprise Edition Pricing for Amazon Kendra Are you a first-time Amazon Kendra user? What is Amazon Kendra? **Amazon Kendra is an enterprise search service that enables your users to intuitively search unstructured data using natural language.** It returns specific answers to questions, giving users an experience that's close to interacting with a human expert. It is highly available and scalable, tightly integrated with other AWS services, and offers enterprise-grade security. Amazon Kendra users can ask the following types of questions, or queries: Factoid questions — Simple who, what, when, or where questions, such as Who is Amazon's CEO?

<https://s3.us-east-1.amazonaws.com/amazon.../.../what-is-kendra.html>

FAQ

No results

Sort: Relevance

1-9 of 170 recommended documents

[How Amazon Kendra works - Amazon Kendra](#)

...How Amazon Kendra works...

Design

Search a query, then you can drag components to design the search page.

Preview
 Show design tools

UI component

Search box

Filter

Suggested answer

Faq

Sort

Documents

Reset to default settings

Kendra Experience Builder | Features

- ✓ Deploy Kendra Search UI in a few clicks
- ✓ Drag and drop Search UI builder
- ✓ Branding and optional code-level customizations (coming soon)
- ✓ AWS SSO integration for secure access and search filtering
- ✓ Fully managed/hosted
- ✓ No ML or coding expertise needed

[DEMO] **Amazon Kendra** **Experience Builder**



How to build a POC?

Add some of your content into Amazon Kendra by either:

- Indexing your website using our web crawler
- Taking a subset of your documents, putting them on Amazon S3, and ingesting the documents into Amazon Kendra
- Connecting to one of your data sources (SharePoint etc.)

Customize and deploy the application using Kendra Experience Builder

Compare the accuracy of Amazon Kendra results to your existing search tool

- Including time savings from suggested answers by not having to open documents to find answers



Thank you!