Forging the Future of Work with Extended Reality: The Critical Role of Immersive Technology in Modern HR Practices

Author: Petra Palusova

Contributors: Michael Neece, Keith Carlson

Introduction

Progressing through our series, we have navigated through the synergistic alliance of AI and XR, highlighting the potential for driving business opportunities, creation of a unified system architecture and application of the multiple facets of Artificial Intelligence (AI) to HR systems. In this fourth article, we turn our focus to another groundbreaking facet of this transformation: Extended Reality (XR). XR – encompassing Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR) – is not just an add-on, but a significant pivot in the HR landscape. It brings an immersive dimension to HR processes, redefining experiences from recruitment to training and beyond.

The main role of XR technologies in HR and HR-Tech goes beyond mere novelty; it represents a fundamental shift in interaction, types of engagement, and an evolution within the workplace. XR in HR redefines employee (and job applicant) experiences, offering immersive training environments, enhancing remote collaboration, and adding depth to talent acquisition and onboarding processes. It enables an engaging, efficient, and connected workplace, irrespective of physical locations.

Beyond presenting practical applications and transformative potential of XR, we aim to paint a comprehensive picture of how XR, integrated within the Bowmo 2.0 platform, is actively forging a dynamic and forward-thinking HR ecosystem. We are convinced that Extended Reality is not just a feature – it is an integral part of the HR-tech evolution, bringing a new dimension to employee engagement and operational agility.



The Spectrum of XR: Virtual Reality, Augmented Reality, and Mixed Reality in User Interaction

Extended Reality is a paradigm shift in user interfaces, merging the physical and digital worlds, offering a new modality of interaction between technology and information. As an umbrella term for Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR), XR creates immersive or semi-immersive experiences that "extend" beyond two-dimensional flat screen-based interfaces. How do these modalities differ?

- Virtual Reality is a fully immersive experience within a digitally created virtual environment, often
 using headsets or enclosed spaces. It's particularly effective in simulating real-world scenarios for
 training, education or entertainment, allowing users to interact within a wholly digital world.
- Augmented Reality is semi-immersive and layers digital information onto the real world. Through
 devices like smartphones or AR glasses, users can see digital overlays such as data, images,
 or animations integrated into their physical surroundings. This technology has already found
 applications in various fields, from navigation aids and educational tools to innovative marketing
 campaigns.
- Mixed Reality combines elements of both VR and AR to create environments where physical and digital objects coexist and interact in real-time. It enables users to manipulate digital objects in the

physical world or overlay digital information in a way that is spatially responsive and contextually relevant to their environment. This modality finds application in manufacturing, education and training, that features controlled settings with high levels of precision, safety requirements and functional engagement.

Extended Reality in Recruitment, Training, and Employee Engagement

XR's integration into HR practices has an impact on traditional methods, and offers innovative solutions to upgrade multiple HR functions, such as:

Recruitment and talent acquisition: With XR, potential candidates can experience a virtual day in the office, getting a feel for the company culture and work environment without physically being there. Such an immersive experience allows candidates to make informed decisions about their fit with the company, and vice versa.

Training and professional development: XR provides an immersive learning environment that is ideal for training employees in realistic yet controlled settings. This is particularly beneficial for high-risk industries where hands-on training can be dangerous. VR simulations can replicate real-life scenarios, from emergency response drills to complex technical tasks, allowing employees to gain valuable experience without the risks associated with the activities.

Personal development: With VR, people can practice and refine any skills in a safe, controlled virtual environment, enhancing their proficiency and confidence. This can cover soft skills, language learning, cultural competence and other.

Employee onboarding: New hires can use VR to virtually tour office spaces, meet their teams, and familiarize themselves with workflows, all before their first day on the job. It can significantly reduce ramp-up time and the anxiety associated with starting a new job.

Remote collaboration: Remote work is exponentially on the rise, and XR is a main tool, playing a crucial role in bridging the gap between physical distance and collaboration. VR meeting rooms are used for virtual meetings, and the same can be applied for any type of get-together, whether it is a job interview, evaluation meetings, a presentation or a tour.

Enhancing employee engagement: XR offers unique, engaging experiences for employees, boosting morale and job satisfaction. For instance, gamified employee training can be used to host virtual

team-building exercises and social events, especially valuable in today's increasingly remote and distributed work environments.

The Measurable Impact of XR on Training Efficacy and Adoption Trends

XR training is rapidly transforming workforce development, boasting remarkable benefits in employee confidence, proficiency, and engagement. Studies reveal that XR learners, particularly in Virtual Reality environments, gain a 275% boost in confidence post-training, leading to increased productivity and a positive influence on company culture. Additionally, VR training expedites the proficiency rate by four times (4x) compared to traditional methods, significantly enhancing the efficiency of onboarding programs.

The corporate adoption of XR is surging, with 82% of executives planning to integrate immersive technologies into their business models within three years, signaling a strong commitment to XR in training and onboarding. This trend is driven by the enhanced knowledge retention and focus seen in practice, as VR stimulates new neural pathways for learning. Financially, XR proves cost-effective, especially for midsize companies, which utilize XR more extensively while incurring lower training costs. Employee engagement also sees a boost, with a Cox Communications VR pilot program reporting 100% learner willingness to reuse VR training.

The current prevalence of AR is becoming evident, with <u>110.1 million U.S. users</u> already familiar with the technology, a familiarity that is expected to translate effectively into corporate training. By 2030, it's projected that <u>2.32 million U.S. jobs</u> will involve AR or VR, further cementing XR's role in modern workforce training. Currently, <u>47% of Americans</u> are acquainted with VR, a statistic that includes the emerging workforce, underscoring the technology's relevance in attracting and retaining new talent. Lastly, nearly <u>80% of companies</u> recognize the potential impact of the metaverse on future learning strategies, illustrating a significant cultural shift in how organizations invest in employee development through innovative and experiential training.

Bowmo 2.0's Integration of XR for Skill Development, Talent Acquisition, and Virtual Onboarding

In the HR domain, the integration of XR is significantly advancing the efficiency and efficacy of various HR functions. XR's application in training and development is particularly noteworthy, because it enables

employees to acquire and refine skills in a controlled, and realistic virtual setting. The recruitment process will also significantly benefit, facilitating new methods for presenting company culture and job roles to potential candidates. Organizations can conduct pre-interview questioning and candidate assessments, and use the human-in-the-loop interviewing technique to provide a holistic understanding of candidates.

XR tools are, of course, pivotal in bridging the physical distance in remote work environments. Tools for remote collaboration and onboarding embedded in virtual spaces are effective for enhancing connectivity, offering an immersive onboarding experience that assimilates new employees into the company culture, irrespective of their geographical location. Location independence is also crucial for learning, that is why the Bowmo 2.0 e-learning modules will be integrated within the platform and will largely utilize immersive spaces as well. Our team is designing them to facilitate interactive educational experiences, while HR practice and process simulations will offer valuable tools for professional development. Digital twinning or doppelgangers will add a layer of 3D innovation, enabling role-playing in training scenarios and the testing of workplace changes in a virtual setting.

Bowmo 2.0 serves as a concrete example of these tools' practical implementation. The platform will leverage virtual assistants for onboarding and continuous user guidance. The platform will feature specialized immersive environments aimed at specific user groups, providing tailored experiences and functionalities. Virtual assistants, speech-to-text conversion, and data visualization will be integrated within the Bowmo XR environments, streamlining the processing and presentation of complex data sets. Bowmo 2.0 will focus on offering more effective, efficient, and engaging XR solutions across a range of HR activities.

Personalizing Talent Development and Acquisition with Adaptive Interactive Technologies

Applying AI in conjunction with XR is instrumental in building personalized interactive experiences. Leveraging the strengths of both technologies, interaction can be redefined by learning from user actions on the platform.

Al's role in this primarily revolves around its capability to analyze, learn from, and adapt to user data. When integrated with XR, Al can tailor immersive experiences to individual users. Personalization is achieved through algorithms that process user interactions, preferences, and performance within the XR environment. For instance, in a VR training program, Al can modify scenarios in real-time based on the user's responses or learning pace. This real-time feedback loop is imminently practical, especially in

talent acquisition and management due to the combination of predictive analytics and immersive simulations that help in forecasting the success of candidates in specific roles or determining the skills and traits most needed in future hires. This foresight gets visualized when coupled with immersive XR simulations.

In the realm of talent management, Al-driven predictive analytics can identify skill gaps, learning opportunities, and career development paths for existing employees. Combined with XR's immersive training environments, employees can get benefits from personalized learning journeys, which are designed to address specific developmental needs, acquisition of new skills and improve existing ones in an interactive manner.

Integration of XR in Workplace Management with Bowmo 2.0

The application of XR in HR is not merely an emerging trend but a fundamental shift in the interaction and engagement within workplace environments. Future projections for this technology indicate a significant move towards immersive applications, which are expected to include comprehensive onboarding experiences in virtual environments, replicating physical workspaces, and advanced training simulations that accurately depict complex real-world situations. The synergy of XR with AI and machine learning further refines these experiences, offering customizable and adaptive learning and development paths.

Bowmo 2.0 will lock down the integration of XR within its platform as a demonstration of a forward-thinking approach in HR technology. Its commitment to XR integration showcases an alignment with the evolving demands and expectations in HR-Tech, positioning it as a key player in shaping the future landscape of HR.

This trajectory is indicative of a shift towards more dynamic, engaging, and effective HR management practices. Platforms like Bowmo 2.0 are at the vanguard of this shift, embracing XR technologies to enhance the multi-level HR functions. This evolution takes place as a necessary advancement and a reaction to the changing nature of how human capital is managed, developed, and taken care of in the modern workplace.