Az COMMUNITY

Conference 2022

Asia's Largest Azure Community Conference

#AzConfDev

Azure Cognitive Services with Jupyter and Power BI

Introduction

- 14 years of experience in Analytics, Reporting and data engineering

- Azure Dev Lead and Microsoft Certified - Azure and AI Engineer

- Enthusiastic learner and tech community contributor

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Agenda

Welcome Note

Azure Cognitive services - Entity extraction

Sentiment Analysis

Language Detection

Case study

Resources

Target Audience:

Level: Beginner

The session is intended for developers and beginners who are new to Azure Cloud, Machine Learning and have experience in NLP.

Azure account, Jupyter Notebook and Power BI

Source:

Azure Cognitive Services

- Azure pre-trained AI Services provide ready-made intelligence for your applications and workflows.
- AI Services easily integrate with your applications to address common use cases such as personalized recommendations, modernizing your contact centre, improving safety and security, and increasing customer engagement.
- AI Services on Azure don't require machine learning experience

Vision	Speech	Language	Decision	OpenAI Service
• Computer Vision • Custom Vision • Face API	• Speech to text • Text to speech • Speech translation • Speaker recognition	• Entity recognition • Sentiment analysis • Question Answering • Conversational language understanding • Translator	• Anomaly Detector • Content Moderator • Personalizer	• OpenAI Service Preview

Source:

Why Microsoft Cognitive Services ?

Easy

Roll your own with REST APIs

Simple to add just a few lines
of code required
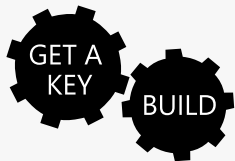
Flexible

Make the same API code call on
iOS, Android, and Windows

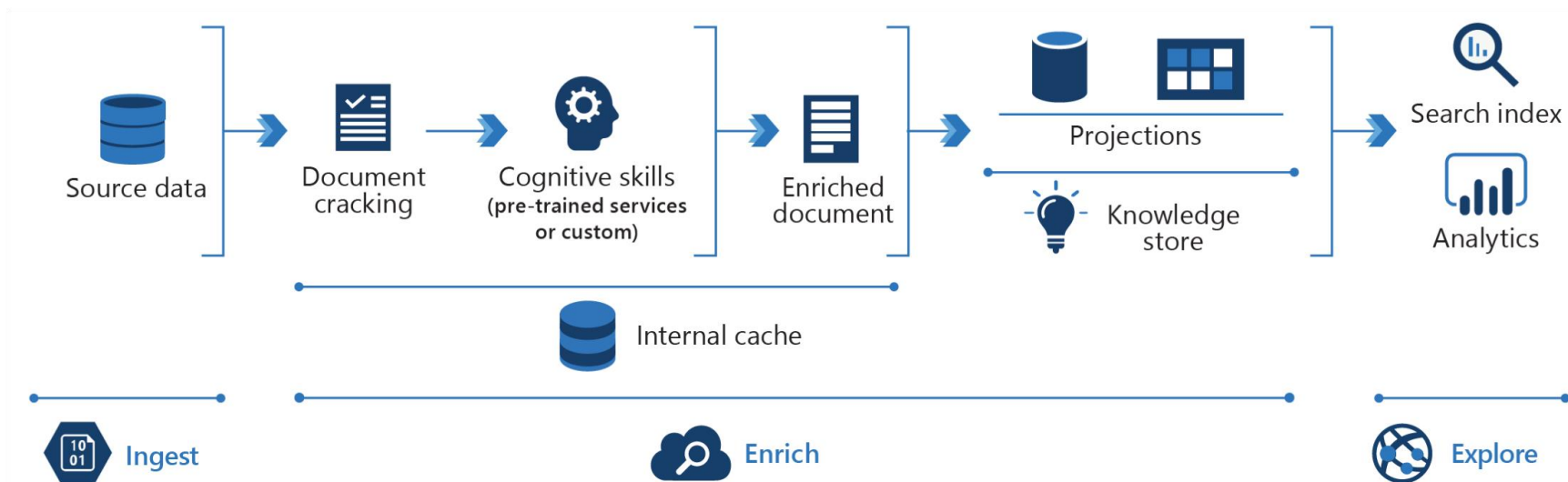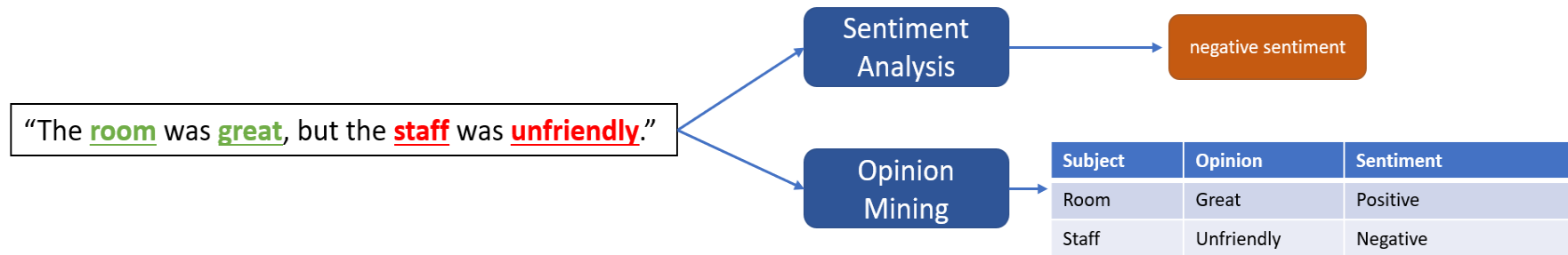Integrate into the language
and platform of your choice

Tested

Built by experts in their field from
Microsoft Research, Bing, and Azure
Machine Learning

Quality documentation, sample code,
and community support

Source:

Architecture

Source data → Document cracking → Cognitive skills (pre-trained services or custom) → Enriched document → Projections / Knowledge store → Search index / Analytics

Internal cache

Ingest — Enrich — Explore

Source: https://learn.microsoft.com/th-th/azure/architecture/solution-ideas/articles/customer-feedback-and-analytics

Sentiment Analysis Vs Opinion Mining

"The **room** was **great**, but the **staff** was **unfriendly**."

Sentiment Analysis → negative sentiment

Opinion Mining →

Subject	Opinion	Sentiment
Room	Great	Positive
Staff	Unfriendly	Negative

Source:

Customer Feedback Analysis

- Track Customer Sentiment
- Determine which Customer segments have the strongest opinions
- Plan product improvements
- Determine the effective communication channels
- Prioritize the customer service issues
- Create a benchmark on customer satisfaction, ease of doing business.

Source:

Learning Resources

- Azure free account: https://azure.microsoft.com/en-in/free/

- QuickStart : https://docs.microsoft.com/en-us/azure/architecture/data-guide/technology-choices/natural-language-processing

- What is Azure Machine Learning?

https://docs.microsoft.com/en-us/azure/machine-learning/overview-what-is-azure-machine-learning?wt.mc_id=AID3035581_QSG_PD_SCL_547447

Source:

Platinum Partner

Gold Partner

Silver Partner

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Open for Q&A

Thank you!!