HOW GENERATIVE AI IS RESHAPING HR AND WHY IT'S TIME TO GET INVOLVED

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What is Generative AI?

When ChatGPT was introduced in late 2022, it revealed to the world the remarkable potential of Artificial Intelligence (AI) in transforming various fields. The technology that powers this advanced chatbot represents a significant leap forward in the realm of AI. Instead of merely analyzing or categorizing existing information, Generative AI possesses the capability to generate entirely new content, encompassing text, visuals, sound, synthetic data, and more. This groundbreaking development will have a profound impact on business, science, and society as a whole, fostering unprecedented human creativity and enhancing productivity.

From ChatGPT to DALL-E, the latest generation of Generative AI applications has emerged from foundational models, which are intricate machine learning systems trained on massive datasets containing various types of data, such as text, images, audio, or a combination thereof, on an extensive scale. Thanks to recent advancements, companies can now construct specialized models that generate images and language based on these foundational models. Currently, the majority of foundational models are Large Language Models (LLMs) trained on natural language.

What doors will Generative AI unlock?

As foundational models expand the scope of what we can achieve with AI, the possibilities will continue to multiply. Businesses will employ them to revolutionize collaboration between humans and AI, ushering in a new era of AI applications and services. AI models will become constant companions, optimizing tasks and enhancing human capabilities. Generative AI will introduce unparalleled speed and creativity to fields like design research and content generation. It will elevate business process automation to a transformative level, ushering in a new era of efficiency in both the back and front offices. It will significantly enhance the productivity of software developers by automating code creation and rapidly converting one programming language to another.

Over time, it will also support enterprise governance and information security, safeguarding against fraud and enhancing regulatory compliance.

With the global AI market projected to approach a value of nearly $2 trillion by 2030 (source: Statista.com, March 2023), companies will discover innovative ways to harness these tools to tackle complex challenges and drive innovation.

Current Outlook on HR Industry

The Human Resources (HR) industry plays a crucial role in managing and optimizing a company's workforce. It encompasses various functions related to personnel management, talent acquisition, administrative processes & employee engagement. However, the industry faces several challenges, which include:

Talent Acquisition and Recruitment Hurdles

Skill Shortages: Finding candidates with the right skills can be challenging, especially in industries where specific skills are in high demand.

Competition: The competition for top talent is fierce, making it challenging for HR professionals to attract the best candidates.

Technology Integration: Keeping up with evolving recruitment technologies, such as applicant tracking systems and AI-powered tools, requires investment and adaptation.

Workforce Engagement & Retention Issues

Employee Burnout: The modern work environment often leads to employee burnout, affecting productivity and retention rates.

Remote Work Challenges: The transition to working remotely has presented fresh difficulties in keeping employees actively involved.

Generational Differences: HR professionals must address the varying needs and expectations of different generations in the workforce, from Baby Boomers to Gen Z.

Administrative Inefficiencies

Paperwork and Manual Processes: Many HR tasks, such as onboarding, payroll, and benefits administration, still rely on manual paperwork and processes, leading to inefficiencies and errors.

Compliance and Regulations: Staying compliant with evolving labor laws and regulations can be complex and time-consuming.

Data Management: Managing and securing employee data, especially in the era of data privacy regulations like GDPR, poses significant challenges.

To address these challenges, the HR industry is increasingly turning to technology solutions. AI and machine learning are being used for more efficient candidate screening and talent matching, while employee engagement platforms help boost retention. Automation tools are streamlining administrative tasks, and cloud-based HR software is enhancing data management and compliance efforts. Additionally, HR professionals are focusing on creating a more inclusive and flexible workplace culture to meet the evolving needs of employees. Despite these challenges, the HR industry is poised for transformation as it adapts to the changing dynamics of the modern workforce.

What Generative AI means for recruiters

Resume/CV Screening and Matching: Generative AI can analyze and match resumes or CVs with job descriptions, highlighting the most qualified candidates. It can identify relevant skills, experience, and qualifications, streamlining the initial screening process.

Personalized Candidate Communication: AI-driven chatbots or virtual assistants can engage with candidates in real-time, answering questions, scheduling interviews, and providing feedback. These interactions can be personalized, creating a positive candidate experience.

Automated Initial Interviews: Utilizes this technology to conduct chats or voice-based assessments with predefined questions, saving time and enabling the early identification of promising candidates.

Customized Onboarding Experiences: It can tailor the onboarding process to individual employees, offering personalized training modules, introductions to team members, and access to resources based on their roles and needs.

Interactive Training Simulations: AI can create realistic, interactive simulations for employee training, especially in fields where hands-on experience is critical. This method is particularly effective for technical or hazardous job roles.

Adaptive Learning Paths: By tracking employee progress and performance, Generative AI can adapt training content and pathways to suit each employee's learning style and pace, ensuring they receive the most effective training.

And what it means for professional growth

In today's world, if one possesses certain skills but lacks a clear vision of potential career opportunities, they often rely heavily on a manager or someone who takes an interest in guiding you toward unconventional career paths.

However, in a world where Generative AI is prevalent, you could engage in a conversation with a highly intelligent chatbot and convey, "These are my skills and experiences. What job options might be available to me?" The chatbot could respond by saying, "Based on your skill profile, most individuals pursue these occupations, but some explore A, B, or even C," with "C" referring to coding. Subsequently, you could inquire about the details of coding jobs, and the

chatbot could provide a job description that isn't laden with technical jargon but instead expressed in terms you can easily comprehend. You could then inquire further, saying, "This is intriguing. What steps do I need to take to acquire the necessary skills?". Generative AI would be capable of outlining the required learning experiences.

Generative AI holds the potential to illuminate diverse career paths and help individuals with inherent skills but limited awareness, understand the steps required to pursue them.

Personalized Surveys and Feedback Analysis: AI can design surveys that are tailored to employees' roles and experiences, making it more likely that

employees will provide honest feedback. Generative AI can then analyze this data to identify trends and areas for improvement.

Mental Health and Well-being Support: AI-driven chatbots or virtual assistants can provide employees with immediate access to mental health resources and support. They can also detect signs of stress or burnout based on language used in communication and suggest appropriate interventions.

AI-driven Employee Assistance Programs (EAPs): Generative AI can offer employees personalized recommendations for EAP services, such as counseling or stress management programs, based on their reported needs and preferences.

How the performance review systems are transforming

Performance reviews are undergoing a significant transformation with the integration of Generative AI technologies. One notable change is the introduction of real-time feedback mechanisms, enabling continuous performance monitoring and adjustment throughout the year. Generative AI's ability to analyze vast datasets provides organizations with data-driven insights into employee performance, going

beyond traditional metrics to offer a more comprehensive view. Moreover, AI generates personalized development plans for employees based on their performance data, suggesting tailored training, skill-building, and mentorship opportunities. Language and tone analysis help in promoting constructive and empathetic communication in feedback, fostering a positive and growth-oriented work culture.

Integrating employee well-being indicators, AI ensures a healthier work environment by considering factors like stress levels and workload in performance evaluations. These innovations collectively make performance reviews more data-driven, equitable, and employee-focused, ultimately enhancing job satisfaction and productivity. Nonetheless, organizations must prioritize transparency, data privacy, and ethical considerations when deploying AI in performance reviews.

Today, Generative AI can amplify bias

Bias Mitigation

Explanation: Generative AI models can inadvertently learn biases present in historical data. In HR, this can lead to biased decisions in recruitment, promotion, and performance evaluation.

Ethical Concern: Unchecked bias can perpetuate discrimination based on race, gender, age, or other protected characteristics, leading to unfair treatment of employees and candidates.

Mitigation Strategy: HR teams should carefully curate and review training data to minimize bias. Implementing fairness-aware algorithms and conducting regular audits can help identify and rectify bias in AI systems.

Data Privacy and Security

Explanation: Generative AI processes and stores vast amounts of sensitive employee and candidate data. Protecting this data from breaches or misuse is crucial.

Ethical Concern: Mishandling of personal data can lead to privacy violations and trust erosion among employees and candidates.

Mitigation Strategy: Employ robust data encryption, access controls, and compliance with data protection regulations like GDPR or CCPA. Clearly communicate data handling policies to employees and obtain informed consent for data usage.

Transparency

Explanation: Generative AI models are often considered "black boxes" because their decision-making processes are not readily understandable by humans.

Ethical Concern: Lack of transparency can erode trust as employees and candidates may not understand how AI-driven decisions are made.

Mitigation Strategy: HR teams should strive for transparency by providing explanations for AI-driven decisions whenever possible. Additionally, companies can invest in AI models that are more interpretable or create user-friendly dashboards to display AI-generated insights.

Potential Implementation Roadblocks

Integration with Existing HR Systems

Challenge: Most organizations have established HR systems, including HRIS (Human Resources Information Systems) and ATS (Applicant Tracking Systems). Integrating Generative AI solutions seamlessly into these existing systems can be complex.

Impact: Poor integration can result in data silos, inefficiencies, and a fragmented user experience for HR professionals and employees.

Mitigation Strategy: Invest in AI solutions that offer robust integration capabilities and work closely with IT teams to ensure smooth implementation.

Consider cloud-based AI solutions that can be easily integrated with existing systems.

Staff Readiness and Training

Challenge: HR teams may lack the necessary skills and understanding to effectively use Generative AI tools. Training HR staff to use these technologies is a significant challenge.

Impact: Inadequate training can lead to underutilization of AI tools, limiting their potential benefits.

Mitigation Strategy: Develop comprehensive training programs to upskill HR professionals on AI tools. Encourage a culture of learning and provide ongoing support and resources for skill development.

Balancing Automation with the Human Touch

Challenge: Striking the right balance between automated AI-driven processes and human intervention is a challenge. Over-automation can lead to a lack of personalization and empathy, which is essential in HR.

Impact: Over-automation can result in a poor candidate and employee experience, potentially damaging the employer brand.

Mitigation Strategy: Design AI systems that enhance human decision-making rather than replace it entirely. Clearly define the roles of AI and humans in HR processes, emphasizing the complementary nature of their contributions.
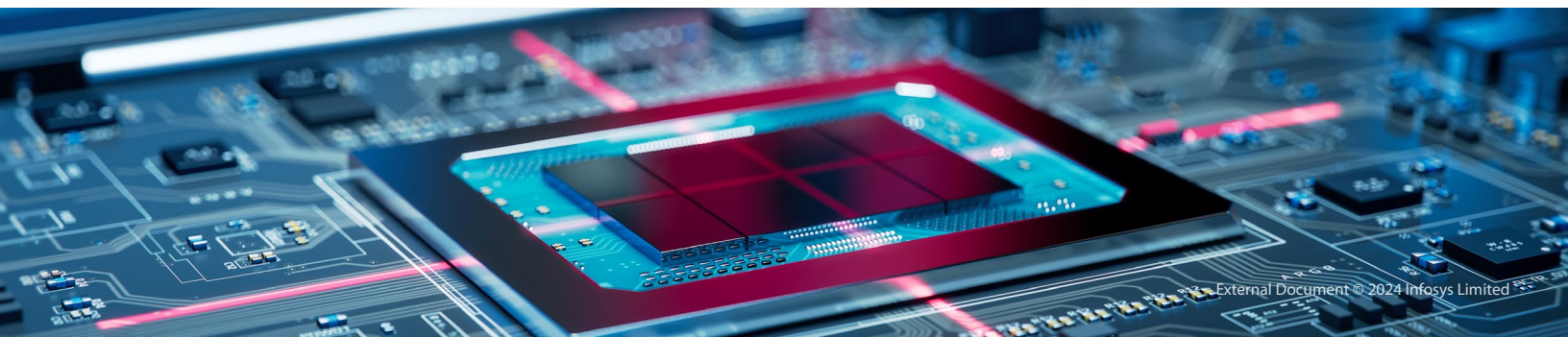
Real-world Case Studies

Enhancing Employee Well-being with AI

Challenge: A large manufacturing company recognized a need to address employee well-being, especially in high-stress roles. Identifying employees who might be experiencing stress or burnout was challenging using traditional methods.

Solution: They implemented a Generative AI-powered employee well-being platform. The AI analyzed employees' communication patterns, such as email and chat messages, to detect signs of stress or burnout. It then provided personalized recommendations for well-being programs and resources.

Outcome: The AI-driven system helped them proactively support employees' mental health and well-being. The company observed a decrease in employee turnover and an increase in overall job satisfaction. Employees felt more supported, and HR could track the impact of well-being initiatives more effectively.

Navigating Complex HR Compliance with AI

Challenge: A growing startup faced challenges in keeping up with evolving HR compliance regulations. The HR team struggled to update policies and ensure that all employees were aware of the changes.

Solution: They implemented a Generative AI-powered policy and document generation system. The AI monitored legal updates and automatically generated compliant policy documents. It also delivered personalized policy updates to employees based on their roles.

Outcome: They improved their compliance management significantly. The AI-driven system reduced the risk of non-compliance and legal issues. Employees received clear and timely policy updates, ensuring everyone was aware of the latest changes, and HR could focus on strategic HR initiatives.

Infosys Innovation Network (IIN)

The Infosys Innovation Network (IIN) ecosystem is a network of partnerships, collaborations, and relationships that drive innovation and growth for Infosys and its customers. It enables Infosys to stay ahead in technology, identify business opportunities, and deliver innovative solutions. Through this ecosystem, Infosys accesses knowledge, expertise, and emerging technologies to solve client problems and seize new opportunities. Yellow.AI is an IIN partner for conversational AI solutions. Their Generative AI integrated solutions are building a lot of interest. Explore how our startup partner, Yellow.ai, is transforming the industry.

Conversational AI Partner Yellow.ai

Founded by three friends with a shared passion for transforming the way customers interact with brands, Yellow.ai is now a global leader in conversational AI, delivering autonomous, human-like experiences for customers and employees to accelerate enterprise growth. They believe that memorable conversations are at the heart of every meaningful brand engagement.

Enabled by their Generative AI-powered Dynamic Automation Platform (DAP), they deliver conversational experiences via dynamic AI agents that help enterprises achieve higher customer satisfaction and employee engagement. With their customer-centric approach and innovative solutions, their team of experts aims to create actionable outcomes for enterprises, their customers, and their employees while continuously pushing the boundaries of what's possible.

How some clients are leveraging Yellow.ai Generative AI to transform the HR Industry

Streamlined workflows: DAP automates repetitive and mundane tasks, freeing up employees from manual, time-consuming processes. This enables employees to focus on more meaningful and challenging aspects of their work, boosting their job satisfaction and engagement.

Personalized experiences: The Generative AI technology used in DAP allows for more personalized interactions with employees.

The platform can understand individual preferences, learning styles, and communication styles, creating a more tailored experience for each employee.

Efficient knowledge sharing: DAP can serve as a knowledge repository, providing instant access to information and resources. Employees can quickly find answers to their questions and access relevant data, leading to

increased productivity and a sense of empowerment.

Continuous learning and development: Yellow.ai's Generative AI can offer personalized learning and development recommendations for each employee based on their strengths and areas for improvement. This fosters a culture of continuous learning and growth, which is highly motivating for employees.

How do clients handle sensitive HR data, ensuring privacy and compliance with regulations like GDPR or HIPAA?

Yellow.ai takes the security and privacy of the data collected on/through the platform extremely seriously and have devised compliances around the platform to ensure that there is no data leakage, especially when leveraging the integration platform.

ISO 27001:2013 and ISO 27018:2019 Certified: The Yellow.ai platform has been certified as maintaining the right processes for handling data and other aspects through ISO certifications. The ISO certifications have audited the platform, people, and processes, and have deemed the platform safe from all three perspectives.

OAuth2.0 and Token-based Approach for Authentication: As they open up the platform for third-party integrations which can be developed by any builder, one of the key aspects of security ensured is that all authentication on the integrations happens through OAuth2.0 using the

token-based approach. This ensures that the platform does not store the actual user credentials, and just provides the certificate to the virtual assistant to call the integration.

Message masking: With all the messages flowing into the platform where there is a chance the user has provided personal information; the information is only available during run-time. After run-time, it is masked with a one-time hash and stored in the database. The one-time hash ensures that the actual message cannot be retrieved without the hash key.

Encryption Standard: Yellow.ai ensures strict encryption standards for both ingress and egress of the traffic flowing. HTTP-only or non-secure protocols are not allowed to be configured on the platform. Currently, they recommend partners and customers use TLS 1.3 as the latest transportation encryption standard. Yellow.ai has defined

the encryption standard for data residing in the platform. All the data must be encrypted using the AES-256 algorithm before being stored. During the transport of data, HTTPS with TLS 1.3/1.2 must be followed.

Other Global Compliances: With an ever-growing global focus on privacy and other compliances, they continuously upgrade the platform to comply with a host of compliances.

To name a few:

- SOC 2 Type 1 Attestation Report
- SOC 2 Type 2 Attestation Report - ETA= Jan 2023
- HIPAA Compliant as Business Associates
- GDPR Compliant as Data Processors
- Comply with Privacy laws as Data Processors in UAE, the US, Indonesia, Singapore, MENA, and ANZ
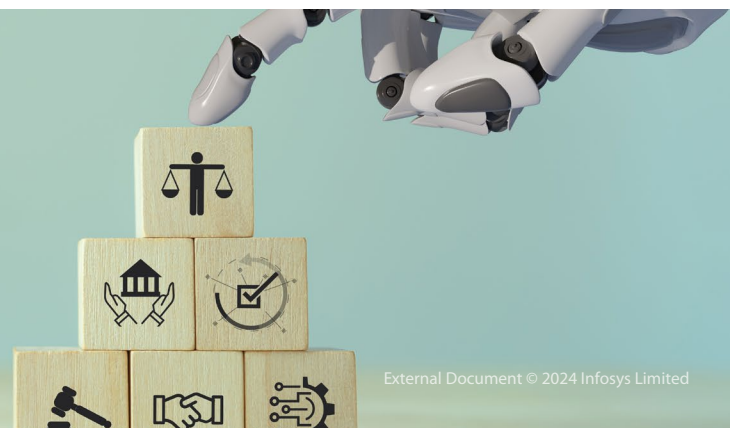
Implementing the solution provided by Yellow.ai can result in

Up to 60% reduction in Operational costs

Automate up to 80% of all day-to-day employee queries, including IT support, password resets, hardware requests, HR policy FAQs, etc. Save 60 % on operational costs with self-serve automation.

30% Boost in Employee Productivity

Enriches the productivity of live agents through auto-assist recommendations, a summary of conversations, and quick formalized replies for faster and more effective query resolutions. Free up HR and ITSM staff bandwidth to focus on high-value employee initiatives.

20% Faster Hiring and Onboarding

Analyze job applications and provide insights to the hiring team by crunching large volumes of conversational data. Automate the end-to-end onboarding process for new hires, from document submission and background checks to dispatching welcome kits in just a few clicks.

40% enhancement in ESAT

Capture the voice of employees with automated feedback and surveys, generating insights on employee sentiments and engagement levels. Suggest personalized training programs based on skill requirements, leading to improved performance and increased engagement.

Future Outlook

Yellow.ai is working on providing a best-in-class experience for the employees using LLMs along these streams:

Hyper-Personalized Employee Engagement

They are focusing on providing an unmatched personalized experience for employees. By recognizing the uniqueness of each employee's journey, they can cultivate a more satisfied and engaged workforce.

The AI-driven Lifecycle Optimizer has been designed to engage with employees at various critical milestones, from the first day to work anniversaries and performance milestones. By recognizing and responding appropriately to these key moments, Yellow.ai aims to create a more meaningful relationship with each employee, leading to greater motivation, productivity, and loyalty.

Reduced HR Support Costs through Automation

The platform uses YellowG to infer answers from an integrated knowledge base, enabling immediate responses to employee queries. This creates a virtual assistant that can understand and respond to inquiries in a natural, human-like manner. As a result, HR departments can significantly decrease the time spent on answering repetitive and routine questions, leading to substantial cost savings. They have out-of-the-box knowledge base connectors for Salesforce, Zendesk, ServiceNow, Amazon S3, Microsoft Sharepoint, Confluence, and PrismaDB as of now. Yellow.ai is working on connecting with more systems in the near future.

Enhanced Candidate Experience through Recruitment and Onboarding Automation

The recruitment and onboarding processes play a critical role in shaping a candidate's perception of the organization. To help ensure a positive experience, they have developed features that can automate these complex processes. From prescreening applications and scheduling interviews to administrative tasks like document submission and verifications, Yellow.ai's AI agents automate all the mundane tasks. This not only simplifies the HR team's task but also significantly enhances the new hire's first experience with organization.

Future Outlook of Generative AI in HR

Generative AI's capabilities unlock heightened productivity and reshape the service model. With a well-balanced combination of maturity, defined goals, and time, a strategic blend of human and AI efforts could potentially increase HR productivity by up to 30% in the foreseeable future. An early adopter in AI for HR has demonstrated financial benefits, consistently reducing its annual budget by 10% over the past three years.

To illustrate the potential of Generative AI in HR, consider the time allocation of HR business partners in a global industrial goods company. Two scenarios depict how a Generative AI-enhanced HRBP can support the firm.

In the first scenario, Generative AI deployments, including chatbots and automation solutions, unlock 25% to 30% of HRBP time. This model relies on the HR copilot and manager to enhance staff skills through tech-based nudges, resulting in more productive HRBPs capable of supporting a larger number of employees due to reduced administrative tasks.

The second scenario aims to increase overall productivity and reinvest the time gained from Generative AI efficiency.

This creates a specialized role—HR business talent strategists—allocating time to deeper employee engagement, change management, and strategic talent planning.

Both scenarios offer productivity gains for the HR organization and the broader executive leadership team. The decision-makers must choose between near-term cost savings or a focus on enhancing talent effectiveness. Regardless of the choice, Generative AI deployments have the potential to yield compelling results, emphasizing the importance of clear vision and strategic direction for HR leaders.

HR Transformation | Gen AI has the potential to drive about 30% increased productivity across the HR value chain in the near term

	Anticipate		Attract		Develop		Engage	
HR Activity Categories	HR Strategy & Planning	Recruiting & Resourcing	HR Admin & Shared Services	Compensation & Benefits	Learning & Development	Performance & Career Management	Employee Engagement	Employee Relations
Example Activities	Strategic Workforce planning, HR Strategy, Organization design, exit management	Employer branding, recruitment, International placement programs	First level support, onboarding, payroll, administration, data management, reporting	Job grading, compensation & benefits, policies, rewards & recognition	People development, training design & delivery	Performance management, icareer & succession planning, international placement	Retention management, DEI, organisation developmet & change management	Trade unions, work council, labor law issue resolution
Share of Total HR Time	10 - 20%	10 - 20%	20 - 30%	5 - 10%	10 - 20%	10 - 20%	5 - 10%	5 - 10%
Generative AI potential efficiency gain								

Legend:
- ○ <10%
- ○ 10 - 25%
- ○ 25 - 50%
- ○ >50%

Conclusion

Generative AI not only enhances the efficiency of existing processes and tasks but also empowers HR to rethink its approach to talent, thereby transforming the overall HR service model. However, amid such transformative change, the HR function must exercise caution regarding the numerous risks associated with Generative AI, particularly when handling personnel information.

For an extended period, HR has aimed to shape employee sentiment and diminish biases in real-time decision-making. The thoughtful implementation of AI holds the potential to further alleviate biases in existing processes. This necessitates a strong collaboration among HR, legal, and business leaders to responsibly implement AI and identify and rectify any biases within Generative AI systems.

Leaders should be prepared for a dynamic landscape encompassing evolving technology and regulations, with continuous monitoring of new solutions and compliance requirements. Despite the capabilities of Generative AI in identifying insights and summarizing data, humans remain indispensable in making sound, just, and well-documented business decisions. The realization of this future hinges on numerous factors, with HR's responsible use of Generative AI being just one of them.

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