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Human-AI Collaboration in Case Study Development: A Pilot Project

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INTRODUCTION

Artificial Intelligence (AI) burst onto the public scene as a widely accessible software tool in late 2022. The adoption of this technological innovation has arguably been the fastest on record, with approximately 100 million users gained in less than a year.¹ The introduction of ChatGPT, an easily queried chatbot developed by OpenAI, was followed by a wave of similar offerings that solidified the perception of AI's breathtakingly rapid emergence. Initial reactions were a mix of awe, excitement, and fear, echoing the sentiment expressed in the first Morse code message transmitted by telegraph in 1844: "What hath God wrought?"

Since then, little has transpired to temper the collective and sometimes breathless expectations that have reverberated across the public landscape. As journalist Ezra Klein opined, "This changes everything."²

This article does not aim to describe the underlying technology of AI,³ nor does it attempt to extrapolate the rapidly advancing capabilities or novel productizations of this technology (**Exhibit 1** provides a brief primer on the popular AI systems). The exponential advancement of AI challenges our conventional linear thinking about cause-and-effect and the related economic, cultural, and educational outcomes that might be described as breakthroughs, disruptions, or even disasters.

Instead, this piece offers a more modest account of a fast-prototyping experiment to develop a case study and the accompanying instructor's manual (IM), as well as a reflection on what was learned about AI and its potential benefits and drawbacks, as applied to case research. The case-writing pilot project itself was undertaken in the run up to the North American Case Research Association's 2023 Annual Conference in San Antonio, Texas.

Two NACRA members collaborated on the development and writing of a NACRA-styled case study and instructor's manual (IM), with Jim Fisher taking the lead in constructing the case narrative and Rob Boyle developing the (IM). The case was subsequently submitted and workshopped in the Entrepreneurship & Family Business track.

Ours was not the only exploration in the use of AI applications. We observed that several participants were starting to experiment with human-machine interaction with

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the quickly proliferating AI platforms. In our experience and observation, AI played some assistive role in pre-conference planning, reviewing both early case proposals and roundtable submissions, and provoking lively discussion in two New Views conference sessions.⁴

What follows is not precisely a case study but is akin to the storytelling impulse that motivates many case-oriented scholars. It is more descriptive than analytical and is offered in a pioneering spirit, hoping to serve as an early volley in what will likely be an ongoing conversation about the intersection of AI and the venerable case writing and research tradition.

READY, FIRE, AIM

To be blunt: we approached the task of case writing with AI as naïfs. In our defense, we can say that we undertook our pilot project in the late spring of 2023, just a few months after OpenAI had launched a free public beta of its GPT-3 powered AI bot on November 30, 2022. At that time, who among us really knew what it was and what it could potentially do? In a similar vein, the potential landmines in the form of irresponsible and unethical applications were largely swamped by the appetite for trial usage and provocative demonstration.

So, we asked what role might AI play in writing a case study. About two dozen prompts later (cf. summary in **Exhibit 2**) and with approximately twenty hours invested, which were distributed over an intense four- or five-day period, we had completed the case study. Here is [a link to the completed case](#)⁵ and [another link to a text copy of the AI chat](#).⁶ The case itself (without the accompanying instructor's manual or IM) was over 2,500 words, while the chat to produce the case (again, without any IM) was over 40,000 words.

In retrospect, we can see that this case writing experiment served multiple purposes, but chief among them was for us to learn how to work with AI.⁷ Ethan Mollick, a management professor at the Wharton School, recommends just this sort of immersive experience, to get out on the learning curve rapidly and in a way that has both breadth and depth. He says, “you need to just start using it . . . my advice is usually bring it to every table that you come to in a legal and ethical way. So I use it for every aspect of my job in ways that I legally and ethically can, and that’s how I learn what it’s good or bad at.”⁸

We will not offer a detailed account of the subsequent drafting process, but we can characterize the experience as one of sustained effort, thinking, and writing. If you revisit the link we previously provided, you will likely discern a certain fluidity in the respective roles variously assumed by both the user and the chatbot. Whatever observations, critiques, and conclusion others may draw, most would likely agree that the production of this case resisted any attempt to conjure it up quickly or completely by, shall we say, “pressing a button.”

TIPS & TACTICS FOR CASE WRITING WITH AI

Recognizing that others may move out along different learning trajectories as they choose to use AI tools in some manner in their case research, case writing, or case teaching projects, we will nonetheless offer a few tips gleaned from this pilot case-writing project:

AI case writing tip #1: Lead the collaborative process with your unique inspiration. A key conviction informing this article is that AI can provide a valuable auxiliary tool for case research. But a tool is a technology directed to achieve certain human aims. Thus, our first tip or suggestion is to choose your case material independently. AI is, in our limited experience, a poor source for the discovery of case topics. Authorial confidence in the power of the story and a belief that it is well-suited to your purposes are necessary pre-conditions. Before you invite AI to your case-writing table, to invoke Mollick's metaphor, you will want to set it properly with the topic, the data, and the narrative direction. This will likely include the company and its allied industry, the critical incident and its reverberations, and the human protagonists with their decision-making inclinations. The menu should be established, even if the entrees are not yet fully prepared.

The data collection effort for this case started with the first author's own professor-student relationship with Mike G, the serial entrepreneur at the center of this case. A media article about Mike and his ugly sweater business landed on the first author's desk along with the conviction that "there's a case study here." Much later, we interviewed Mike and, with his permission, produced a transcript of our telephone interview. Additional data collection was mostly desktop research following the various leads the article and interview generated. We subsequently exchanged emails with Mike for various follow-up questions.

AI case writing tip #2: customized prompting must lead the collaboration. The process quickly became a highly iterative process. Calling it a step-by-step affair is not quite right, as is more likely to be two steps forward, one step back. Once the big-picture narrative flow had been staked out a more painstaking process ensued. This required a certain editorial sensibility with fine-bore considerations over word selection, sentence composition, and structural modifications. Repetition and reiteration became go-to tools. The chatbot is an indefatigable partner that will rewrite, repeat, and revise without delay or complaint.⁹

A few examples of key junctures in the collaboration reveal the necessary and even productive push and pull between human and artificial intelligence. The prompt reproduced below captures the sort of call-and-response elicitation that working with a chatbot would seem to require:

Recast this document as follows: 1) remove specific references or titles in the form of (A) Case, (B) Case, and (C) Case, while retaining the descriptive headings now in the document. This makes the document a unitary case study. Further recast this document to reflect a narrative flow in which Mike G first overcomes his sourcing challenge only to then encounter competitors that effectively address the supply-side shortage that Mike had similarly recognized by designing and manufacturing ugly Christmas sweaters at scale. As the "mass" retail market is no longer as attractive to Mike G he pivots to exploiting niches available in the wholesaler market -- effectively an arbitrage opportunity or price play -- and by embracing customization and creating unforgettable experiences for consumers. Finally, recast this case study to give it a stronger "decision-focus" that appears at or near the end of the case study. In this decision-focus we are taken into Mike G's strategic determinations and tactical initiatives as he contemplates next steps: Are his preliminary considerations about wholesale and commercial expansion sustainable? Is Mike well-positioned to do this better than others competing for the same customer spending? Can his jockeying for some sort of differential advantage in this

now more competitive market be implemented successfully and at sufficient scale so the economic profits are attractive and achievable? This decision-focus serves a pedagogic purpose in that it may provoke better discussion of the case when it is used in an educational context that takes up issues like successful entrepreneurship and the crafting of effective and profitable marketing strategies.

This tactic of nudging the AI platform to develop the case in this or that direction is an example of a technique now commonly referred to as “prompt engineering.” It is not enough, in our experience, to simply ask the chatbot to “regenerate” or “retry,”¹⁰ without also providing explicit direction on how to do so or without a clear delineation of the desired effect. Specific prompts are one effective means to guide text generation and content development.

The sample prompt above reflects our authorial intention. It imposes discrete storytelling elements while also making their pedagogic aims transparent. But many other prompts have less lofty goals in which we take the chatbot into the weeds of case construction and organization. Here the human user is more editor and ChatGPT is more scribe:

Merge into one case the four sections that we have been constructing, beginning with "Introduction: Meet Mike's Mom" followed by "A Call from Mom: I hit the mother lode," which is then followed by "It's beginning to feel a lot like Christmas: The economics of ugly sweaters" and then by "Blood in the water: The "Shark Tank" episode." Retain all the subsection headings and make incremental improvements that enhance the voice, style, and flow of the overall case narrative.

AI case writing tip #3: harness and augment AI’s creative impulses. Our previous emphasis on maintaining a clear sense of purpose and direction, that AI then picks up on and dutifully follows, is only a partial account of the process. As the human partners we brought domain expertise, strategic guidance, and iterative refinement. But at the same time, the AI platform appeared adept, if not always reliable, at delivering clever story elements, truncating prolix descriptions, and generating content that was frequently colorful and engaging.

Thus, AI was a useful collaborator in the case development experiment. This should come as no surprise. ChatGPT and many of the other commercially available AI software offerings have been built and tuned to fulfill user expectations. In the little more than the year and a half it has been available, AI has gotten noticeably and dramatically better. On the one hand, users of AI are gaining skill at working with these smart machines, but on the other hand, these artificial intelligences are themselves getting better with startling speed at discerning human intention: what their human interlocutors want them to say, to write, and to create.

As AI burrows deeper and deeper, with its large language models, into an analysis of *our* own language and signifiers, which will likely include our personal data such as our writings, our emails, our photos, our calendars, and our contacts – in short, our personal histories – it will get weirdly prescient and knowing about what we want, both consciously and subconsciously.

TIPS & TACTICS FOR WRITING THE INSTRUCTOR'S MANUAL WITH AI

We immediately found that using artificial intelligence as a tool for helping to write the instructor's manual required a unique and thoughtful approach. When writing the case study, the goal seemed to be capturing a story that had already occurred and fashioning it into a cogent narrative that would remain true to the protagonist's journey, while simultaneously being clear and intriguing to the reader. Writing the IM, however, required less looking backward at what previously had happened and more looking forward to what would happen in the classroom at some point in the future. Simply put, creating the IM was less about the plot and more about the pedagogy.

In the spirit of effectively using AI as a tool for ideation and iteration while maintaining the wisdom that can only come from human experience, we offer the follow tips for developing the instructor's manual in tandem with ChatGPT or another AI platform.

Instructor's manual writing tip #1: get the right bite of the apple. Author Carroll Bryant has a humorous quote that cautions, "don't bite off more than you can chew because nobody looks attractive spitting it back out." These words seemed apt to us, particularly during the initial stages of IM development. We found that too many inputs in ChatGPT led to lousy yields that needed to be spit out and discarded. For the purposes of developing sophisticated teaching methodologies, AI seems ill-equipped to handle multiple inputs simultaneously.

This became immediately apparent with our first (and clearly novice) approach of loading the entire case as well as all nine Case Research Journal instructor's manual elements into ChatGPT and asking for a complete IM to be generated. The resulting instructor's manual was only two pages long and the following issues were problematic:

- The outputs were bland and lacked specificity. Relating to theoretical linkages, for example, ChatGPT suggested the simplified idea of "reading case studies or articles on businesses that successfully navigated market saturation and competition."
- The outputs were overly brief. For example, the proposed discussion questions lacked rich description, e.g. "What factors contributed to Mike's success?"
- The outputs were sometimes not relevant. As a proposed assignment, ChatGPT suggested "developing a social media strategy for the business," which had very little to do with the case.

The cautionary tale here is that trying to develop an entire piece by overloading inputs has the counterintuitive effect of producing short, watered-down outputs that are not particularly helpful. It almost seems that requiring ChatGPT to connect too many dots at once results in safe outputs that lack depth. In other words, ChatGPT seems to prioritize "checking all of the boxes" above quality and richness. In the end, we found it more effective to load the entire case into ChatGPT, but to only load one instructor's manual element at a time.

Instructor's manual writing tip #2: prime the prompts. It did not take long for us to determine that entering thoughtful prompts and patiently iterating carried the day. By using this approach, we avoided becoming overly seduced by the perceived ease of developing an initial draft. We continually kept in mind the adage, "a good

paint job is 90 percent prep work and 10 percent painting.” In our experience, this adage clearly applied to using ChatGPT.

In the example that follows, we loaded the entire case into ChatGPT and only utilized “learning outcomes” as the IM element. We then began entering prompts on a trial-and-error basis and continued to iterate the prompts, becoming more detailed and specific until we were satisfied that the outputs were enough for us to work with:

- Prompt 1: List learning outcomes for the following case study: *Enter Case Text*
- Prompt 2: List college-level learning outcomes for the following case study: *Enter Case Text*
- Prompt 3: List college-level learning objectives related to entrepreneurship and marketing for the following case study: *Enter Case Text*
- Prompt 4: List six college-level learning objectives related to entrepreneurship and marketing for the following case study: *Enter Case Text*

Note that each prompt iteration led to more robust and relevant outputs. For example, the outputs generated using prompt 4 above resulted in the most detailed learning outcomes and were even punctuated by specific examples from the case. These rough learning outcomes gave us a useful leaping-off point for developing the more thoughtful and streamlined learning outcomes that ultimately became part of our final IM draft.

Instructor’s manual writing tip #3: remember to add the human touch.

Those who have spent a significant amount of time leading classrooms may agree that teaching is a nuanced endeavor. Students come to us with different aptitudes, interests, and styles that often need to be considered in order to maximize learning. Perhaps the noblest of pedagogical goals, then, is looking beyond individual strengths and weaknesses and inspiring those in our charge to be curious; to create settings where students are self-motivated to seek knowledge. As Socrates famously said, “education is the kindling of a flame, not the filling of a vessel.”

Because of these nuances, and because of the need to kindle the proverbial flame of curiosity, it would be a fool’s errand to simply outsource the development of teaching approaches to ChatGPT or any other comparable platform. For all its processing power, we quickly found that AI does not know how to create a learning environment that inspires students; this is clearly best left to experienced faculty members who have spent countless hours honing their craft.

What AI did offer us when writing the IM, however, was a continuously accessible brainstorming partner that helped us edit ideas born of human prompts. The process prevented us from staring at a blinking cursor and immediately drove us headlong into fertile (and sometimes not-so-fertile) ideas that we could either discard or begin bending and shaping into useful and complementary methodologies.

When prompted to help us develop teaching approaches, for example, ChatGPT offered broadly valuable pedagogies but lacked specifics. These included role plays, debates, and audiovisuals. When we further honed the prompts, ChatGPT offered a bit more detail related to these suggestions, but ultimately it was the shaping of these pedagogies based on our classroom experiences that lifted them from the page and transformed them into the following viable strategies that we believe have the potential to inspire learning:

- Role plays: students can engage in role plays to simulate conversations between Mike and his mom, interaction with the Chief Marketing Officer of White Castle, or negotiations with potential corporate clients.

- Debate: divide the class into groups and assign them different perspectives (e.g. small business owner, big retailer, consumer) to debate the impact of Walmart and Target entering the market for ugly Christmas sweaters.
- Audiovisuals: Show relevant images, videos, or infographics related to the case study, such as examples of ugly Christmas sweaters, the "Shark Tank" episode featuring Topsy Elves, or Mike's collaboration with White Castle.

AN APPRAISAL

As academics, much of our professional development and work – not to mention our self-definition and self-image - centers around our writing abilities. This use of language is, for many of us, inextricably tied to our critical thinking capacities. Creative and conceptual breakthroughs, such as they are, are often summoned into words in ways that can be stubbornly slow. First drafts are typically clunky and ineffective. But rewriting typically improves and refines, and submissions beget revisions. The process is typically arduous, but in the bargain both our writing and our thinking improves. In just this way writing can be both the means and ends associated with achieving professional and academic success.

Although academic prose rarely garners praise for its grace, clarity, or readability, it is nevertheless a skill that has had to be cultivated and practiced over an extended period that variously includes study, training, and practice.

So, to outsource some of this writing (in whatever proportion) cuts across the academic grain, provoking some unease and misgivings. Let us sketch out some of these concerns:

- **Ethical use:** attribution, transparency, and misappropriation of intellectual property. The use of AI, especially for content generation, raises questions and concerns about authorship and attribution. Transparency in circulating and using jointly-produced work seems a minimum requirement at this juncture. But going forward, we suspect (though perhaps wrongly) that AI will become deeply imbedded in our work flows, parallel in a way to our use of search engines, software editorial tools, and research assistants, and incorporated to such an extent that a precise delineation of role responsibilities and intellectual contributions may be unwieldy and difficult to ascertain. The line separating human endeavor and artificial intelligence input is becoming blurry and may soon be impossible to discern. Indeed, the precise way in which AI generates its output is shrouded in some mystery. The owners and developers of some AI systems have been less than forthcoming about the data sources on which their products have relied.¹¹ But the spectacular performance and discontinuous leaps in creativity and originality that AI systems are now making cannot be fully explained or understood, even by those deeply into the software development. The potential for factual inaccuracies must be recognized and managed. The taint of plagiarism is also a real risk.
- **Overreliance on AI:** The temptation to accelerate the production of cases, articles, papers, and books may ineluctably lead to a decrease in our own hard-earned or yet-to-be fully developed thinking and writing abilities. And as AI steadily or exponentially improves its capacity to deliver engaging and smart content, integrating visual and aural elements effectively and in pedagogically sound ways, then there is a real possibility that the motivation to write original educational material may get sapped away. Some may ask, “what really is the

point, if AI can produce content faster, easier, and, alas, better?” Of course, we are not yet at this point, but if the trajectory of AI improvement moves along this trajectory, then one can imagine various anchoring¹² effects will shape our case development in ways difficult to anticipate, but just as difficult to avoid. Outright disruption may still be far out on the horizon, but along this path the role of some case developers may start to subtly shift from that of writer and to that of editor, director, and producer.

- **Originality of voice.** In the pilot project we have detailed in the previous sections, we have tried to describe a sustained effort in which a good deal of our energy and intention was to maintain a consistent and distinctive authorial voice throughout the case study. Whatever the ultimate outcome, this much is clear: the AI user needs to be diligent, conscientious, and even insistent on reviewing and editing the AI-generated content to ensure it is embodied with the desired style, tone, and voice of the human initiator. Although our approach has largely been trial-and-error, we seem to have landed on a few approaches that have been similarly employed by others. For example, we found it helpful (even necessary) to develop explicit prompts that guide the cases narrative flow, that shape character development, that clearly delineate different sections or paragraphs, that include critical incidents, that insert quotes or dialogue, and that provide useful conclusions or calls for decision. Collectively these elements will imprint your own plan and design on the case. Jumping in directly and frequently with your own prose or word choice is also a powerful cue on which the chatbot will pivot and expand. We see these approaches referred to in the literature as “chain of thought” method or “few-shot” prompting. The more you write, or the more samples of your writing you provide to these AI platforms, the more capable they are of mimicking your tone, voice, and style.

Taken together the preceding considerations lead to the inescapable conclusion that collaborating with AI may make it challenging for the human partner to lead the process unambiguously. And if one flies in the face of this reality, there is the very real prospect of self-deception. One can blithely maintain the originality of the work, but once the layers get peeled back it is entirely plausible that the work itself is not really that unique, that it is largely derivative, and that many other researchers and writers are writing similar cases. Cases are a distinctive genre, but they should not be generic.

MOVING FORWARD: WHAT VALUE DO AI-ASSISTED CASES HAVE?

We have shared this case writing process together with the text of the case itself, to encourage discussion within the case research community. A set of issues revolve around the suitability of cases written with AI assistance in the larger scheme of case research, case development, case publishing, and case use.

There may be some value in encouraging experimentation and sharing a wide range of use-cases before developing specific rules and policies with that might otherwise push AI to margins of case research. This position might gain fuller consideration if we, as a case research community, undertake a range of AI-assisted case writing projects to stake out feasible and effective techniques and a set of practices that warrant further debate and consideration. NACRA has the collective case-oriented experience, commitment, and wisdom to encourage and oversee such an undertaking.

Exhibit 1 - Features of Popular Artificial Intelligence Systems: What's right for you?

Claude 3

Various describes as “the most intellectual model” or more literary, “a slightly artsier vibe.” Mollick’s overview: “Claude 3 is currently the warmest of the models. And it is the most allowed by its creators, Anthropic, I think, to act like a person. So it’s more willing to give you its personal views, such as they are. And again, those aren’t real views. Those are views to make you happy . . . and it’s a beautiful writer, very good at writing, kind of clever, closest to humor, I’ve found.” Well-suited for re-writing and editing task. Instant feedback for that first draft.

Google’s Gemini

This is “probably the most accessible,” and integrates well with the Google ecosystem. Gemini “feels like it really, really wants to help. We use this for teaching a lot. And we build these scenarios where the A.I. actually acts like a counterparty in a negotiation. So you get to practice the negotiation by negotiating with the A.I. And it works incredibly well.”

ChatGPT-4

This has “the biggest capability set right now.” Mollick’s point of view: “GPT-4 feels like a workhorse at this point. It wants to get stuff done for you. And it will happily do that. It doesn’t have a lot of time for chitchat.” Especially suitable for quantitative analysis and coding work.

Keep in mind, though, “you really do need to use the paid version, they are significantly smarter . . . and if you don’t work with the frontier models, you can lose track of what these systems can actually do.”

It’s just tokens all the way down: “hallucination rates are dropping over time. But the A.I. still makes stuff up because all the A.I. does is hallucinate. There is no mind there. All its doing is producing word after word. They are just making stuff up all the time. The fact that they’re right so often is kind of shocking in a lot of ways.”

Source: Klein, “Ezra Klein Interviews Ethan Mollick,” 2024,

<https://www.nytimes.com/2024/04/02/podcasts/transcript-ezra-klein-interviews-ethan-mollick.html>

Exhibit 2 - A Descriptive Account of Case Study Development (generated by ChatGPT)

Logical Flow of Prompts and Key Steps:

1. ****Introduction and Background:****
 - ***Prompt:** The user introduces the concept of an ugly sweater business owned by Mike Golomb.
 - ***Response:** ChatGPT follows up with questions about Mike Golomb's background, his business model, and how he got into the ugly sweater business.
2. ****Character Development:****
 - ***Prompt:** User introduces Mike's mom as a kindergarten teacher.
 - ***Response:** ChatGPT queries about the mom's role and develops her character, creating a link between her sweaters and Mike's entrepreneurial journey.
3. ****Setting the Scene:****
 - ***Prompt:** The user creates a scenario about Mike needing an ugly Christmas sweater.
 - ***Response:** ChatGPT develops the story further, adding details about Mike's search and his frustration.
4. ****Unexpected Discovery:****
 - ***Prompt:** The user introduces a twist where Mike's mom finds a stash of sweaters at Goodwill.
 - ***Response:** ChatGPT explores the significance of this discovery, hinting at the potential for a business opportunity.
5. ****Business Expansion and Economics:****
 - ***Prompt:** User mentions Mike's eBay venture and the success of selling sweaters.
 - ***Response:** ChatGPT delves into the economics, discussing Mike's strategy, pricing, and how he scaled up the business.
6. ****Research and Sourcing:****
 - ***Prompt:** The user guides the conversation towards Mike's research on the supply chain.
 - ***Response:** ChatGPT provides details about Mike's research, uncovering the network of "raggers" and the bulk buying model.
7. ****Operational Excellence:****
 - ***Prompt:** User inquires about the quality control measures taken by Mike.
 - ***Response:** ChatGPT introduces Mike's partnerships with laundry services and his mom's role in maintaining sweater quality.
8. ****Market Shift and Competition:****
 - ***Prompt:** User brings up the entry of big players and the impact on Mike's business.
 - ***Response:** ChatGPT discusses the challenges, the decline in retail sales, and Mike's adaptation strategies.
9. ****Adaptation Strategies:****
 - ***Prompt:** User inquires about Mike's shift to Etsy and other adaptations.
 - ***Response:** ChatGPT explores Mike's diversification into alternative platforms and the reasons behind it.
10. ****Innovative Collaborations:****
 - ***Prompt:** User introduces the collaboration with White Castle.
 - ***Response:** ChatGPT describes how this collaboration unfolded, including the marketing strategy and challenges faced.
11. ****Pandemic Impact and Diversification:****
 - ***Prompt:** User asks about the impact of the pandemic.

- *Response:* ChatGPT discusses how Mike diversified income streams with a chair refurbishment business and introduced new designs. 1
- 12. **Future Strategies:**
 - *Prompt:* User inquires about Mike's future plans.
 - *Response:* ChatGPT outlines Mike's vision, including expanding product lines, collaborating with brands, and targeting the corporate market.
- 13. **Conclusion:**
 - *Prompt:* User wraps up the case study.
 - *Response:* ChatGPT provides a summary of Mike's journey, highlighting his resilience and adaptability.

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- ² Ezra Klein, “This Changes Everything,” *The New York Times*, March 12, 2023 <https://www.nytimes.com/2023/03/12/opinion/chatbots-artificial-intelligence-future-weirdness.html?smid=url-share>
- ³ Ethan Mollick (@emollick) on X identifies three guides to the underlying technology for large language models (LLMs) for non-specialists at <https://x.com/emollick/status/1775355910761681177>
- ⁴ “Generative AI and the Case Method: ChatGPT & Beyond” and “Ambushed by AI and ChatGPT? Implications for the Future of Cases in Business-School Education.”

⁵ <https://www.dropbox.com/scl/fi/w3scfqr4ilc1gwtzazfjm/An-Ugly-Christmas-Sweater-is-a-Beautiful-Thing-v5-1.pdf?rlkey=mbbxsz8nvxschbbfyknspuo28&st=jxalflov&dl=0>

⁶ <https://www.dropbox.com/scl/fi/td1fh36nz2qkrwmkkeqgv/Chat-history-for-Mike-Golomb-s-ugly-sweater-case.pdf?rlkey=6lnz52g0ca7ubzaur2xym2onb&st=6zq8g3k8&dl=0>

⁷ Ezra Klein's prediction: "I think getting good at working with A.I. is going to be an important skill in the next few years." Ezra Klein, "Ezra Klein Interviews Ethan Mollick," The Ezra Klein Show, April 2, 2024, <https://www.nytimes.com/2024/04/02/podcasts/transcript-ezra-klein-interviews-ethan-mollick.html>

⁸ Klein, "Ezra Klein Interviews Ethan Mollick."

⁹ One prompt representative of this "rinse and repeat" tactic: "Revise this case, improving its narrative flow and style, but not abridging the case text or otherwise consolidating or shortening it. Here is the case text ..."

¹⁰ ChatGPT features a regenerate icon following each response; Anthropic's Claude provides a retry button.

¹¹ Cade Mertz, Cecilia Kang, Sheera Frenkel, Stuart A. Thompson, and Nico Grant, "How Big Tech Cut Corners To Harvest Data For Their A.I. Models," The New York Times, April 8, 2024 <https://www.nytimes.com/2024/04/06/technology/tech-giants-harvest-data-artificial-intelligence.html?searchResultPosition=4>

¹² Anchoring, in the context of AI and writing, refers to the cognitive bias where individuals rely too heavily on the initial piece of information offered (the "anchor") when making decisions. In writing, this means that the initial ideas, phrases, or structures suggested by AI can disproportionately influence the direction and content of the writer's subsequent work, potentially limiting creativity and critical thinking.