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Executive Summary

This Policy Analysis Exercise (PAE) was conducted for the Human Leadership Lab (HLL) and explores the intersection of Generative Artificial Intelligence and leadership development. We mapped how Generative AI (GenAI) tools are currently being used for developing leadership skills, and examined potential benefits and risks associated with their use.
The findings were translated into actionable recommendations for HLL regarding the integration of these technologies in their work.

Our research included an extensive overview of existing literature and use cases, as well as an analysis of interviews with 22 practitioners and academics from the leadership development, AI technology, and ethics fields.

Our findings revealed that AI is increasingly being used in simulations, as assistants for coaches, learning companions and advisors, with AI coaches also being developed.

Arguments for embracing Generative AI included increase in speed, scale, scope, and sophistication offering efficiency, democratizing potential, and benefits that are unique to AI tools. Key concerns regarding the integration of AI tools encompassed its potential to reinforce biases, create over-reliance on AI and job displacement, produce false or useless information, and the lack of emotional intelligence and accountability.

We recommend HLL to experiment with some Generative AI tools to:

(1) evaluate their practical application and effectiveness in their context,
(2) implement a feedback mechanism to evaluate the effectiveness of AI tools, and
(3) foster critical thinking among coaches and coachees.

We argue that Generative AI tools need to be developed with a commitment to cultural sensitivity and inclusivity, and that human-centered leadership organizations choosing to embrace such tools need to actively advocate for responsible AI development and deployment.

I. Introduction

Throughout history, technological advancements have impacted the ways we learn and teach. From the invention of the printing press or computers to the proliferation of the internet, each wave of innovation has impacted education. Today, Generative Artificial Intelligence emerges as the latest industry disruptor.

Over the course of our two-year graduate studies, we have witnessed firsthand Generative AI's transition from a novel concept to an integral part of our educational journey. From leveraging AI-powered chatbots to refine our negotiation skills and public speaking abilities to experimenting by juxtaposing our ethical decision-making with that of ChatGPT, Generative AI use cases have entered our Harvard classrooms. These personal experiences in its practical application served as a backdrop for this thesis, emphasizing the immediate relevance and transformative potential of Generative AI in reshaping how we learn.

AI has now also entered the field of leadership development, where Generative AI-powered tools and methodologies are increasingly employed to enhance the capabilities and skills associated with leaders. These tools, ranging from AI assistants to learning companions or AI coaches, are now used to automate managerial tasks and support learners in cultivating essential leadership skills and capacities like empathy, self-reflection, and negotiation. As the adoption of Generative AI accelerates in many domains, the implication for leadership development remains largely unexplored, presenting both opportunities and challenges to investigate for organizations specializing in leadership training and striving to navigate this new landscape. Our client, the ***Human Leadership Lab*** (HLL), stands at the forefront of this exploration, and seeks to understand, critically examine, and potentially harness the possibilities of Generative AI in cultivating human-centric leaders.

In this Policy Analysis Exercise (PAE) we aim to:

(1) examine the current state of Generative AI in leadership development,
(2) understand the rationale behind using Generative AI in this context,
(3) explore the potential benefits and risks associated with its integration,
(4) address ethical considerations, and
(5) identify recommendations for incorporating these insights into HLL's work.

By addressing these issues, we aim to help our client, HLL, make informed decisions and navigate the complexities of using AI in leadership development.

II. Background and Literature Review

To explore leadership development in the age of AI, we conducted an extensive literature review structured in three different phases. First, we investigated the definition of leadership to establish a clear foundation for our research. Second, we examined the current landscape of the leadership development industry and existing leadership programs. Third, we explored the impact of AI, more specifically Generative AI, in leadership development.

Human-Centric Leadership

This part of the literature review brought up a myriad of interpretations and themes around the definition of leadership that were challenging to distill into one. Marshall Ganz, Senior Lecturer at the Harvard Kennedy School, defines leadership as “accepting responsibility for enabling others to achieve shared purpose under conditions of uncertainty” (Ganz, 2023). Ganz’s definition underlines leadership’s dual nature: its personal aspect of taking responsibility and its relational aspect of “enabling” others to navigate “uncertainty” towards a common purpose. This view moves away from traditional command-and-control models to prioritizing adaptability, collaboration, and empowerment, which creates space for creativity and growth. Today's world is characterized by constant change – whether in societal norms, climate, markets, or technologies – and requires resilience and flexibility to navigate.

Ronald Heifetz, Senior Lecturer at the Harvard Kennedy School and creator of the Adaptive Leadership Framework, suggests that leadership should not be defined by a fixed set of personal characteristics but by the necessity to address challenges and by the work to be accomplished (Heifetz, 2019). The exercise of true leadership hence becomes essential in facing new challenges that demand learning and adapting to unfamiliar ways, rather than in routine situations where managerial skills suffice to solve problems. Heifetz highlights that leadership often involves unlearning established beliefs, risking departure from tradition and experimenting in new areas even without full competence. He describes leadership as an educative process aimed at mobilizing people to consider different points of view, clarify values, adjust relationships, redistribute power, and innovate progressively, all while managing failures en route to success. This perspective anchors leadership as an action open to anyone determined to address a problem and willing to engage others in overcoming it. It hence emphasizes the mobilization of individuals to innovate and develop new capacities, which democratizes the concept of leadership beyond formal authority or positions (Heifetz, 2019).

Several organizations have explored what type of leadership is needed: a 2023 McKinsey report suggests redefining “leadership for a new era” to meet the demands of today’s complex world in which “turbulence and disruption are the norm” (De Smet et al., 2023). According to the authors, “five fundamental shifts in mindsets and ways of working” among leaders are required: (1) beyond profit to impact; (2) beyond expectations to wholeness; (3) beyond the command to collaboration; (4) beyond control to evolution; and (5) beyond competition to co-creation. (De Smet et al., 2023)

Following a similar logic, Gartner HR identifies *human leadership* as “the next evolution of leadership” (Gartner, 2022). According to them, *human leaders* have three key traits. They are:

1. **Authentic**: acting with purpose and enabling true self-expression, for both themselves and their teams.
2. **Empathetic**: showing genuine care, respect, and concern for employees’ well-being.
3. **Adaptive**: enabling flexibility and support that fits team members’ unique needs.

Having leaders who master these qualities is defined as crucial for organizational success, as “these leaders’ teams have less turnover, higher engagement scores, and better well-being” (Gartner, 2022).

Lastly, a 2023 study by Harvard Business Publishing emphasizes the need for leaders at all levels to be able to navigate continuous disruption, enhance tech-savviness, humanize leadership in the digital age, and effectively lead hybrid work strategies (Harvard Business Publishing Corporate Learning, 2023). To tackle these challenges, the study suggests emerging approaches, such as integrating learning into daily life, engaging top leaders in training initiatives, cultivating adaptable authenticity among leaders, and actively building social capital and organizational culture in remote and hybrid settings.

Several key themes have emerged in this literature review on leadership: on one hand, uncertainty and the advent of new challenges – particularly, the rise of the digital world and the impact of COVID-19; on the other hand, adaptability, authenticity, empowerment, and creativity – which have been highlighted as essential human skills. This observation has guided us to anchor our project’s definition of leadership around the concept of *human-centric leadership*, emphasizing the importance of these human skills in navigating the complexities of contemporary leadership challenges.

Moreover, recent discussions in leadership literature, particularly human-centric leadership, have witnessed a shift from emphasizing “soft skills” to focusing on “human skills”. The attributes that are inherently human and difficult to replicate by AI, such as empathy, authenticity, adaptability, communication, teamwork, and ethical judgment, hence become a key part of our analysis. Human-centric leadership, which values and develops these skills, is crucial for navigating the rapid technological change and cultural diversity of a 21st-century workplace. In contrast, non-human-centric leadership that focuses on efficiency and results without prioritizing individual well-being and growth can hinder an organization’s ability to adapt and innovate in today’s fast-paced digital environment. This approach may lead to decreased employee satisfaction, engagement, and ultimately, organizational resilience and competitiveness (Wells, 2024).

The Leadership Development Industry

Big Market, Major Flaws

The leadership development industry is estimated to be valued anywhere from $77.9 billion in 2022 to as high as $366 billion (Khandelwal, 2024). In 2023, an executive coach charged approximately $350 per hour for organizations (Practice, 2023). While leadership training programs, such as workshops, webinars, and certificates, are attracting significant global investment – there is a consensus that many leadership development efforts fail to produce lasting results (Yemiscigil et al., 2023). This highlights a possible gap between investment and effective transformation in leadership skills. Boston Consulting Group (BCG) points out the ineffectiveness of traditional training and suggests a “design for adoption” approach that embeds skill and behavioral development into leaders’ daily activities (BCG Global, n.d.). Their strategy emphasizes practical application and executive coaching, with the intent to foster an organizational culture conducive to empowerment and agility. In a 2019 Forbes article, leadership coach Chris Westfall critiques the leadership industry for its generalized approaches and lack of customization, suggesting the success of leadership programs relies on tailored experiences that directly address organizations’ specific contexts and cultures (Westfall, n.d.). A Harvard Business Review article highlights that while the potential for positive impact on personal growth and organizational performance exists, achieving tangible results requires a focus on comprehensive development, practical application, and adaptability to stress, among other strategic changes (Yemiscigil et al., 2023).

The literature review hence clearly highlights that the leadership development industry faces critical challenges that undermine its effectiveness, namely (1) a lack of long-lasting behavioral change, (2) training programs isolated from participants’ daily work, (3) a one-

size-fits-all approach that fails to account for organizational context and culture, (4) an overemphasis on theoretical reflection over practical application, and (5) the underestimation of the influence of organizational culture. These limitations highlight the necessity of a more integrated, customized, and holistic approach to leadership development.

Our PAE client, the Human Leadership Lab (HLL), is a forward-thinking organization in the leadership development industry, that is dedicated to bridging the gap between theoretical knowledge and practical application. Founded by May Samali, HLL advocates for a human-centric leadership model, anchored in adaptability, bravery, and compassion, for engaging and innovating in today's organizations (Human Leadership Lab, 2024) .

Types of Leadership Development Programs

The objective of leadership development is to provide leaders with the necessary tools, behaviors, and mindsets to effectively lead their teams and organizations. Several factors influence the choice of leadership development, including the purpose of the training, context, learner, duration, region, industry, and whether it is online or in-person (Khandelwal, 2024). Different types of leadership development approaches emerged in the literature review:

- ⇒ Online trainings that utilize digital platforms for self-paced leadership development (e.g. Coursera and LinkedIn Learning).
- ⇒ Digital development platforms that use AI and other tools for personalized coaching and mentoring (e.g. Torch and BetterUp).
- ⇒ Consultancy-led strategic leadership initiatives that offer tailored workshops, coaching, and leadership transformation programs aligned with strategic objectives.
- ⇒ Academic and executive education programs that offer in-depth courses blending academic research with practical training, provided by institutions such as Harvard Kennedy School and MIT Sloan.
- ⇒ Personalized coaching offered by consultants that focus on developing leaders through one-on-one or small group coaching or tailored workshops, either internally within organizations or through external professionals.

Moving Inward for Outward Changes

Leadership development programs are increasingly emphasizing the significance of inner transformation as a catalyst for systemic change.

MIT's Otto Scharmer, co-author of "Leading from the Emerging Future", urges for "a shift in our paradigm of thought and a shift in consciousness from an ego-system to an eco-system awareness" (Presencing Institute, n.d.). He links an individual's awareness and behavior to systemic issues like social and ecological crises (Presencing Institute, n.d.).

"The Spirit of Leadership" by the Leadership Circle Profile presents an in-depth approach to leadership development that, influenced by adult development theory and the work of psychologist Robert Kegan, highlights the dual importance of expanding leaders' mindsets alongside their practical skills. It encourages a transformative journey that alters how leaders view themselves, their roles, and the larger environment, encouraging them towards more adaptive, growth-oriented mindsets suited for managing complexity and initiating change. This approach focuses on developing essential skills, competencies, and behaviors that drive visionary leadership and organizational success and advocates for a balance between internal growth and external skill development for genuine leadership effectiveness (Anderson, n.d.).

Similarly, the Inner Development Goals (IDG) Framework addresses the necessity of inner transformation alongside external action to tackle global challenges effectively (IDG, n.d.). By identifying a gap in current global sustainability efforts, the IDG Initiative aims to support the United Nations' Sustainable Development Goals through fostering personal growth. The framework, based on comprehensive interdisciplinary research, defines 23 essential skills across five dimensions – Being, Thinking, Relating, Collaborating, and Acting – to guide personal and collective progress towards sustainable change (IDG, n.d.).

Building on the themes of inner transformation and comprehensive skill development in leadership, Heifetz's concept of adaptive leadership (mentioned in the "Human-centric Leadership" section) further enhances our understanding of what effective leadership entails: it requires a willingness to learn, unlearn, and relearn.

Generative AI and Leadership

Artificial Intelligence

AI denotes a machine's capability to perform tasks that typically require human cognitive functions, such as learning, problem-solving, and decision-making (McKinsey, 2023). Historically, humans have relied on machines to enhance productivity and ease of life, from the invention of the wheel to modern robotic assembly lines. The progression towards intelligent machines was significantly influenced by 20th-century pioneers who envisioned

machines that could perform tasks at unprecedented speed. Today, with AI permeating everyday life, from voice assistants to customer service chatbots, AI's value lies in its application to support human tasks.

Within AI, machine learning and deep learning represent two advanced subsets. Machine learning involves algorithms trained on data to recognize patterns and make predictions, which has become increasingly essential with the overwhelming volume of data generated today. Deep learning, a more sophisticated form of machine learning, utilizes neural networks to process and learn from data in more complex ways, simulating human brain functions. McKinsey's research across hundreds of use cases demonstrates that nearly all sectors stand to benefit from machine and deep learning, highlighting AI's transformative potential across the business landscape (McKinsey, 2023).

Generative Artificial Intelligence

Generative AI, with technologies like ChatGPT, Claude, and Gemini, is part of the broader AI and machine learning landscape. It is designed to respond to prompts with newly generated content ranging from text to images. The review of literature showed that several businesses believe they stand to gain significantly from Generative AI's capabilities, especially with tasks like automating content creation processes, enhancing marketing strategies, and even supporting complex IT and R&D functions (McKinsey, 2024). However, Generative AI also comes with its set of challenges: recent examples have shown its outputs are sometimes misleading, plagiarized, or exhibit bias, reflecting the flaws of the data used in training these models (Robertson, 2024). The rapid advancement and embrace – in a "laissez-faire" approach – of AI technologies also poses potential challenges surrounding the integration of Generative AI in company operations. As AI continues to evolve, companies that effectively navigate these challenges and opportunities can take advantage of the power of Generative AI to innovate in their respective fields (McKinsey, 2023).

Generative AI and Leadership

The literature review reveals that AI plays an increasing role in learning and development (L&D). Some organizations highlight Generative AI's potential to enhance L&D through personalization and scalability. For example, The World Economic Forum discusses AI's capacity to support the development of a diverse and future-ready leadership pipeline, emphasizing the importance of accessibility and quality in L&D processes (World Economic Forum, 2023). Coaching companies like BetterUp argue that AI helps to scale and optimize for leadership development, given that it allows to "reach more people with the same resources" (Hancock, 2024). AI could hence contribute to breaking down traditional barriers

in education and training, which could also cascade to leadership development. Analysis further indicates that AI can streamline the identification of essential leadership competencies by analyzing vast datasets, including job descriptions and employee feedback (OriginBluy, 2024). This data-driven approach enables the creation of personalized development plans that could facilitate a leadership training closely aligned with both individual needs and organizational goals (Cowherd, 2023).

An article from Berkely Executive Education stresses that, in the field of leadership development, organizations must ensure the deployment of AI tools aligns with their core objectives and addresses security concerns (Berkeley Exec Ed, 2023). The article portrays AI as a tool that must be harnessed to maintain a competitive edge, as it enhances efficiency, innovation, and customization, and revolutionizes corporate fields such as decision-making, customer experience, operational efficiency, risk management, and more, with examples including IBM Watson, Adobe Experience Cloud, and UiPath (Berkeley Exec Ed, 2023). The benefits of AI in leadership could potentially extend to improved decision-making confidence, increased job satisfaction, reduced burnout, and a more harmonious workplace environment, but one must also acknowledge AI's challenges such as misinformation and biases within these systems (Berkeley Exec Ed, 2023).

The literature we examined suggests a potential role for AI in leadership development through personalized learning, efficient competency identification, and performance analysis. It is also worth noting that the integration of Generative AI in leadership development, particularly in coaching and leadership training, is a nascent field with limited data and reports. Despite claims by some companies of utilizing AI in leadership coaching, there is a notable scarcity of documented evidence or studies detailing AI's effectiveness in this specific application. This gap in the literature suggests a need for further research and documentation to examine and critically assess AI's role and efficacy in developing human-centric leadership skills, as well as the potential benefits and challenges of using it for different use cases.

III. Key Challenges and Problem Framing

This section will describe the key challenges we have identified with regards to leadership development and Generative AI. We also highlight considerations that are important for our client, the *Human Leadership Lab*.

The State of Leadership Development: "High Demand Low Supply"

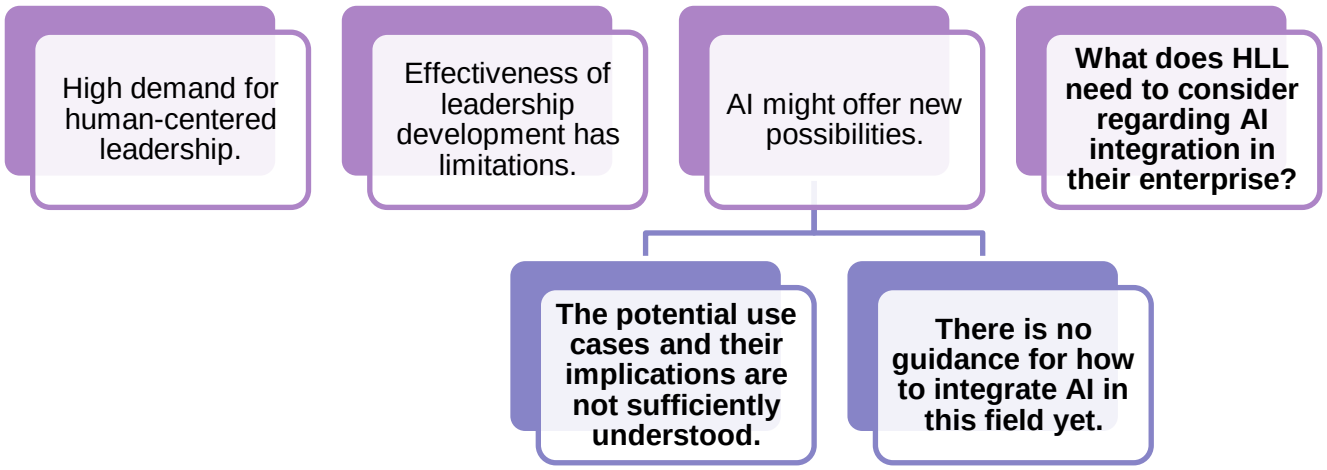
Leaders today are expected to navigate complex social environments, which translates into a growing demand for leadership development trainings (Moldoveanu & Narayandas, 2019), that focus on developing human-centric leaders who are authentic, empathetic, and adaptive (Gartner, 2022).

The literature review revealed several barriers to achieving this in the current leadership development landscape, namely: **misalignment, inaccessibility, and ineffectiveness.** There is a gap between the status quo and the aspired reality: Despite working with leadership coaches, organizations often do not get leaders that are "sufficiently human-centered" because current training programs either fall short in developing these qualities or are inaccessible.

First, many leadership programs are still rooted in traditional top-down approaches or use one-size-fits-all approaches. Such misalignment with organizations' needs means that what is being taught does not equip leaders with the capacities that are currently required, nor does it account for the unique contexts and cultures of different organizations. Second, leadership coaching, which can be considered a more effective alternative to generic training programs, is usually not accessible due to high costs and the limited availability of quality coaches. This lack of accessibility prevents widespread adoption of human-centric leadership coaching. There is also a growing concern about the overall effectiveness of leadership coaching programs. Despite significant investments, many programs fail to produce meaningful behavioral changes in people.

These challenges showcase the need for a shift towards more accessible, effective, and human-centric leadership training programs for people and enterprises. It also poses the question, whether Generative AI could help address parts of these challenges.

Figure 1: Considerations for AI Integration in HLL's work



Key Challenges Linked to Generative AI

According to proponents of its integration, Generative AI provides an unprecedented opportunity to increase access to leadership training, providing personalized learning experiences at a lower cost (Hancock, 2024). While Generative AI seems to offer promising avenues for innovation and access, the risks associated with its deployment must be first understood. The key challenges associated with its use, particularly from a human-centric leadership perspective, include bias, privacy, misinformation, reliability, anthropomorphization, and job displacement amongst others.

First, Generative AI can inadvertently reinforce existing inequalities and injustices by perpetuating biases present in the data it was trained on (Ferrara, 2023). This can lead to discriminatory outcomes in areas like hiring, lending, and criminal justice. Second, the collection and use of personal data by Generative AI systems raise concerns about privacy breaches and misuse of information (Hancock, 2024). Next, AI systems can generate incorrect or misleading information – known as “hallucinations” – which poses risks in application scenarios where accuracy is critical. Even worse, there have been reported instances in which Generative AI tools have generated harmful content (Baxter & Schlesinger, 2023).

The anthropomorphization of AI, which refers to people’s “tendency to attribute human-like traits to non-human entities” (Deshpande et al., 2023) like Large Language Models (LLMs), might lead to unrealistic expectations or overreliance on AI for emotional support or decision-

making. Moreover, the automation of tasks by Generative AI could lead to job losses, particularly in sectors where tasks can be automated, which raises concerns about economic inequality and displacement.

Responding to the Emergent Trend: A Challenge for Human Leadership Lab

The emergence of Generative AI in the field of leadership development raises many questions. Organizations like Human Leadership Lab are debating whether they should integrate AI into their training and face the dilemma of wanting to leverage AI's potential without fully understanding its impact on leadership development processes.

In their quest to accommodate or adapt to change, (see Ganz' framework in the Methodology section), HLL needs to identify the right blend of AI applications that can supplement rather than replace the human elements of their leadership training, while maintaining integrity and ensuring high quality services. Without robust ethical guidelines and governance in place, AI-driven leadership development might prioritize efficiency and profitability over human-centered growth, or even risk causing harm due to unintended consequences.

Considering this challenge, our research aims to explore the following question:

What does HLL, an organization that is committed to developing human-centric leaders, need to consider when it comes to integrating AI in their work?

To answer this question, we will examine potential risks, benefits, and implications associated with using AI in enterprise leadership development.

IV. Sources and Methodology

4.1. Sources of Information

Our research relies on a comprehensive approach: the review of existing literature, the observation of practical use cases, and the analysis of insights gained from a series of interviews.

Existing Literature

Our research relies on an extensive literature review that was conducted in three distinct phases. (1) Our initial phase focused on defining leadership to ensure a coherent understanding of leadership throughout our study. (2) We then assessed the current state of the leadership development industry by reviewing existing programs and examining the methodologies employed in leadership training across multiple methods. (3) Lastly, we investigated the specific impacts of both AI and Generative AI on leadership development.

Observing Use Cases

Our research also relies on real-world applications of AI in leadership development. We researched several leadership coaching companies that have already integrated AI into their services and conducted multiple outreach efforts for interviews and information. Our goal was to gather and analyze – even potentially shadow – any available use cases where AI has been used in leadership development coaching and programs. This investigation aimed to uncover practical examples of AI's application in enhancing leadership capabilities and to understand the tangible benefits and challenges of implementing AI in this context. However, this aspect of our investigation was limited due to the lack of responses from the companies we contacted, despite multiple outreach efforts. The scarcity of observed on-the-ground examples in our research presents a limitation in painting a full picture of how AI is practically playing out in the business world.

Interviews

Our research relies on 22 interviews as the primary source of findings. Please refer to the Methodology section for more information on the interview process (also, refer to Appendix B for an overview of the response rate of people we contacted for interviews).

4.2. Methodology

This PAE aims to delve deeply into the specific questions of (1) whether and how generative AI can contribute to human-centric leadership development and (2) how the integration of Generative AI tools could look like for HLL. The focus is on exploring Generative AI's capacity not just to automate or enhance efficiency but to contribute to the growth of leadership qualities that are inherently human, such as empathy, creativity, adaptability, and strategic thinking. Our methodology aims to address the gap between the technological potential of AI and the practical needs of developing leaders who can navigate the complexities of modern organizational landscapes with a human touch. This exploration could help shape policies and strategies that would leverage AI's strengths while ensuring that leadership development remains deeply rooted in human values and capabilities.

Interview Methodology

Semi-Structured Interviews

Our research relies on semi-structured interviews as the primary method for data collection. The purpose of this choice is to allow for enough flexibility to accommodate the exploratory nature of our research, especially given the newly emergent state of Generative AI within leadership development and the lack of data on AI's impact, concerns, and opportunities in this specific area. This method enabled us to "test the waters" and gauge several experts' reactions to the introduction of AI in leadership development.

Sample Selection and Size

To ensure a holistic understanding of our research question and consider both theoretical and practical arguments, we gathered a sample of experts from three different groups:

i. Experts in leadership development and human-centered leadership (e.g. leadership professors and professional coaches).
ii. Specialists in the intersection of AI/technology and education (e.g. EdTech startup founders, teachers).
iii. Thought leaders focused on the ethics of AI and human interactions. (e.g. Philosophy of Technology professors, and practitioners).

The selection of participants was done by a combination of purposive and snowball sampling methods. Based on the principle of saturation, we decided to stop conducting interviews once no new information emerged from subsequent ones.

In selecting participants, we leveraged referrals from our advisor, Julie Battilana, and key contacts provided by our client, HLL. We also did an extensive and targeted outreach through LinkedIn and professional networks. Out of 70 individuals contacted across the specified categories, we received 3 rejections and 22 confirmations, with the remainder not responding. Despite efforts to ensure diversity, we observed a male-dominated representation within our sample.

Conducting Interviews

- During the preparation process, we crafted an interview guide (see Appendix A) that aligned with the specific questions of our research.
- To accommodate the preferences and availability of participants, our interviews were conducted either in-person or via Zoom, depending on geographical and time zone considerations.
- The interviews' duration typically ranged from 30 to 45 minutes.
- With explicit consent from interviewees, Zoom interviews were recorded, and in-person interviews were audio-recorded using a mobile device. The transcription of interviews was done using Otter.ai.

Ethical Considerations

- Consent: Informed consent was obtained from all participants prior to recording, ensuring transparency and voluntary participation.
- Anonymity and Confidentiality: We assured respondents of the anonymity of their responses and sought explicit consent via email before quoting any part of the interviews directly.
- Ethical Approval: The research adhered to the ethical guidelines set forth by Harvard Kennedy School's guidelines.

Data Analysis

The analysis of the interviews was conducted as follows.

- **Step 1:** The interview transcription was done using Otter.ai to ensure accuracy and efficiency.
- **Step 2:** The qualitative coding of interviewee responses was conducted on Dedoose, under a structured set of categories:
    - Leadership qualities
    - Opportunities around AI
    - Concerns around AI

- AI surpassing Human capabilities (AI > Human)
- Human surpassing AI capabilities (Human > AI)
- Qualities and skills potentially cultivated by AI
- Use cases
- Recommendations on AI policy
- Notable quotes
- Items flagged for further review

- **Step 3:** The data was then exported to Excel for comprehensive sorting and analysis. For example, the category "Concerns around AI" contained 72 excerpts. These excerpts were then examined closely to identify key themes and repeated keywords for further analysis, e.g. hallucinations, bias, fear, dependency, profit, etc.
- **Step 4:** We then categorized our research findings in a coherent narrative of the prevailing trends, opportunities, and challenges (please refer to the Analysis section).
- **Step 5:** We asked explicit permission from our interviewees to use their quotes in our report and made sure to attribute their contributions only upon receiving their consent.

Limitations

We acknowledge the limitations that may impact the robustness and applicability of our findings. Some limitations are inherent to this interview-based methodology, including the possibility of biases, challenges in the generalizability of findings, and the interpretation of qualitative data. A notable limitation is the lack of diversity among our participants. 13 out of 22 our interviewees are male (59%), 21 out of 22 are based in the United States (95%) and 14 out of 22 are affiliated with prestigious institutions (64%). This geographic and institutional concentration together with the absence of a broader range of voices in terms of gender, race and cultural backgrounds bear the risk of echoing a homogeneous narrative. We are aware of these gaps and emphasize the importance of seeking broader perspectives for a more well-rounded understanding of this newly emerging field.

Marshall Ganz's Framework for Navigating Change

The literature review revealed two primary issues. Firstly, there is an observable inefficiency and ineffectiveness in current leadership development programs. Secondly, the integration of AI in leadership development has sparked debates regarding its ability to address this gap, with some questioning its current state of readiness. Using Marshall Ganz's Public Narrative

Framework, we consider four possible approaches for dealing with AI as a disruptive change:

1. **Reject Change**, to ensure continuity: A complete refusal to incorporate AI in human leadership development in order to keep the reliance on established methods and avoid unproven technologies. This approach may risk missing out on AI's potential benefits, such as increased efficiency and innovation, which may result in falling behind in an evolving technological landscape.

2. **Accommodate Change**, to enable continuity: AI integrates leadership development passively, without deliberate guidance or regulation. A potential benefit of this approach could be the organic evolution of AI's role in leadership, allowing for observation and gradual adjustment. However, this laissez-faire approach may lead to possible ethical or practical challenges due to the lack of clear regulation.

3. **Adapt to Change**, to enable change: AI is seen as a potential assistant to traditional leadership training, e.g. as a chatbot negotiation partner, within an ethical context. Proponents of this approach suggest a collaboration between human expertise and AI's efficiency would encourage innovative training modalities while preparing for a future where AI is intertwined with everyday functions.

4. **Reject Continuity**, to ensure change: This narrative suggests letting AI fully assume control of leadership development, e.g. as a virtual AI coach, which could maximize efficiency and cost-effectiveness. While it potentially offers scalable and accessible leadership training solutions, this approach poses the risk of sidelining ethical considerations and the intrinsic human elements of leadership.

Considering these perspectives and different approaches to the emergence of Generative AI as a potential tool for leadership development, our PAE will explore what it would look like to embrace this change either by **accommodating or adapting** to it. We anchor our exploration on these two approaches because several leadership coaches and companies have either already started using AI tools in their work or are considering it. Organizations like HLL need support in critically assessing the potential risks, benefits, and implications associated with integrating AI in their attempt to develop human-centric leaders.

V. Analysis and Findings

5.1. Use Cases

We started our analysis by mapping existing use cases that show how AI has been used in the learning and development industry, including in leadership trainings. The use cases we found have varied from children using AI to generate visual image stories based on their verbal descriptions to adults facing loneliness finding company in AI-powered companions. These cases, involving vulnerable groups, require particular ethical consideration. For the scope of this research, we will focus on use cases that are relevant for the cultivation of human-centric leaders. The practical Generative AI applications that have been repeatedly described include simulations, and AI being used as an assistant, learning companion, advisor, and coach. We describe each use case and the rationale behind its application.

Simulations powered by AI

The use case we have encountered most often involves AI-powered simulations, either through chatbots or Virtual Reality (VR). Today, it is possible to assign a role or persona to a Generative AI tool and define a specific scenario. By creating such role plays, simulations become an "immersive training" that allows people to practice their skills in different situations[1]. Concrete examples that were mentioned in interviews to demonstrate how Generative AI can simulate interactions for practice included difficult conversations, negotiations, fundraising, diversity trainings, and dealing with upset customers. These scenarios aim to replicate real-world situations, allowing users to experiment with different responses and styles, gain new insights, and practice relevant skills (e.g. giving a speech, negotiating, listening, managing across differences). According to one interviewee, a VR training program used by Walmart was successful in helping employees improve in empathy, customer service skills and the ability to manage other people's emotions. Another respondent even flagged the possibility of using virtual environments to create social scenarios in which "one can have personas across the political spectrum, [..] different hierarchies, or even implement certain economic policies" to see how others might react. This could enhance our capacity to "be integrative to solve social problems"[2].

AI as an Assistant for Coaches

Interviewing leadership development coaches highlighted some of their uses of AI to assist them. For example, some reported that Generative AI is useful for generating tailored

[1] Interview with Dan Schwartz, conducted on Zoom, March 26, 2024.
[2] Interview with Mathias Risse, conducted in person, February 23, 2024.

questions for their coaching conversations; analyzing transcripts of conversations and coming up with key takeaways; developing new training programs, cases, workshops, and webinars; and providing suggestions for content improvement. One leadership coach also mentioned the possibility of using deepfake technology in the future to create instruction videos featuring their own image delivering content. The coaches mentioned that using AI as an assistant for these tasks freed up time that allowed them to focus on where "their unique added value is" – doing the "deeply human work" of using their "hypersensitivity" to decipher if people are ready to be challenged or not yet[3]. One leadership company shared using AI for analyzing assessment data of coachees (e.g. strengths, leadership style etc.) to provide tailored recommendations.

AI as a Learning Companion

Another use case that emerged showcases Generative AI as a "personalized learning companion"[4]. In this scenario, an AI tool provides tailored recommendations or insights based on learning progress. One example is Khanmigo, an "AI-powered teaching assistant, [that] is designed to think and respond like an educator" (Khan Academy, n.d.).

Today, Generative AI has the capacity to engage in conversations and provide counterarguments and feedback, which could help users improve their communication skills. Even platforms like LinkedIn Learning now use AI to personalize learning by customizing development paths for leaders based on their roles, interests, past behaviors, and learning needs. Education institutions like Harvard University have started offering "tutor bots" and "answer bots"[5] that aim to enhance the learning experience by answering questions or providing additional information on specific topics. Harvard Business School's AI co-pilot, "ChatLTV" showcased how chatbots can be used to practice course-specific terminology (Bussgang, 2023). According to one leadership coach we interviewed, such chatbots could enhance analytical skills through the application and clarification of concepts from particular leadership frameworks like Adaptive Leadership.

AI as Advisor and Coach

Another use case scenario that has been flagged portrays Generative AI as an "advisor" that "will make suggestions just like the human advisor"[6]. Based on the historical insights of other leaders' past decisions and experiences, Generative AI can be used to assist in certain

[3] Interview with Leadership Trainer (anonymous), conducted on Zoom, March 25, 2024.
[4] Interview with Satya Nitta, conducted on Zoom, March 4, 2024.
[5] Interview with Simeen Mohsen, conducted on Zoom, March 28, 2024.
[6] Interview with Bruce Schneier, conducted in person, March 20, 2024.

leadership decision-making instances, as one interviewee suggests. Some companies already offer, or are starting to develop, AI coaches, as an interviewee working in the industry highlighted. In this scenario, Generative AI is being programmed to take on the role and tasks of a human coach, e.g. engaging in coaching conversations.

AI as a Mirror

Another practical application that we explored, "AI as a mirror", is inspired by a use case at Harvard's Graduate School of Education, where students compared their analysis of a given ethical dilemma case study with the response of ChatGPT (Karout & Harouni, 2023). Generative AI can hence be used as a reflective tool that can help individuals recognize and understand the limitations of their habitual ways of thinking and interacting with others[7].

Tools for Enhancing Emotional Intelligence

New technologies like sentiment analysis claim to assist people in better recognizing emotions by using devices like Google Glass to identify and label emotions observed in others. Affective computing makes it possible for AI to analyze emotions through facial expressions and tone of voice, which could be useful for people who struggle with recognizing emotions including people on the autism spectrum[8].

5.2. The Potential of Generative AI in Learning and Development

This section summarizes the key arguments *for* using AI in learning and development settings that were shared by the interviewed practitioners and scholars in these fields.

One of the most compelling arguments for the adoption of Generative AI is its "potential to transform the dimensions of **speed, scale, scope, and sophistication**" in various domains[9]. In the leadership development field, this means that AI could help make processes like curricula development faster, broaden access to knowledge and coaching for (leadership) skills, help reach "thousands of leaders", and in some use cases, even reach a level of sophistication that surpasses human capabilities.

The "**efficiency argument**" suggests that by automating specific "technical tasks", Generative AI enables coaches and educators to focus on the more human-centric aspects of coaching, and therefore, "increase productivity" and impact. As Gouri Maheshwari,

[7] Interview with Dana Karout, conducted in person, March 26, 2024.
[8] Interview with Dan Schwartz, conducted on Zoom, March 26, 2024.
[9] Interview with Bruce Schneier, conducted in person, March 20, 2024.

representative of a leadership development company that is starting to integrate AI in their services, argued: "[Generative AI] is going to help you move faster in life, be more automated, get results, be better and more efficient at work"[10].

The "**democratizing potential**" of Generative AI was repeatedly highlighted by several interviewees. According to Satya Nitta, founder of a deep tech Generative AI company, "the holy grail is [a] personalized AI companion for anyone anywhere." A sociologist and leadership trainer we interviewed, who founded a leadership consultancy firm, noticed Generative AI's potential of "reaching more people and democratizing the access to our teaching"[11]. Giving the example of people with language barriers, Ian Sato, education program manager at the Stanford Institute for Human-Centered Artificial Intelligence, notes that with AI, people now "have access to knowledge in a different way than people had before. By providing personalized learning experiences and coaching at scale, AI can reach individuals who might not have had access to such opportunities otherwise"[12]. In addition to these benefits, Generative AI offers asynchronous learning opportunities as is encapsulated by this idea: "I can talk to this thing anytime – it's available 24/7"[13].

Several interviewees shared reasons why using Generative AI tools might be preferred over relying on humans in certain instances and for certain tasks:

1. **A judgement-free "safe space":** AI can provide a safe environment for individuals, particularly those who are introverted or anxious, to practice skills like negotiation or delivering tough messages without having to worry about "hurting its feelings"[14] or being judged. Additionally, it might be easier for some people to accept its feedback, given they do not describe judgment onto AI[15].
2. **AI surpasses human capabilities in certain areas:** When it comes to identifying patterns, computation, and big data analysis, among others, AI outperforms humans[16]. This capability might extend to decision-making scenarios, such as negotiations, where AI can consider a much larger number of variables simultaneously, leading to more sophisticated strategies[17].

[10] Interview with Gouri Maheshwari, conducted on Zoom, March 29, 2024.
[11] Interview with Leadership Trainer (anonymous), conducted on Zoom, March 25, 2024.
[12] Interview with Ian Sato, conducted on Zoom, March 8, 2024.
[13] Interview with Satya Nitta, conducted on Zoom, March 4, 2024.
[14] Interview with Pat Yongpradit, conducted on Zoom, March 1, 2024.
[15] Interview with Dana Karout, conducted in person, March 26, 2024.
[16] Interview with Mathias Risse, conducted in person, February 23, 2024.
[17] Interview with Bruce Schneier, conducted in person, March 20, 2024.

3. **Addressing Bias more effectively:** According to four interviewees, addressing and correcting biases in AI is more feasible than changing humans to be unbiased. There is a sentiment that “fixing human behavior is tough, but fixing AI is easier”[18]. Cryptographer, computer security professional, and Harvard lecturer Bruce Schneier underscored this view, giving the example of a judge: “Imagine an AI as a judge for a criminal prosecution: maybe we want a real human there. But what is it about the human that we want? It's not that the human is fair. It's not that the human is less racist. [...] Human judges are terribly racist and sexist. But we can improve the AIs. We can't fix the humans”[19]. Executive trainer Robert Schaffner also emphasizes the potential for AI to enable “more neutral, less biased conversations” within teams, given that “the data is correct” and “properly cleaned [not to be racist, sexist etc.] and unbiased”[20].

[18] Interview with Aria Finger, conducted on Zoom, March 19, 2024.
[19] Interview with Bruce Schneier, conducted in person, March 20, 2024.
[20] Interview with Robert Schaffner, conducted on Zoom, March 20, 2024.

Table 1: Overview of AI Use Cases for Learning & Development

Use case of AI tool	Purpose	Perceived Benefit	Key concerns
VR simulation of realistic and relevant scenarios	Increase effectiveness in (difficult) high-stake situations	Impactful learning through immersion	Psychological safety
Chatbot for practicing skills (e.g. negotiations or communication)	Master skills	24/7 availability, opportunity for repetitive practice, “safe space”	Reduced human interactions for learning, missing out on opportunity to grow in the discomfort, effectiveness
Creating social environments virtually	Stretch imagination through experimentation	Increased empathy and understanding of diverse perspectives	Potential bias in simulations
AI assistant for coaches	Reduce workload of “technical tasks”	More time and space for “human aspects” of coaching	Data privacy and protection (especially for leadership development clients)
AI learning companion	Personalize learning to support progress	24/7 availability, tailored learning support, more accessible	Accuracy of personalized recommendations, data privacy, over-reliance
Course-specific answer bots	Help students master course content	24/7 availability, opportunity to ask clarifying questions anonymously	Student engagement
AI as mirror	Reflect on own limitations and automatic patterns	Increased self-awareness	Ensuring constructive reflections
AI advisor or coach	Offer guidance and feedback on leadership skills	Accessibility of coaching, better decision outcomes	Ensuring the trustworthiness of responses, over-reliance

"AI changes traditionally human tasks in four dimensions: speed, scale, scope, and sophistication. The question is: when does a difference in degree become a difference in kind?" – Bruce Schneier

5.3. Key Concerns

This section summarizes the key *concerns* around using AI in learning and development settings that were shared by the interviewed practitioners and scholars in these fields.

Over-reliance and Dependency

One of the key concerns identified through the analysis of interview data in this research is the potential for humans' over-reliance on Generative AI, which may create dependency on these tools. There were several reports that feared dependency on AI could act as a barrier to innovation, adaptability, and creativity, essentially dulling critical thinking skills. Some of our interviewees expressed that by delegating too much to machines, there is a risk of diminishing our reliance on human intelligence and interaction, which underscores the necessity of balancing our use of AI with the maintenance of our innate human capabilities. Philosopher and Harvard Professor Mathias Risse emphasizes this perspective: "We need to maintain the exercise of genuine human intelligence, remain active as beings with consciousness, intelligence, and practical rationality. To maintain human excellence, and the performance of brain capacity, we need to make sure that we're not delegating too much to machines"[21].

AI's potential to replace jobs, which applies to almost every sector it infiltrates, presents a profound ethical and societal concern that was expressed by some interviewees. The fear of job replacement, or the perception of being replaceable, also raises concerns over the morale and future of employees who might be displaced by technology[22]. While the phenomenon of technology replacing human roles is not new, AI introduces a new dimension of complexity because of its capability to undertake tasks traditionally thought to require human creativity and judgment, such as translation, marketing, and even aspects of legal and creative work. This evolution is not merely a technological issue but a significant social, political, and economic decision that society must navigate. Bruce Schneier highlights a key concern: the importance to ensure AI serves to augment humanity rather than replace it[23]. Entrepreneur and strategist Aria Finger adds to this conversation by recognizing the validity

[21] Interview with Mathias Risse, conducted in person, February 23, 2024.
[22] Interview with James W. Riley, conducted in person, March 27, 2024.
[23] Interview with Bruce Schneier, conducted in person, March 20, 2024.

of concerns around wage loss and employment disruption. She also advocates for a proactive approach, emphasizing the need for innovative solutions to adapt to these changes rather than hinder the progress of AI[24].

Bias

Bias was brought up by several interviewees as a key concern for using Gen AI in leadership development. ChatGPT, Gemini, and other Generative AI platforms have at times manifested gender, racial, and various other biases – which are primarily a reflection of the datasets on which AI models are trained. This echoes the inherent biases within our socio-political systems. The datasets on which Generative AI are based on are curated by humans, who are – intentionally or unintentionally – filling AI with the same biases. This concern is further complicated by instances of overcorrection, where efforts to mitigate bias resulted in skewed outcomes – such as the recent incident of Google's Gemini "racially diverse Nazis"[1] – highlighting the delicate balance required in addressing AI bias.

This conversation extends into the broader implications of AI bias, particularly in fields requiring nuanced understanding and empathy, such as leadership development. Executive Leadership Coach Maya Niksic argues that Generative AI inherently lacks the capability to embrace multiple perspectives, which is particularly critical in coaching, where maintaining an "agenda-free" stance is essential. According to Niksic, coaches must foster an environment that prioritizes the client's needs and journey, facilitating a space for self-discovery without imposing their own agenda – something that AI could not do because it is programmed with biases[25].

Countering this view, one might argue that framing human interactions as entirely free of bias or agenda oversimplifies the complexity of human nature. To suggest that AI's inherent biases disqualify it from contributing meaningfully to coaching or similar roles, while ignoring the biases that humans bring to these interactions, may overlook the potential for AI to complement or augment human capabilities, despite its limitations. Aria Finger voices this perspective in our interview[26]:

"The reason why AI is sexist is because the world is sexist. It is not because AI secretly wants to be discriminatory, but because it is trained on data that is

[24] Interview with Aria Finger, conducted on Zoom, March 19, 2024.
[25] Interview with Maya Niksic, conducted on Zoom, March 27, 2024.
[26] Interview with Aria Finger, conducted on Zoom, March 19, 2024.

discriminatory, and the data comes from the real world. We have so much discrimination in people that, if we could use AI to be less discriminatory than people, imagine what a beautiful thing it would be." – Aria Finger

The comparison between human and AI biases suggests an underlying similarity in the tendency to carry and reflect biases. While some interviewees argued that humans, equipped with self-awareness and the capacity for ethical reflection, traditionally navigate these biases with a degree of intentionality that AI has yet to achieve, others have expressed that it would be easier to fix AI bias – by fixing LLM datasets and codes – than it is to fix human bias (please refer to section 5.2 for more information).

AI Manipulation and Human Naïveté

Some interviewees raised critical concerns about the humanoid aspect of Generative AI technologies and how it plays on the subsequent human tendency to accept AI-generated content at face-value, without questioning its origins or the data it is based on.

Central to this discussion is an insight from Dan Schwartz, Dean of Stanford's Graduate School of Education: "There is a perception that ChatGPT is innocent, because it does not have intentions, so we think it is not manipulative. But ultimately, we don't know who is feeding it, so we need to encourage people to be able to engage in a critical thinking process that identifies what is being given by ChatGPT with the intent to manipulate vs. what is just being said because ChatGPT is "stupid" [..] Are there bad actors who are using the system to intentionally confuse me? [..] Is it hallucinating?"[27].

Zak Stein and Hélène Landemore delve deeper into the implications of AI's humanoid presentation. Stein, co-Founder of the Civilizational Research Institute, critiques the deliberate attempts to make AI seem human-like: "I hate that it uses first person pronouns, it shouldn't be pretending to be humanoid when it's actually this vast, inscrutable computational matrix"[28]. The concern here is that there is a true risk – which has been found in the literature (Eliot, 2023) – of emotionally manipulating users into forming unrealistic relationships with AI systems. Stein also warns against anthropomorphizing Generative AI into something it is not. Political Scientist and Yale Professor Hélène Landemore echoes this sentiment, questioning the authenticity of the claims around AI's emotional intelligence and its ability to truly understand or empathize with human emotions: "The emotional intelligence

[27] Interview with Dan Schwartz, conducted on Zoom, March 26, 2024.
[28] Interview with Zak Stein, conducted on Zoom, March 20, 2024.

to me is more of a simulation. There's no consciousness behind the LLM. There's no real causal understanding. There's no unifying identity. I think it's a metaphor. It's not real. So, when an LLM is friendly to you or woos you or flirts with you, it's not meaningful. We're anthropomorphizing. That's a bit why I am very skeptical that you're going to get the machine to reach emotional intelligence anytime soon"[29]. Stein[30] also argues that there are financial motives behind these strategies and suggests that the anthropomorphizing of AI deliberately serves to enhance user engagement and, consequently, profitability for companies like OpenAI. He calls for a clearer understanding among people who use these tools to prevent confusion and misconceptions about Generative AI's capabilities and intentions.

Emotional Intelligence and the Human Body

In the key findings from the interviews, a concern that emerged more prominently than its *humanoid* depiction is AI's *impersonal* nature. Generative AI lacks emotional intelligence, physical presence, and the capacity for empathy and nuance. It is unable to sense, perceive, or convey the subtilities of human emotions, which ensues a critical limitation in its understanding of the contextual nuances inherent in leadership scenarios.

Several leadership coaches who were interviewed repetitively highlighted the importance of the heart, body, emotional intelligence and intuition in leadership, which Generative AI cannot replicate. Randy Haykin highlights his passion driven by the heart within the context of the Gratitude Network, adding that conscious leadership is fueled by an emotional drive to solve problems and alleviate suffering – a dimension Generative AI cannot comprehend.

Ian Sato also articulates a fundamental limitation of AI and the irreplaceable value of human beings, especially when emotional intelligence is essential: "There are high-stakes scenarios where you really need a human in the loop, that's the natural limitation of AI. It does not have a heart nor arms nor legs to really do and act. A human in the loop, I think, is always going to be necessary in any number of important cases"[31].

Maya Niksic emphasizes the unique impact of human connection and embodied experience on personal and professional development: "AI is never going to be able to replicate a coaching session that can help me regulate emotionally, an experience that can only manifest in the presence of another human being. The emotional contours of embodiment are irreplaceable. The more embodied we are, the more we can access critical somatic

[29] Interview with Hélène Landemore, conducted on Zoom, March 26, 2024.
[30] Interview with Zak Stein, conducted on Zoom, March 20, 2024.
[31] Interview with Ian Sato, conducted on Zoom, March 8, 2024.

information that can help us exist in integrity as we navigate the complexities of life. While AI is going to make us more efficient technologically, it's never ever going to be a substitute for the human element – the human and cosmological dimensions of existence"[32].

Relying on Generative AI could reduce our dependence on human collaboration that involves diverse human perspectives[33]. The beauty of collective human intelligence is in its ability to reach innovative solutions through the integration of diverse perspectives and openness to correction and mutual learning. Generative AI taps into this "collective human intelligence" idea without truly engaging in the depth of its deliberative potential. Several interviewees highlighted the notion that people learn best in the context of their relationships with other people. This underscores the irreplaceable value of human guidance in fostering personal and professional growth, especially in leadership development.

A Capacity Building Coach we interviewed also captures the craving for personal recognition and interaction: "AI is very impersonal, and I think what every person on earth craves is that they want to be seen and valued as who they are. […] The actual ability of being together and doing things together is different than doing them individually. I think you need a physical facilitator who can actually sense all the different people, because you cannot feed all of that into the ChatGPT, these non-verbal cues. […] ChatGPT doesn't read between the lines"[34].

Beyond the Hype, How Useful is Generative AI, really?

Several questions arose in the interviews surrounding the very usefulness of Generative AI in leadership development, especially it being a nascent field lacking data. As mentioned previously, there is a concern around the output produced by Generative AI: the notion of "garbage in, garbage out"[35] sheds light on the importance of the quality of data used to train AI systems. Does AI, in its current form, genuinely serve as a helpful tool? Or is our perception of its utility skewed by corporate marketing strategies profiting from AI? To get a better understanding of whether these tools can help some learners improve their human-centric skills, more research needs to be conducted.

A key finding in the interviews directed us to question the predictive value of Generative AI's in enhancing our critical thinking or knowledge, and whether it reinforces vs. challenges our

[32] Interview with Maya Niksic, conducted on Zoom, March 27, 2024.
[33] Interview with Capacity Building Coach (anonymous), conducted on Zoom, March 27, 2024.
[34] Interview with Capacity Building Coach (anonymous), conducted on Zoom, March 27, 2024.
[35] Interview with Satya Nitta, conducted on Zoom, March 4, 2024.

pre-existing beliefs. In the field of leadership development, some interviewees flagged that, in most cases, Generative AI simply echoes our thoughts back to us, potentially leaving us unprepared for unforeseen challenges – while there is an opportunity in Generative AI acting as a mirror in simulations (please refer to section 5.2 for more information), there is also a genuine concern on whether or not it can truly engage in difficult conversations that broaden our understanding and preparedness for future challenges.

Beyond questioning the outputs of Generative AI, another concern that emerged in the interviews is the idea that the usefulness of Generative AI is contingent on the level of trust placed in the model. On one hand, interviewees expressed skepticism about the usefulness of Generative AI and cautioned against blind trust. On the other hand, other interviewees advocate for trust in Generative AI to fully realize its potential to maximize its impact. The challenge here lies in critical thinking, and its role in humans determining the reliability of AI-generated content. Generative AI's potential is maximized when it interacts with humans equipped with essential critical analytical skills.

This section serves as a reminder that Generative AI's outputs are only as useful as (1) its data inputs, and (2) the human interpretation of its outputs. This focus highlights (1) developers' responsibility to ensure data integrity and representativeness and (2) users' agency and responsibility to be well-equipped to maximize the utility of Generative AI.

Narrative and Perception

The trust humans have in Generative AI tools is rooted in the narrative surrounding it and the experiences they have had with it (Hancock, 2024). While some view AI as "the epitome of efficiency" and a useful support tool, others might perceive its use under negative connotations, like laziness, depersonalization, loss of human touch in services, or even ethically worrying. Different people will have a different assessment of and feeling around the trustworthiness of AI tools. In cases where Generative AI can significantly enhance processes, it is hence important to create a trustworthy environment for AI deployment. A crucial note to consider here is that this does not imply a blanket endorsement for the universal use of Generative AI. Economic Sociologist and Harvard Professor James Riley points out that despite AI's potential to improve outcomes in some areas, a palpable human resistance based on moral and principled grounds exists in the real world[36].
Research by BetterUp, a leadership development company that embraces Generative AI, suggests that leveraging the benefits of Generative AI requires a mindset and organization

[36] Interview with James W. Riley, conducted in person, March 27, 2024.

culture of openness and readiness for experimentation with AI (Hancock, 2024). They found that the value and impact of AI tools depends on people's attitudes towards the technology: if Generative AI is seen as a tool that can help achieve one's goal, instead of a force that is going to replace them, the impact of the tool will be higher (Hancock, 2024). For this to happen, trust and integrity need to be established, e.g. by being transparent about how AI data is used, auditing, and accountability. If there are instances where AI has broken that trust, such as through deceptive deepfakes, recovering this trust becomes a considerable challenge.

Conditionality

Our interview findings show there is a common understanding that the use of AI is dependent on specific conditions and human agency. In other words, the value derived from AI-generated information is inherently contingent upon the quality of human judgment applied to it. This conditionality also sheds light on the fact that, in the end, individuals hold – and should retain – the autonomy to critically evaluate, accept, or reject the information provided by Generative AI.

James Riley captures this sentiment, advocating for the responsibility to engage critically with Generative AI: "We can't mindlessly take the dictates of what a model spits out for us without critically thinking about what it means and interpreting it for us as a species"[37]. Mathias Risse also reinforces the importance of human judgment in navigating AI's outputs: "You still need to be able to judge for one thing whether this is the right course of action or whether there's some version of hallucination"[38].

The generational aspect – which was brought up by several interviewees – might also be of relevance in this context. On one hand, some interviews reflected the argument that older generations, having more foundational knowledge and longer experience, might be better equipped to judge the credibility of AI-generated content. On the other hand, some interviewees suggested that younger generations, growing up in a digital and information-saturated world, may develop new forms of literacy and skepticism that allow them to navigate the AI landscape more proficiently. This challenges the notion that foundational knowledge alone suffices for critical engagement with AI, proposing that adaptability and familiarity with digital technologies could also enhance discernment capabilities.

[37] Interview with James W. Riley, conducted in person, March 27, 2024.
[38] Interview with Mathias Risse, conducted in person, February 23, 2024.

Accessibility, Equity, and Cultural Sensitivity

Several interviewees flagged their concerns around the claims that AI is set to democratize access to information and services, with some cautioning that Generative AI might perpetuate existing inequalities, particularly affecting marginalized communities (Friis & Riley, 2023) and the Global South. These concerns reflect an even broader debate on technology and social justice. For the purpose of this project, this section will focus on interview findings in relation to our main topic: leadership development.

The cultural insensitivity of Generative AI, with notably its focus on Western, English-centric data, was a key finding in the interview process: what ensues is further concerns on Generative AI's performance disparities across different languages and cultural contexts. James Riley and Simeen Mohsen raise compelling concerns about the equitable distribution of Generative AI's benefits. Riley questions the extent to which Generative AI can provide customized services and highlights its limitations in capturing the diverse realities and nuances of global populations, especially the Global South[39]. Simeen Mohsen, Senior Managing Director of Harvard Business School Online, also questions the notion of "AI as an Equalizer", pointing out the educational and socioeconomic divides that AI might exacerbate rather than bridge: "I do worry when people say AI is a great equalizer because it gives everyone access to the same information. While that might be true, we also know there are huge educational divides. So, could it end up being just another tool that only makes the smart smarter?"[40].

Others, however, argue that the potential for AI to bridge gaps in service access – i.e. to increase scale – cannot be overlooked, especially as the technology refines with time. Bruce Schneier, who also expressed worry around equity, gives the example of AI's role in addressing the mental health crisis. According to him, the demand for therapists in the US exceeds the supply. He poses the question: "Can an AI be a therapist? Maybe not yet, but it will get better. This will be good for the mental health crisis but will also open a gap between the rich and the poor. The rich will have people therapists and the poor will be stuck with the AI therapists. But if the choice is between an AI therapist, and no therapist, maybe that's better. AI can increase the scale of therapy"[41]. This point raises an important question that can also be applied to the leadership development industry: what if coaching services by human coaches were indeed only attainable to "more privileged" groups in the future, leaving

[39] Interview with James W. Riley, conducted in person, March 27, 2024.
[40] Interview with Simeen Mohsen, conducted on Zoom, March 28, 2024.
[41] Interview with Bruce Schneier, conducted in person, March 20, 2024.

people who are less well off with AI alternatives? Is this scenario still better compared to not having an AI coach at all?

Aria Finger highlights Generative AI's capacity to democratize access to executive coaching, envisioning a future where high-quality AI coaching could make leadership development accessible to a broader audience. She outlines three potential scenarios. Scenario (1): AI coaches, although not as adept as human coaches, offer a valuable alternative for those unable to afford the high costs of personal coaching. Scenario (2): the absence of AI coaching leaves leadership development out of reach for many who cannot afford it. Scenario (3): AI coaches become preferred for their effectiveness, challenging the traditional coaching model[42].

There is a critical tension here: while Generative AI may not currently offer fully democratized access, its evolving capabilities could significantly expand the scale of services like leadership development and coaching, *potentially* offering a more inclusive future than the present. However, to reach this rather optimistic potential, there is a critical need for Generative AI development to be inclusively designed and thoughtfully deployed to ensure it serves as a tool for growth rather than perpetuate existing disparities.

5.4. AI Governance and the Big Picture

The incredible speed at which our society is "jumping on the AI train" has been reflected in both the literature review and the interview findings. A question emerges here: is there a need to pause and reflect on its integration in our lives? The feedback from interviewees presents a mixed perspective. While some argue that the AI high-speed rail should not be slowed down, there is a consensus on the necessity for improved strategies and solutions to address emerging challenges more effectively than in the past. Some interviewees expressed concerns over the "social trap" that the speed of AI represents, underlining the dilemma industries and governments face today: the pressure to jump on the train to stay competitive vs. the imperative for regulation. However, an unchecked embrace of technological possibilities can prove dangerous. Several interviewees emphasized concern about the need for more awareness, measure, and caution, rather than hastily embracing every new AI development and use case.

Profit vs. Humanity?

[42] Interview with Aria Finger, conducted on Zoom, March 19, 2024.

The integration of AI in leadership development, or any field for that matter, was intertwined by several interviewees with capitalism and profitability, false claims of for-profit companies, horrible regulation, and humanity. Some interviewees expressed the tension between the alleged benefits of Generative AI for societal advancement and the profit-driven motives of corporations and companies. In the absence of conclusive data on AI's efficacy in leadership development, some coaches were skeptical regarding the inclusion of AI in leadership and questioned whether it truly centers on human well-being or veers more towards profitability.

Several interviewees have further emphasized the need for a deliberate and ethical approach to AI deployment. Riley advocates for a nuanced consideration of AI's relevance: "Is AI actually suitable and appropriate for this given task? It's not simply "AI can make things less costly by automating them and therefore we should adopt it". It's more about: some things are really going to be calling for it, and other things you might be forcing it. And you should have pause if you're forcing it"[43].

Stein challenges the narrative of deploying sophisticated AI technologies for market opportunities. He advocates for a thoughtful analysis of the potential psychological impacts and a shift towards a non-profit model for AI development – which calls for a rethinking of AI's role in society[44].

The historical context of big corporations' rise to power without adequate regulation serves as a cautionary tale for AI's trajectory. The current landscape around AI suggests a repeat of past mistakes – allowing corporations to dictate terms that may not align with broader societal interests or human rights. In her interview, Hélène Landemore encapsulates this concern, urging a reconsideration of automation and AI deployment under conditions that prioritize human rights and a dignified life over corporate profit. Landemore warns against following the laissez-faire path taken with globalization, advocating for a more regulated and controlled approach to AI that places humans at the forefront[45].

"I think we need to think hard about the conditions under which we want to automate and delegate. It is for sure going to benefit some people. The corporation that produced this AI will make a ton of money. Then the companies that use this AI will make a ton of money from not having to pay creative people, not having to pay legal clerks, not having to pay engineers because now AI will code for them much faster, much more cheaply and more efficiently. But

[43] Interview with James W. Riley, conducted in person, March 27, 2024.
[44] Interview with Zak Stein, conducted on Zoom, March 20, 2024.
[45] Interview with Hélène Landemore, conducted on Zoom, March 26, 2024.

is that the society we want? If we say humans come first, not corporations, not robots, not technology, humans come first, then we can decide to regulate, slow down, control, partition in a way that is more beneficial to more of us, and in a way that's compatible with human rights, and our right to dignified life. But I'm afraid we won't. I'm afraid it's going to be the same path that we followed with globalization, a laissez faire approach, in the name of the excuse that "this will be great!", and that's a huge problem."

"It's the Middle Ages in terms of governance structure. There is so much to change." – Hélène Landemore

The Human Problem and The Governance Table

As AI continues to assert its presence on a global scale, the question of regulation becomes increasingly complex. In our interview, Hélène Landemore shifts the conversation from simple regulation to the broader, certainly not less important, concept of governance. She highlights that AI's governance is a fundamentally political issue that goes beyond ethical and economic considerations and suggests that everyone should have a voice in shaping how AI is integrated into our lives. Landemore advocates for a democratic, inclusive, and responsive approach to AI governance, one that involves the broader public in decisions that affect global workforces and societal well-being.[46]

AI is not acting on its own. There is a human element behind every decision-making process that surrounds AI, even when it comes to its governance – or lack thereof. Here come the questions: Who should have a seat at the governance table? How is it even possible to establish trust in AI systems with the current governance structures?

Zak Stein observes that society is essentially mesmerized by trends that emerge as intriguing toys – like ChatGPT and Gemini – yet falls short of seeing the true extent to which AI is influencing leadership decision-making and global dynamics, from financial markets to battlefield operations influenced by big corporations[47]. Landemore emphasizes that the core issues with AI are inherently human – political, social, and economic in nature. She argues that the ethical challenges around AI are not new but are intensified by its scale and speed of implementation: "It seems to me that blaming AI is like blaming electricity. It doesn't make much sense. The problem lies with the economic actors who concentrate the power to produce AI, and the political actors who want to use AI to push their ends. […] Who is

[46] Interview with Hélène Landemore, conducted on Zoom, March 26, 2024.
[47] Interview with Zak Stein, conducted on Zoom, March 20, 2024.

representing the interests of humanity? Where is the accountability? Where is the representativeness? Where is the legitimacy? It's the Middle Ages in terms of governance structure. There is so much to change"[48].

James Riley echoes the sentiment of human agency in shaping AI governance and advocates for proactive engagement in governance discussions, emphasizing the importance of human voices in steering the narrative around AI, ensuring it serves the collective good rather than exacerbating inequalities[49].

"AI may be smart, but still needs humans to set the right goals and engage in creative interpretation. Human intelligence alone, and by association, artificial intelligence, do not equal wisdom." – Dr. Peter Verhezen

[48] Interview with Hélène Landemore, conducted on Zoom, March 26, 2024.
[49] Interview with James W. Riley, conducted in person, March 27, 2024.

VI. Policy Recommendations

In this section, and following our qualitative research, we present policy recommendations for our client, the Human Leadership Lab. Each recommendation is first briefly explained, then provided with an operational guidance (i.e. action steps for HLL) and an evaluation against the following criteria: Ethical Integrity, Operational Feasibility, Relevance and Preservation of Human-Centered Values.

Recommendation 1: Experimentation is Key

We encourage HLL to embrace experimentation with Generative AI tools. Such a hands-on approach will allow HLL to evaluate first-hand the practical application and effectiveness of AI in their unique coaching approach and day-to-day operations. Experimentation serves as a strategic approach to discovering whether Generative AI can enhance HLL's impact. First, we recommend HLL to first experiment with AI assistant tools that would delegate part of their technical tasks to Generative AI, to free up time for more impactful actions, e.g. human-to-human coaching interactions. Second, we recommend HLL to explore use cases that could help cultivate the skills of their coachees. We recommend testing and experimenting with AI assistants or helpdesk, and AI-powered simulations and chatbots, that offer scenario-based learning experiences. In our opinion, short-term testing is vital because the outcomes of these trials could inform the longer-term path for integrating Generative AI tools within HLL's coaching practice.

Operational Guidance

(1) Begin by evaluating HLL's current workflows to identify routine tasks that could be automated by AI (e.g. managing emails, scheduling appointments, client service interactions, writing reports).
(2) Analyze HLL clients' growth edge to determine which skills could benefit from AI-powered tools (e.g. communication, empathy, negotiation, self-reflection etc.).
(3) Select and pilot existing Generative AI tools, testing them to assess their effectiveness in enhancing specific capacities.
(4) Guide clients through the integration of these Generative AI tools, providing support and instruction to ensure clients are comfortable experimenting with that tool.

Criteria Evaluation

- **Ethical Integrity**: testing prior to integration of Generative AI tools ensures a commitment to responsibly serve clients.

- **Operational Feasibility:** experimenting with tools might be a time-consuming process and should be considered an investment, that may or may not translate into time-efficiency in the long run. Sufficient time needs to be allocated for trials.
- **Relevance:** experimentation is relevant because it ensures that Generative AI tools are only rolled out and used after having been tested and found to be useful.
- **Preservation of Human-Centered Values**: encouraging the use of AI to handle either technical tasks or the enhancement of capacities that are central to human-centric leadership upholds HLL's values.

Recommendation 2: Fostering Critical Thinking

It is crucial to equip both coaches and coachees with the skills necessary for a critical engagement with Generative AI tools. This involves building and constantly improving AI literacy to understand the potential and limits of AI, encouraging online civic reasoning, and developing a critical mindset toward the illusion of AI sentience. An informed approach mitigates risks like AI manipulation and anthropomorphization, ensuring decisions and interactions are anchored in the awareness of AI's capabilities and limitations.

Operational Guidance

(1) Either identify an existing module on AI literacy or develop a new one. The module must include content on AI basics (what it is, how it works), different Generative AI use cases, ethical considerations as discussed in the key challenges section of this PAE, critical thinking in AI application, and potential implications.
(2) Create a holding environment for critical discussion about Generative AI, where coachees can voice their questions, thoughts, hopes, concerns, and experiences freely.
(3) HLL coaches should regularly participate in continuous learning sessions to ensure they stay informed on the latest developments and ethical considerations in Generative AI.

Criteria Evaluation

- **Ethical Integrity**: while critical engagement with AI can mitigate risks and guide its ethical use, it is crucial to acknowledge that the guarantee of ethical application ultimately depends on the individuals using the technology.
- **Operational Feasibility**: this recommendation requires an initial, and continued, investment of time for drafting the content and learning.

- **Relevance**: critical thinking is the pre-requisite for engaging with any digital tool, particularly Generative AI.
- **Preservation of Human-Centered Values**: this recommendation emphasizes and encourages human judgment and agency.

Recommendation 3: Building Trust and Readiness for AI Interactions

To ensure a successful integration of Generative AI in leadership development, we recommend that HLL establishes a balanced approach to trust and openness towards AI tools, among both coaches and coachees. Our analysis indicated that the effectiveness of Generative AI hinges significantly on the degree of trust or willingness to engage with the AI model. While being well-equipped with the skills to critically engage with AI is important, so is the cultivation of an attitude of receptiveness and willingness to experiment with AI tools. HLL must navigate this balance carefully, ensuring neither coaches nor coachees become overly dependent on AI. The goal is to promote an understanding of Generative AI as a supportive tool rather than a potential replacement or threat. To avoid the risk of diminished trust or detachment among clients, HLL is advised to craft a strategic narrative on AI integration.

Operational Guidance

(1) Implement an opt-in/opt-out approach for integrating Generative AI into HLL leadership development programs to avoid pressuring clients into adopting Generative AI within their coaching sessions.
(2) Craft a narrative that ensures full transparency and open communication with coaches and coachees. Educate coaches and coachees on the benefits and concerns highlighted in this research. HLL could also enhance understanding and openness by sharing use-cases (e.g. by coaches), particularly those in the testing phase.
(3) Focus on making the Generative AI tool adaptable and customizable to cater to the individual needs and preferences of coachees. This is key in enhancing coachees' experience with Generative AI.
(4) Implement feedback loops and maintain a consistent check-in process with coachees who use HLL's AI tools, ensuring their insights inform AI integration.
(5) Prioritize robust data privacy mechanisms. Given the sensitive nature of developmental data in leadership training, emphasizing the privacy and secure storage of such information is essential. HLL should ensure coachees are fully informed about data privacy practices, including the specifics of data storage.

Complying to high privacy standards and regulatory compliance will safeguard coachee information and strengthen trust in HLL's services.

Criteria Evaluation

- **Ethical Integrity**: this recommendation stresses on the importance of full transparency and open communication.
- **Operational Feasibility**: the operational guidance seems feasible but depends on the time and resources that HLL has at its disposal.
- **Relevance**: this recommendation is directly relevant to the current context in which society stands vis-à-vis AI and poses a relevant action plan to craft a strategic narrative for AI-assisted trainings.
- **Preservation of Human-Centered Values**: this recommendation preserves agency and promotes openness and informed decision-making.

Recommendation 4: Cultivating Cultural Sensitivity

For a successful integration of Generative AI tools in leadership development, we recommend HLL to ensure its Generative AI tools are developed with a deep commitment to cultural sensitivity and inclusivity. If HLL is considering scaling up its leadership development trainings through AI assistance, it must ensure its AI tools are thoughtfully deployed to serve for empowerment rather than perpetuating existing inequalities and biases.

Operational Guidance

(1) Conduct a diversity audit of any AI tool and training content adopted by HLL, during the testing phase and the roll-out period, to identify potential cultural insensitivity or AI bias.
(2) Ensure inclusivity in HLL's team of developers and leadership coaches to mitigate bias and cultural insensitivity. Potentially provide unconscious bias training to HLL staff.
(3) Ensure the Generative AI tools are developed with the consideration of language and cultural barriers that could limit accessibility. This is particularly important in the development phase and in the selection of datasets fed into the AI model.
(4) Engage with other coaches and with clients in a consultative process to ensure representativeness in the development on the AI-assisted trainings.
(5) Create continuous feedback and assessment channels to identify and address any emerging biases or cultural insensitivities, while providing a safe space for users to report any issues of cultural insensitivity or bias.

(6) Maintain open communication with all stakeholders about the measures taken to ensure cultural sensitivity in AI-assisted trainings.

Criteria Evaluation

- **Ethical Integrity**: the recommendation emphasizes the importance of cultural sensitivity and inclusivity in AI development, directly addressing the risk of perpetuating biases and inequalities.
- **Operational Feasibility**: implementing cultural sensitivity within AI tools is operationally feasible, but it may prove resource-heavy as it requires a dedicated effort in inclusive design, continuous testing, and iteration based on user feedback.
- **Relevance:** as HLL considers the use of AI leadership development, ensuring its AI tools are culturally sensitive is highly relevant for their effectiveness and acceptance across global audiences.
- **Preservation of Human-Centered Values**: the recommendation prioritizes human-centered values by focusing on empowerment and inclusivity.

Recommendation 5: Establishing a Continuous Feedback Loop

We recommend HLL to ensure it puts in place a robust feedback mechanism, in order to constantly evaluate and assess the effectiveness, usefulness, and safety of Generative AI tools used in leadership development. Regular evaluations of the tools' outputs and the (perceived) impact on training should continuously inform the next steps. This also allows for the monitoring and early detection of any biases or technical issues that may arise. Constant check-ins with clients could help maintain the integrity of the coaching process.

Operational Guidance

(1) Guarantee that human supervision is an integral part in the process, meaning that HLL constantly debriefs with coachees on their experience with Generative AI tools.
(2) Draft a structured feedback protocol that can be used in regular check-ins for assessing coachees' experience.
(3) Set up and commit to routine discussions with both coaches and coachees to collect insights; monitor what works well and what does not.
(4) Pivot and adjust the coaching approach and use of Generative AI tools based on the feedback.

Criteria Evaluation

- **Ethical Integrity**: constant check-ins and monitoring increase the chances for ethical usage.
- **Operational Feasibility**: this approach will require a regular commitment of time.
- **Relevance:** continuous feedback ensures that Generative AI tools are relevant to the learning journey.
- **Preservation of Human-Centered Values**: this safety mechanism is aligned with HLL's commitment to human wellbeing and growth.

Recommendation 6: Consider Building Own AI-Powered Tools

After testing different AI use cases and evaluating their effectiveness and popularity among clients, HLL could consider a proactive approach and create its own AI-powered tools, following the example of HBS's ChatLTV. A chatbot specifically built on HLL's coaching methodologies and materials would allow for greater control over the features, data input and ethical standards of the AI tools. This could be one avenue for scaling HLL's human-centric leadership training. In the meantime, while relying on external Generative AI tool providers, HLL needs to conduct careful due diligence, ensuring that the chosen provider adheres to high ethical standards and data protection measures. To mitigate risks, HLL is recommended to prioritize partnerships with providers that have established ethical oversight.

Operational Guidance

(1) Assess the technical, financial, and operational feasibility of creating a custom AI tool.
(2) Outline the objectives and essential features of own AI tool, to ensure alignment with HLL's coaching philosophy and methods.
(3) Build and iteratively test the tool to ensure it aligns with HLL's goals and values; adjust based on feedback.
(4) Establish an ethics board to monitor the tool's impact.

Criteria Evaluation

- **Ethical Integrity**: has the potential to have high integrity because HLL would have control over what data is put into the models and how it is used.
- **Operational Feasibility**: likely to be unfeasible in the immediate future because of resources and time constraints.

- **Relevance**: relevance needs to be confirmed by testing existing tools before considering this recommendation.
- **Preservation of Human-Centered Values**: ensures alignment with HLL's commitment to ethical coaching and personalized leadership development.

Recommendation 7: Active Participation in AI Governance

As HLL starts using Generative AI tools in its training programs, it becomes essential to engage actively with the governance structures of entities that provide these tools, e.g. OpenAI. For HLL, this not only means getting familiar with these frameworks, but also asking for a seat at the governance table, to advocate for representativeness, transparency, the assurance of dignified life, and a moderated pace in AI development to allow for more thoughtful regulation. Adopting AI is not only a technological decision but also a commitment to advocate for the responsible use of AI, which aligns with HLL's core values of human-centered leadership.

Operational Guidance

(1) Investigate the governance committees and decision-making bodies of AI organizations like OpenAI and identify key contacts. Initiate outreach and get more familiar with current governance structures, policymakers, and influential voices in AI ethics to build a network and presence in the community.
(2) Potentially join or form coalitions with other leadership development organizations to gain collective bargaining power and a unified voice. Collaborate with regulatory bodies and industry groups to support the creation of guidelines that ensure a dignified approach to AI deployment.
(3) Establish internal policies that reflect HLL's position on AI governance to ensure that AI integration in HLL programs adheres to the principles of representativeness, transparency, and the assurance of dignified life.

Criteria Evaluation

- **Ethical Integrity**: achieved by HLL through advocating for transparency and fairness in AI governance. Yet, these efforts may not fully address the extensive challenges of AI governance on a larger scale.
- **Operational Feasibility**: while challenging, the action plan could be operationally feasible. It would require dedicated resources and a strategic approach to navigating AI governance landscapes.

- **Relevance**: the recommendation is highly relevant in the broader context of thoughtful AI integration, but advocating for AI governance could extend beyond HLL's immediate mandate and raises questions on the availability of resources to commit to this recommendation.
- **Preservation of Human-Centered Values**: the recommendation upholds human-centered values by advocating for responsible AI deployment and regulations that prioritize human dignity and societal welfare.

VII. Conclusion

As mentioned at the start of this Policy Analysis Exercise, we find ourselves at a pivotal moment in educational history: Generative AI has an immense potential to change the “How” and “What” of leadership development through its capabilities to customize learning experiences, increase accessibility, and take on technical tasks. The use of AI-powered simulations, tools, and coaching methods could alter how human-centered leadership skills are taught.

Yet, these new possibilities come with significant concerns that require careful consideration. The risks of amplifying existing inequalities, the potential to increase over-reliance on AI tools, privacy concerns around sensitive data, and the broader individual and collective implications that come with integrating AI into human-centric professions emphasize the need for a balanced, thoughtful and principled approach.

To help Human Leadership Lab navigate this newly emerging field in a way that resonates with their values and vision, we provided recommendations that prioritize ethical integrity, operational feasibility, relevance, and the preservation of human-centered values.

As we conclude this analysis, we recognize that this will be an ongoing journey for HLL and all organizations embracing change, and that it will require continuous learning and adaptation. While our recommendations might provide a first step for thinking about how to integrate AI into aspects of leadership development, they also open doors to many remaining questions that future research must address.

HLL has the opportunity to lead by example, setting standards not only for the integration of AI into leadership development but also for the responsible use of technology in benefiting humanity. Finding the balance between embracing innovation and preserving our human essence and connections will define the future of learning and development.

VIII. Appendices

Appendix A: Interview Guide

Questions for Experts in Learning & Development Human-centered Leadership

- What skills or capacities characterize a leader?
- How do you effectively develop these?
    - What works / does not work?
- Do you see AI having a role in cultivating these qualities? How?
- Have you used AI in trainings or seen use cases?
    - If yes, which?
    - What has been the observed impact?
- Do you have any ethical concerns with using Generative AI tools for developing these skills?
    - If yes, what concerns?

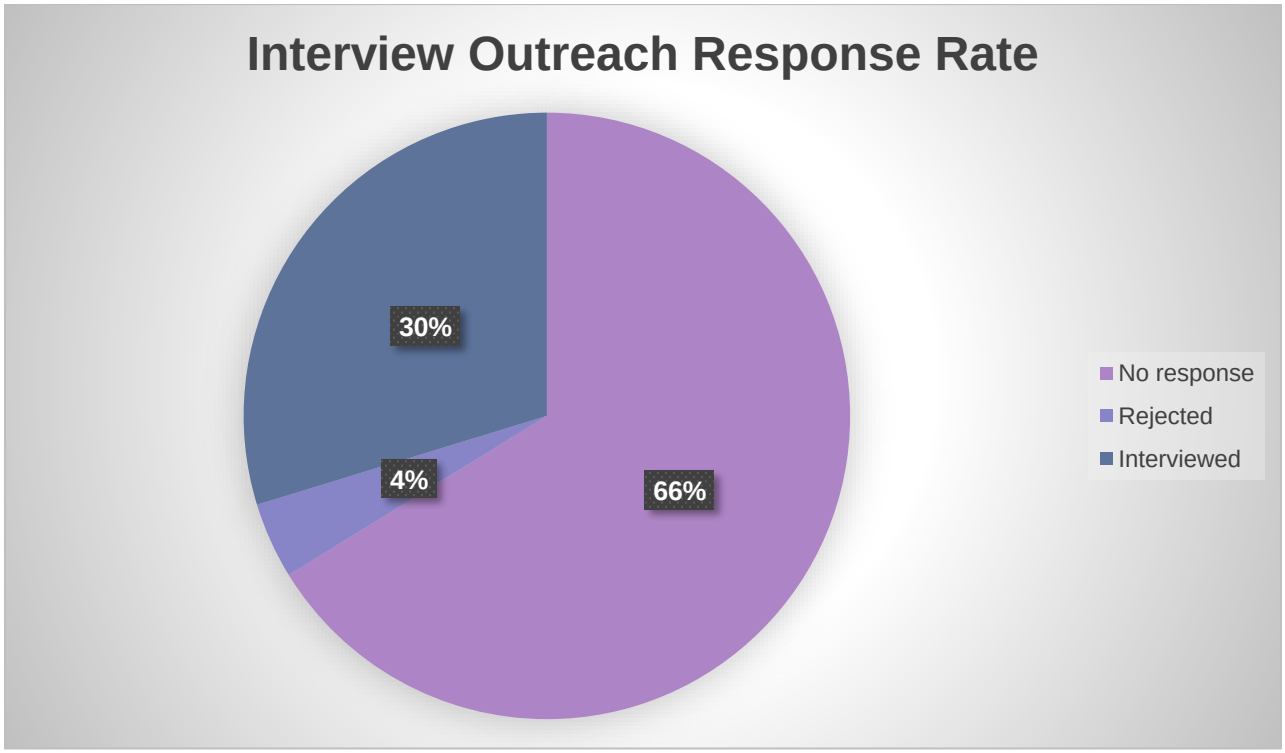
Questions for Specialists in EdTech

- What is your experience with integrating AI tools into education?
- What are specific use cases?
- Why do you build or use Generative AI tools for education?
    - What have you observed about the impact of the tools?
    - What are the opportunities?
    - What are the risks?
- Do you believe AI can enhance the emotional intelligence of humans or develop socioemotional skills? If so, how?
- Do you have any ethical concerns with using Generative AI tools for developing these skills?
    - If yes, what concerns?

Questions for Thought Leaders focused on the Ethics of AI

- In your perspective, what skills are key for humans to thrive today?
- Do you see AI having a role in cultivating these qualities? How?
- Have you seen AI use cases in this field?
    - If yes, which?
- Do you have any ethical concerns with using Generative AI tools for developing these skills?
    - If yes, what concerns?

Appendix B: Interview Outreach Response Rate



Appendix C: List of Interviewees

1. Interview with Mathias Risse, conducted in person, February 23, 2024.
2. Interview with James W. Riley, conducted in person, March 27, 2024.
3. Interview with Zak Stein, conducted on Zoom, March 20, 2024.
4. Interview with Hélène Landemore, conducted on Zoom, March 26, 2024.
5. Interview with Aria Finger, conducted on Zoom, March 19, 2024.
6. Interview with Maja Niksic, conducted on Zoom, March 27, 2024.
7. Interview with Bruce Schneier, conducted in person, March 20, 2024.
8. Interview with Dan Schwartz, conducted on Zoom, March 26, 2024.
9. Interview with Satya Nitta, conducted on Zoom, March 4, 2024.
10. Interview with Anne-Liis Lääne-Sáez, conducted on Zoom, March 27, 2024.
11. Interview with Simeen Mohsen, conducted on Zoom, March 28, 2024.
12. Interview with Dana Karout, conducted in person, March 26, 2024.
13. Interview with Gouri Maheshwari, conducted on Zoom, March 29, 2024.
14. Interview with Ian Sato, conducted on Zoom, March 8, 2024.
15. Interview with Pat Yongpradit, conducted on Zoom, March 1, 2024.
16. Interview with Robert Schaffner, conducted on Zoom, March 20, 2024.
17. Interview with Dhairya Pujara, conducted on Zoom, March 21, 2024.
18. Interview with Andre Shojaie, via LinkedIn Message, March 10, 2024.
19. Interview with Timothy O'Brien, conducted in person, March 19, 2024.
20. Interview with Randy Haykin, conducted on Zoom, March 19, 2024.
21. Interview with Elizabeth Weingarten, conducted on Zoom, March 19, 2024.
22. Interview with Axelle Bagot, conducted on Zoom, March 25, 2024

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