



SAP Thought Leadership Paper | SAP SuccessFactors solutions

Is AI right for your HR organization?

Guidance for choosing relevant,
reliable, and responsible business
AI technology

Table of contents

- 4** The fundamentals of AI for HR organizations
- 7** Understand what AI is and what AI isn't
- 12** Select AI-powered HR solutions to help you succeed



Artificial intelligence (AI) is among the hottest technology topics, attracting interest from business executives and HR leaders alike. **AI can increase HR efficiency and speed as well as enable greater automation to help boost talent potential.** But business leaders have many questions regarding the use of AI in HR – including its potential benefits and ethical considerations. This paper offers guidance on using AI in HR effectively and ethically while producing the best possible outcomes for your organization.

The fundamentals of AI for HR organizations

Business AI promises to deliver significant value for HR

Many technology innovations generate buzz and excitement as they burst onto the market. Almost overnight, AI has landed with even more hype – and more venture capital investments – than anyone could have expected. As a result, we've seen rapid growth in AI technologies and use cases. It sometimes seems as if everyone is talking about AI and how it can be used in business, especially for HR applications.

In fact, AI technology potentially can become a central contributor to your HR organization's success. Effectively deployed, it offers opportunities to accelerate your processes, improve interactions with employees, and create better people experiences.

As generative AI tools grow in popularity and become more widely available, HR professionals are quickly finding ways to use them to add value to their jobs and daily lives. And leaders across industries and business functions are considering how AI can transform their operations and deliver opportunities to the business.

HR decision-makers may be positioned to lead the way to AI-driven successes. Because AI has the potential to make a huge impact on worker efficiency, HR professionals are beginning to explore early use cases and assess where AI can enhance their processes.

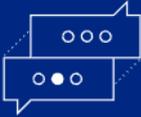
To gain maximum value from the technology and mitigate risk, you need to learn about the benefits – and potential concerns – that business AI may bring to your HR organization.

For HR professionals, generative AI can provide greater levels of automation, improve how you make decisions, and **boost your ability to optimize processes.**



Understanding key AI concepts and uses is a priority

Let's get started by defining the fundamentals of business AI for HR. Many discussions treat different types of AI interchangeably, but each technology is best suited for specific applications. The following table summarizes types of AI, their key functionalities, and common use cases.

AI type	Definition	HR use-case examples
 Generative AI	Creates text, images, or other media using models that learn the patterns and structure of training data, producing new data with similar characteristics	<ul style="list-style-type: none">• Create job descriptions, employee performance goals, and interview questions• Revise content to meet changing requirements such as inclusivity, diversity, or gender neutrality, for example
 Conversational AI	Mimics human conversations using technologies such as chatbots or virtual agents and natural-language processing to help bots understand users' intent	<ul style="list-style-type: none">• Enable employees to easily change their own personal data, such as preferred pronouns or chosen name, and view their job-related data• Allow employees to request or give job-related feedback
 Deep learning	Performs specific analysis on HR data to create a deep understanding of data and provide directional insights and recommendations	<ul style="list-style-type: none">• Provide individualized recommendations for learning, roles, projects, dynamic teams, mentors, and peer connections• Support a variety of learning and development experiences, including peer connections, volunteer causes, skill coaches, and project assignments
 Automation	Uses AI-driven intelligence to create simulations that inform HR decision-making	<ul style="list-style-type: none">• Recommend the most appropriate benefits for specific employees• Detect fraud within payroll processing

Why is everyone talking about generative AI?

Perhaps more than any other AI technology, generative AI has the potential to spark a disruptive shift for HR organizations and businesses. With this technology, you can reduce the time needed to create compelling content, including text, images, data, and videos.

As organizations begin to experiment with generative AI, they are discovering emerging use cases that can add immediate value to people processes, such as:

- **Writing assistance:** Helping HR users in creating tailored job descriptions and goals
- **Talent acquisition:** Generating questions to help prepare recruiters for candidate interviews
- **Information and search:** Querying HR data in a natural language and searching for answers to common questions

For HR professionals, generative AI can provide greater levels of automation, improve how you make decisions, and boost your ability to optimize processes.

Effectively deployed, AI technology offers opportunities to accelerate your processes, improve interactions with employees, and create better people experiences.



Understand what AI is and what AI isn't

Careful evaluation is a critical first step

The buzz around AI and developing intelligent technology capabilities may give the impression that technology is more capable than it is. For now, AI technologies are still new, relatively untested, and far from perfect.

The following are some of the technology concerns or potential limitations you should consider when thinking about business AI for your HR organization.

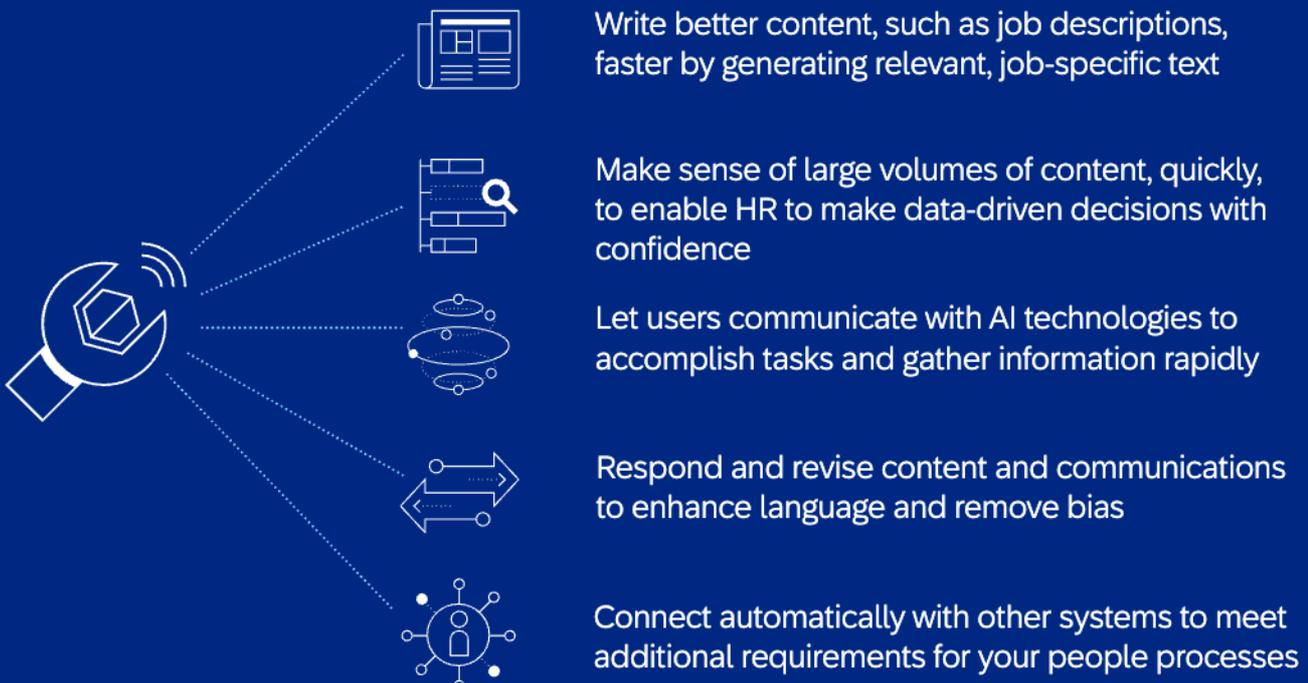
Data leaks

In just the first year of use, mainstream AI bots have been involved in several data breaches. For one vendor, a vulnerability in the code's open-source library exposed the data of certain subscribers.

One large enterprise allowed its engineers to use a widely available AI tool for assistance, only to find that the technology leaked confidential corporate information. Some companies have since restricted employee use of such tools to reduce the threat of these leaks becoming an opportunity for cyberattacks.

Key capabilities of business AI for HR

AI technology continues to mature, becoming a more sophisticated tool for your HR organization. Advanced tools can help you do the following:



Bias

Inherent bias has been a long-standing concern regarding how algorithms are developed. Generative AI is built on foundation models, which are deep learning models trained on massive volumes of data, that can continue to be optimized with new context. One type of foundation model is a large language model (LLM), which is optimized for text and chat.

Yet LLMs often scrape large amounts of data from unverified sources across the Internet. By using this data, AI technology can reflect the biases of content creators – political, sexist, and racist – in many of its communications. Although tools and approaches are being developed to mitigate this risk, the challenges are significant and removing these biases entirely will take time.

Assumptions and inaccuracies

Generative AI models routinely make assumptions and create fabrications, known as “hallucinations.” In such hallucinations, the algorithm produces content by deducing the next plausible sentence – making a guess as to what the answer could be based on what it knows. This is not unlike the autocomplete feature in texts and e-mails that people often use to access suggestions for the next word in a string but that has been known to sometimes produce inaccurate assumptions.

Technology creators are working to make the technology more reality-based and truthful while issuing disclaimers acknowledging this known problem. Users must be aware that generative AI algorithms might not produce completely truthful statements and that human review, fact-checking, and editing are required in the near term.

Copyright and intellectual property considerations

Most AI technology has been built without prioritizing intellectual property (IP) protections. LLMs are fed data from various sources – often unattributed – and many models have been trained on Internet data of uncertain origin. Some LLMs are trained on copyright-protected information.

Using this data runs the risk of creating copyright violations for your business. From the HR perspective, using content created by AI tools could make your organization more vulnerable to IP-related lawsuits and legal action.

Clearly there is no settled law yet on the issue of IP violations created by business AI or how they should be handled. Perhaps there will be changes in the way that LLMs are built and operate that could address these issues. Until then, you must consider the IP property issue when choosing AI for your organization.

Human ability to prompt generative AI

It takes practice to learn which prompts to use to get a desired response from generative AI tools. Unskilled users tend to structure their prompts in ways that produce suboptimal, erroneous, or nonsensical results.

With greater experience, users begin to understand the language structure and phrasing needed to create prompts that elicit more useful and accurate responses. They're also more likely to offer prompts that help ensure that the tool answers the same question consistently every time it's asked.

As AI technology matures, it will communicate in ways that are closer to natural language. For now, the number of people skilled in communicating with AI technology is small but growing. Colleges, universities, and training programs offer classes to help users learn to prompt AI models effectively.

Transparency

Many generative AI technologies are built without clear descriptions of where data is sourced for their LLM, offering little transparency into its validity. Often models share no insights into how decisions

are made or what inherent biases may have influenced those decisions.

To mitigate your risk, you need AI tools that provide transparency, allowing users to know where the data comes from so that you can fairly assess its reliability and be accountable for using it.

Moving fast and breaking things is not an option for HR

Meeting legal requirements while juggling employee and business needs for your HR organization is no easy task. With HR under a perpetual microscope, focusing on compliance is mandatory. And when it comes to data stewardship, HR has a responsibility to protect the organization's people and their livelihoods first and foremost.

As always, the goal of HR is to put people at the center of decision-making. Properly deployed, business AI technology can help you answer key questions and make better business decisions. The value offered by this technology can significantly change the way HR teams work and serve the organization. In fact, AI has the potential to become the core of everything you do.



We recommend that you gain as much insight as possible into how your HR organization can use AI to benefit your people and your company. Here are questions you may want to consider when assessing your AI choices.

What are the specific HR challenges you want AI to address in your organization?

Identify the challenges and inefficiencies within HR processes that AI could potentially improve.

How will you measure the success of AI in HR?

Define KPIs to evaluate the effectiveness and impact of AI-driven HR initiatives.

How could AI impact your workforce?

Define KPIs to evaluate the effectiveness and impact of AI-driven HR initiatives.

How will you communicate AI to employees?

Transparently communicate the purpose, benefits, and limitations of AI in HR to gain employee trust and acceptance.

What data will AI use, how will it be collected, and where will it be stored?

Assess whether data collection and storage comply with relevant privacy and security regulations and rules for copyright and data ownership. Help ensure that employees can control which of their data is exposed to AI.

What ethical guidelines should govern AI's use in HR?

Establish clear ethical principles to avoid bias, discrimination, and any adverse impact on employees.

How will AI support diversity and inclusion efforts in the workplace?

Check whether AI tools are designed to promote diversity and mitigate biases.

What are the potential risks and challenges associated with AI implementation in HR?

Identify and plan for potential issues such as data breaches, algorithmic biases, and employee resistance. Consider the potential for inaccurate assumptions in LLMs, factual errors, and other difficulties.

How will AI be integrated into existing HR and enterprise systems and processes?

Prioritize the alignment of AI with the current HR and enterprise infrastructure, processes, and workflows.

What training and resources are required to upskill HR professionals to perform AI-related tasks?

Invest in appropriate training to empower your HR teams to work with AI effectively.

Properly deployed, business AI technology can help you **answer questions and make better business decisions**. The value offered by this technology can significantly change the way HR teams work and serve the organization.



Select AI-powered HR solutions to help you succeed

SAP solutions elevate business AI for HR

SAP SuccessFactors solutions build business AI into the employee experience. Our solutions help you transform human experience management, with technology that enables you to optimize workforce planning, deepen employee engagement, and align the employee experience to your business objectives throughout the employee lifecycle.

With SAP SuccessFactors, you can:

- Help your workforce reach its potential with individualized development paths
- Find and attract the best talent for new job postings equitably using gender-bias detection
- Give employees instant access to information
- Simplify workflows and focus on critical tasks with intelligent workforce management

To remain at the forefront of innovation, SAP is investing heavily in business AI across our human experience management solutions. Some vendors are rushing to roll out AI functionality as quickly as possible in response to market hype. But SAP is focused on only developing AI solutions that add

value to your organization and its people in a relevant, reliable, and responsible manner.

The following initiatives help us meet this goal.

Support for ethical AI

As an industry pioneer in ethical AI, SAP is committed to providing organizations with AI that is built on leading ethics and data privacy standards. We were one of the first companies in the industry to develop an external ethics board when we created the SAP Global AI Ethics organization in 2018. This group includes a steering committee that creates policies that are widely disseminated both within our organization and externally.

Since its formation, the committee has evaluated every AI use case we consider developing. A structured review and approval process identifies red flags, such as unpermitted activities that could affect the privacy or security of corporate or personal data. We use a red-yellow-green-light approach to make consistent, ethical AI development decisions.

AI has the potential to become the **core of everything you do.**



For example, the following are some questions that the SAP Global AI Ethics steering committee might ask about an AI use case:

- Which personal or sensitive information, if any, will be used?
- How will AI be used to support decision-making?
- What is the output of the decision? How will it be displayed?
- What human intervention is needed to make a decision?
- Is this use case relevant to the most critical business processes?

Our support for ethical AI differentiates us from the competition. With our AI-enabled solutions for HR, the technology never tells the user what decision to make – such as which candidate to hire. Instead, it allows AI-powered technology to enable HR's decision-making with intelligent suggestions and recommendations.

Finally, we plan to develop AI-enabled solutions that help eliminate racial, gender, or disability bias. By

pinpointing biases that may align with decision-makers' existing points of view, the solutions can help HR organizations avoid amplifying unintentional biases.

Technology to simplify AI use

Our business AI technology is built using private LLM technology that reduces the typical problems introduced by public LLMs. Our solutions rely on common generative AI technology, with features that enable greater readiness to support HR teams and employees. This makes it easier for more people to use the technology and supports more-effective AI prompts.

AI-driven solutions from SAP anonymize data requests, helping ensure that no personally identifiable information is shared with these tools and mitigating the risks of data leaks. They also work to reduce bias by adding protections to the generic technology that benefit your company and its employees. Our solutions are fine-tuned for relevant HR use cases, offering additional data privacy and security to meet your compliance needs.



As an industry pioneer in ethical AI, SAP is committed to providing organizations with AI that is built on **leading ethics and data privacy standards.**

Enterprise data

SAP SuccessFactors solutions rely on a wealth of organizational data anonymized for use with our AI-enabled solutions. This data not only includes HR-specific data from more than 500 million résumés, 200 million job descriptions, and historical data from our recruiting solutions. It also includes enterprise data from ERP, financial, and planning systems. Other solutions cannot integrate enterprise data with HR solutions, leaving you with a lack of transparency into business data.

With decades of customer business data and support for industry best practices, SAP offers business AI tools that optimize your potential to work with and interpret data in ways that benefit your business.

Risk mitigation features

Our AI technology offers key features that reduce risk and help protect your business.

By offering more transparency about the way AI is used, our solutions help improve user agency. Users can see how data was extracted and displayed, giving them insight to make the best decisions.

The solutions also display a warning to let users know that the technology is using AI. The warning reminds users to review the output carefully to help ensure that it's complete, accurate, and logical.

As part of our commitment to use data wisely, we analyze the business résumés and job descriptions of companies using SAP SuccessFactors solutions anonymously. By doing so, we help protect the people and organizations who submitted the data.

Partner technology

SAP partners work with industry-leading vendors to support and enrich our AI-enabled HR solutions. These partnerships allow us to deliver software to market more quickly by deploying the technology that offers the best fit for each use case.

Despite developing these functionally rich, integrated solutions, we take seriously our responsibility to remove complexity for users. Even when our AI-enabled HR solutions rely on a multitude of technologies, we deliver a single, simplified user experience for your employees.

SAP SuccessFactors solutions build business AI into the employee experience, helping you transform your recruit-to-retire process.



Bridges across your intelligent enterprise

[SAP Business Technology Platform](#) (SAP BTP) is the foundation for our AI-powered solutions. It offers a platform built with flexibility that can help you infuse AI into your HR solutions, supporting scalability and responsibility while also empowering you to focus on your employees and business without sacrificing functionality.

SAP BTP allows applications from SAP and partners to leverage AI capabilities in the context of SAP software and solutions. AI capabilities in SAP BTP improve the developer experience, how integrations are done, the process automation space, and analytics and holistic planning activities, as well as simplifying administrative tasks.

We are also using SAP BTP to enable LLM choice. Applications built on SAP BTP can leverage LLMs or similarly powerful tools available as a service from one of the hyperscaler providers or open-source models. With this technology, developers who work with SAP BTP can choose the most appropriate LLM for their use case.

SAP BTP offers numerous tools and capabilities for our solution portfolio, as well as for our other lines of business. Using these tools, your developers can enhance SAP SuccessFactors Human Experience Management solutions by extending them with AI-powered intelligent decision-making. Prebuilt integrations between data sources make it easier for your company to facilitate the flow of business data and create powerful AI-enabled HR solutions to optimize your business.

Catalyze your HR processes with SAP SuccessFactors solutions

SAP is building business AI into SAP SuccessFactors solutions. The technology-enhanced solutions can help you improve the employee experience by optimizing workforce planning, deepening employee engagement, and aligning the employee experience to your business objectives throughout the employee lifecycle. In addition, we offer:

- [Generative AI use cases](#): These help people leaders and recruiters create job descriptions and generate interview questions, as well as helping employees find personalized learning recommendations to fuel their career development and growth.
- [Joule](#): This is SAP's natural-language, generative AI copilot, which helps people get work done faster and drive better business outcomes in a more secure, compliant way. Joule improves the employee experience by making it easier and faster for employees to find information, get answers to questions, and complete HR-related tasks, such as approving or rejecting time-off requests and changing names, locations, or personal pronouns, and more.
- The [talent intelligence hub](#) within SAP SuccessFactors solutions: This acts as an AI-powered engine for an organization's learning and talent strategy and offers greater visibility into skills coverage and gaps across teams to guide future workforce planning. Embedded in SAP SuccessFactors Human Experience Management Suite, the talent intelligence hub creates a skills portfolio for each employee in the workforce and can infer skills and attributes based on, for example, data from performance feedback and dynamic teams.

Discover the benefit of AI for your HR organization

Learn how the [AI capabilities enabled within SAP SuccessFactors solutions](#) – combined with [SAP Business Technology Platform](#) – help you put people and their experiences first while producing the best possible outcomes for your HR organization.