

Data Engineering in Age of AI

Career: Challenges, Opportunities

Our story. An aspiration

|

Land of Data

|

Reaching for AI

..our story

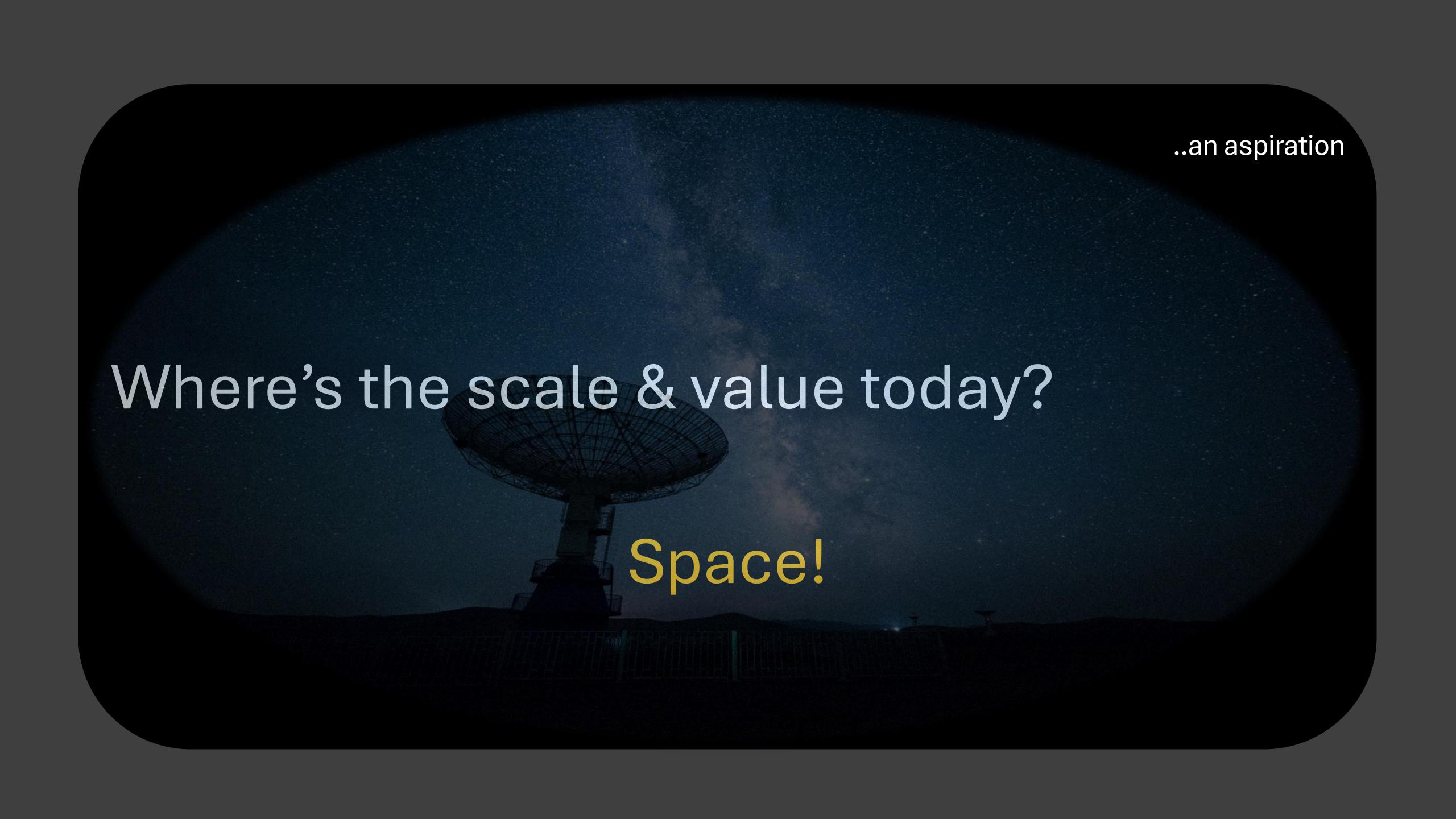
We humans are a bunch of explorers.

Islands.

Oceans.

Space.

..our story

A large satellite dish antenna is silhouetted against a dark, star-filled sky. The dish is positioned in the lower-left quadrant of the frame, pointing upwards towards the center. The background is filled with numerous small white stars of varying brightness.

..an aspiration

Where's the scale & value today?

Space!



..an aspiration

Why Space Economy?

Transformative – Weather, Telecom, Security

Pathways – source or create

Endless possibilities

..an aspiration

What's stopping us from Space?

Gravity!

Land of Data

..let's go: data

Business runs on Apps.

..let's go: data

Apps produce data.

Business runs on Apps.

..let's go: data

Different understanding. Different Business Groups.

Apps produce data.

Business runs on Apps.

..let's go: data

Non-conformed / Disjointed Data.

Different understanding.

Different Business Groups.

Apps produce data.

Business runs on Apps.

..let's go: data

Data Platform: Conformed / Consolidated

Non-conformed / Disjointed Data.

Different understanding.

Different Business Groups.

Apps produce data.

Business runs on Apps.

..let's go: data

Business =^(pull)=> Conformed Data (value)

Data Platform: Conformed, Consolidated

Non-conformed Data.

Different understanding.

Different Business Groups.

Apps produce data.

Business runs on Apps.

..let's go: data

Let's call it...

Gravity

Reaching for AI

Transformative

Buy or Build

Endless possibilities

..transformative, **buy** or build

Sales
Copilot

Search –
Bing, Edge

Security
Copilot

GitHub
Copilot

Fabric,
Power BI

Azure AI
Services

..endless possibilities

We are moving from auto-pilot era to the
co-pilot era of AI !

Satya Nadella

..endless possibilities

From

To

Tools



Creative assistant

Product specific



Cross-fitting

Data input



Content generation

Following commands



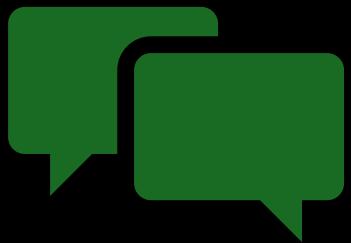
Provides recommendations,
with human in the loop

Uses specialized languages



Uses natural language

..endless possibilities



discuss Possibilities



loop Endlessly

..endless possibilities

Discuss

Take off..

Outcome & Value focus.

Environment and Priorities.

Bias and Disablers.

Be Grounded..

Guardrails.

Loop

Dev – Test – Deliver Fast.

Integration. End Points.

Responsible AI. Access.

Controls and Policies.

..examples

GitHub Copilot

Pair Programming. Almost.

Contextual. Look left. Look right.

Curvature. Rate of Change. Big / Small.

```
19     screenshot = imagegrab.grab()
20     # Convert to text
21     text = image_to_string(screenshot)
22     # Parse text for email addresses
23     emails = re.findall(r'[\w\.-]+@[\\w\.-]+', text)
24     return emails
25
26 def validate(addresses) :
27     ...
28
```

..examples

Microsoft Fabric

Unified. Scale + Multi-faceted.

Governance. Agile + Controls.

For Age of AI. Collect => Deliver.





Questions. Resources.

aka.ms/fabric

aka.ms/azureai

aka.ms/azure-openai

aka.ms/githubcopilot

aka.ms/bing

aka.ms/salescopilot

aka.ms/securitycopilot

aka.ms/learn

aka.ms/responsibleai

aka.ms/artificialintelligence

Thank you