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國立臺灣大學 115 學年度碩士班招生考試試題

科目： 專業英文(D)： 一般英文

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※注意：Part I 題目請於試卷內之「選擇題作答區」依序作答，Part II 請作答於試卷內之「非選擇題作答區」。

Part I (40%): CARS Model Analysis (閱讀辨識學術論文的修辭步驟，並回答下列問題於試卷內之「選擇題作答區」):

Identify the most appropriate CARS move represented by each numbered sentence in the introductions of the two selected articles. Each question has ONE best answer.

The CARS model (Create a Research Space), proposed by John Swales (1990), explains how effective academic introductions are structured. Most research article introductions follow three major rhetorical moves, although the order and emphasis of these moves may vary across disciplines and texts.

Figure 1. Moves in Research Paper Introductions
Move 1—Establishing a research territory <ul style="list-style-type: none">a. By showing that the general research area is important, interesting, problematic, or relevant in some wayb. By introducing and reviewing items of previous research in the area
Move 2—Establishing a niche <p>By indicating a gap in the previous research or by extending previous knowledge in some way</p>
Move 3—Occupying the niche <ul style="list-style-type: none">a. By outlining purposes or stating the nature of the present researchb. By listing research questions or hypothesesc. By announcing principal findingsd. By stating the value of the present researche. By indicating the structure of the RP

Article 1: Excerpts from “Generative AI at Work,” by Erik Brynjolfsson, Danielle Li, and Lindsey Raymond, *The Quarterly Journal of Economics* (2025).

① The emergence of generative artificial intelligence (AI) has attracted significant attention for its potential economic impact.
② Although various generative AI tools have performed well in laboratory settings, questions remain about their effectiveness in the real world, where they may encounter unfamiliar problems, face organizational resistance, or provide misleading information (Peng et al. 2023a; Roose 2023).

③ We provide early evidence on the effect of generative AI deployed at scale in the workplace. We study the adoption of a generative AI tool that provides conversational support to customer-service agents. ④ We find that access to AI assistance increases the productivity of agents by 15%, as measured by the number of customer issues they are able to resolve per hour. The gains accrue disproportionately to less experienced and lower-skill customer-support workers, indicating that generative AI systems may be capable of capturing and disseminating the behaviors of the most productive agents.

We examine the staggered deployment of a chat assistant, using data from 5,172 customer-support agents working for a Fortune 500 firm that sells business-process software. The tool we study is built on Generative Pre-trained Transformer 3 (GPT-3), a member of the GPT family of large language models developed by OpenAI (OpenAI 2023). The AI system monitors customer chats and provides agents with real-time suggestions for how to respond. The AI system is designed to augment agents, who remain responsible for the conversation and are free to ignore or edit the AI’s suggestions.

We have four sets of findings. First, AI assistance increases worker productivity, resulting in a 15% increase in the number of

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chats that an agent successfully resolves per hour. These productivity increases are based on shifts in three components of overall productivity: a decline in the time it takes an agent to handle an individual chat, an increase in the number of chats that an agent handles per hour, and a small increase in the share of chats that are successfully resolved.

Second, the impact of AI assistance varies widely among agents. Less skilled and less experienced workers improve significantly across all productivity measures, including a 30% increase in the number of issues resolved per hour. The AI tool also helps newer agents to move more quickly down the experience curve: treated agents with two months of tenure perform just as well as untreated agents with more than six months of tenure. In contrast, AI has little effect on the productivity of higher-skilled or more experienced workers. Indeed, we find evidence that AI assistance leads to a small decrease in the quality of conversations conducted by the most skilled agents.

Third, agents who follow AI recommendations more closely see larger gains in productivity, and adherence rates increase over time. We also find that experience with AI recommendations can lead to durable learning. Using data on software outages—periods when the AI's output is unexpectedly interrupted due to technical issues—we find that workers see productivity gains relative to their pre-AI baseline even when AI recommendations are unavailable. The gains are most pronounced among workers who had greater exposure to AI and followed AI suggestions more closely. [...] We further analyze the text of agents' chats and provide evidence that access to AI improves their English-language fluency, especially among international agents.

Fourth, we focus on the dynamics between agents and customers. [...] Our findings show that access to AI assistance significantly improves customer treatment of agents, as reflected in the tone of customer messages. Customers are also less likely to question agents' competence by asking to speak to a supervisor. Notably, these changes come alongside a decrease in worker attrition, which is driven by the retention of newer workers.

⑥ This article provides new evidence of longer-term effects in a real-world workplace where we also track patterns of learning, customer-side effects, and changes in the experience of work.

Article 2: Excerpts from "Evidence of a Social Evaluation Penalty for Using AI," by Reif et al., *PNAS* (2025).

⑥ A longstanding question in social psychology is how perceivers interpret and explain others' behavior when there are multiple possible causes (1-4). For example, when someone accepts assistance completing a task, observers may conclude that this choice reflects dispositional qualities (e.g., a lack of ability or motivation to complete the task without help) or situational factors (e.g., receiving assistance is the norm for the task). ⑦ Attribution theory posits that observers tend to favor dispositional explanations relative to situational ones (5, 6), suggesting they may attribute the use of assistance to personal deficits rather than circumstantial causes. Professional image concerns may therefore motivate people to avoid appearing dependent on external assistance (7, 8).

The attribution processes that shape evaluations of help-seeking behavior can be fruitfully extended to understand the social implications of AI use in today's workplaces. AI technologies present a dilemma to the people who use them. On the one hand, AI can enhance human performance on a variety of tasks (9, 10). People thus have strong incentives to use AI, as it might improve their performance at work. On the other hand, AI represents a powerful form of assistance. Consequently, using AI may raise doubts about one's own abilities and motivation. ⑧ Consistent with this notion, a recent industry survey found that apprehension about being perceived as lazy ranks among the top concerns of people who use AI at work (11). Further, numerous reports suggest that people actively conceal their AI use in professional settings (12, 13). ⑨ This apparent tension between AI's documented benefits and people's reluctance to use it raises a critical question: are people who use AI actually evaluated less favorably than people who receive other forms of assistance at work? Extending theories of attribution, we propose that observers will be likely to make (negative) dispositional inferences about people who receive help from AI relative to people who receive other forms of help.

⑩ In four preregistered studies, we examine this prediction from the lens of both the help recipient and observer. In Study 1, we show that people who receive help from AI believe they will be evaluated as lazier, less competent, and less diligent than people who receive similar help from non-AI technologies. In Study 2, we demonstrate that this fear is justified: observers perceive people who get help from AI as lazier, less competent, and less diligent than people who get help from other sources. Study 3 shows that managers who do not use AI themselves may act on their negative assumptions of people who use AI in an incentive-compatible hiring task. Finally, Study 4 shows that perceptions of laziness mediate the relationship between AI use and assessments of poor task fit in a hiring scenario.

Select the ONE best answer for each of the following questions. 請於試卷內之「選擇題作答區」依序作答。

1. (5%) What move and step does sentence ❶ represent?
 - a. Move 1a
 - b. Move 1b
 - c. Move 2
2. (5%) What move and step does sentence ❷ represent?
 - a. Move 1a
 - b. Move 1b
 - c. Move 2
3. (5%) What move and step does sentence ❸ represent?
 - a. Move 2
 - b. Move 3a
 - c. Move 3b
4. (5%) What move and step does sentence ❹ represent?
 - a. Move 3a
 - b. Move 3c
 - c. Move 3d
5. (5%) What move and step does sentence ❺ represent?
 - a. Move 3a
 - b. Move 3c
 - c. Move 3d
6. (5%) Which option BEST represents the sequence of rhetorical moves from Sentences ❸-⑩ in Article 2?
 - a. Move 1a → Move 1b → Move 2 → Move 3a → Move 3c
 - b. Move 1b → Move 1a → Move 2 → Move 3a → Move 3b
 - c. Move 2 → Move 3a → Move 3b → Move 3c → Move 3d
 - d. Move 1a → Move 1b → Move 1b → Move 2 → Move 3a

Identify the type of Move 2 (Research Gap) represented by each statement below.

7. (5%) Choose the ONE best answer from the options provided.

“Although AI tools have been shown to improve productivity, little is known about how their use affects employees’ professional reputation.”
 8. (5%) Choose the ONE best answer from the options provided.

“Building on prior research on social evaluation, this study extends the literature by examining AI use in hiring decisions.”
- Move 2 Options (for both statements):**
- a. Counter-claim: Something is wrong or flawed
 - b. Indicate a gap: Something is missing
 - c. Raise a question: Something is unclear
 - d. Continue a tradition: Something can be added

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Part II (60%): Analytical Writing (分析寫作：作答於試卷內之「非選擇題作答區」)

Read the excerpts from all three selected articles and compose an essay in response to the issue below. Responding to any other issue will receive a score of zero.

Article 3: Excerpts from “When combinations of humans and AI are useful: A systematic review and meta-analysis,” by Vaccaro et al., *Nature Human Behaviour* (2024).

People increasingly work with artificial intelligence (AI) tools in fields including medicine, finance and law, as well as in daily activities such as travelling, shopping and communicating. These human-AI systems have tremendous potential given the complementary nature of humans and AI—the general intelligence of humans allows us to reason about diverse problems, and the computational power of AI systems allows them to accomplish specific tasks that people find difficult.

A large body of work suggests that integrating human creativity, intuition and contextual understanding with AI’s speed, scalability and analytical power can lead to innovative solutions and improved decision-making in areas such as health care (1), customer service (2) and scientific research (3). However, a growing number of studies reveal that human-AI systems do not necessarily achieve better results than the best of humans or AI alone. Challenges such as communication barriers, trust issues, ethical concerns and the need for effective coordination between humans and AI systems can hinder the collaborative process (4-9). These seemingly contradictory results raise important questions: when do humans and AI complement each other, and by how much? (omitted)

Essay Question

Based on the selected articles, generative AI can improve worker productivity and performance, but it may also lead to negative social evaluations and mixed outcomes in human-AI collaboration.

Do you think generative AI ultimately benefits or harms workers’ long-term career outcomes?

Take a clear position and support it with reasons and evidence. Include at least one counterargument (an opposing point of view) and provide an effective refutation explaining why your position is stronger.

Write 300-1000 words. Develop a well-organized argument using clear reasoning and relevant examples drawn from the articles and/or your reading, experience, observations, or academic studies. Your response will be evaluated for its overall quality based on how well you:

- Respond to the specific task instructions
- Consider the complexities of the issue
- Organize, develop, and express your ideas
- Support your ideas with relevant reasons and/or examples
- Control the elements of standard written English

Use the bottom of this page to plan your response, and then write your response in the answer sheets (試卷內之「非選擇題作答區」). Allow time to proofread and revise your work.

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