

English Summary for Week 1 (10 minutes)

Good morning/afternoon everyone.

To wrap up today's class, let me give you a short English summary of what we covered in Week 1: **An Introduction to Large Language Model (LLM) Tools and Applications.**

1. Key Concepts

We began by introducing the foundations of LLMs:

- **Emergent abilities** – when a model reaches a certain scale, it shows new and unexpected capabilities.
- **Edge AI** – running AI directly on local devices like smartphones or IoT hardware.
- **TOPS** – “trillions of operations per second,” a measure of AI computing power.
- **AI Agents** – autonomous systems that can plan, act, and interact with other tools on our behalf.

These concepts explain why LLMs are transforming both technology and business.

2. Major LLM Tools

We then reviewed the current landscape of LLM platforms:

- **ChatGPT** (OpenAI)
- **Gemini** (Google)
- **Copilot** (Microsoft)
- **Claude** (Anthropic)
- **DeepSeek**
- **Perplexity**

- **Grok** (xAI)
- **Qwen**
- **DeepL** (translation)
- **AI Analysis** (new evaluation tools)

Each has unique features, but together they form a powerful ecosystem that we can leverage in different business contexts.

3. Applications in Practice

We looked at some practical use cases:

- ChatGPT's strong results in standardized tests (*Forbes*).
- Its performance on professional certification exams (*SSRN*).
- OpenAI's **Sora** video generation service, supported by technical reports.
- ChatGPT's role in **carbon audit assistance**, as shown in class.
- Using **Google Colab with Bertscore** to compare millions of sustainability disclosure records.

These examples show the wide applicability of LLMs—from academic exams to sustainability reporting.

4. Business Case Studies

Next, we explored AI's impact on business strategies:

- **Amazon's AI-driven warehouse operations** and its **BF14 logistics center**.
- **Elon Musk's ventures**, where overpromising sometimes leads to underperformance.
- The tension between **technology and society**, highlighting ethical and survival issues.

- How **startups** pursue innovation, disruption, and survival strategies.

These cases illustrate both the opportunities and challenges when adopting AI at scale.

5. Supporting Resources

Finally, we recommended further learning resources, including the **NTU Generative AI course video series** by Professor Lee Hung from National Taiwan University. This is a good reference for deepening your understanding beyond our classroom discussions.

Closing

In summary:

This week we covered the **core concepts of LLMs**, surveyed the **major tools**, discussed **practical applications**, examined **business case studies**, and pointed you to **further resources**. This provides the foundation for the rest of our course, where we will look more deeply into how AI can support business decision-making and innovation.

Thank you.