Hicrosoft Azure

The Era of Al

Cumarran Kaliyaperumal Chief Data and Al Officer, APJ



Traditional model development

High cost and slow deployment—each service is trained disjointly





green vehicle with the word elephant on the door

a man is driving a car and the driver is holding a microphone.

Tel: +27 (82) 4288 223

a rhino is standing on the road and the other one is on the rig

Elepa black and white image of three elephants with the word s on it. Toura mana black and white image of a horse with the word elephant on it a rhino is w

green vehicle with elephant herd tours safaris on the side.

man driving a car with a windshield that says'on the side '

a person is seen in a car with a black glove on.

TOURS

Tel: +27 (82) 4288 223

Elephant Herd

SAFARIS



a rhino is v

a rhino is walking on a dirt road and the other side of the black

Staff Tailgating



Staff detection



What does building an AI product look like?



Help bring generative AI to clients by delivering copilots across Microsoft cloud

Microsoft Al approach

Empowering our customers on our AI platform using our Open AI Service on Azure

Empowering clients through deep engagement and co-innovation of generative AI solutions leveraging the full range of our AI services on Azure.

Microsoft Copilots | Built Into



Microsoft Confidential

* For illustrative purposes only, may not be fully comprehensive.



Unlock productivity and unleash creativity





MICROSOFT 365

Copilot in Word



Designer PREVIEW Fall Harvest Festival ~





T Text

5 Brand kit



Generative fill Generative expand



Remove background

Generative erase



Q Quick select 🐺 Brush sele





n		Power BI		× +														-	Ō	\times
\leftarrow	C	🖒 http	s://msit.powert	bi.com/groups/me/	e/datasets/dfa4e2c5-5	5c7-48b7-9f7f-278504	:6990a?experience=powe	r-bi						ć	5 A to	G	Ē			b
		Microsoft	Power BI	My workspace			Qs	Search							Ç!	ŝ	$\underline{\downarrow}$?	•	
G Home	File 🕥	View ~	Reading view	Mobile layout					💭 Ask a question	ि Explore ∨	E Text box	℃ Shapes ~	⊂⊳ Buttons ∨	Visual interactions ~	C Refresh	0 Du	uplicate tł	nis page	🛱 Save	
⊕ Create																	Visual	ata D Search		*
Browse Data hub																S	>	 Measure Buckets Calendar Employe 	r ee Demogra	
Metrics Apps						Let's work to	ent with Copilot PREVIE gether to create a repoi some suggested topic rn idea.	rt with meani	ngful insights. To ge ort. Select the one y	t started, base /ou're interest	ed on your ed in or						> > >	 Employe KPI Own Manager Operatio Projects 	ners rrs ons Team	tions
eployme pipelines							ls in our employee hiri board for key workford		re attrition rate acro Summarize workfo		era C									
lonitorin hub	g					Ask a quest	on or request, or type	e '/' for sugge	estions		\square									
My rorkspac																				
Power B	1 D	Page 1	+																	
-	47°F Rain						Q Search		Microsoft 🔲 💭	0 📲 💧	I 💷 🖬	•							2:21 / 3/29/20	

Help bring generative AI to clients by delivering copilots across Microsoft cloud

Microsoft Al approach

Empowering our customers on our AI platform using our Open AI Service on Azure

Empowering clients through deep engagement and co-innovation of generative AI solutions leveraging the full range of our AI services on Azure.

Horizontal use cases for LLMs

Content Generation

Call Center Analytics: Automatically generate responses to customer inquiries

Generate personalised UI for your website



Call Center Analytics: Summary of customer support conversation logs

Subject Matter Expert Document Summarization (e.g. financial reporting, analyst articles)

> Social Media Trends Summarization



Convert Natural Language to SQL (or vice versa) for telemetry data

Convert Natural Language to Query Proprietary Data Models

Code Documentation



Search reviews for a specific product / service

Information Discovery and Knowledge Mining

Examples of Multiple Model Use Cases

End to End Call Center Analytics: Classification, Sentiment, Entity Extraction, Summarization and Email Generation

Customer 360: Hyper-personalisation using timely Summarization of customer queries & trends, Search, and Content Generation

Business Process Automation: Search through structured & unstructured documentation, Generate Code to query data models, Content Generation

Business value, Resources (Budget, skills etc)

"My AI led enterprise"

Re-imagine thousands of processes across the enterprise

"My corporate co-pilot"

4 I want my whole enterprise to be Al first!



What do right foundations look like?



Create roadmap for focus business use case scenarios Envisioning future state; Assess Readiness of Data and App estate

Modernize your Data and Legacy Infrastructure

Unlock existing data safely: migrate SQL Server, Windows Server, Hadoop, Datawarehouse, Oracle and other Operational Data Stores

Innovate with AI and Cloud Native Services in every Application Modernize your Application Estate, Modernize

Operational Databases

Empower your Business Users by democratizing AI and Analytics

Modernize your Application and Data Estate with Modern Analytics and Governance Solution

Azure OpenAl Service

Runs on trust

Your data is y<u>our</u> data

Data is stored encrypted in your Azure subscription There is no shared services between Microsoft and OpenAl

Your data is protected by the most comprehensive enterprise compliance and security controls Encrypted with Customer Managed Keys

Private Virtual Networks, Role Based Access Control

Soc2, ISO, HIPAA, CSA STAR Compliant

<u>Responsible AI</u> controls built-in

Ongoing monitoring of harms - Monitoring real-world conversations for factors such as groundedness

Content Moderation - Detect and filter undesirable content

Prompt Engineering - Instructions to the base model for your scenario to improve outputs

Quality and Safety Measurements - Metrics to assess risk and drive continual improvement with a focus on relevance, groundedness, and coherence

Responsible AI built into Azure AI



Fairness

Assess fairness and mitigate fairness issues to build models for everyone.

Explainability

Understand model predictions by generating feature importance values for your mode.



Counterfactuals

Observe feature perturbations and find the closest datapoints with different model predictions.



Causal analysis

Estimate the effect of a feature on real-world outcomes.



Error analysis

Identify dataset cohorts with high error rates and visualize error distribution in your model.



Responsible AI scorecard

Get a PDF summary of your Responsible Al insights to share with your technical and non-technical stakeholders to aid in compliance reviews.

Help bring generative AI to clients by delivering copilots across Microsoft cloud

Microsoft Al approach

Empowering our customers on our AI platform using our Open AI Service on Azure

Empowering clients through deep engagement and co-innovation of generative AI solutions leveraging the full range of our AI services on Azure.

Co-innovation framework for Strategic Partnerships

(1) Innovation

Net new projects that clients want to co-develop with Microsoft teams in developing cutting edge solutions

Examples: Co-building of IP PG, MSRA, ISE, Bing X-Box collaborations with research, equity investments

CxOs: Typically Innovation or Al Office, CDAO etc

2

Acceleration

Existing business projects that are already underway but require technology interventions or expertise to accelerate

Examples: Deep expertise on products, architecture, implementation, CoE or joint council, Azure deep dives, CSA, partners)

CxOs: Typically BU heads, CDAO, core business use case leads

3

Enablement

IT related systems or infra that Microsoft can support with core foundational products

Examples: SaaS (M365, Dynamics etc), Azure core, Apps, Databases, warehouse, security

CxOs: Typically CIO, CTO etc



ADVISOR CO-PILOT







Thank You