

How Do Employees Perceive AI's Role in Performance Evaluation and Skill Gap Identification?

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How Do Employees Perceive AI's Role in Performance Evaluation and Skill Gap Identification?

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Key messages

- This policy brief provides firm-specific insights into how employees perceive AI's role in deep performance monitoring and skill gap identification following the implementation of an AI-assisted coaching tool in their work environment.
- For this purpose, we conducted 22 semi-structured interviews with 12 employees from the same multinational private-sector company that implemented an AI-assisted coaching tool in their customer service department, interviewing most of the workers twice.
- In addition, we conducted a discrete choice experiment to examine if the AI-assisted coaching tool affected job satisfaction among call center agents.
- Qualitative findings indicate that AI collaboration enhances the coaching process by streamlining workflows and improving techniques, offering opportunities for skill enhancement, and elevating overall work quality.
- While employees appreciate the efficiency AI brings to coaching, they emphasize the continued importance of human interaction in their work.
- Despite a strong employee preference for AI-assisted coaching, our discrete choice experiment did not show a statistically significant positive effect on job satisfaction, nor did it indicate any significant negative impact.
- While this brief provides nuanced insights into individuals' perceptions of deep performance monitoring and skill gap identification, more research is needed to further understand the long-term impacts of AI in this regard and the optimal integration of AI with human coaching techniques.

1 Introduction

In recent years, the field of Artificial Intelligence (AI) has undergone rapid advancements, with organizations increasingly integrating AI technologies into their operations (Acemoglu et al., 2023). Its implementation is widespread, with companies leveraging AI to improve efficiency, drive innovation, and tackle complex problem-solving tasks traditionally performed by humans (Brynjolfsson et al., 2023; Dwivedi et al., 2021). These AI systems behave ‘intelligently’ by analyzing their environment and autonomously choosing the best actions to achieve certain goals (Levels et al., 2019).

The growing presence of AI across various application areas has already had a direct impact on human lives and well-being (Haenlein & Kaplan, 2019). For example, in environments such as call centers, AI-driven chatbots excel at handling customer inquiries and providing solutions, a task that previously required human agents (Albrecht et al., 2021; Brynjolfsson et al., 2023). These generative AI systems, a sub-area of AI, can generate creative output from learned data (Gmyrek et al., 2023). In call centers, they understand natural language, analyze customer requests, and offer relevant responses swiftly and accurately. This enhances efficiency and allows human employees to focus on more intricate or specialized customer concerns (Kahn et al., 2020). As these advancements continue, AI is increasingly reshaping the work landscape and, more importantly, the future of work (Brynjolfsson et al., 2024). While governments and international institutions develop regulatory frameworks for AI use (e.g., the EU AI Act) (European Parliament, 2024), the implications for workplaces remain unclear. This is likely due to the relatively low diffusion of AI technologies in firms, at least until recently, which has limited the available evidence on the consequences of AI deployment (Babina et al., 2024; Seamans & Manav, 2018). In particular, the effects of AI implementation on employees have largely been overlooked. Early evidence on the effects of AI on employees will help decision-makers to assess and anticipate the near future of work in a timely manner. Therefore, gathering early evidence on how such technologies are received by those they directly affect – the employees – is essential for informing timely and effective decision-making. This policy brief aims to provide firm-specific insights into how employees perceive AI’s role in deep performance monitoring and skill gap identification following the implementation of an AI-assisted coaching tool in their work environment.

Through a mixed-method approach, we conducted 22 qualitative interviews with 12 employees at the outset of the AI integration and followed up with additional interviews after five months. These interviews took place at a large financial organization in Europe that had recently implemented a new AI-assisted coaching tool in its call center in 2023. The introduction of the AI-assisted coaching tool aims to enhance objectivity and consistency within the coaching process. To identify patterns in workers’ perceptions, we analyzed the interview transcripts using the qualitative coding software, *ATLAS.ti*. Complementing the qualitative research, we conducted a discrete choice experiment (DCE) with 50 call center agents before the AI implementation and 61 agents five months after. This approach was used to assess whether AI has a positive effect on their job satisfaction.

2 Organizational setting, AI-use case, role characterization

The following section provides an overview of the organizational setting of the company, details of the specific AI-use case implemented within the customer service department and offers a characterization of the roles of the employees who participated in the interviews.

2.1 Organization

The company implementing the AI use case is a prominent financial organization in Europe. Their initiative to integrate AI into call center operations commenced in May 2023. The call center handles a variety of inquiries, including retirement planning, benefit disbursements, and general financial advice. Clients contacting the call center are typically participants in pension plans and retirees seeking information about their benefits. The call center comprises four distinct teams, collectively managing an annual call volume ranging from 400,000 to 500,000, with each call recorded for subsequent analysis and quality control. Each team within the call center is supported by two to three coaches, amounting to a total of 12 coaches overseeing a workforce of 100 to 120 call center employees. These coaches are tasked with providing guidance and coaching during scheduled sessions. Coaching sessions, recognized as essential for professional development by the company, are typically scheduled once a month, lasting between 30 to 60 minutes. However, the frequency and duration of these sessions are adjusted to address the specific needs and circumstances of the call center employees. This adaptive approach is particularly

advantageous for new employees who often require more frequent guidance as they acclimate to their roles within the organization. Conversely, employees with greater tenure and experience may benefit from less frequent coaching.

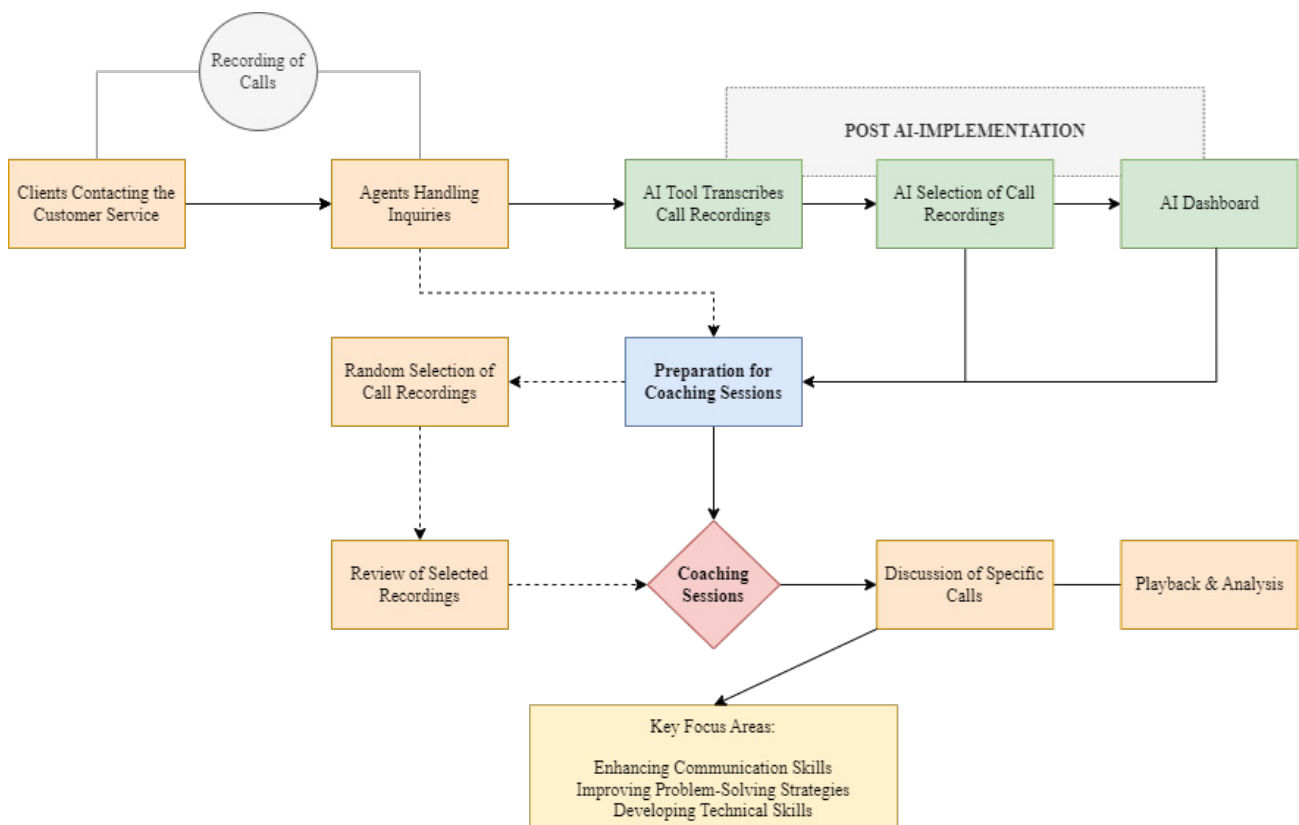
2.2 Situation before AI

Before the introduction of the AI tool, the coaching process was entirely manual. Coaches would prepare for coaching sessions by listening to a few randomly chosen recordings of interactions between call center agents and clients. During the coaching sessions, three specific calls were typically discussed, and coaches had the option to replay portions or entire conversations to analyze them more closely with the workers. However, this method had a significant drawback: the random selection of recordings introduced bias. An agent could be fortunate if the coach happened to select only their best conversations, leading to an incomplete evaluation of their performance. This randomness could prevent the identification of areas needing improvement, limiting the effectiveness of feedback and potentially missing opportunities for the worker's skill development and overall growth.

2.3 Situation with AI

For this reason, the company has implemented an AI-assisted coaching tool to enhance objectivity in the coaching process. This AI-assisted coaching tool not only records conversations but also transcribes them and utilizes algorithms to generate detailed, factual reports on the performance of call center agents during each conversation. The data is then systematically organized and stored in an online dashboard, giving coaches a clear and objective overview of each employee's performance. With this dashboard, coaches can efficiently prepare for coaching sessions, using the data to pinpoint specific areas for improvement. For instance, the dashboard can reveal if an employee frequently uses filler words. This structured method enables coaches to provide personalized feedback and focused guidance. Importantly, the AI tool primary function is to bolster coaching efficacy and promote ongoing enhancement in customer interactions, ensuring that AI acts as an instrument for employee development rather than a mechanism for appraisal or judgment. Figure 1 illustrates the coaching process, highlighting the main steps and components, with the green boxes indicating the new features introduced by the AI-assisted coaching tool.

Figure 1: Coaching Process before and after the AI-assisted Coaching Tool Implementation



2.4 Roles

We conducted interviews with coaches and call center employees in two phases to collect insights on the roles and experiences surrounding the implementation of the AI-assisted coaching tool. In the first wave, conducted in May 2023, we engaged twelve participants – eight call center employees and four coaches. These initial interviews provided valuable insights into the roles and responsibilities in the call center, as well as the coaching process and employee experiences at the onset of AI integration. In the subsequent wave, carried out in October 2023, we followed up with six of the original call center agents and four coaches, totaling ten participants. This second round of interviews enabled us to explore deeper into the themes and patterns that had begun to emerge from the earlier data, focusing especially on the adjustments and experiences linked to the ongoing application of AI in the call center. These discussions offered a comprehensive view of how the AI was reshaping roles and dynamics. Through this iterative data collection process, we achieved data saturation (Charmaz, 2014), where no new information or themes emerged regarding the AI implementation. This point of saturation marked the conclusion of our data collection phase.

3 How does the implementation of an AI-assisted coaching tool impact the work processes and quality of work of coaches?

First, we explored how the AI-assisted coaching tool influenced the work processes of coaches. Thereby, we investigated changes to the workflow and methodologies in coaching, assessing if AI streamlined processes or integrated new technologies that impacted strategic and operational aspects. Additionally, we considered how AI's integration might have shifted coaches' perceptions of employee development, exploring whether it enhanced employee growth, improved performance outcomes, or introduced challenges to the developmental process.

3.1 Work processes

It is important to acknowledge the initial challenges faced by all coaches during the AI tool's implementation. Specifically, the tool encountered functional issues, including a two-week delay in data processing, which presented challenges in the work processes for coaches. This delay impeded the effective coaching of new colleagues, as the information from two weeks prior often lost relevance due to rapid employee improvement. As a result, the feed-

back given lacked the timeliness and applicability necessary for impactful coaching.

“In the beginning, the AI tool wasn't immediately 100 percent operational. It performed poorly, and there were either no transcripts or they were too old. I couldn't coach based on conversations from three weeks ago.” – Coach

Furthermore, the introduction of this new technology created a learning curve that temporarily increased the workload for coaches. Adapting to the new system required them to invest additional time and effort to master the tool's functionalities. This was particularly evident during the first round of interviews, where most coaches expressed that learning and integrating the tool into their existing work processes increased demands. Once the initial glitches were resolved and everyone understood the system, the coaches' work processes improved significantly. The functionalities of the AI tool, such as automated analysis and timely performance reporting, enabled all coaches to work more effectively and efficiently. The system provided real-time insights, allowing coaches to respond more precisely and relevantly to the developmental needs of their colleagues.

“For me, it takes a bit longer to complete the preparation because of the AI tool, but after the preparation, I feel more ready. I really like the numbers. If the call center agent asks me a question or disagrees with something, I'll have an answer ready. Whatever I say, I know I come armed with data. It might take a bit longer, but I feel much more prepared.” – Coach

3.2 Quality of work

All coaches perceived that the quality of coaching sessions improved due to the AI system's ability to provide comprehensive and accurate data. By flagging specific aspects like filler words, the AI tool enabled coaches to deliver more precise and targeted feedback. This data-driven approach facilitated personalized guidance tailored to each worker's needs. The visual representation of performance trends helped coaches clearly illustrate areas of improvement to call center agents, leading to quicker behavioral changes and significant progress. Consequently, the coaches observed that coaching sessions became

more impactful, resulting in faster improvement among call center agents.

“I believe the quality of my coaching has improved significantly in this regard. Also, because the AI visually represents what I say, the impact on call center agents is greater, leading to faster changes.” – *Coach*

4 How do call center agents perceive the usefulness and trustworthiness of AI-assisted coaching, and how does it impact their well-being?

We investigated how call center agents perceive the usefulness and trustworthiness of AI-assisted coaching and its impact on their well-being. Thereby, we focused on understanding how employees feel about the AI’s role in their coaching sessions, particularly in terms of how much they trust the AI to provide fair, accurate, and relevant feedback. Additionally, we explored whether the AI’s involvement in coaching influences their well-being.

4.1 Usefulness and trustworthiness

In our case study, the AI tool did not directly reduce the workload for call center agents. Instead, by enhancing the quality of coaching, it indirectly shortened customer service calls as employees became more skilled in handling inquiries. Most agents noticed that calls were now briefer and more straightforward, leading to faster resolution times. This improved efficiency in meeting customer needs resulted in faster task completion, as calls were processed more rapidly, allowing for additional clients to be assisted. This, in turn, fostered a more productive work environment.

“I find the AI tool very useful because you can see exactly where your pain points are – whether it’s in this topic or in that topic. What’s my conversation time? You might complete a conversation in ten minutes, but it could also be done in five, which makes a big difference. It’s better for my average time, and I can help more people.” – *Call center agent*

Call center agents have noticed that the feedback they receive is now more constructive than before. The enhanced quality of coaching sessions, facilitated by the AI tool, enables coaches to provide

more accurate and useful feedback. With the AI tool objectively selecting conversations, employees have developed greater trust in the process, knowing that feedback is based on unbiased, data-driven insights rather than random selection. This increased trust allows employees to feel more confident that the feedback they receive is relevant and tailored to their specific developmental needs.

“My coach can now identify my pain points more easily with the AI tool because it used to be randomized. He just happened to select good conversations, which was lucky for me. But now, with the AI tool, he can spot my pain points more quickly, and those are addressed in our sessions. So, I actually learn more from my coaching sessions than before.” – *Call center agent*

4.2 Well-being

In the context of deep performance monitoring and the related employee well-being, perceptions varied among call center agents following the implementation of the AI-assisted coaching tool. Employees generally perceived that the tool provided them with confirmation of their performance, contributing positively to their sense of well-being. This validation allowed them to feel more secure in their roles and increased their confidence in their abilities.

“In the end, it’s also great that the AI tool makes it clear that your conversations are going well. In the beginning, I used a lot of filler words, but when you hear later that AI picks up on them less and less, you can see the quality improving over time. That does a lot for you personally.” – *Call center agent*

Some call center agents experienced the AI tool in a somewhat negative light, perceiving it as a source of additional scrutiny. However, they also acknowledged that, ultimately, they learned from the tool because it highlighted areas for improvement, leading to personal growth and skill development. Despite their initial reservations, they recognized that the AI tool’s objective feedback and performance insights helped them refine their abilities, enabling them to deliver better service and, in turn, derive personal satisfaction from their progress.

“My coaching might be a bit less positive than before, but I learn a lot from it. Ultimately, they become more positive as they notice I’m growing thanks to the tips. That’s very important.” – *Call center agent*

5 Does the new AI-based deep monitoring affect the job satisfaction of call center agents?

Lastly, we investigated if the implementation of the AI affected the job satisfaction of call center agents. Therefore, we asked the call center agents to participate in a DCE where they had to choose between two hypothetical jobs with random combinations of attribute values in which they felt most satisfied with their job. The first DCE was conducted before the introduction of the AI-assisted coaching tool (April 2023), and the second DCE took place five months later (September 2023). The call center agents in the treatment group had worked with the AI tool, while those in the control group had not.

Table 1: Overview of the attributes and respective situations.

Attribute	Situation A	Situation B
Coaching meeting with a senior once every two weeks based on...	A random selection of several conversations that are listened to together	An objective report on your performance generated by AI on all conversations conducted with the option to listen to some conversations
One-on-one coaching	32 hours per year	16 hours per year
Classroom training	32 hours per year	16 hours per year
Self-coaching (training on your own initiative)	32 hours per year	16 hours per year

5.1 Job satisfaction

The results from the first experiment showed no strong positive effect of AI-assisted coaching on job satisfaction (Figure 2). We expected to see a change in the second experiment among the call center agents who worked with the AI tool, but we still did not observe a positive effect of AI-assisted coaching on job satisfaction (Figure 3). Despite the lack of statistical significance, the data indicated an inclina-

tion towards traditional forms of learning and development. Specifically, call center agents expressed a preference for 32 hours per year of one-on-one coaching with peers, 32 hours of classroom training annually, and 16 hours of self-directed coaching per year. These preferences underscore a desire for human interaction and collaboration in their professional growth. This trend suggests that despite the integration of AI technology in workplace training, there is still value placed on personal and interpersonal learning experiences.

Next, we considered whether age could be a potential factor influencing the outcomes. Specifically, we explored if different age groups responded differently to AI-assisted coaching in terms of job satisfaction. However, we found no significant age-based differences in the results. This indicates that the effectiveness of the coaching methods applied was consistent across various age demographics, suggesting a universally applicable approach regardless of age.

Overall, the DCE’s did not reflect a positive impact on job satisfaction. Further research could explore the underlying mechanisms that contribute to these findings, and examining the long-term effects might provide deeper insights into the reasons behind job satisfaction.

5.2 Human aspect

In our DCE, it became evident that call center agents preferred more hours of coaching and training annually. This preference suggests that the human aspect still holds considerable importance in their professional development. This finding was further corroborated in the interviews, where agents consistently emphasized their desire for continued human interaction with their coaches, despite acknowledging the benefits of AI integration. The consensus among agents was that the AI tool is a valuable addition to the coaching process, enhancing it with data-driven insights and efficiency. However, they strongly emphasized that this tool should assist, not replace, human coaches. Agents valued the personal connection and empathy that human coaches provide – qualities they felt were indispensable and could not be replicated by AI.

“I view the AI tool primarily as a supplement, not as the main guide – the coach still plays that role. To me, it’s simply a positive enhancement.” – *Call center agent*

Figure 2: No positive effect of AI-assisted coaching on job satisfaction

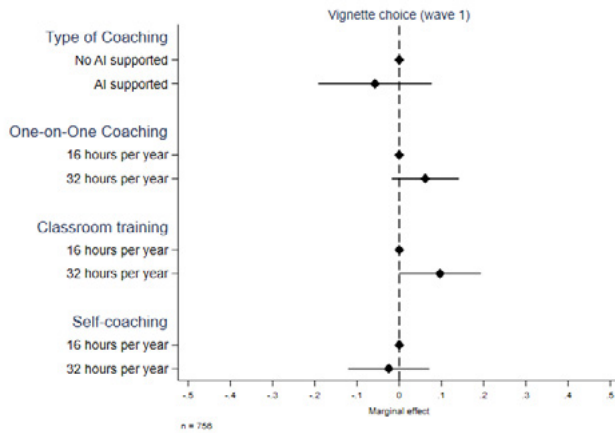
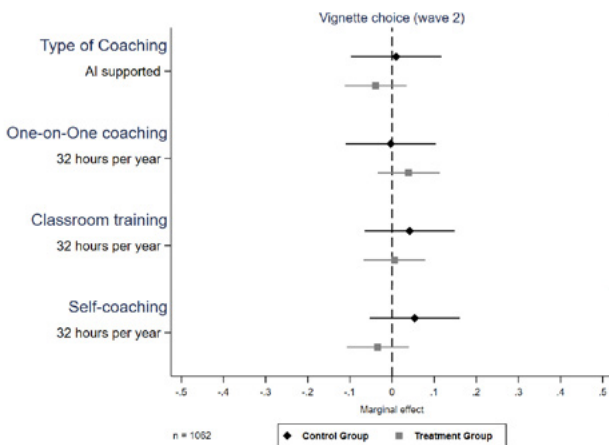


Figure 3: No expected positive treatment effect of AI-assisted coaching on job satisfaction



6 Conclusion

In our study focusing on the use of AI to assist coaches in training call center agents, we uncovered a complex and layered perspective among employees regarding the integration of this technology. Employees appreciated the numerous benefits brought by AI, including its ability to streamline coaching processes, provide real-time feedback, and analyze large volumes of interaction data to identify areas for improvement. These capabilities were seen as transformative, potentially increasing the consistency and objectivity of feedback, and enabling more targeted and effective coaching strategies. However, despite the evident advantages, there was a concurrent emphasis on the necessity of human interaction within the workplace. Employees expressed that an over-reliance on AI might lead to a reduction in personal

touch and empathy, which are critical in training environments. Call center agents valued the nuanced understanding and emotional intelligence that human coaches bring, which AI cannot fully replicate.

Although our DCE did not yield statistically significant results, it revealed interesting insights into employee preferences regarding job satisfaction. When asked to choose between two hypothetical job scenarios, call center agents showed a preference for coaching meetings that were based on 'a random selection of several conversations that are listened to together' (situation A). This preference highlights the importance of collaborative and interactive coaching sessions. We had expected that the positive outcomes observed in the qualitative research would also translate into a positive effect on job satisfaction through the use of AI. However, it is plausible that the framing of our DCE was not optimal, which might explain why no positive effect on job satisfaction was observed. If the scenario where an AI-generated report is used (situation B) was described as involving a joint discussion of the metrics, it is plausible that the results might shift. By explicitly stating that the AI-generated report would be discussed together, the scenario would likely address some of the concerns about the lack of human interaction, potentially making this option more appealing to call center agents. This suggests that while AI has the potential to greatly enhance coaching processes, the integration of AI tools must be carefully balanced with opportunities for human interaction. Ensuring that AI-generated insights are discussed collaboratively can help maintain the personal touch and empathy that employees find valuable. This balanced approach can lead to more effective coaching, higher job satisfaction, and better overall outcomes for both employees and the organization.

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