

INFO5992 – Understanding IT Innovations

Is 5G General Purpose Technology?

The 5G Era: To have a discussion on whether 5G can be a GPT or not, you need to have some understanding of what 5G is, what it means for other industries, and how 5G is evolving over time. McKinsey & Company has prepared a concise and comprehensive industry report on 5G wireless technologies:

<https://www.mckinsey.com/industries/industrials-and-electronics/our-insights/the-5g-era-new-horizons-for-advanced-electronics-and-industrial-companies>

The website provides a good overview of the report, and for more details, you can refer to the PDF report (on the website). Once you have finished reading the overview, discuss it with your teammates. Compare 5G to 4G and answer the first question in the tutorial sheet.

What is a 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 5G a GPT?

Use the following questions to determine whether the criteria of GPT fits 5G wireless connection technology or not. Fill in your Responses in the tutorial sheet provided.

- Can 5G connection be pervasively used in different industries? Explain with a few reasons.
- Is 5G connection continuously improving and lowering in cost? Give examples of improvement if your answer is yes.
- Can 5G connection spawn innovation in other areas by making inventing and producing new products or processes easier? Explain with a few reasons.
- Is 5G wireless technology 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 → Week 01** and provide answers.