# **INFO5992 - Understanding IT Innovations**

## Is Generative AI a General Purpose Technology?

#### The Generative AI Era

To discuss whether **Generative AI** (including models like GPT, diffusion models, and multimodal systems) qualifies as a General Purpose Technology (GPT), you first need to understand what generative AI is, its impact across industries, and how it is evolving.

This resource provides a comprehensive policy-oriented exploration of generative AI, summarizing its core capabilities, industry applications, current development, and outlook as a GPT.

https://www.oecd.org/en/publications/is-generative-ai-a-general-purpose-technology 704e2d12-en.html

Once you finish reading the Executive Summary, discuss it with your teammates. Compare generative AI to earlier forms of AI and earlier digital GPTs like cloud computing and answer the first question in the tutorial worksheet.

## What is a General Purpose Technology (GPT)?

To answer the question posed by this tutorial's title, we must also revise our understanding of 'what is a General Purpose Technology (GPT)?'

Spend 5 minutes to discuss with your teammates (offline) and try to answer these questions.

- There are four criteria a technology must meet to be a GPT.
- What are these criteria?
- Why are they important?

#### Is Generative AI a GPT?

Use these questions to determine if generative AI meets the GPT criteria (record your responses as evidence):

- Can Generative AI be pervasively used in different industries? Explain with a few reasons.
- Is Generative AI continuously improving and lowering in cost? Give examples of improvement if your answer is yes.
- Can Generative AI spawn innovation in other areas? Explain with a few reasons.
- Is Generative AI fundamentally disruptive and foundational?

## Conclusion

Through this exercise, you should have learned what a GPT is and how to use its criteria to judge whether an emerging technology has the potential to become a GPT. Remember that how you arrived at your conclusion is more important than the conclusion itself.

#### **Upload Tutorial Worksheets:**

Please download the worksheet document from Canvas -> Assignments -> Tutorial Submissions -> Tutorial Submissions -> Tutorial Submission - Week 01 and provide answers.