#### WHAT IS GENERATIVE AI

#### Generative Al Uses

Image generation

Video synthesis

Language generation

Music composition

Generative Al is designed to generate new content as its primary output.

Generative AI models are either private or public (open source).

A **model** is a set of algorithms that have been trained on a specific dataset.

A **notebook** is a tool for writing and running code.

An **application** is an example of how a model can be used.

An **outcome** is what the end user produces using generative Al or a notebook that houses a model.

Generative Pre-trained Transformer (GPT)

A natural language model developed by OpenAl

GPT

Large scale

Transformer architecture

Human-like text generation

## Time to 1M Users

GPT-3 less than a week

Netflix - 49 months

Twitter - 24 months

Airbnb - 30 months

Facebook - 10 months

Instagram - 2.5 months

## **GPT-3 Limitations**

Lack of common sense

Lack of creativity

No understanding of generated text

Biased databases

Danger of normalization of mediocrity with creative writing

## Text to Image Generation Services

Midjourney

DALL-E

Stable Diffusion

GAN models work together to improve the generator's ability to create realistic data.

Variational Autoencoders (VAE) use anomaly detection.

**VAE Uses** 

Financial fraud

Manufacturing flaws

Network security breaches

## Computer Graphics and Animation

More realistic and believable characters, particularly in 3D modeling

# Natural Language

Improved understanding in virtual assistants and chatbots

# Energy

Optimized consumption and production
Predicted demand
Management of renewable sources
Efficient distribution networks

# Transportation

Optimized traffic flow Predicted vehicle maintenance Realistic and accurate simulations in architecture, urban planning, and engineering.

New materials and products in manufacturing and textile design.

Natural language generation improvement in news articles, books, and movie scripts.

Improved self-driving cars with realistic virtual scenarios for testing and training.

Audio to asset generation.

Humanity will transcend from a society of consumers, to creators.

Assess whether the generated result fits your quality and satisfaction parameters.

Organize a board as an ethical foundation for the integration of Generative AI.

Provide employees with guidance and education.

Ensure that humans remain the decision makers.

Focus on highlighting the role that humans play in the creation and use of Al.