The advent of artificial intelligence-based coaching

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Abstract

Purpose – *This paper aims to explore the application of artificial intelligence (AI) for coaching. This paper discusses the different applications, benefits, challenges and implementation issues in AI usage in coaching. It highlights how AI is facilitating the up-skill and re-skill of employees.*

Design/methodology/approach – *The viewpoint reviews the articles, research papers and case studies.*

Findings – *AI-based coaching apps are aiding managers and supervisors in coaching and tracking trainees and mentees' progress. AI is being used to customize the coaching program as per the mentee's individual needs. AI-powered coaching systems can analyze recorded sales conversations and offer real-time coaching and feedback.*

Research limitations/implications – *AI-powered coaching systems help transform coaching from standard in-person one-to-one mode to personalized and customized AI system assisted coaching system. Research is needed to understand the factors that can facilitate AI-powered coaching transform into a game changer in the coaching industry.*

Originality/value – *This paper reviews and discusses several AI-powered coaching applications. This paper is useful for researchers and professionals in the field of coaching and mentoring, as it offers a review of the current AI-powered coaching applications.*

Practical implications – *AI systems offer private unbiased feedback and help self-assessment of individual mentee and mentor performance. AI provides a capability for organizations to track individuals' learning and calculate return on investment.*

Keywords *Coaching, Development, Artificial intelligence, Mentor and mentoring*

Paper type *Viewpoint*

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I n simple words, coaching is training people to help them prepare for something. Coaches inspire people to realize their personal and professional potential. For successful sportspersons and professionals, coaches have played an essential role in transforming them into leaders and winners. Bill Bowerman, the cofounder of Nike Inc., had trained more than 31 Olympic athletes. Martha Beck was a life coach to celebrity talk show host, Oprah Winfrey.

Coaches and their conversations are helpful for trainees in the discovery of their unique traits and confidence. Artificial intelligence (AI)–powered coach bots can coach humans by listening and discovering their strengths and weaknesses. Apps such as Next Play's Ellen.ai are using AI to connect mentees to mentors. The mentors are offering contextual advice and helping mentees expand their network. The AI at Next Play, based on employee input, makes immediate recommendations for prospective mentors. AI nudges users to engage in meaningful conversations. The mentees have more clarity about their career path and are now better equipped to achieve their personal goals and cost savings in hiring costs.

On the app, the users are finding friendship as well as purpose with their mentors. The right career conversations are being facilitated with internal mentors, resulting in higher retention and engagement due to AI-based mentorship exchanges (Chaudhary, 2018).

Transforming coaching and mentoring with artificial intelligence

MentorCloud, an AI-based coaching and mentoring service provider, reports that a mentoring program can lead to increased retention, reduced absenteeism and improved performance. Organizations with leaders sharing advice and perspective have a 60% higher retention, a 24% reduction in absenteeism and a 17% increase in productivity (MentorCloud, 2021).

The AI results in the personalization and customization of coaching and mentoring support to the users based on their performance reviews. Several AI-based coaching apps such as Butterfly.ai, VoiceVibes and Orai help coaches and mentors develop leadership skills, communication skills and presentations skills.

Due to pandemic and skilled staff shortage, telecommuting and remote assistance are the new norms for many companies. With AI-based coaching apps, the remote workers can now get customized, proactive and quick support and feedback on their performance. Economically and logistically, it is not possible to provide personalized coaching support to individual employees. One more issue that companies face is the reluctance and inability of supervisors who are not trained as coaches and mentors to offer practical advice to their mentees.

Employees in senior positions need a different kind of support that is very specialized and specific. AI-powered coaching apps address this gap by delivering frequent and targeted feedback to senior managers and younger executives. AI-powered coaching apps autonomously and anonymously evaluate individual performances and offer input on parameters that humans find difficult to monitor and track.

Benefits of artificial intelligence-based coaching

The AI coaching app is a virtual entity with time and power for objective thinking free of human bias and fatigue. An AI-based coach can measure performance, diagnose patterns and suggest tips to the trainee. The human coach, armed with an AI-based app, can perform in synergy. The AI-based app can provide real-time statistics, suggestions, evidence and opportunity for an in-depth review of the trainee's performance. The AI-powered app is helpful to the physical coaches as they share their workload and allows them to focus attention on other vital areas. Many experts see AI in coaching as a game changer in terms of enhancing the efficiency of human coaches.

Limitations of artificial intelligence-based coaching apps

The creation of a customized AI-based coaching system is expensive, complicated and, most of the time, needs a constant upgrade. The collection, storage and retrieval of data are expensive. An AI-based system can have long development and implementation time.

Application of artificial intelligence-powered coaching

There are multiple AI-powered coaching applications available in the market. In this section, a few of the AI-powered coaching applications include the following.

Orai: For public speaking, Orai is a language coaching app that listens and reviews speeches. The data reported by Orai include counts of the filler words, pauses, speed, tone and energy level. Orai also advises the user on ways to improve speech to the user (Gale, 2018).

Butterfly.ai: Butterfly.ai is helping leaders to be exceptional by offering them personalized guidance using team members' feedback. Butterfly.ai offers mobile accessibility and

notifications and feedback on over 50 workplace topics, including autonomy, growth and impact (Butterfly.ai, 2021).

VoiceVibes: VoiceVibes helps user sound natural and polished while speaking by analyzing speech patterns and scores on some metrics. The AI system reports clarity, the strength of opening, volume, pace, pausing, up-speak and positive and negative vibes. The AI system reports whether the vibes are assertive, authentic, captivating, confident, energetic and persuasive. On the negative side, the vibes are arrogant, belligerent, annoying, condescending, ditsy, nervous and timid. VoiceVibes reports on items that need the focus of the trainee (VoiceVibes, 2019).

Roadblocks in implementation

Multiple challenges include issues such as ethical, privacy risk and compliance. Human coaches have a fear of losing jobs, and that acts as a hurdle. The initial high cost of developing an AI-based coaching solution is also a considerable challenge.

Although the fears are real, traditional coaches should look at AI coaches as an aid and tool to augment their efficacy. The AI coaches can record the client progress or performance, and physical coaches can use it to nudge, praise or help trainees during the coaching sessions.

Discussion and future

AI-based coaching will grow and disrupt the coaching market dramatically. Critical benefits of AI-based coaching include personalization, customization and performance gains. The benefits of using an AI coach also include learning at one's own pace and higher retention. The AI coach can be more objective and analytical in understanding the activity data and identifying weaknesses. The AI can also automate content creation in multiple languages. An AI-based coaching system can also look at the behavioral, cognitive and engagement preferences of trainees. While implementing AI-based systems for the right coaching, it is essential to decide on the technology, methodology and measurement metrics. The different AI-based coaching apps provide automatic feedback and help physical coaches save time for introductory coaching sessions. AI-powered coaching is self-powered but still needs a human coach for critical strategic interventions. If developed with a learner at the center and principles of learning at the core, AI-based coaching applications can be useful in the long term.

References

Butterfly.ai (2021), "Why butterfly?", available at: www.butterfly.ai (accessed 2 March 2021).

Chaudhary, M. (2018), "Next play launches new AI app to personalize leadership development", available at: www.hrtechnologist.com/news/leadership-succession/next-play-launches-new-ai-app-to-personalize-leadership-development/ (accessed 2 March 2021).

Gale, S.F. (2018), "The dawn of the robot coach", available at: www.clomedia.com/2018/04/09/dawn-robot-coach/ (accessed 6 March 2021).

MentorCloud (2021), "Benefits", available at: www.mentorcloud.com/mentorcloud-benefits/ (accessed 2 March 2021).

VoiceVibes (2019), "VoiceVibes unveils study showing the science behind the sales pitch at ATD international conference & expo", available at: www.myvoicevibes.com/newsmay20.html (accessed 6 March 2021).

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