

# Transforming the Digital Workers Experience Intelligently

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**Abstract**— Employee expectations change dramatically due to the increase in digital work and work over the past few years. This study underscores the growing role of Artificial Intelligence (AI) in Human Resources (HR) in designing advanced digital worker knowledge. A collection of popular AI applications such as chatbots and visual assistants in human resource development, career development, and employee engagement is provided with their definitions. Estimates of their organization implementation, including concerns related to potential benefits, are listed.

**Keywords:** Artificial Intelligence (AI), Human Resources (HR)

## I. INTRODUCTION

As organizations with good employee experience are growing rapidly with high profit margins, job knowledge (EX) has become a major priority in the Human Resources (HR) agenda over the past few years. Employee experience involves a variety of factors, including how employees find meaning in their work and how they perceive, participate, and respond to internal processes and organizational culture during their employment. Good employee self-esteem creates high employee interaction, and more dedicated and dedicated employees create a better feeling for their co-workers and work for them. Today, many organizations view employee reviews as important as customer feedback. Effective organizations have adopted a 'work first' approach and translated the principles of customer experience in managing talent and development areas in HR.

## II. BACKGROUND

Work experience design involves both human and digital components. Technology is an important factor in the digital transformation of the user experience. Today, customers receive customized shopping recommendations based on personal preferences and past, which can be delivered to them at a faster rate. These digital features aim to make the lives of consumers easier in a growing complex world. In line with this change in consumer expectations, employees also expect personalized and similar customer perceptions in their work, reflecting features such as digital customers. Making available the right technology for employees is essential to improving employee knowledge, but that alone does not guarantee high satisfaction. Integrating technology into sensitive workforce areas and designing a complete employee life cycle from 'employment to learning' through appropriate digital initiatives has been an important focus of related efforts. In the literature, there is a growing focus on effective AI applications in the HR field, especially in the field of talent discovery; however, only a limited number of studies investigating the impact of AI in one context of work experience.

## III. AI APPLICATIONS

Artificial intelligence (AI), combined with human ingenuity, is often hired to design advanced work knowledge. AI helps to perform various repetitive tasks in HR tasks and redesign processes. Contrary to the original vision of reducing human interaction, digital automation aims to give HR teams more time to build relationships with employees, managers, and candidates to better address their needs. Some of the most common AI applications in Human Resources, shown in Figure 1, are given in the following list.

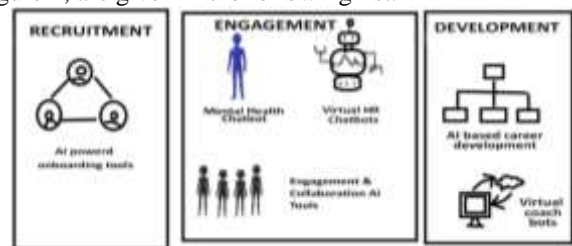


Fig. 1: Artificial Intelligence (AI) Applications to Enhance Employee Experience

### A. Visible HR Assistants / Chatbots

These smart AI-based assistants are able to answer employees' basic questions about HR policies regarding benefits, vacation plans, and work procedures as well as the ability to create standard employment letters based on employee requests. Employees have regular access to these assistants, which helps HR teams improve productivity by saving time, which can be used to focus on other high-value jobs that have a positive impact on the overall staff experience.

### B. Virtual Coach Bots for Managers

The AI-based coach bot prepares managers when they need to have difficult conversations with their employees. Coach bots cannot install training sessions for people; however, it helps managers to practice and prepare for their discussions that involve complex staff situations.

### C. Personalized AI-Based Career Development Tools

AI development sites can promote open internal positions that are appropriate for employees based on their profiles in addition to recommending training programs based on their self-improvement needs, passions, and interests. These forums are well integrated with internal talent management, performance management, and talent acquisition programs.

### D. Engagement and Collaboration AI Tools

AI-based surveys, surveys, and collaborative forums help generate real-time data on employee feelings, reactions, and engagement levels. These tools provide an in-depth understanding of staff opinions and expectations of organizations and managers, allowing them to respond in a timely manner to any issues that need to be addressed.

### E. Mental Health Chatbots

One of the leading causes of disease worldwide is mental health [9]. Mental health chatbots are designed to analyze the feelings, behaviors, and stress levels of employees by asking specific questions to assess their risk of burnout. These AI-enabled chatbots are built based on natural language analysis and emotional analysis. Depending on the needs and the needs of the staff, some chatbots even suggest personal reflection practices. Studies have shown that users feel safer and more comfortable talking to mental health chatbots.

### F. AI-Powered Onboarding Tools

AI manages some of HR's handicrafts, such as sending papers, arranging board meetings, and answering some basic questions of new employees during the employee boarding process. In this way, new employees who experience delays during their boarding process while receiving timely answers to their questions. Internal chatbots can enhance the self-esteem of new employees by providing better communication flow and much-needed information.

## IV. IMPLEMENTATION SUCCESS AND RISK FACTORS

These AI-based tools are regarded as game changers with their ability to achieve digital transformation of the staff experience. However, there are potential concerns and risk factors in their use of the organization.

Both the success and risk aspects of AI-based tools for creating improved employee awareness are analyzed, as shown in Table 2.

Success Factors	Risks Factors
Business communication and HR strategy	Lack of trust and openness
The culture of a supportive organization	Privacy and security of data
Ability to manage data and expertise within HR teams	Possible data entry is biased in the system
Easy to see use in AI tools	The feeling of touching the less man to the staff

### A. Success Factors

**Business communication and HR strategy:** Many AI tools are used to improve employee interaction and information. However, organizations should select or develop appropriate AI tools based on their business strategy and needs. Otherwise, investing in non-essential or good AI tools you have creates additional administrative burden and organizational costs, and does not help to improve job knowledge.

#### 1) Support organization culture:

Most AI solutions are considered plug-and-play technologies by organizations. However, managing change and organizing the organization based on business culture is essential to the successful adoption of technology. On the other hand, AI solutions can also help organizations to create an internal culture that is inclusive and enjoyable.

#### 2) Ability to manage data and expertise within HR teams:

The AI tools used to develop employee knowledge generate large amounts of data where HR teams may not have the necessary skills to analyze and make informed decisions. Therefore, HR teams should form a demographic team

consisting of data scientists, engineers, and experts with quantitative knowledge and expertise.

**Easy-to-use AI tools:** When employees use AI tools without technical difficulties, they tend to be more inclined to use them. AI tools should be designed to be easy to use for better user experience.

### B. Risk Factors

- 1) **Trust and openness:** Trust and transparency in data management are also important factors as employees should be comfortable enough to use these applications. When employees trust AI applications and the benefits of the result of AI applications, they will not hesitate to use them.
- 2) **Data privacy and security:** AI tools have access to employee personal and confidential data as they interact with metadata through communication and engagement tools. In many cases, employees may not be aware of this data collection. Data security is an important factor in building trust in AI systems. Organizations should develop secure data management models based on local legal regulations.
- 3) **Potentially biased-data entry to the system:** AI can learn continuously and use previous data to make predictions about the future. In the case of biased data entry in the AI system, the result from the system will also be biased. Organizations should evaluate their AI algorithms for real-life situations to ensure that results from AI systems are not biased.

## V. CONCLUSION

AI tools help improve the knowledge of digital employees in organizations. However, the successful implementation of such AI-based tools depends largely on the interaction with the organization's culture, the appropriate design of AI tools, and the effectiveness of data management tasks. Many of these tools generate large amounts of demographic data for organizations to analyze, understand, draw conclusions, and be used to make decisions. HR teams need to have the right data management skills to analyze and participate in effective decision-making. Additional staff concerns involving data confidentiality and other ethical considerations should be considered and addressed in order to successfully adopt AI technology by organizations. Some companies are happy to use new AI tools quickly to make them new. However, this digital transition does not happen overnight, and requires more detailed planning and management. Also, companies need to make sure that these tools are purposeful and adapted based on the needs of the organization. In the future, as more and more organizations adopt AI solutions to engage and empower employees, negative perceptions about AI will eventually diminish over time.

## REFERENCES

- [1] Serap Zel" Transforming Digital Employee Experience with Artificial Intelligence", 2020 IEEE/ ITU International Conference on Artificial Intelligence for Good (A14G)
- [2] Monika D. Rokade, Dr. Yogesh kumar Sharma," Deep and machine learning approaches for anomaly-based

- intrusion detection of imbalanced network traffic.” IOSR Journal of Engineering (IOSR JEN), ISSN (e): 2250-3021, ISSN (p): 2278-8719
- [3] Monika D. Rokade, Dr.Yogesh kumar Sharma” MLIDS: A Machine Learning Approach for Intrusion Detection for Real Time Network Dataset”, 2021 International Conference on Emerging Smart Computing and Informatics (ESCI), IEEE
- [4] Monika D. Rokade, Dr. Yogesh Kumar Sharma. (2020). Identification of Malicious Activity for Network Packet using Deep Learning. International Journal of Advanced Science and Technology, 29(9s), 2324 - 2331.
- [5] Sunil S. Khatal, Dr.Yogesh kumar Sharma, “Health Care Patient Monitoring using IoT and Machine Learning.”, IOSR Journal of Engineering (IOSR JEN), ISSN (e): 2250-3021, ISSN (p): 2278-8719
- [6] Sunil S. Khatal, Dr. Yogesh kumar Sharma, “Data Hiding In Audio-Video Using Anti Forensics Technique For Authentication ”, IJSRDV4I50349, Volume : 4, Issue : 5
- [7] Sunil S. Khatal, Dr. Yogesh Kumar Sharma. (2020). Analyzing the role of Heart Disease Prediction System using IoT and Machine Learning. International Journal of Advanced Science and Technology, 29(9s), 2340 - 2346.

