Rethinking Technology Adoption for Generative AI: Insights from a Case Study of Microsoft Copilot

Kristina Sen (kristina.sen@kuleuven.be) & Prof. Dr. Stijn Viaene (stijn.viaene@vlerick.com)

Introduction

Generative AI tools, like ChatGPT and Microsoft Copilot, emerge as potentially important workplace technologies (Bick et al., 2024). Generative AI tools like ChatGPT, GPT-4, Microsoft Copilot, etc., are "a class of machine learning algorithms that can generate new data from scratch, such as images, text, audio, or videos that are similar to existing data" (Prasad Agrawal, 2024, p. 636). These abilities endow generative AI with a significant promise of value for businesses and society (Prasad Agrawal, 2024). Many abilities of these tools are already being realized in knowledge work, for example, searching for information, brainstorming, structuring content etc. (Retkowsky et al., 2024). Beyond their potential uses for knowledge work, generative AI tools also promise future far-reaching innovation (Holmström & Carroll, 2025), which makes adoption of generative AI tools an important area for practice and future research (Prasad Agrawal, 2024).

Organizations are becoming more interested in using generative AI tools to their advantage (Holmström & Carroll, 2025). Despite the expanding user base of ChatGPT, organizational adoption of generative AI tools is not straightforward. Technology adoption more generally is "a complex, multifaceted process influenced by both technical capabilities and socio-organizational factors" (Al-kfairy, 2025, p. 11). In the case with generative AI tools, additional research is needed on their adoption and impact (Gupta et al., 2024), including developing new perspectives that take into account more nuances of their distinct features and impacts (Al-kfairy, 2025).

In light of this need to develop a more nuanced understanding of the adoption of generative AI tools, in this study, we ask, *should the adoption of generative AI tools be approached differently from that of non-generative technologies?* In response to this question, we conduct a case study studying the adoption of Microsoft Copilot in a large international biopharmaceutical organization. The organization started rolling out Microsoft Copilot in August 2024, with the adoption initiative being overseen by a support office driving the change management around it. Despite the tool being available at the organization and being easy to use, from the perspective of the support office, the adoption process has been slow. All available licenses for Microsoft Copilot have only been taken up in January 2025, with the organizational goal for Copilot adoption being set at employees performing two actions with Copilot per day.

Beyond the distribution of licenses, the support office provides group and individual training sessions as well as checkpoints for Copilot Ambassadors – an online meeting for individuals across the organization who took up a voluntary initiative to raise awareness about Copilot among their colleagues. This approach towards driving Copilot adoption is not against the advice of popular technology adoption theories. Yet, preliminary findings

show that performing actions with Copilot might not be reflective of individuals' decision to use Copilot in their work, or their adoption of Copilot. This might be explained by the different nature of generative technologies, requiring more work and initiative from users to figure out (1) what the desirable uses of Copilot for them can be, and (2) how to achieve desired results with it. These findings might indicate that organizations are in need of practical approaches grounded in a more nuanced understanding of what technology adoption means when it comes to generative AI tools.

Background

Theories to study the adoption of generative AI tools

The technology acceptance model (TAM) is one of the most influential models that specifies relationships between technology and its adoption by emphasizing individuals' perceptions of a technology innovation (Davis, 1987; Straub, 2009). TAM specifies two factors as determinants of adoption of a particular innovation: perceived usefulness and perceived ease of use. Perceived usefulness is defined as "the degree to which an individual believes that using a particular system would enhance his or her job performance" (Davis, 1987, p. 10). Perceived ease of use, in its turn, refers to "the degree to which an individual believes that using a particular system would be free of physical and mental effort" (Davis, 1987, p. 12). This theory has already been discussed as useful for studying the adoption of ChatGPT (Gupta et al., 2024). In line with this theory, users are more likely to adopt it if they believe it to be both useful and easy to use. The differences in adoption, then, would stem from individuals not finding it useful or finding it challenging.

The Unified Theory of Acceptance and Use of Technology (UTAUT) takes the probability of technology adoption to be underpinned by four factors: performance expectancy, effort expectancy, social impact, and facilitating conditions (Venkatesh et al., 2003). When it comes to applying this model to the acceptance of ChatGPT (Gupta et al., 2024), it is expected that performance expectancy and effort expectancy will be important in determining individuals' decisions to use the chatbot, as users expect it to be easy to use. Facilitating conditions would refer to whether all prerequisites for using ChatGPT are met and social impact refers to individuals being persuaded by others to use it.

The technological, organizational, and environmental (TOE) framework pinpoints the nature of technology and its perception by users (technology), internal context in which technology operates (organization), and external pressures influencing technology adoption (environment) (Awa & Ojiabo, 2016). This model is taken to be highly relevant to study the adoption of ChatGPT, as it takes a comprehensive view on the technological aspects of ChatGPT and its comparison to other available options, the internal capabilities and readiness of the organization, and the external influences on its adoption (Gupta et al., 2024).

The managerial implications from applying these theories to the study of the adoption of ChatGPT in organizations include focusing on (1) the technical aspects of AI implementation, (2) organizational culture, and (3) developing a skill set required for collaboration between humans and machines (Gupta et al., 2024). These recommendations,

however, do not take into account the different nature of generative technologies compared to other technologies (Schulz-Schaeffer, 2025) and are too high-level to take into account the different modes of engagement that generative technologies might require.

Peculiarity of generative AI tools

The different nature of generative AI tools has been outlined in comparing learned technologies with designed technologies (Schulz-Schaeffer, 2025). Designed technologies are characterized by their designers specifying their use in a specific context. The technologies' resulting features, while not strictly determining how they are going to be used, provide a suggestion for how they would be used. These technologies, lending themselves well to specific tasks, allow users to "instruct" them to play their part in a predefined task.

The features of generative AI, on the other hand, are not directly specified by technology designers (Schulz-Schaeffer, 2025). Instead, generative AI models obtain their features by learning. While the model's behavior is fine-tuned, the outcome of its interaction with users is not explicitly designed. Using generative AI tools, therefore, does not lend itself well to instructing them with a clear task distribution in mind. Using generative AI requires "interacting" with them to figure out what it can be useful for and how to get to a desired or useful response.

Generative AI tools, like ChatGPT and Microsoft Copilot, therefore, require users to switch to a different mode of interacting with them. That is evident in individuals reporting going through a process of tinkering when starting to use ChatGPT. Tinkering refers to "the activity of interacting with a technology in an iterative, trial and error manner" involving "hands-on exploration and adaptation, to figure out new solutions to problems that arise in the flow of use" (Retkowsky et al., 2024, p. 514). Needing to go through this process of back-and-forth with the tool, therefore, might affect what it means for users to adopt such a technology and the way organizations should approach their efforts of stimulating technology adoption.

Research Approach

This research-in-progress studies the adoption and use of generative AI tools in the context of the introduction of Microsoft Copilot in a multinational biopharmaceutical company. The company is focused on developing innovative medications and treatments, specifically focusing on epilepsy, Parkinson's disease, and Crohn's disease, employing 7,600 people in 2020. With a large majority of the organization engaged in knowledge-intensive work, generative AI and generative AI tools have been perceived to be of interest for the whole organization.

Within this case study, we have so far interviewed all representatives of the generative AI "support office," attended the information sessions provided through it, and worked on identifying and interviewing individuals who have used it or other generative AI tools to complement their work, going beyond performing several actions with it. This process

resulted in 26 semi-structured interviews with 4 representatives of the "support office" and 19 Copilot adopters, totaling 1804 minutes.

Preliminary findings

Top-down "admin" view on Copilot

The exposure to the company context and the interviews conducted so far reveal that Microsoft Copilot has been introduced and presented as an office support tool. The responsible support office measures the adoption of Microsoft Copilot in numerical terms by tracking the number of times individuals use it daily and weekly. At the same time, they view it as having a limited set of uses: "*Oftentimes, people don't really understand, Copilot is a basic tool. […] A use case for Copilot is how to write an email with Copilot."* The information sessions, reflective of this sentiment, focus on administrative and private-life demonstrations that would incentivize individuals to increase their usage of Copilot.

Resisting the central sharing of prompts

Individuals are also continuously encouraged to share new uses for Copilot that they identify, to make the support office aware but also so that the uses and prompts can be stored in a database available to everyone in the organization: "*[The "support office" representative] always tell us that if we have something, we should give it to her and then she can also report it and put it here."* At the same time, while individuals are aware of the prompt database, they are not keen to contribute to it or to use it: "*Going through the database, let's be honest, who really does this?"* or: "*It's not really a thing to go through [database name] and look through the use cases."*

Shadow AI use and going beyond admin uses

At the same time, despite the explicit prohibition of non-company-provided AI tools, individuals engage in both "shadow" AI use and in using Microsoft Copilot for "shadow" purposes: *"There are certain questions that in biology I will not be able to ask because I will disclose the target or disclose secrets. But [we] have the advantage that you can talk of [subject omitted] without revealing anything, because you don't need to reveal anything about the target.* […] *That means that you can ask ChatGPT or Grok or other tools without discussing any secrets."* And:*"It's a consumer tool, and that's my way to bypass many, many stakeholders. So that's maybe inherently also something that allows me to go fast, faster than any other department can support me with. We cannot have solutions wait one year until they are released, so we actually start leveraging more the consumer-oriented tools for purposes where it makes sense instead of going for long development cycles."*

Difficulties in learning from examples

Examples that are shared in ambassador meetings are difficult for individuals to translate to their own work context: "*It's specific to their workç and it's very helpful for them. But the use case doesn't help because I don't do that type of work."* And: "*I mean, they're very specific to their work. And it's really interesting, but I can never apply it because I don't do that task."*

These preliminary findings suggest a misalignment between how the adoption of Copilot is being stimulated, some of which might stem from the differences in the required mode of interaction with generative AI tools. Individuals are not interested in attending information sessions highlighting administrative uses for Copilot. At the same time, they cannot immediately translate more complex and contextualized examples to their own work. Rather than learning from what other people did, or using their prompts, individuals who started contextualizing Copilot for their purposes mention having time to experiment with it as the most important factor of using it in a contextualized way.

References

Al-kfairy, M. (2025). Strategic Integration of Generative AI in Organizational Settings: Applications, Challenges and Adoption Requirements. *IEEE Engineering Management Review*, 1–14. https://doi.org/10.1109/EMR.2025.3534034

Awa, H. O., & Ojiabo, O. U. (2016). A model of adoption determinants of ERP within T-O-E framework. *Information Technology & People*, *29*(4), 901–930. https://doi.org/10.1108/ITP-03-2015-0068

Bick, A., Blandin, A., & Deming, D., J. (2024). The Rapid Adoption of Generative AI. *National Bureau of Economic Research Working Paper Series*. https://www.nber.org/system/files/working_papers/w32966/w32966.pdf

Davis, F. (1987). User Acceptance of Information Systems: The Technology Acceptance Model (TAM). *Working Paper #529, University of Michigan*. https://quod.lib.umich.edu/b/busadwp/images/b/1/4/b1409190.0001.001.pdf

Gupta, R., Nair, K., Mishra, M., Ibrahim, B., & Bhardwaj, S. (2024). Adoption and impacts of generative artificial intelligence: Theoretical underpinnings and research agenda. *International Journal of Information Management Data Insights*, *4*(1), 100232. https://doi.org/10.1016/j.jjimei.2024.100232

Holmström, J., & Carroll, N. (2025). How organizations can innovate with generative AI. *Business Horizons*, *68*(5), 559–573. https://doi.org/10.1016/j.bushor.2024.02.010

Prasad Agrawal, K. (2024). Towards Adoption of Generative AI in Organizational Settings. *Journal of Computer Information Systems*, *64*(5), 636–651. https://doi.org/10.1080/08874417.2023.2240744

Retkowsky, J., Hafermalz, E., & Huysman, M. (2024). Managing a ChatGPT-empowered workforce: Understanding its affordances and side effects. *Business Horizons*, *67*(5), 511–523. https://doi.org/10.1016/j.bushor.2024.04.009

Schulz-Schaeffer, I. (2025). Why generative AI is different from designed technology regarding task-relatedness, user interaction, and agency. *Big Data & Society*, *12*(3), 20539517251367452. https://doi.org/10.1177/20539517251367452

Straub, E. T. (2009). Understanding Technology Adoption: Theory and Future Directions for Informal Learning. *Review of Educational Research*, *79*(2), 625–649. https://doi.org/10.3102/0034654308325896

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, *27*(3), 425–478. https://doi.org/10.2307/30036540