

How can AIs like ChatGPT Transform Efficiency, Staff Well-being & Client Care in SLT?



**Workshop for RCSLT Scotland Connect
17th September 2024**

Rachel Barton, SLT

Please have your mobile ready to join www.slido.com

Introduction

1995



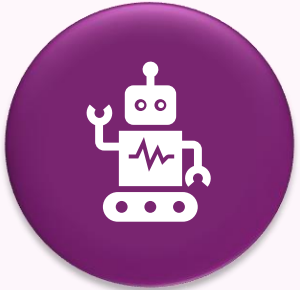
2023



We will explore...



What is generative AI?



Generative AIs in action



Examples: AIs increasing efficiency & enhancing client care > reducing workplace stress



How to generate the best results from AIs



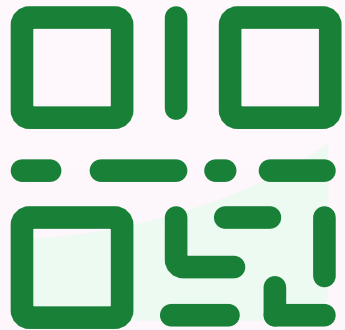
Limitations and ethical considerations

What's your starting point?



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**What words or feelings come
to mind when you think about
AI?**

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**Which best describes your level
of experience in using
generative AI (like ChatGPT)?**

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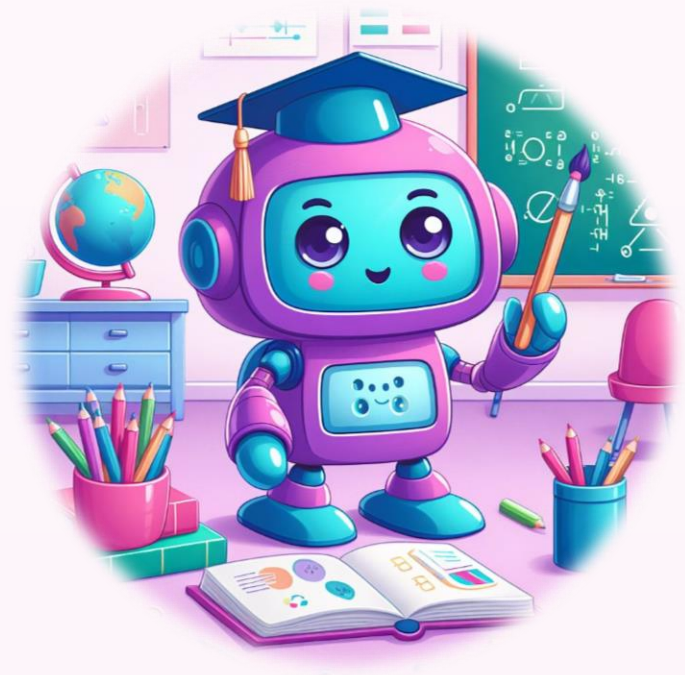


If you've used AI (either at work or at home), what tasks have you used it for?

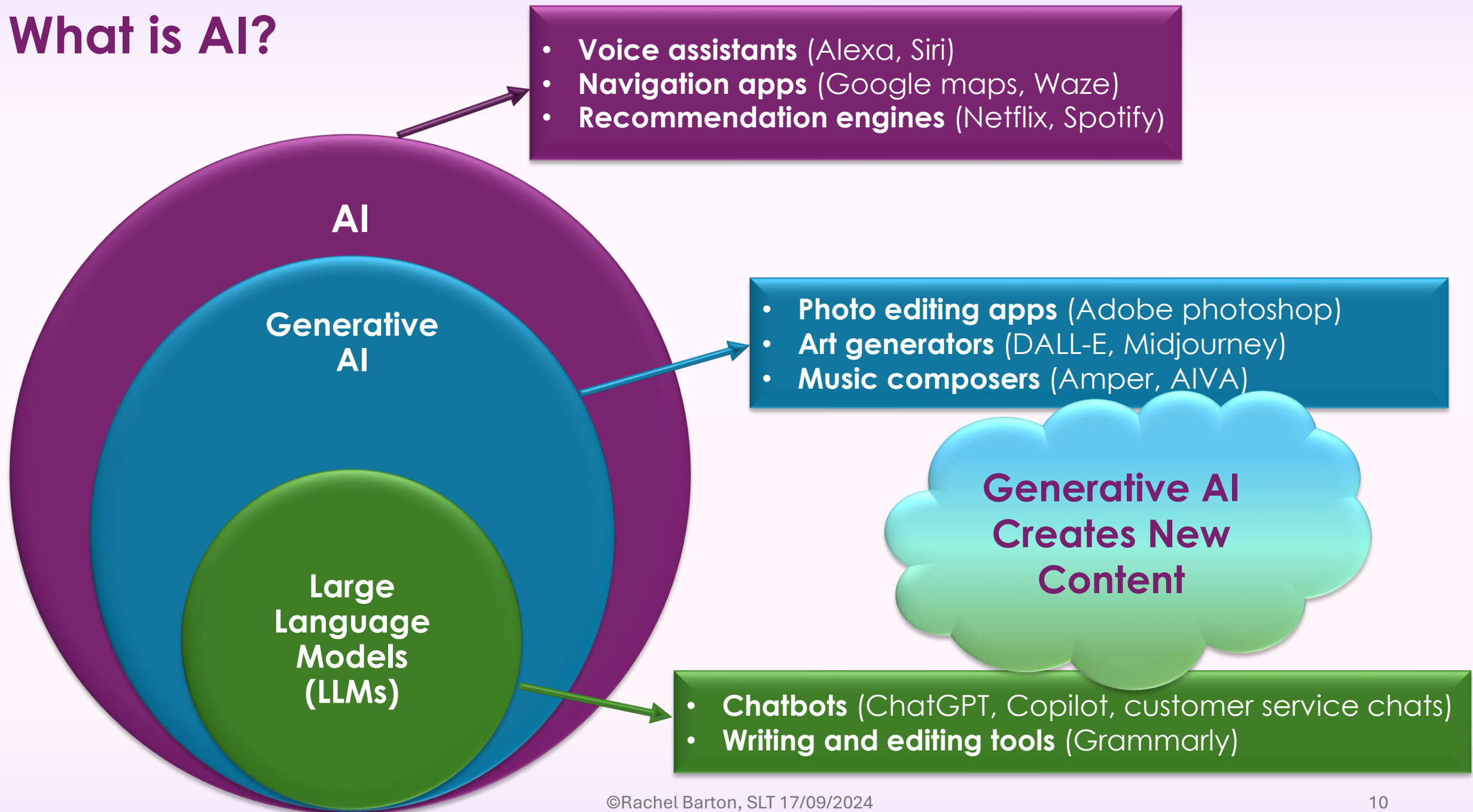
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What is Artificial Intelligence?

- Computers doing human tasks e.g. learning, problem solving, decision making
- Learn from patterns in data to make predictions
- Mimics human intelligence, thought and language (but doesn't actually think or understand)



What is AI?



Demonstrations



ChatGPT

Writing



Researching

ANTHROPIC



Talk to Claude

claude.ai

**Planning &
Idea
Generation**

Copilot



**Resource
& Image
Creation**

Gen AI can help with...

Website
content

IT queries

Target
wording

Policy
wording

Explaining
complex
concepts

Writing a
tricky
email

Planning a
study day

Designing
picture
resources

Therapy
ideas

Analysing
survey
feedback

Researching
clients'
interests

Searching
for research
papers

Functional Phrases



"Great goal!"

"Nice pass!"

"Offside!"

"Good tackle!"

"What a goal!"

"Pass the ball!"

"Nice one, ref!"

"Great team effort!"

"That was close!"

"Well played, lads!"

Social Stories™



“Please create a social story for a 7-year-old autistic child who is **learning to** ask for a break when feeling overwhelmed in the classroom. The child **understands** basic emotions **but struggles with** recognising when they need a break. The **goal** is to help the child identify when they are overwhelmed and use the phrase, 'Can I have a break, please?'

The story should follow **Carol Gray's criteria**, with a higher ratio of **descriptive** and **perspective** sentences. It should use **simple, short sentences**, have a **positive** and **reassuring** tone, and be written in the **first person**. Please include suggestions of visual images that could be used. Use UK spelling and vocabulary.”

Teaching Vocabulary



“Please make a list of **10 tier 2 vocabulary words** that are found in the first chapter of '**The Great Gatsby**'.

List them in the **order** they appear in the chapter with a **brief definition** for each word.”

1. **Feign** - to pretend or give a false appearance of; to fake.
2. **Supercilious** - having or showing arrogant superiority or disdain for those one considers unworthy.
3. **Fractious** - unruly, easily irritated or quarrelsome.
4. **Deft** - skilful, nimble, quick, and accurate in movement or performance.
5. **Pungent** - having a strong, sharp, and sometimes unpleasant smell or taste.
6. **Divan** - a long, low sofa without a back or arms, typically placed against a wall.
7. **Imperceptible** - impossible or difficult to perceive or notice.
8. **Complacency** - a feeling of smug or uncritical satisfaction with oneself or one's achievements.
9. **Intimation** - an indication or hint.
10. **Anon** - soon, shortly, or immediately.



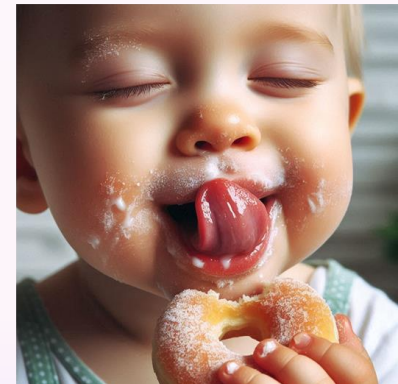
Image Creation Examples

Updating and Adapting Resources



Image Creation Examples

Assessment



Copyright- free images for publications



CPD tools to try:

- Microsoft Edge – Summarise **YouTub**e videos
- **Perplexity** <https://www.perplexity.ai/>
- **SciSpace** <https://typeset.io/>
- **Elicit** <https://elicit.com/>
- **Consensus** <https://consensus.app/>
- ChatGPT –**Scholar GPT** in the GPT Store



Or just chat to the **ChatGPT app** if you want to investigate something

Using AI: Collaboration not Delegation

(like an employer and employee)



*“Think of it as an **imaginative, creative partner**, not a calculator that uses words”*

Ethan Mollick

The Ezra Klein Show Podcast – How should I be using AI right now?
<https://www.nytimes.com/2024/04/02/opinion/ezra-klein-podcast-ethan-mollick.html>



What tasks would you like AI to assist with in your life?

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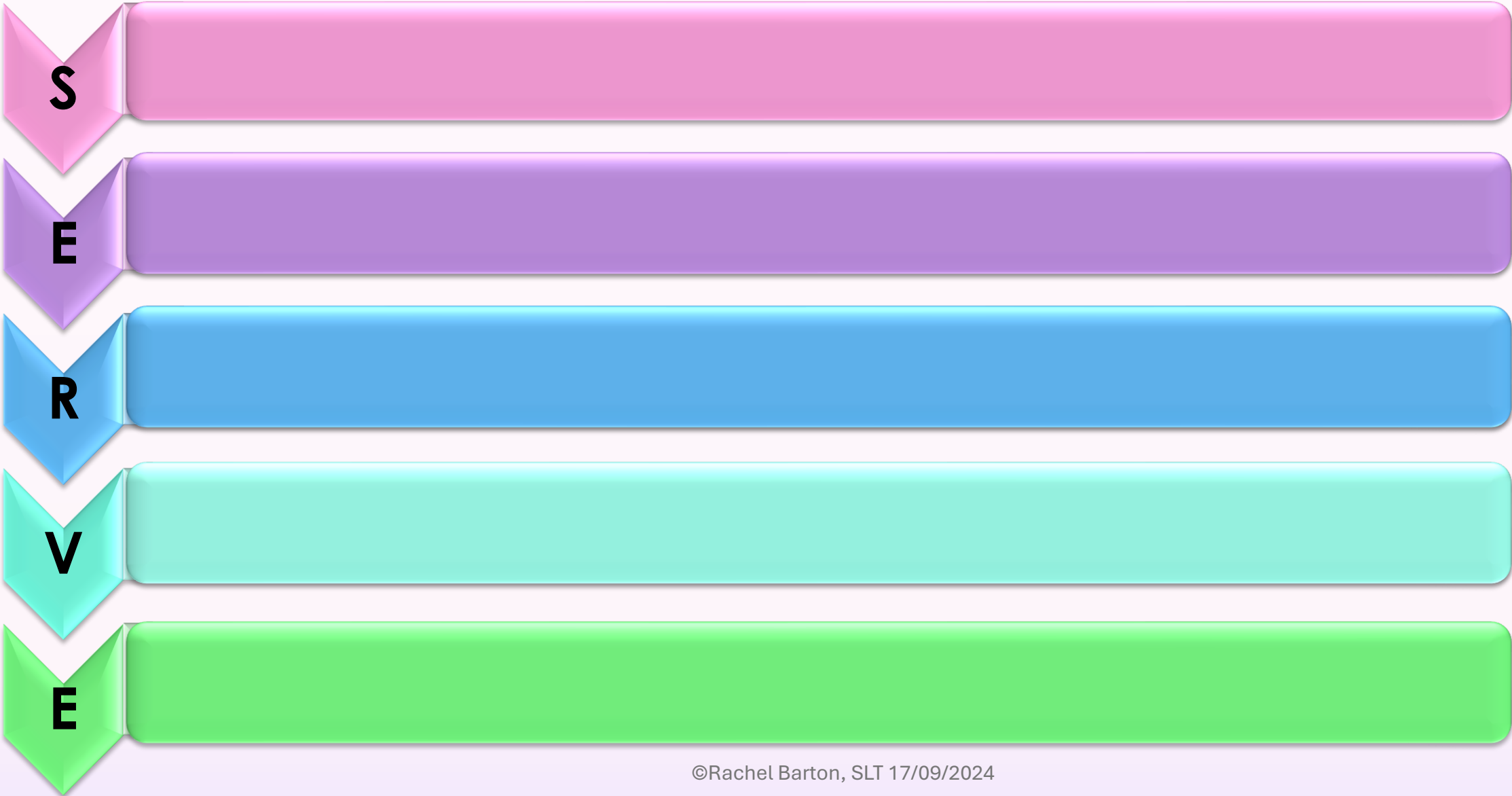
Communicating with LLMs

- The better your **prompt**, the better their **output**
- Prompts need:
 - **enough context** to help the AI solve the problem accurately
 - **enough flexibility** for the AI to be creative



Getting the best service from AIs:

'The SERVE Prompt Framework' © Rachel Barton 2024



Beware of Bias!

- AI-generated outputs, including images often **lack diversity**
- Representations often align with **dominant societal norms** rather than reflecting the full spectrum of human diversity
- They reflect their often-biased **training data**
- We must use **specific prompting** to represent diversity



“Create an image of a successful business person”





Limitations and Ethical Considerations

Knowledge
Limitations

AI Accuracy

Bias

Data Privacy

Professional
Skills

Professional
Accountability

Professional
Standards

Ethical
Boundaries

Inclusive
Practice

Intellectual
Property

Change
Management

Environmental
Impact

Guiding the Way



UK Government

Government white paper 29th March 2023 (rev 3rd August 2023)

“A Pro-innovation Approach to AI Regulation”

<https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach>



The
Health
Foundation

“AI in the NHS: Shaping the Future of Healthcare” 18th July 2024

<https://www.health.org.uk/about-the-health-foundation/get-involved/events/ai-in-the-nhs-shaping-the-future-of-healthcare>

“Priorities for an AI in Healthcare Strategy” 26th June 2024

<https://www.health.org.uk/publications/long-reads/priorities-for-an-ai-in-health-care-strategy>

Ethan Mollick: 4 Rules for Using AI

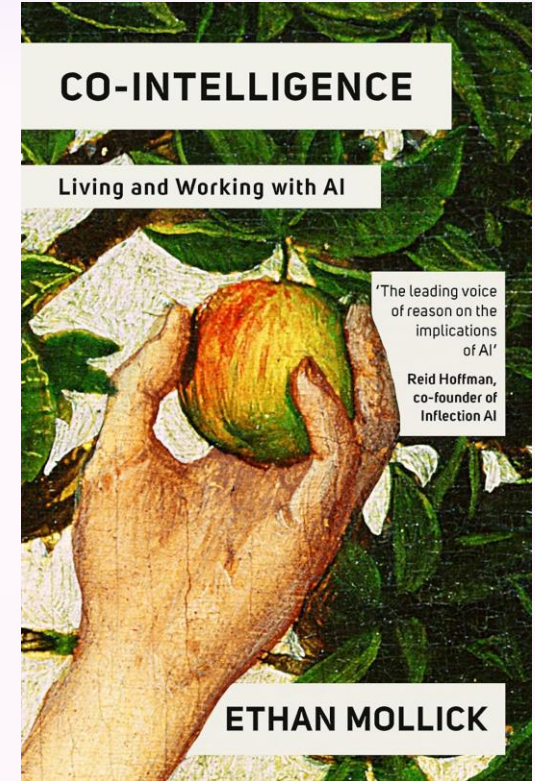
Mollick, E. (2024). *Co-Intelligence: Living and Working with AI*.

Always invite AI to the table (in a safe and ethical way)

Be the human in the loop

Treat the AI like a person (but tell it what kind of person it is)

Assume this is the worst AI you will ever use



What Next?



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What one thing do you plan to do now?

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Where to find me 😊

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Further Learning

- For a full list of further listening, watching and reading go to: <https://www.chatterboxsussex.com/aiworkshops> and click on the further learning link

Additional Slides

- Summary of 5 generative AI models
- Summary of compliance requirements for organisations looking to integrate AI in their workflow from www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach
- The SERVE Prompt Framework full slide

ChatGPT 4-o: Summary

Strengths:

- **Multimodal Interaction:** Supports text, voice, and image inputs
- **Natural Conversational Abilities:** Engages with human-like communication, including humour and tone adjustments
- **Language Support:** Over 50 languages, aiding multilingual therapy

Limitations:

- **Usage Limits:** Free version has message limits
- **Occasional Inaccuracies:** Can produce unexpected responses
- **Voice access:** Only on app not desktop

Best Use in SLT:

- **Resource Creation:** Generate therapy materials, ideas
- **Coaching:** Converse with ChatGPT app to problem solve

Paid Version:

- **Increased conversational turns:** 5 x more than free version
- **Image generation:** Create and edit images
- **GPT Builder:** Can create own GPTs e.g. WordMango



Gemini: Summary

Strengths:

Advanced Language Processing: Ideal for creative writing

Speed: One of the fastest response rates

Voice input: Access from desktop

Drafts: Produces 3 drafts to choose from

Limitations:

- **Browsing:** Less effective at browsing the internet than other models
- **Occasional Inaccuracies:** Can produce unexpected responses
- **Restricted:** Some people are not able to register (not sure why?)
- **Image generation:** Not yet working

Best Use in SLT:

- **Resource Creation:** Generating stories and passages

Paid Version:

- **More advanced:** Can tackle more complex tasks
- **Memory:** Longer context window
- **Multimodal:** Can deal with images and video



Copilot: Summary

Strengths:

Styles: Three to choose from: Precise, standard and creative

Voice input: Access from desktop

Image generation: Available on free version, gives 4 alternatives

Video Summariser: When used on Edge browser with YouTube

Limitations:

- **Temperamental:** Will sometimes say it can't produce images
- **Occasional Inaccuracies:** Can produce unexpected responses
- **Restrictions:** Runs on GPT4-o but when busy may reduce to 3.5

Best Use in SLT:

- **Image generation:** Does well if you prompt for diversity
- **Organisation:** Creation of tables, breaking down tasks

Paid Version:

- **Integration with Office:** AI features integrated in Word, Excel etc
- **Priority:** Access to GPT 4-o at busy times



Claude: Summary

Strengths:

Safety and Reliability: Low rates of incorrect information, trained for ethical, non-biased outputs

Effective Summarisation: Excellent for summarising and editing

Writing Style: Intelligent, clear and nuanced

Limitations:

- **Text only:** No voice or image capabilities
- **No web browsing:** Cannot retrieve live web information
- **Restrictions:** Limited to 30 messages a day

Best Use in SLT:

- **Factual writing:** drafting leaflets, writing articles
- **Feedback & editing:** requesting evaluation of your work and collaborating on improvements

Paid Version:

- **Advanced:** More sophisticated and more human-like responses
- **Usage:** 5 times more conversation turns than the free version



Perplexity: Summary

Strengths:

- **Research Capabilities:** Excellent for detailed research
- **Information Synthesis:** Combines data from multiple sources
- **Multimedia:** Will suggest relevant images or videos online
- **Citations:** Cites all sources

Limitations:

- **Answers Engine :** Not for creative tasks
- **Access to research:** Open access articles only
- **Occasional inaccuracies:** More common in free version

Best Use in SLT:

- **Research:** Quicker and more effective information gathering than traditional search engines like Google

Paid version:

- More Pro searches, unlimited file uploads



Compliance

www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach

Summary generated by ChatGPT 26/06/24

Organisations that are end users of AI need to consider several critical factors as they start to implement AI technologies. Here are some key aspects to bear in mind:

Data Privacy and Security:

Ensure that data used by AI systems is handled securely and in compliance with relevant data protection regulations such as GDPR. Implement robust data governance practices to protect sensitive information from breaches

Ethical Considerations:

Evaluate the ethical implications of AI applications. This includes avoiding bias in AI algorithms, ensuring fairness, and making decisions that are transparent and explainable to stakeholders



Compliance

www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach

Summary generated by ChatGPT 26/06/24

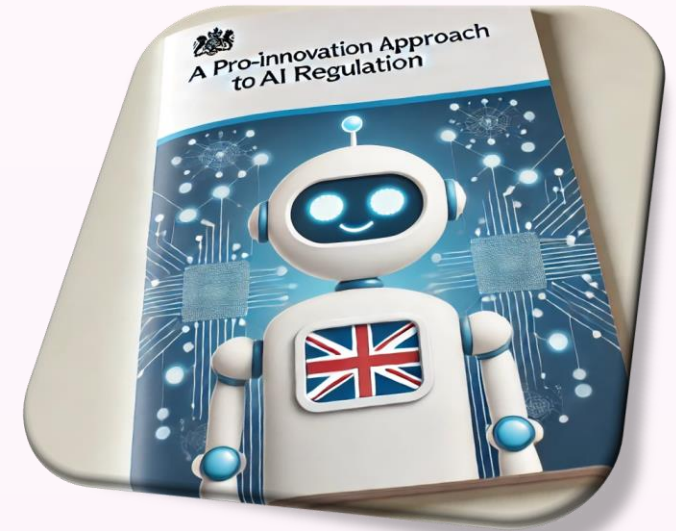
Compliance with Regulations: Stay updated with current and emerging regulations related to AI usage. This includes industry-specific regulations that may affect how AI can be deployed and used. For example, healthcare, finance, and legal sectors have stringent compliance requirements

Impact on Workforce:

Consider the impact of AI on the workforce. This involves preparing for potential job displacement due to automation and providing training for employees to work alongside AI technologies. Workforce reskilling and upskilling are crucial to maximise the benefits of AI

Operational Transparency:

Maintain transparency about how AI systems are used within the organisation. This helps in building trust with customers and stakeholders by clearly communicating the purpose, functionality, and decision-making processes of AI systems



Compliance

www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach

Summary generated by ChatGPT 26/06/24

Integration and Interoperability:

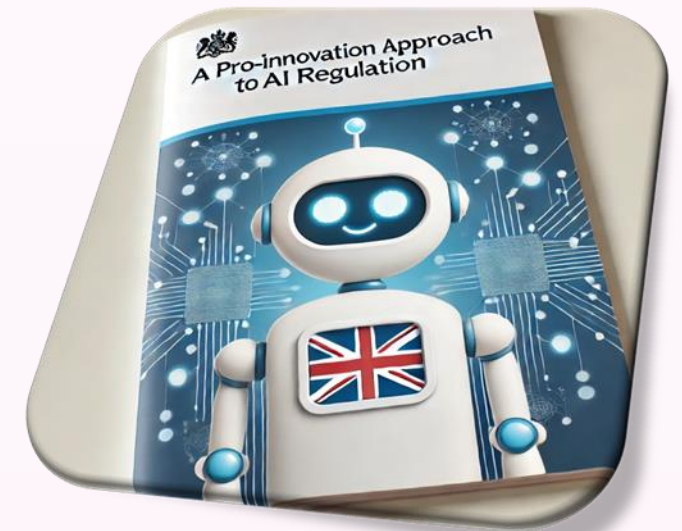
Ensure that AI systems are compatible with existing IT infrastructure and can be integrated seamlessly into current workflows. This includes evaluating the scalability of AI solutions to meet future demands

Risk Management

Identify and mitigate risks associated with AI deployment. This includes understanding the limitations of AI technologies, potential errors in AI decision-making, and implementing fail-safes to handle unexpected outcomes

Vendor and Third-Party Management:

Carefully select AI vendors and third-party services. Evaluate their compliance with security standards, data handling practices, and the ethical use of AI. This ensures that external AI solutions align with the organization's values and regulatory requirements



Getting the best service from AIs:

'The SERVE Prompt Framework' © Rachel Barton 2024

S

- **Set the scene:** your role, your audience / client and their needs, context, goal, relevant background (no client identifiable details)

E

- **Explain the task:** give instructions, use specific language, clarify desired outcome & tone, give examples, ask 'what else do you need to know?'

R

- **Refine the response:** review clarity, relevance & alignment with goal, give feedback, correct errors, add detail, adjust tone, ask 'how can you improve this?'

V

- **Verify the facts:** go to cited sources, use at least two independent and reputable sources to cross check key facts

E

- **Evaluate professional integrity:** does this adequately represent your values & views? Is it ethical? Are there biases? Does it meet professional standards?