
Gaurab Patra

Generative AI

enabling

crowdsourced interactivity



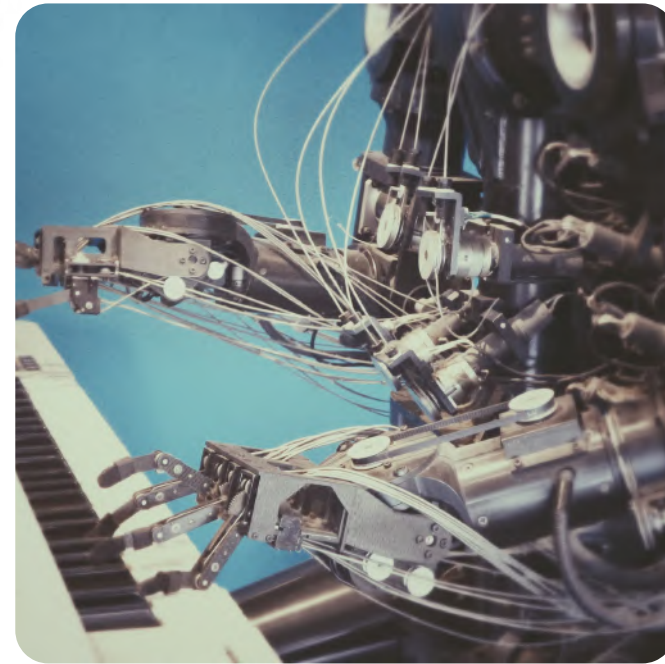
May 18, 2023
gaurab@flurgo.com

What does that mean?



Interactivity

01



Generative AI

02



Crowdsourcing

03



We see, listen,
smile, touch, hug,
kiss, fight, smell,
handshake, high-
five, play

Human-to-Human Communication

- **Complex, multiple modalities**
- **Richer context and Effective**
- **Verbal and Non-verbal**
- **Speech**
- **Hand gestures**
- **Facial expressions, Eye-motions**
- **Body languages**
- **Collaborative interactions**



**Google's
Project Soli**

You are the only
interface you need

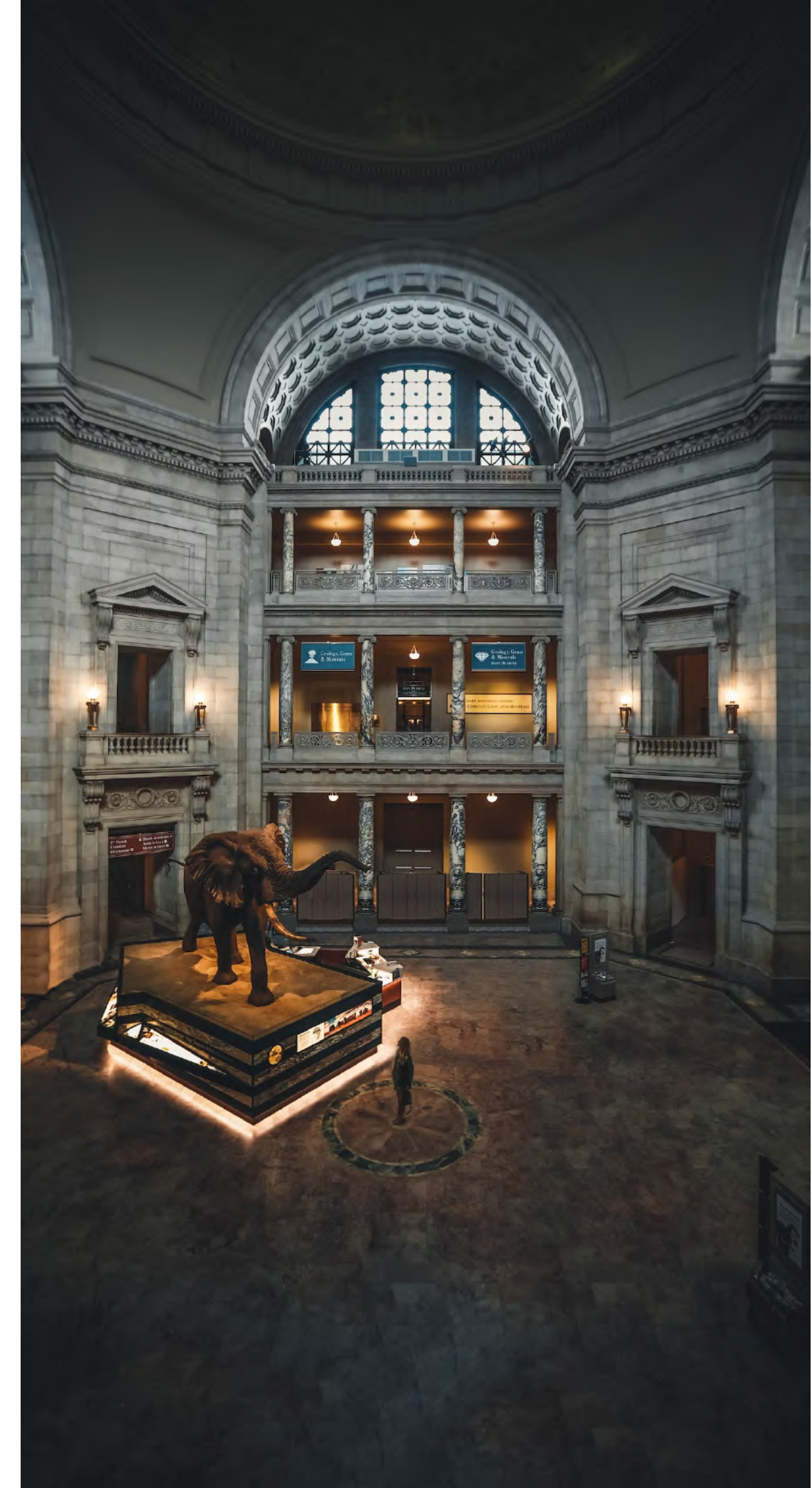
Human-to-Machine Communication

- **Graphical interface**
- **Touch, Swipe, Play**
- **Natural language**
- **Voice interface**
- **Gesture and motion control**
- **Brain computer interface**
- **Augmented reality**
- **Haptic feedback technology**
- **Autonomous machines**

The elephant in the room

Generative AI

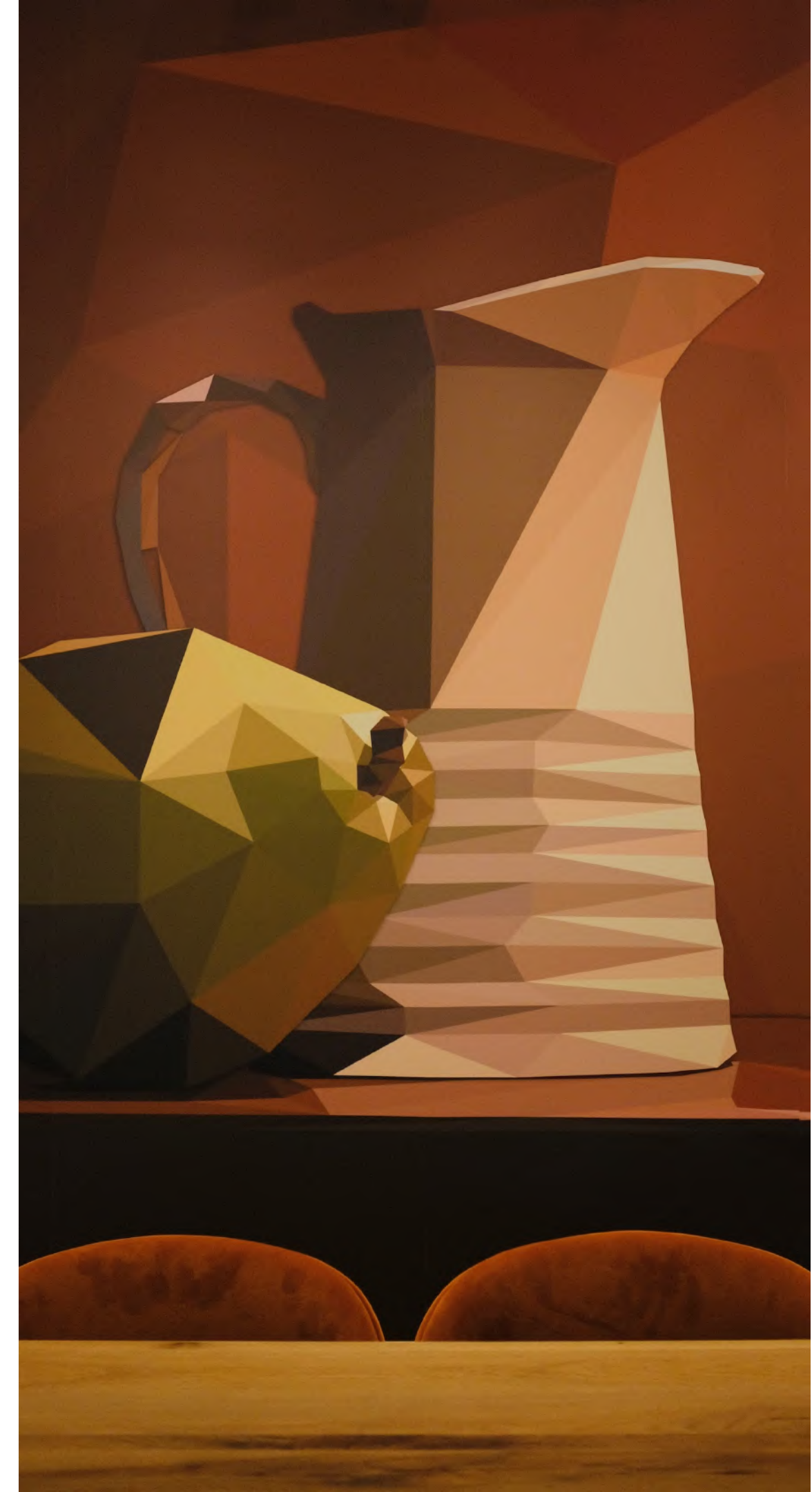
Class of deep learning models that use unsupervised learning techniques to generate data that is similar to the input data



The elephant in the room (contd.)

Generative AI

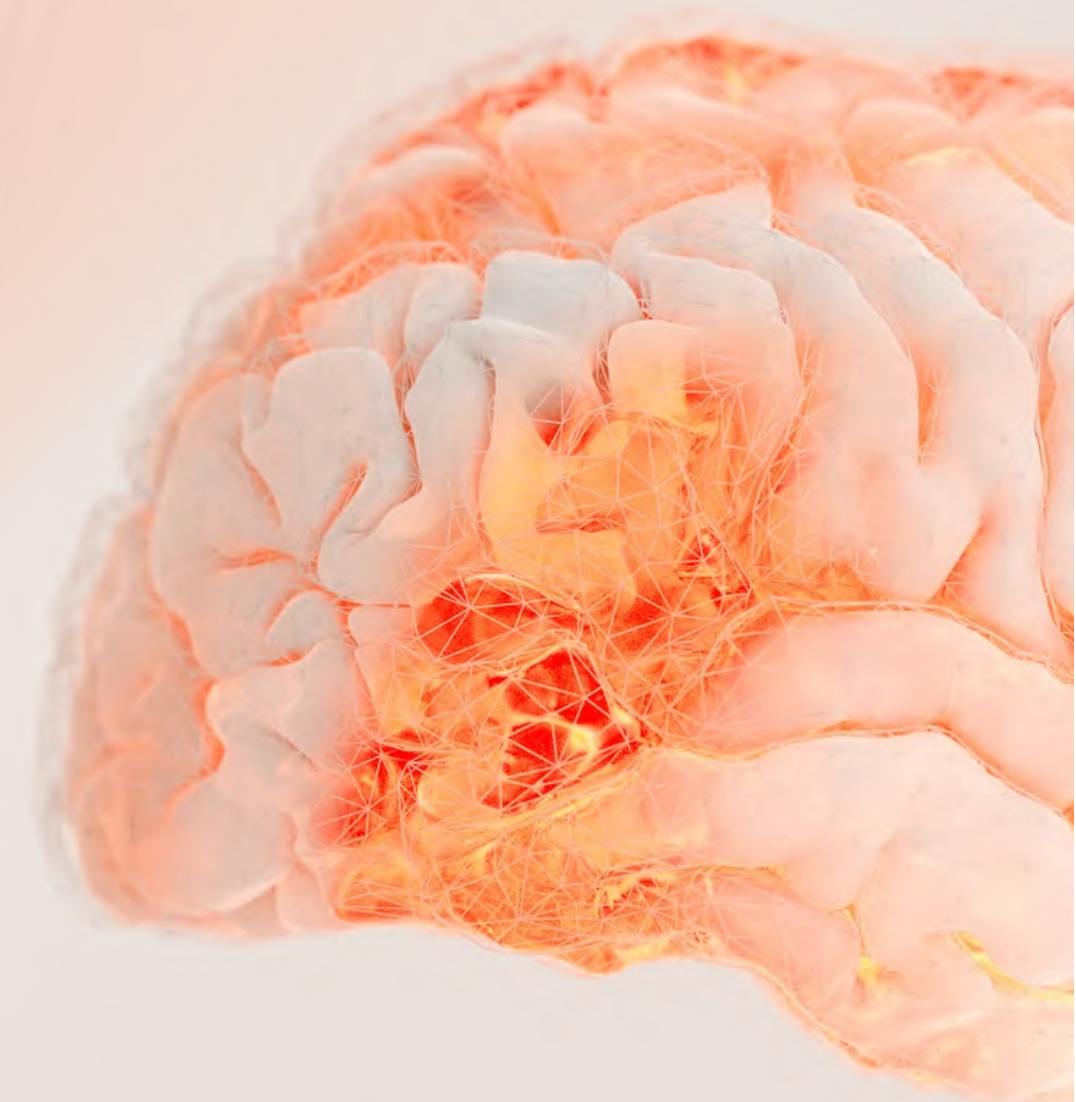
Generative Adversarial Networks (GANs), which can generate high-quality images, musics and videos



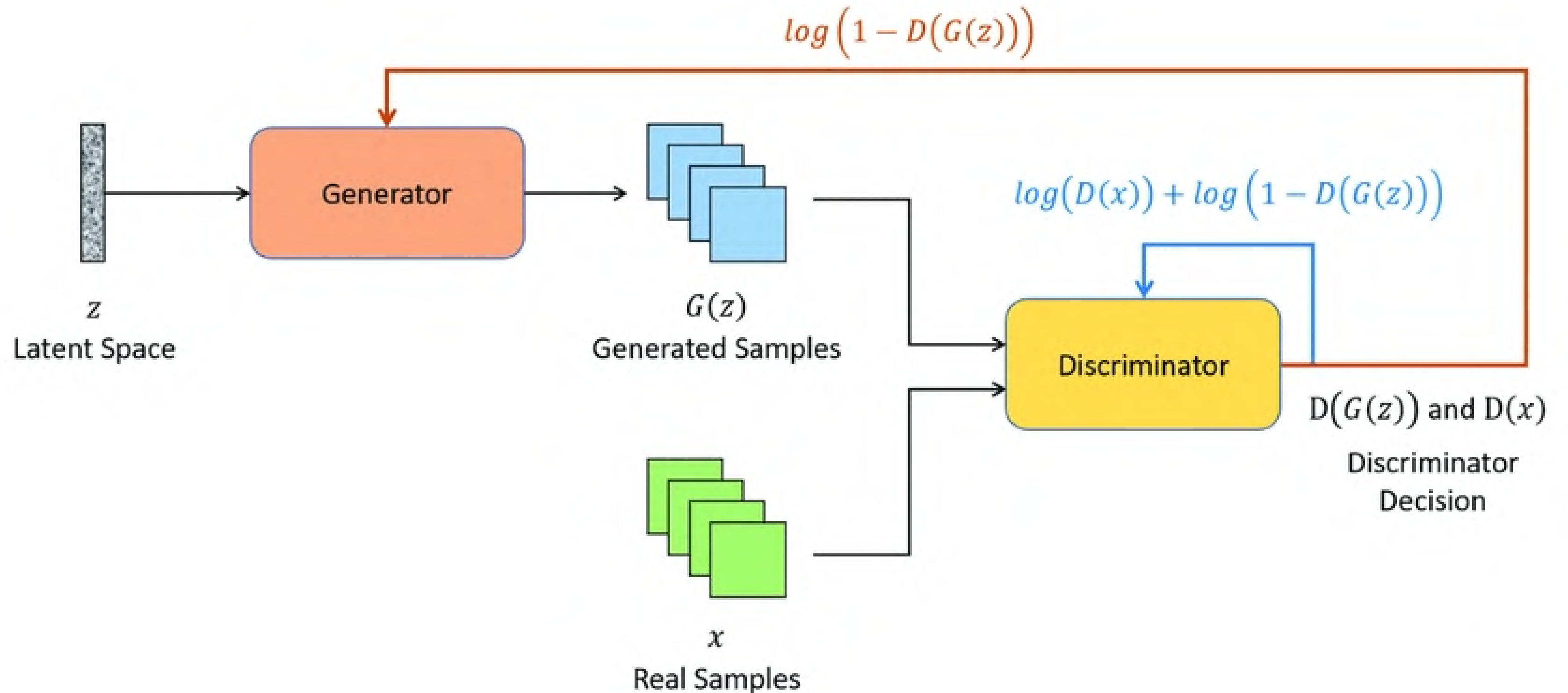
The elephant in the room (contd.)

Generative AI

Language generative models, such as GPT, are based on deep neural networks that use transformers to process and generate natural language text.



GAN Architecture



What it has enabled

Process and understand human language at scale



What it has enabled

**GANs enables generating input-
like output**
—
crowdsourced?





Generative AI is at the foundation building stage

- ✓ Improved Training Techniques
- ✓ Better Understanding of the Models
- ✓ Multimodal Generation
- ✓ Controlled Generation
- ✓ Incorporating Prior Knowledge



Crowdsourcing for interactivity

- **Diverse range of perspectives and ideas**
- **Efficient – Scale – Speed**
- **Idea generation**
- **Iterations and experimentation**
- **Combining and remixing**
- **Contextual Awareness**
- **Personalization and Adaptability**
- **Multi-Modal Interfaces**
- **Collaboration**

Image Synthesis



Unicorn running on
the mars

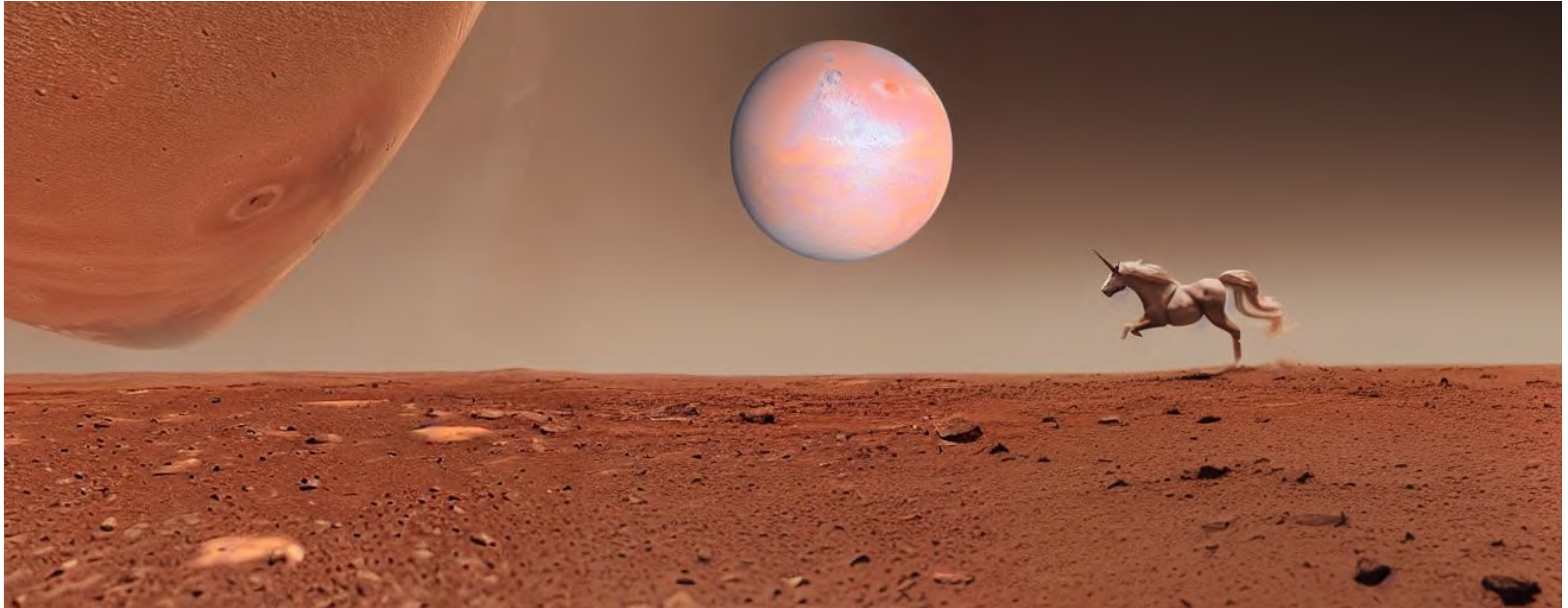


Unicorn running on
ice surface



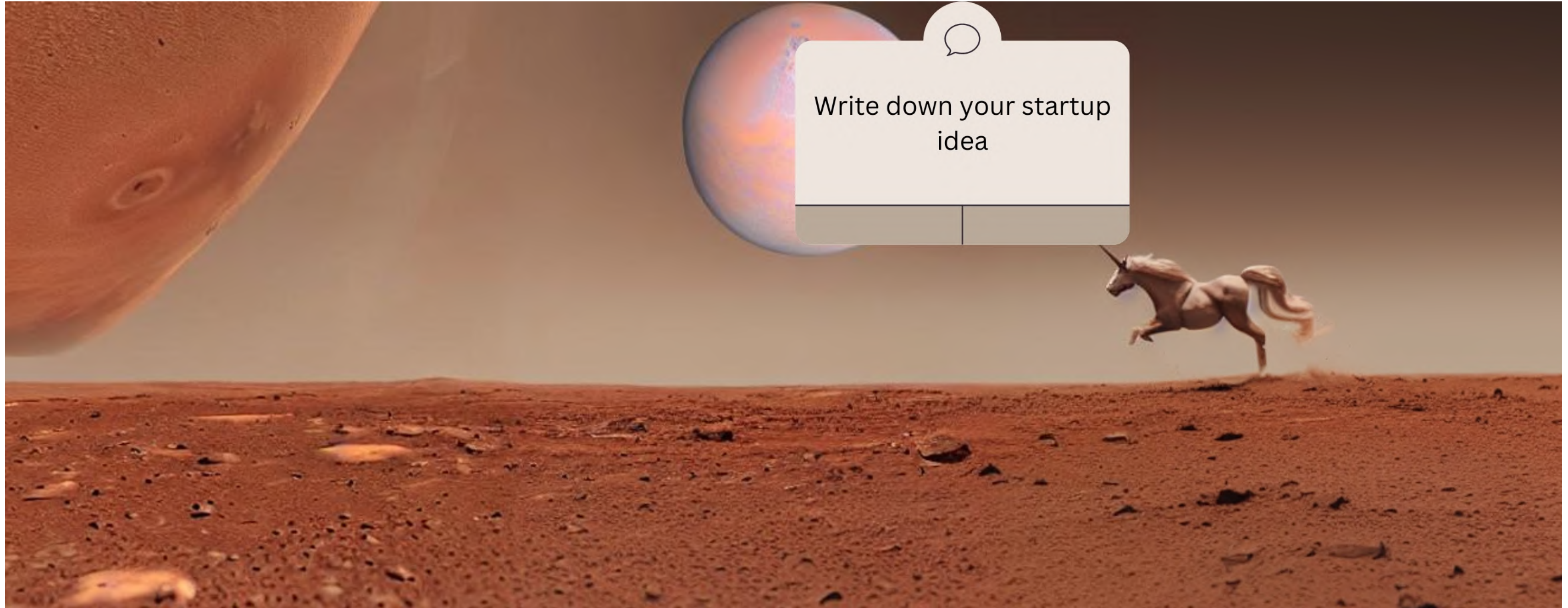
Unicorn running on
marble surface

Image Extension

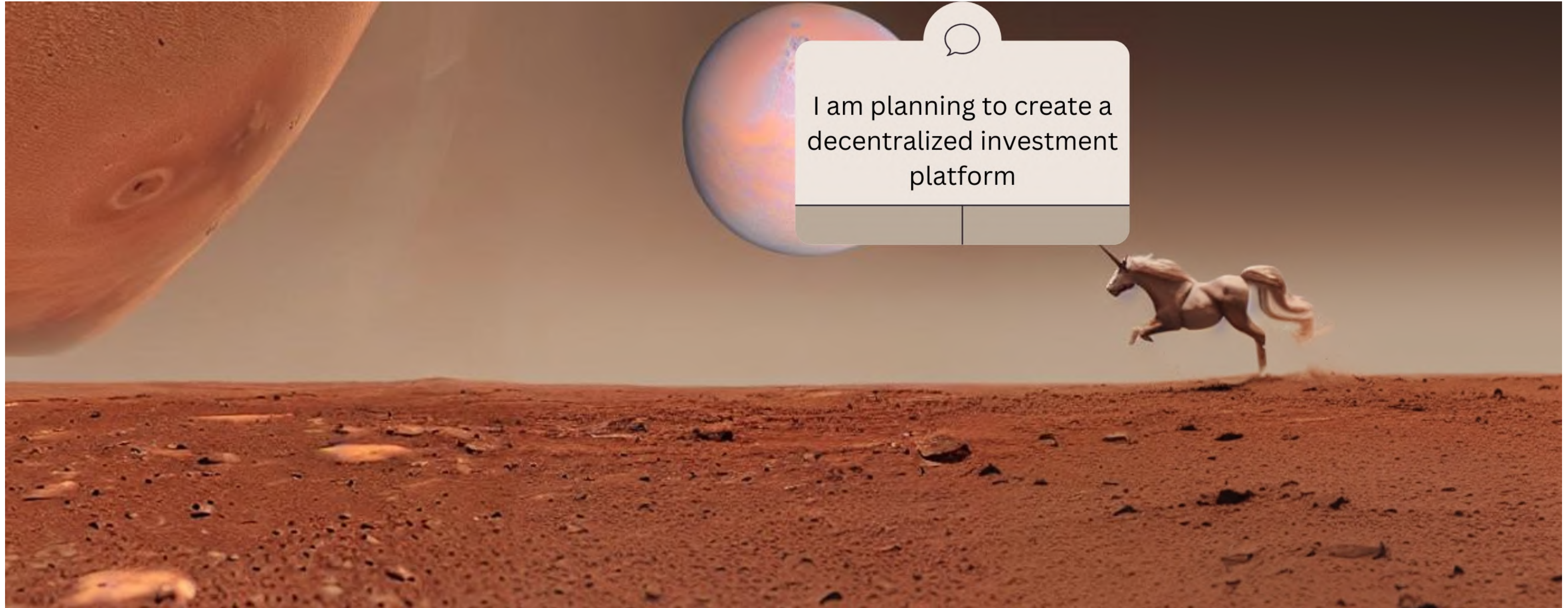


Imagination is expanded with a context aware generation

UniCorner - Startup Idea Validator



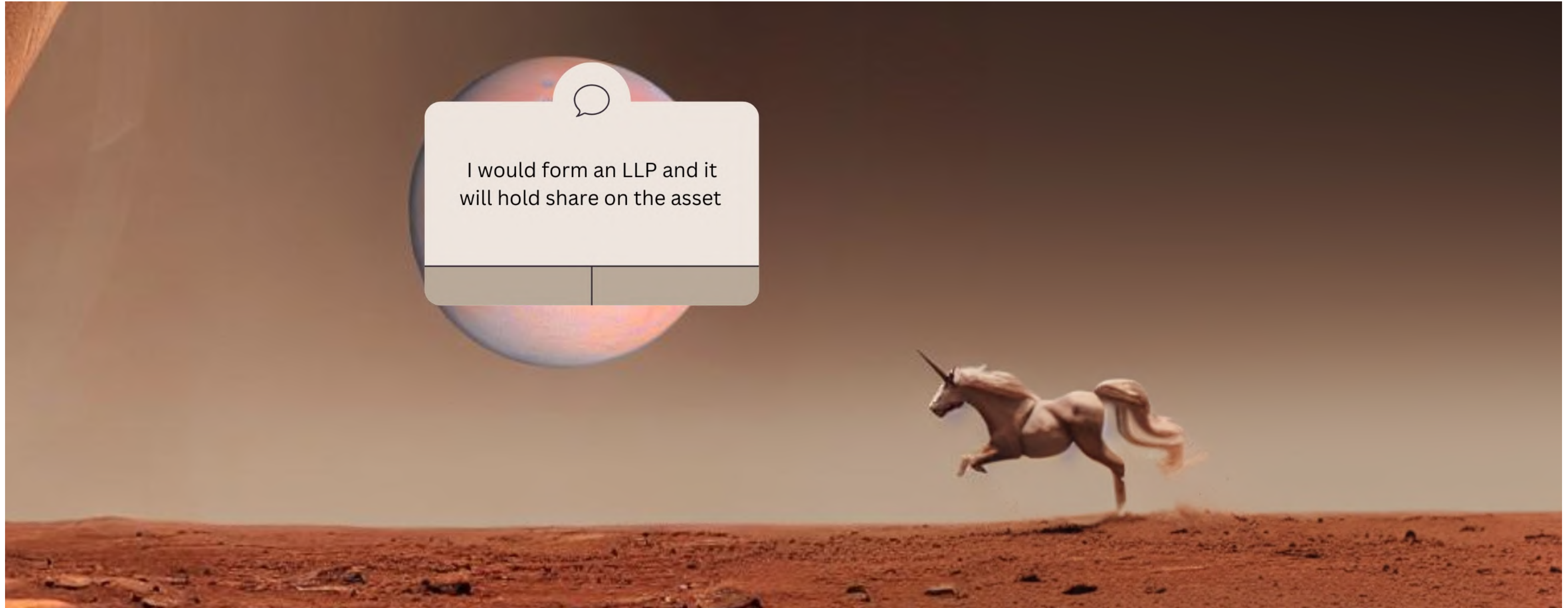
UniCorner - Startup Idea Validator



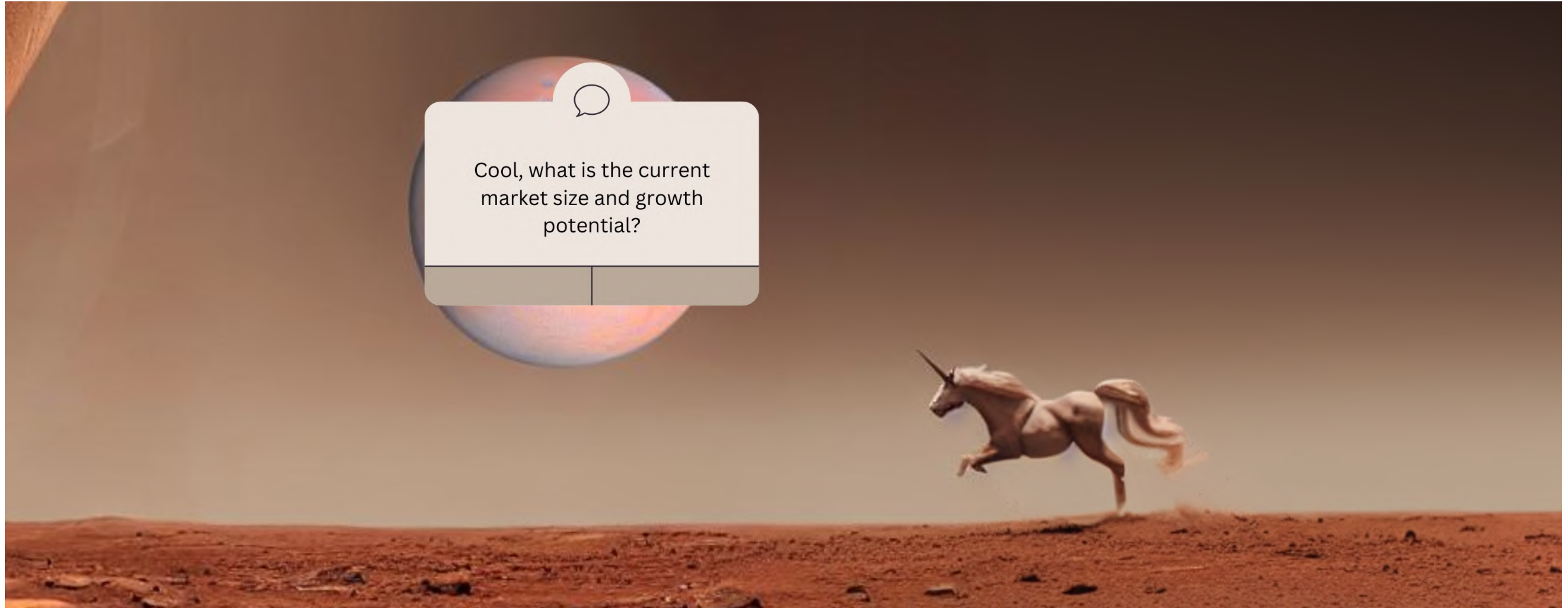
UniCorner - Startup Idea Validator



UniCorner - Startup Idea Validator



UniCorner - Startup Idea Validator



UniCorner - Startup Idea Validator



UniCorner - Startup Idea Validator



Coperate with machines, don't operate

Gaurab Patra
gaurab@flurgo.com