

EMBRACING GENERATIVE AI

What Are Universities Concerned About?

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Vice President for Education and Digital



Risks vs Opportunities



% CEOs who selected risks versus opportunities



Defining Generative Artificial Intelligence

GenAI

Expert System AI
Programmers teach AI exactly how to solve specific problems by providing precise instructions and steps.

Artificial Intelligence
The theory and methods to build machines that think and act like humans.

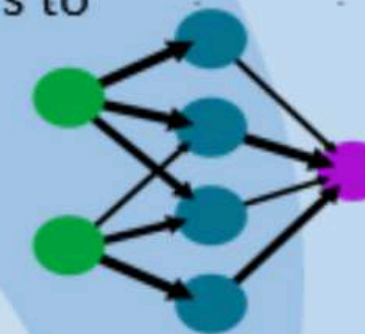


Machine Learning
The ability for computers to learn from experience or data without human programming.

Deep Learning
Mimics the human brain using artificial neural networks such as **transformers** to allow computers to perform complex tasks.



Generative AI
Generates new text, audio, images, video or code based on content it has been **pre-trained** on.



ChatGPT



Midjourney



Bard

AI for Education

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aiforeducation.io



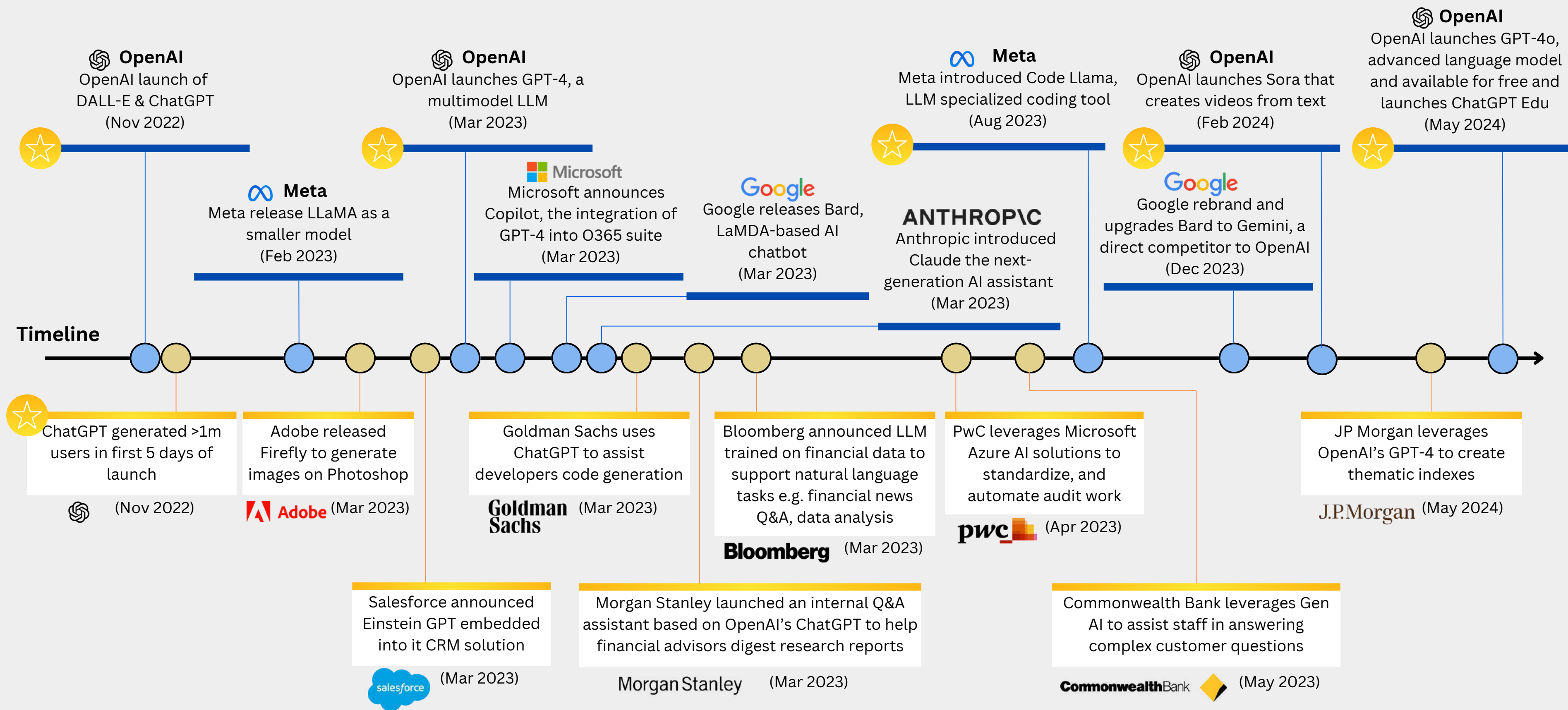
Gen AI Tech development



Gen AI adoption



Key milestone





“

Generative AI will transform the global economy. Let's make sure it benefits humanity. It is likely to **impact 60% of jobs** in advanced economies and **40% of jobs around the world** in the **next two years**. We have very little time to get **people and business ready** for it . It could bring tremendous **increase in productivity** if we manage it well, but it can also lead to more **misinformation** and, of course, more **inequality** in our society.

May 2024

”

Kristalina Georgieva

International Monetary Fund Managing Director

Forbes

How Generative AI Will Change All Of Our Jobs In 2024

Bernard Marr, Dec 2023



- The Rise Of Creative Machines
- Enhanced Decision-Making And Strategic Planning
- The Evolution Of Customer Service
- Transforming Education And Training
- Reinventing Research And Development
- The Emergence Of New Roles And Skills
- The Challenge of Ethical and Responsible AI Use
- The Shifting Landscape Of Remote And Hybrid Work
- The Impact On Traditional Industries

Published: 18 September 2023

Jobs of Tomorrow: Large Language Models and Jobs

Download PDF 

In the latest white paper of the Jobs of Tomorrow series, the World Economic Forum, in collaboration with Accenture, presents an examination of the potential impact of large language models (LLMs) on jobs. The integration of LLMs in various industries presents a paradigm shift in how we interact with information and, by extension, how we work.

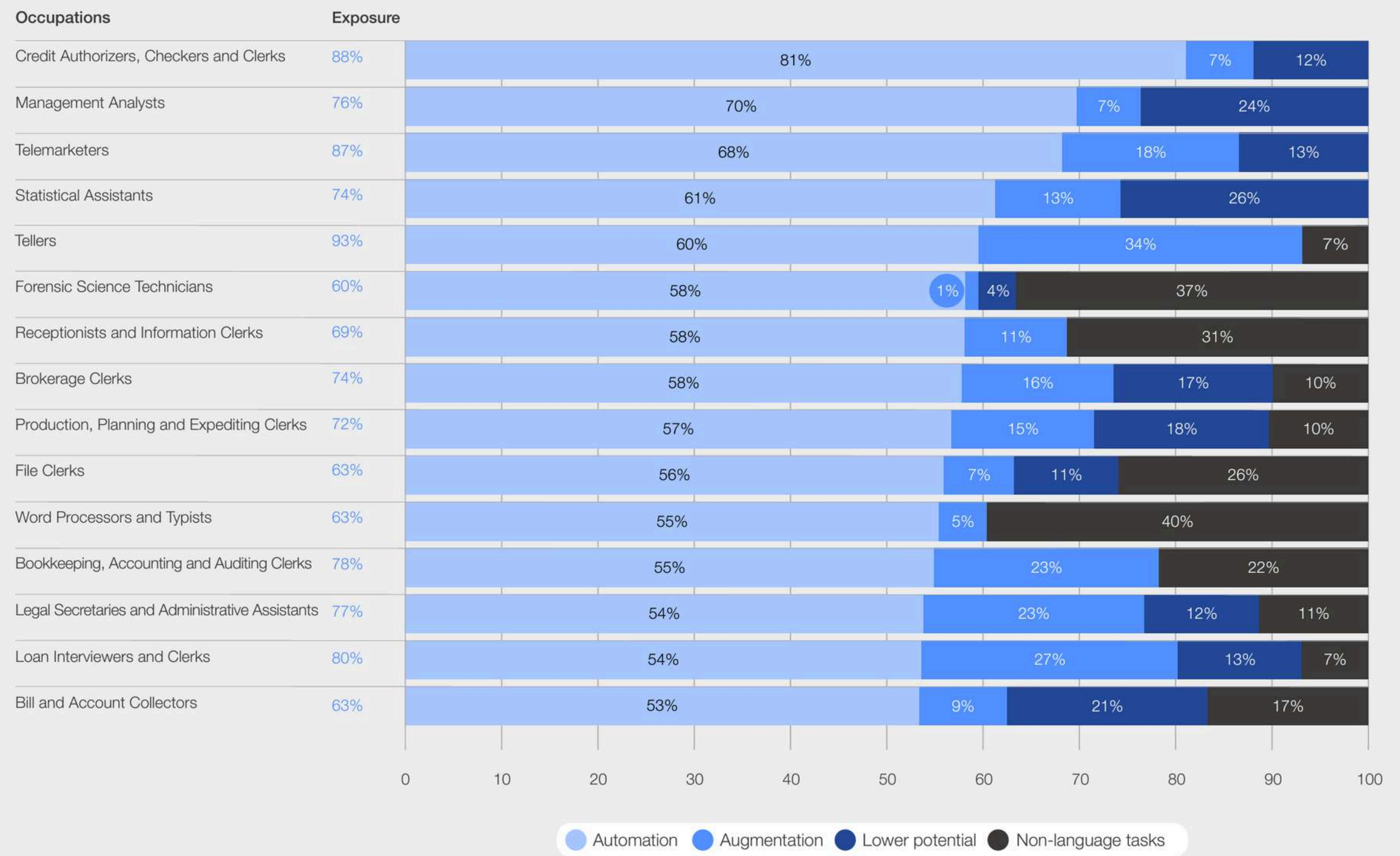


In collaboration
with Accenture

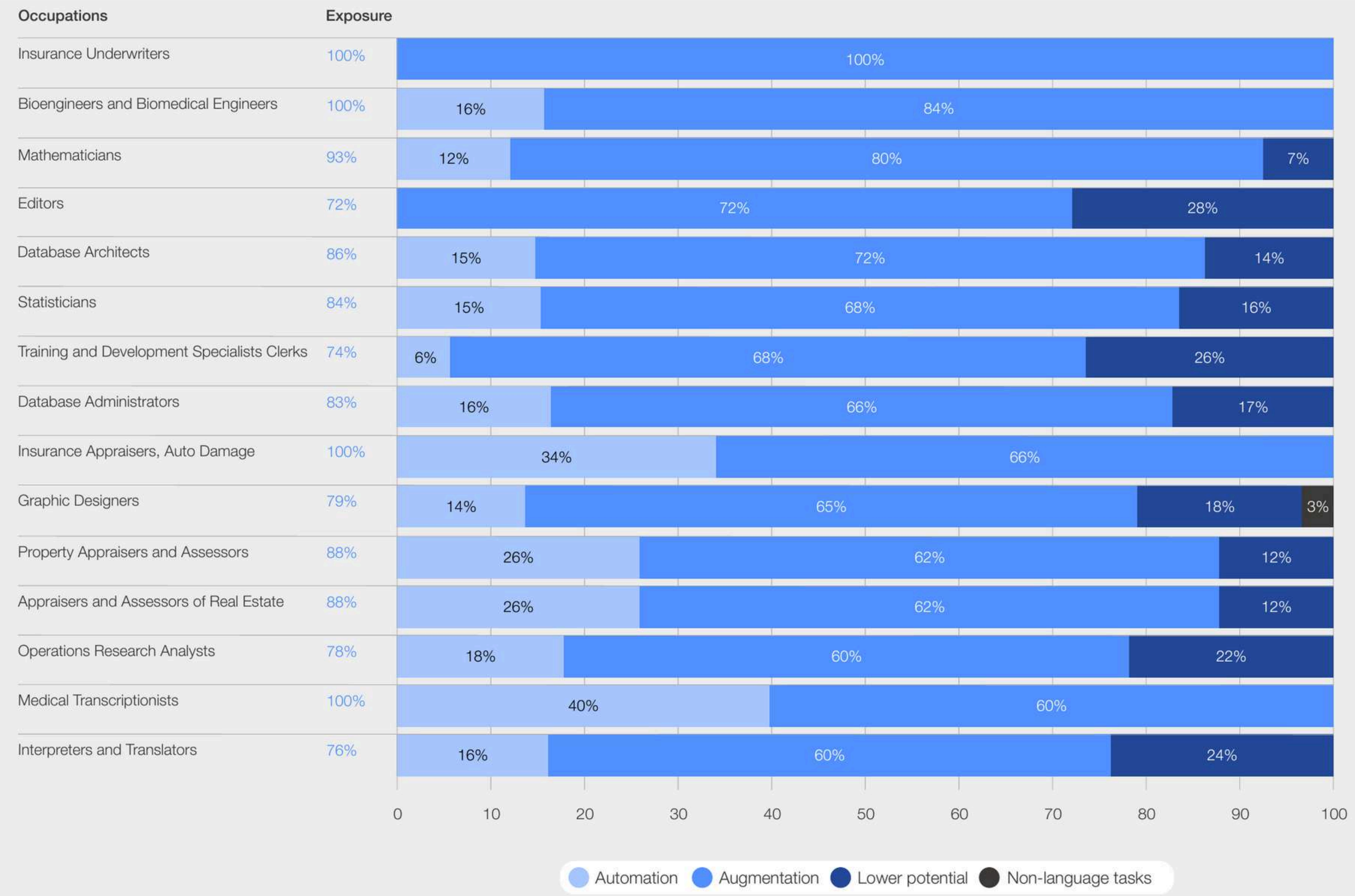


JOB

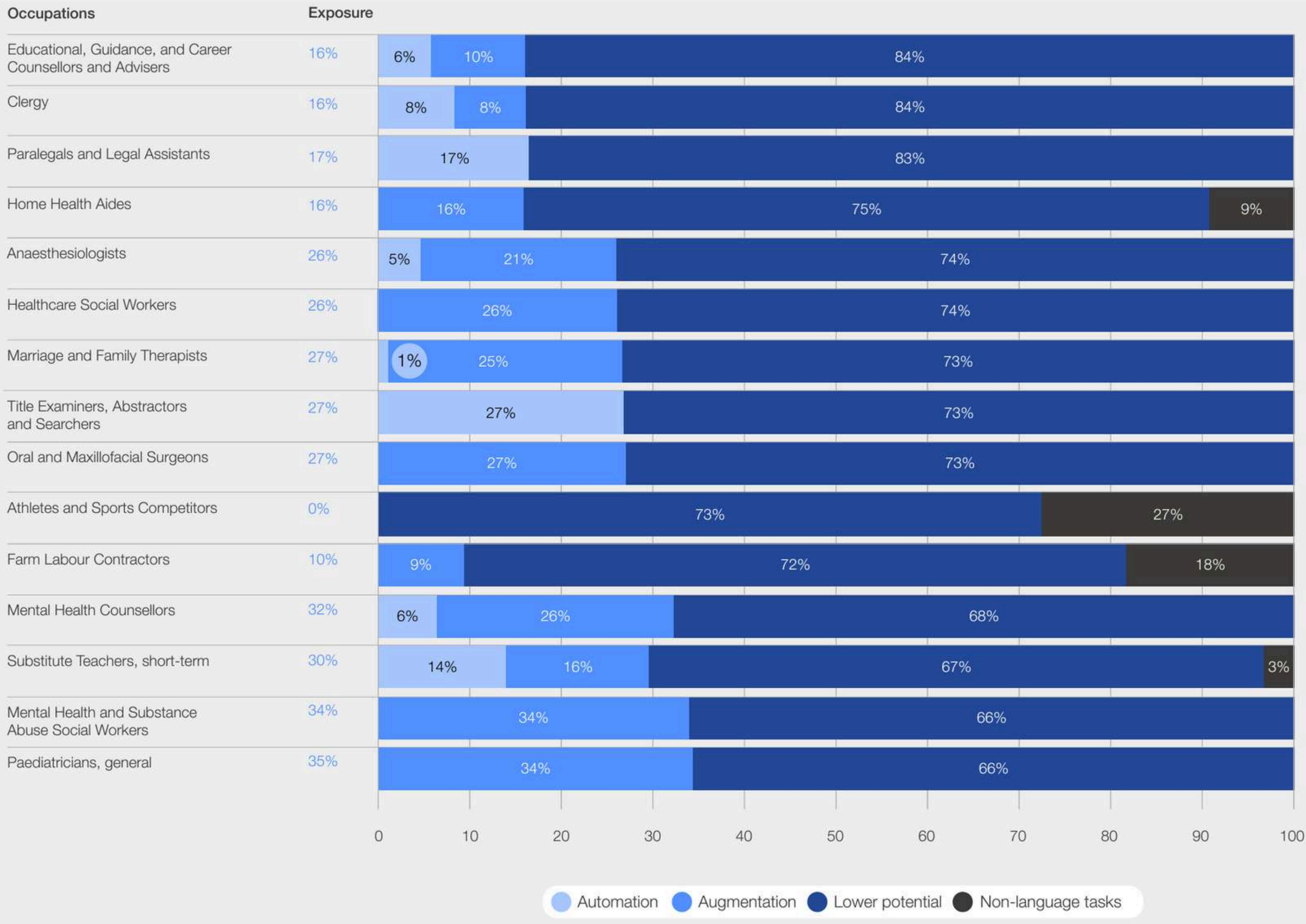
S WITH THE HIGHEST POTENTIAL FOR AUTOMATION



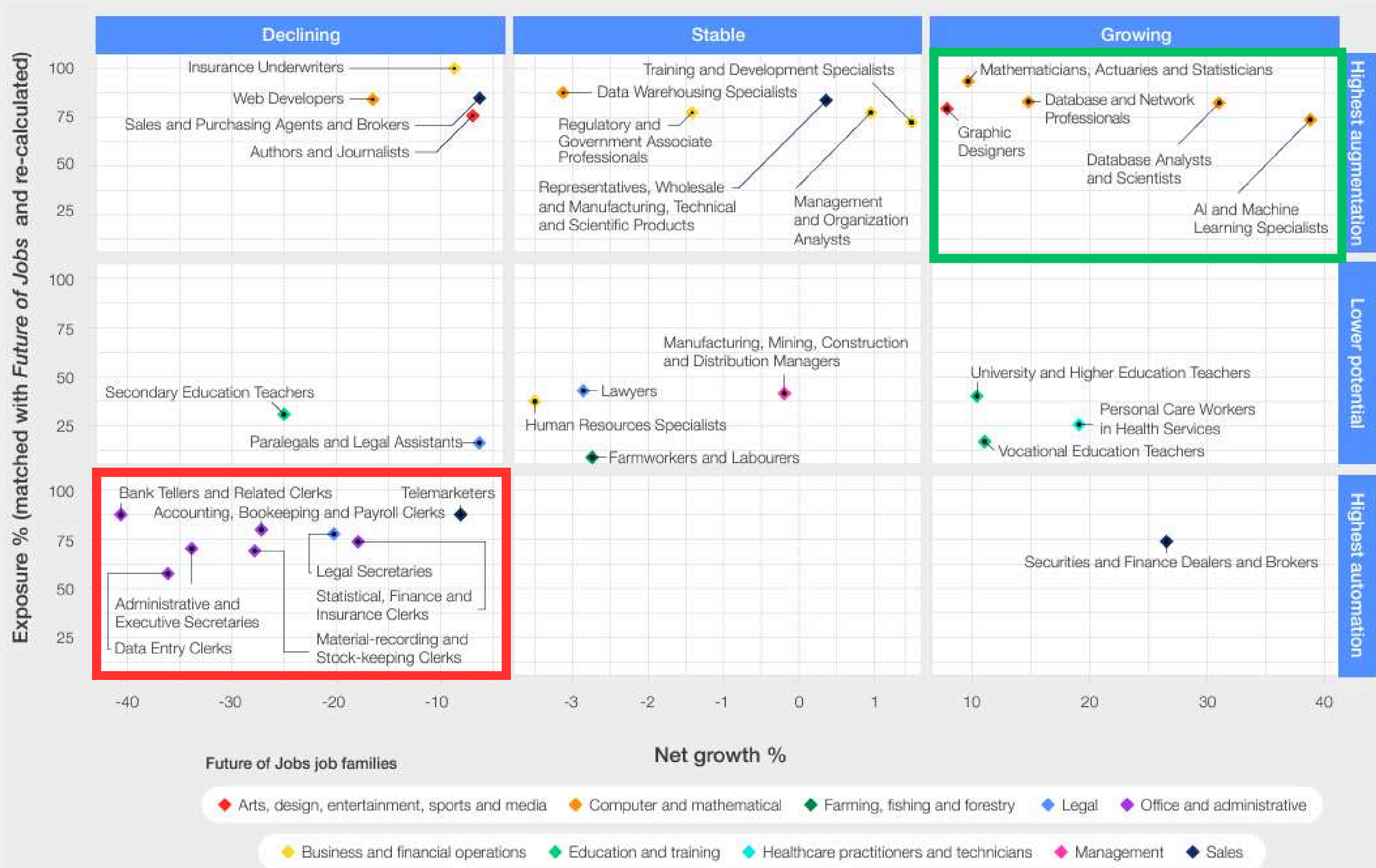
JOB

 WITH THE HIGHEST POTENTIAL FOR AUGMENTATION

JOB WITH THE LOWEST POTENTIAL FOR EXPOSURE



JOB EXPOSURE POTENTIAL VS GROWTH POTENTIAL

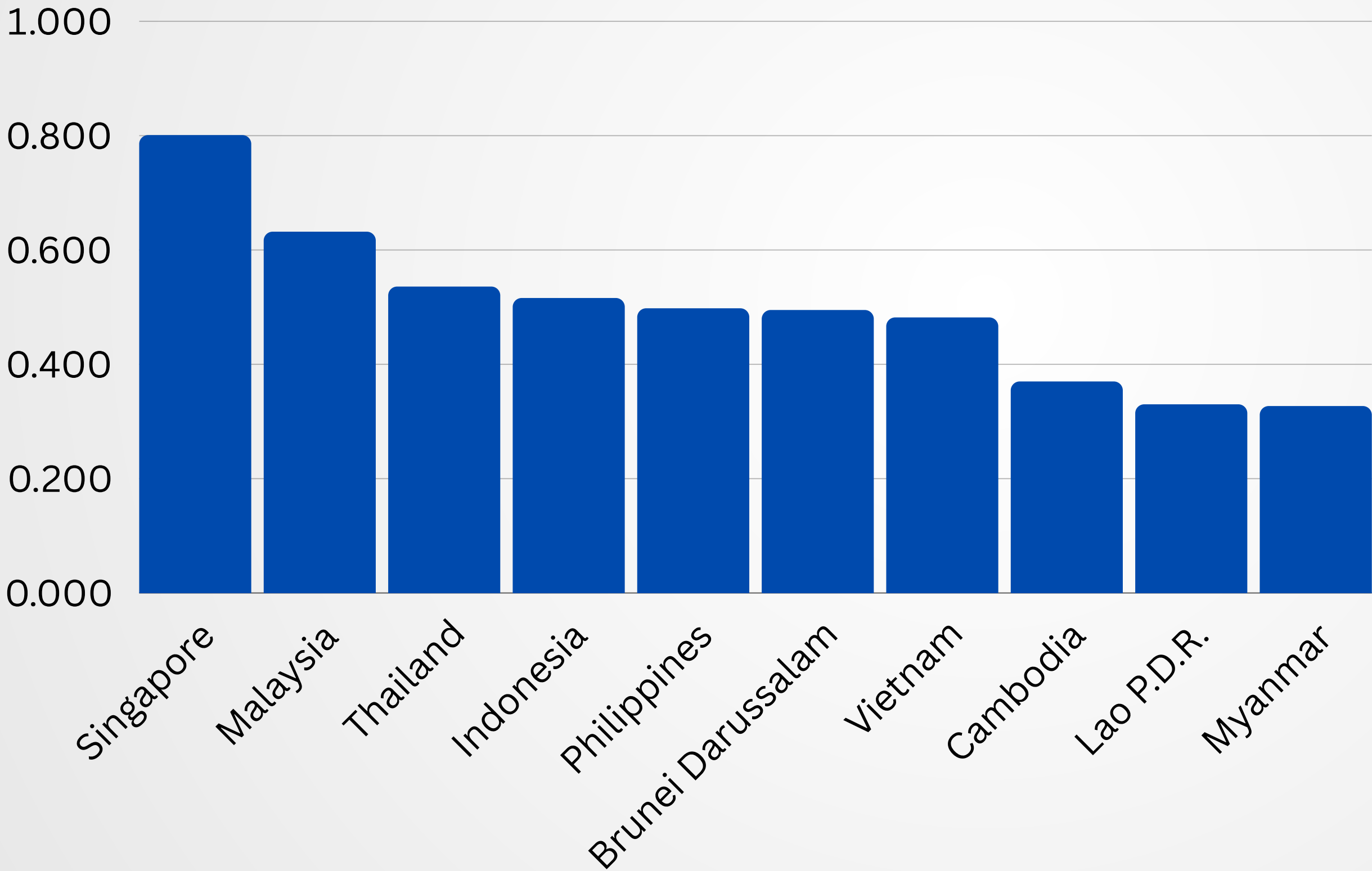




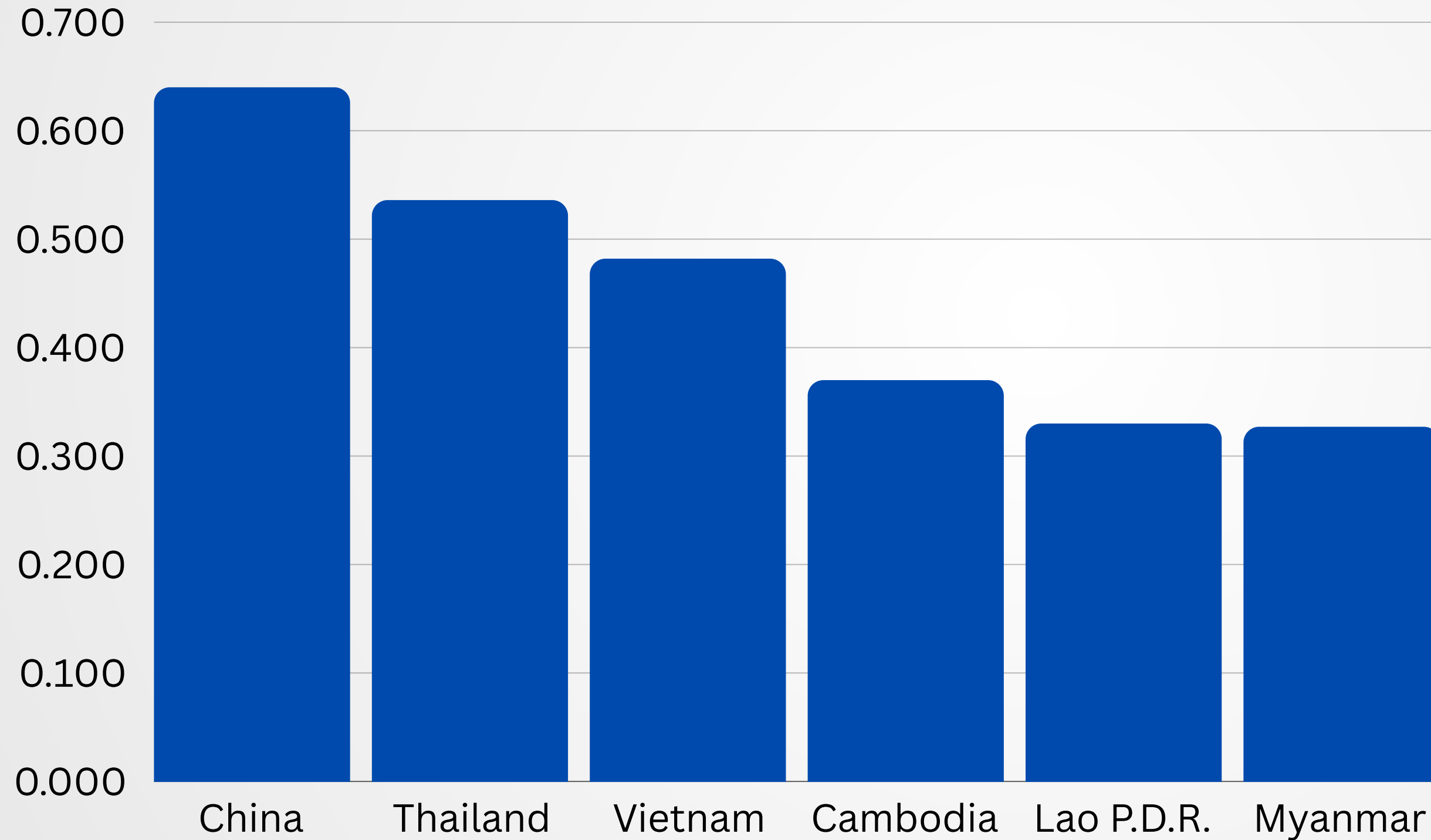
What's next?

- AI as operating system
- AI-literate people

ASEAN AI Preparedness Index

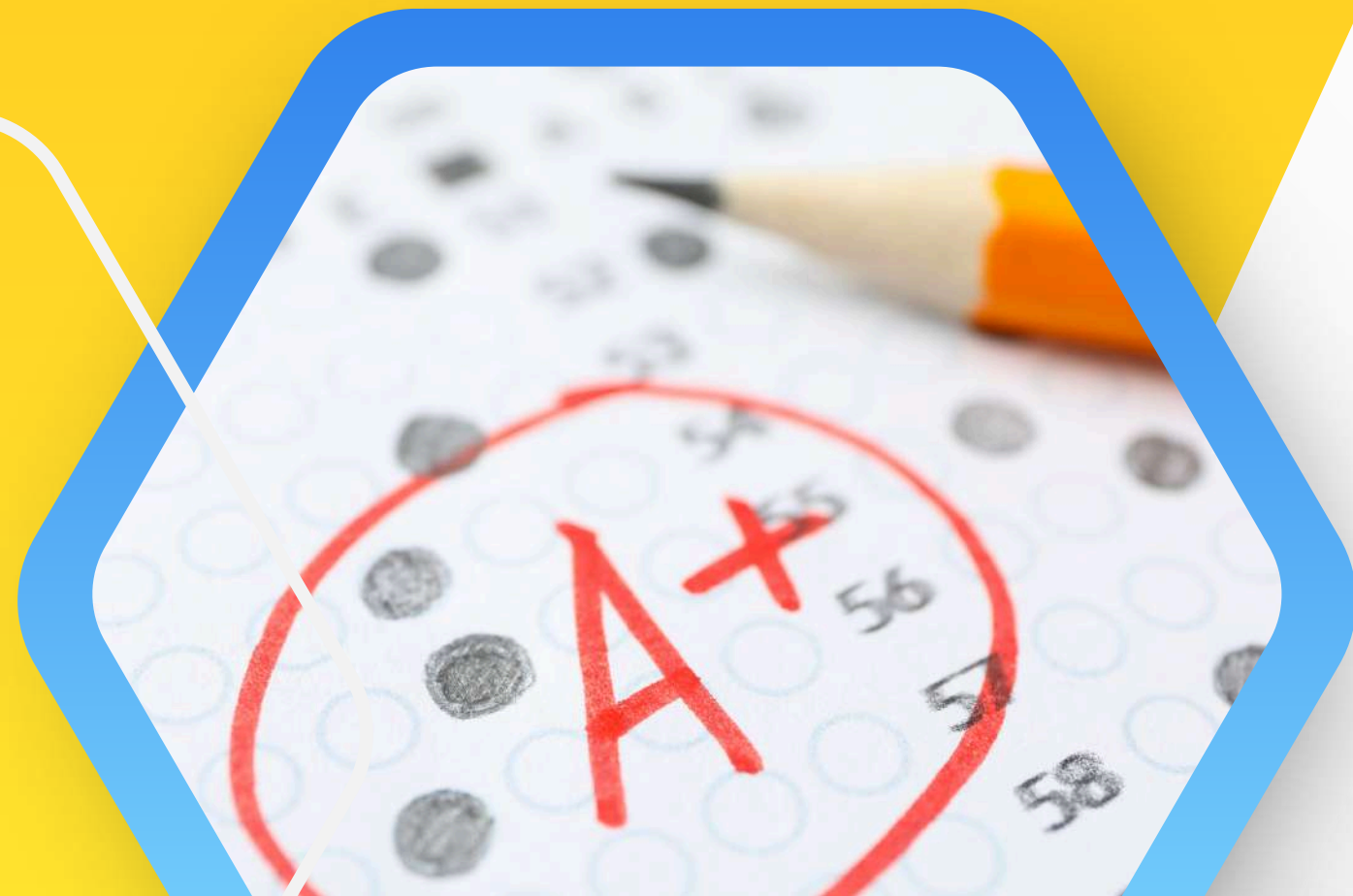


GMS AI Preparedness Index



Gen AI utilization concerns

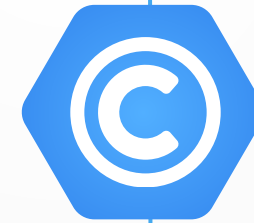
ACADEMIC & RESEARCH



**Academic Integrity and
Plagiarism**



**Quality and Accuracy of
AI-Generated Content**



**Intellectual Property and
Copyright Issues**



**Impact on Learning and
Skill Development**

Reported Challenges & Concerns

- Potential Negative Impact
- Implementation & Operations
- Organisational Structure
- External Environment

Ethical Concerns: Ethical issues such as cybersecurity and explainability of AI

Integration Complexity: Complexity in integrating AI into the existing systems

Plagiarism Risk: Increased risk of plagiarism and academic integrity

Degree Devaluation: Devaluation due to more accessible high-quality education

Tech Vendor Uncertainty: Difficulty in choosing AI technologies and vendors

Revenue Impact: Decreased revenue from programmes if over-rely on AI

Defensibility: Ability to maintain premium offering and leadership in the market

Resistance to Change: Staff and faculty that might be skeptical and reluctant

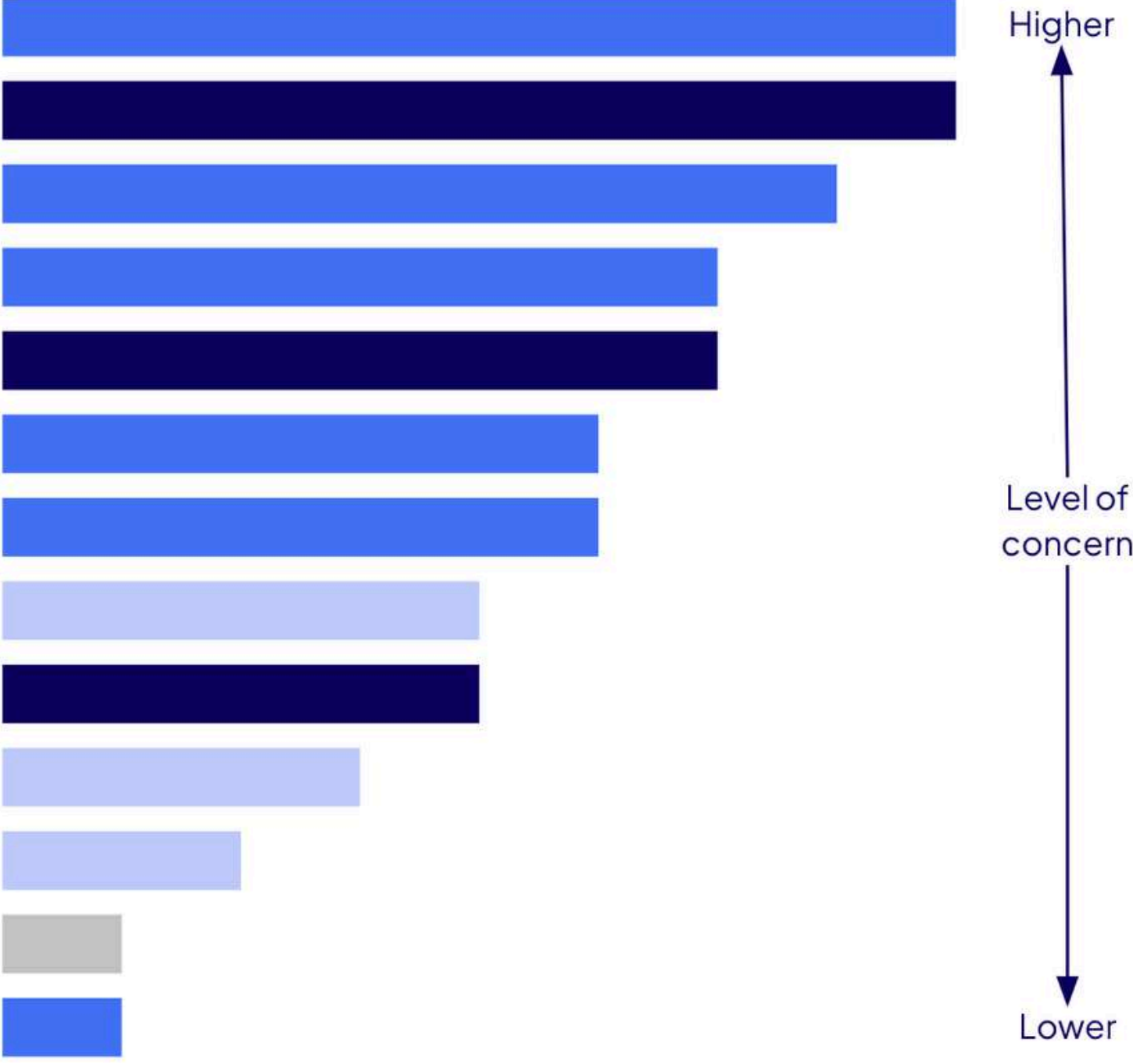
Users Training: Getting faculty and staff trained on AI tools

Employee Engagement: Getting everyone on board in the transformation process

Structural Obstacles: Siloed departments and complex decision making

Regulatory Clarity: Lack of comprehensive guidelines governing the use of AI

Unequal Access: Unequal access to AI technologies



Gen AI contribution or collaboration or tool in research

Life & Times

Generative AI in medical writing: co-author or tool?

Richard Armitage

British Journal of General Practice 2024; 74 (740): 126-127. DOI: <https://doi.org/10.3399/bjgp24X736605>

The Use of Controlled Artificial Intelligence as a Co-Author in Academic Article Writing

August 2023 · European Journal of Therapeutics 29(4)

August 2023 · 29(4)

DOI: [10.58600/eurjther1801](https://doi.org/10.58600/eurjther1801)

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AI as a Co-Author: Exploring Collaborative Writing with Technology



Phan Nython · [Follow](#)

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<https://doi.org/10.1177/14413582231167882>



Editorial



Should Artificial Intelligent Agents be Your Co-author? Arguments in Favour, Informed by ChatGPT

Michael Jay Polonsky and Jeffrey D. Rotman

Gen AI utilization concerns

MANAGEMENT



**Data Privacy and
Security**



**Bias and
Fairness**



**Ethical Use and
Compliance**



**Resource Allocation
and Cost**

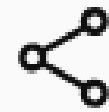
TECH · SAMSUNG

Samsung threatens to fire employees if they leak data to A.I. chatbots like ChatGPT

BY NICHOLAS GORDON

May 2, 2023 at 6:25 PM GMT+7

Updated May 4, 2023 at 4:37 PM GMT+7



OPENAI

OpenAI Fires Two Researchers for Alleged Leaking



CHRIS MCKAY

APRIL 11, 2024 • 2 MIN READ

Cost of implementation						compared to GPT4		compared to Amazon Bedrock Claude 2		compared to GPT3.5	
Provider	Model	input price per 1k Token	output price per 1K Token	input price per 1M Token	output price per 1M Token	input token	output token	input token	output token	input token	output token
<u>(Azure)</u> <u>OpenAI</u>	GPT-4 (8K)	\$0,03000	\$0,06000	\$30,00000	\$60,00000	0,00%	0,00%	172,23%	83,60%	1900,00%	2900,00%
	GPT-3.5-turbo	\$0,00150	\$0,00200	\$1,50000	\$2,00000	-95,00%	-96,67%	-86,39%	-93,88%	0,00%	0,00%
<u>Amazon</u> <u>Bedrock</u>	Claude 2.1 (Same as on Anthropic)	\$0,01102	\$0,03268	\$11,02000	\$32,68000	-63,27%	-45,53%	0,00%	0,00%	634,67%	1534,00%
	Claude Instant (Same as on Anthropic)	\$0,00163	\$0,00551	\$1,63000	\$5,51000	-94,57%	-90,82%	-85,21%	-83,14%	8,67%	175,50%
	Titan Text	\$0,00130	\$0,00170	\$1,30000	\$1,70000	-95,67%	-97,17%	-88,20%	-94,80%	-13,33%	-15,00%
	Cohere (Same as on Cohere)	\$0,00150	\$0,00200	\$1,50000	\$2,00000	-95,00%	-96,67%	-86,39%	-93,88%	0,00%	0,00%
	Jurassic-2 Ultra	\$0,01880	\$0,01880	\$18,80000	\$18,80000	-37,33%	-68,67%	70,60%	-42,47%	1153,33%	840,00%
<u>Google</u> <u>Vertex AI</u> 1 token ~ 4 chars	PaLM 2	\$0,00200	\$0,00200	\$2,00000	\$2,00000	-93,33%	-96,67%	-81,85%	-93,88%	33,33%	0,00%
<u>Anyscale</u>	Llama 2 70b	\$0,00100	\$0,00100	\$1,00000	\$1,00000	-96,67%	-98,33%	-90,93%	-96,94%	-33,33%	-50,00%
<u>MosaicML</u>	Llama 2 70b	\$0,00200	\$0,00200	\$2,00000	\$2,00000	-93,33%	-96,67%	-81,85%	-93,88%	33,33%	0,00%
<u>IBM</u> <u>WatsonX</u>	Llama 2 70b	\$0,00500	\$0,00500	\$5,00000	\$5,00000	-83,33%	-91,67%	-54,63%	-84,70%	233,33%	150,00%



KKU Case

How is KKU preparing and progressing?





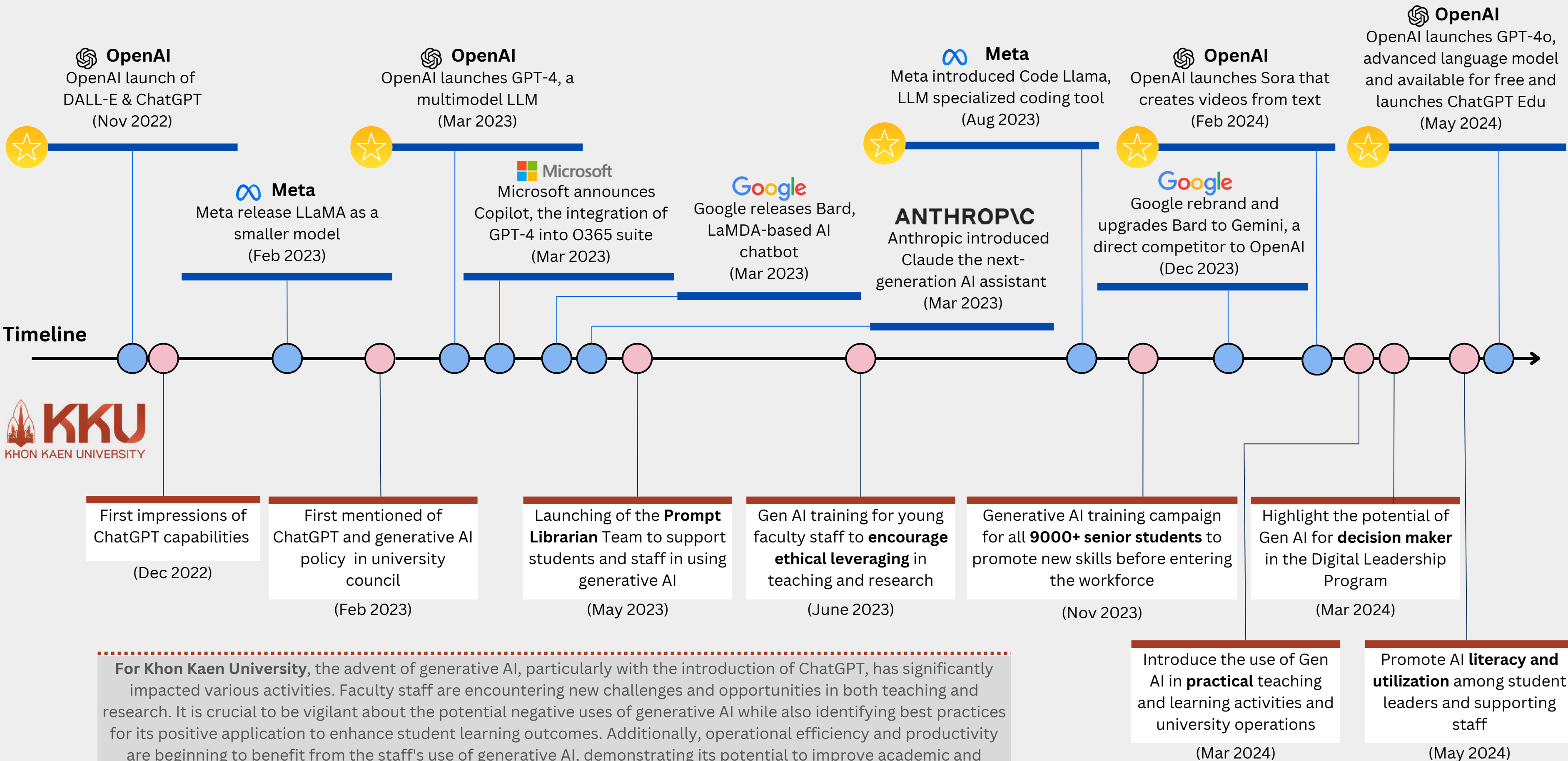
Gen AI Tech development



KKU key Gen AI adoption



Key milestone



For Khon Kaen University, the advent of generative AI, particularly with the introduction of ChatGPT, has significantly impacted various activities. Faculty staff are encountering new challenges and opportunities in both teaching and research. It is crucial to be vigilant about the potential negative uses of generative AI while also identifying best practices for its positive application to enhance student learning outcomes. Additionally, operational efficiency and productivity are beginning to benefit from the staff's use of generative AI, demonstrating its potential to improve academic and administrative processes.

Generative AI & RPA

Current Suite @KKU

 **OpenAI**
ChatGPT

 **Google**
Gemini

 **Microsoft**
Copilot

 **nintex**
RPA



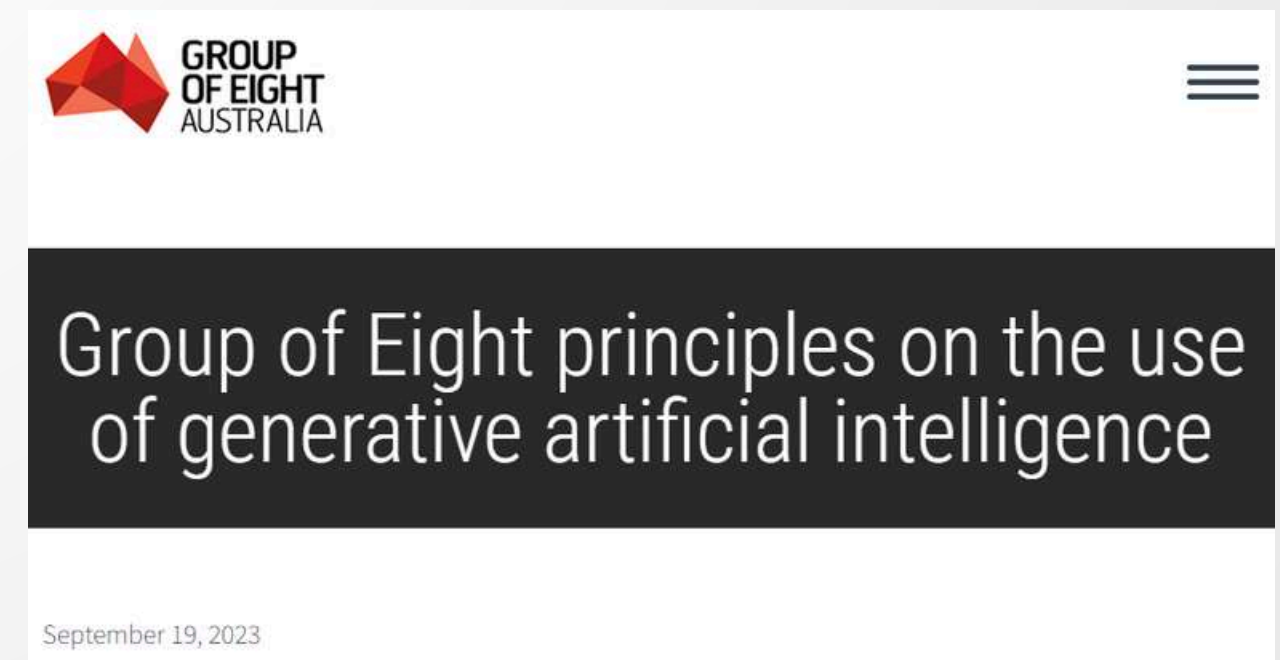
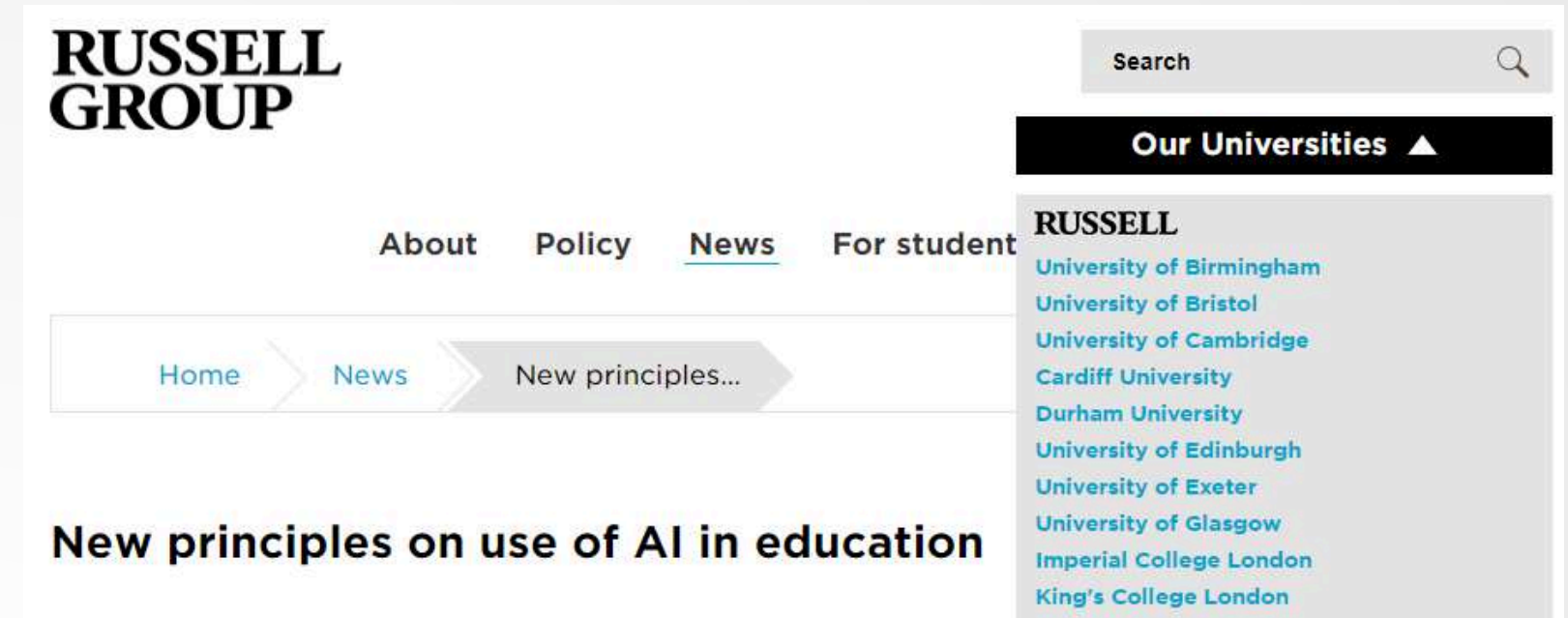
Guidance

Principles on the use

not Regulation

For emerging technologies like generative AI

- Flexibility and Innovation
- Uncertainty and Complexity
- Encouraging Best Practices
- Stakeholder Engagement
- Regulatory Hesitancy
- Building Trust and Understanding
- Scalability and Global Reach





Gen AI Tech development



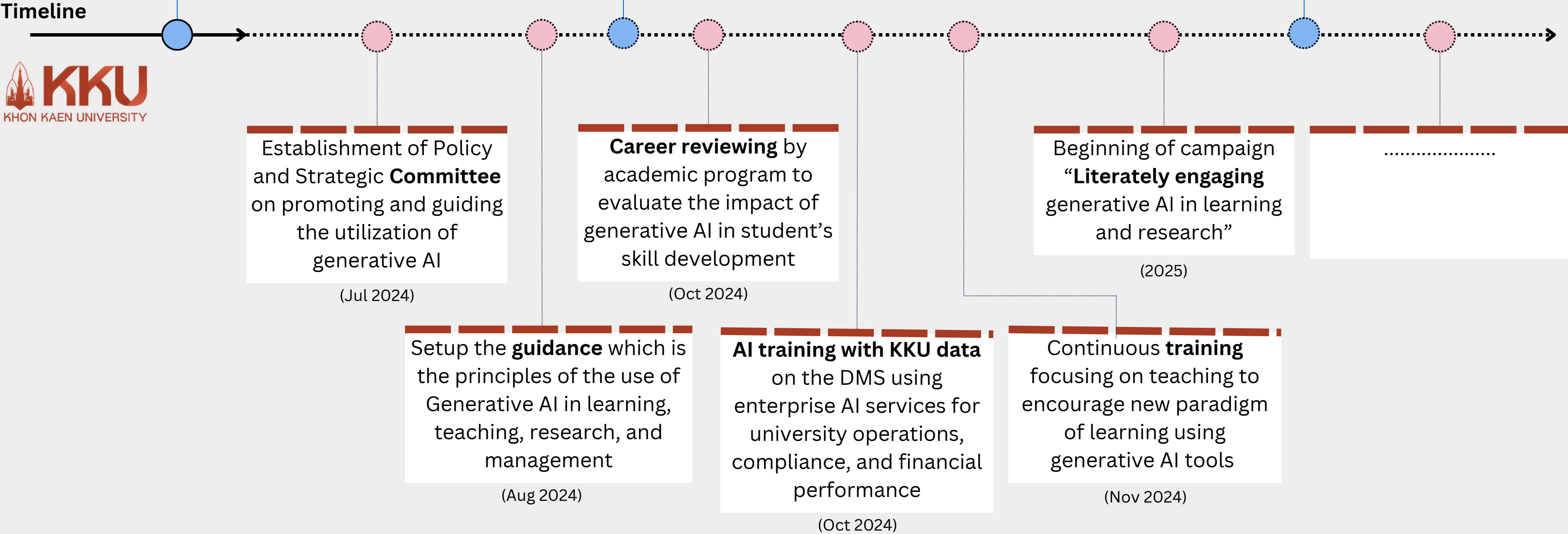
KKU key Gen AI adoption



OpenAI launches GPT-4o, advanced language model and available for free and launches ChatGPT Edu (May 2024)



Timeline





The AI Idiot

is a person who **defaults to using AI tools in place of developing their own expertise**, causing us to lose out on the greatest benefits of AI.

THANK YOU

denpong@kku.ac.th

This Presentation



<https://kku.digital/13eof>

