

A graphic featuring a human head profile in profile, filled with a complex network of glowing blue and white lines, representing neural networks or AI. The background is a light blue gradient with scattered colorful dots and particles.

AI AND THE FUTURE OF THE HR FUNCTION

Contact: Aimé Lachapelle, Managing Partner, aime.lachapelle@emerton-data.com

AI is projected to enhance HR productivity by 30 to 40%, catalyzing its strategic evolution within the company's framework.

The rise of AI sets the stage for profound changes in the landscape of employment.

Recent advancements in this field are already integrated into tools that are transforming our daily lives: **text generation with ChatGPT, code generation with GitHub Copilot X, and image generation with DALL-E**. They challenge and disrupt traditional business structures and the future of certain fundamental functions, foremost among them, **human resources management**.

Thus, companies operate within a constantly changing technological environment. In an ideal world where AI maximizes task efficiency, solution personalization, and work productivity, **would the HR function still be necessary?** This provocative question conceals another, fundamental one: **what kind of business model do we aspire to, and how can emerging technologies like generative AI enable us to achieve it?**

To address these questions, we conducted an extensive **2-month study involving 40 European HR experts** from various sectors and companies ranging from tech scale-ups to large international corporations. The interviews conducted allowed us to associate **21 AI use cases with key HR activities poised to revolutionise various HR roles and processes**.

Our goal is to assess the feasibility and impact of these use cases on the HR function, as well as the level of user acceptance. This comprehensive evaluation, applied to various profiles of HR collaborators, also helps identify **implications in terms of job displacement and skill evolution**.

RECENT ADVANCEMENTS IN AI WILL ENABLE A PROFOUND TRANSFORMATION OF THE HR FUNCTION, WHICH HAS THUS FAR BEEN RELATIVELY UNAFFECTED BY PREVIOUS WAVES OF DATA AND AI-DRIVEN TRANSFORMATIONS

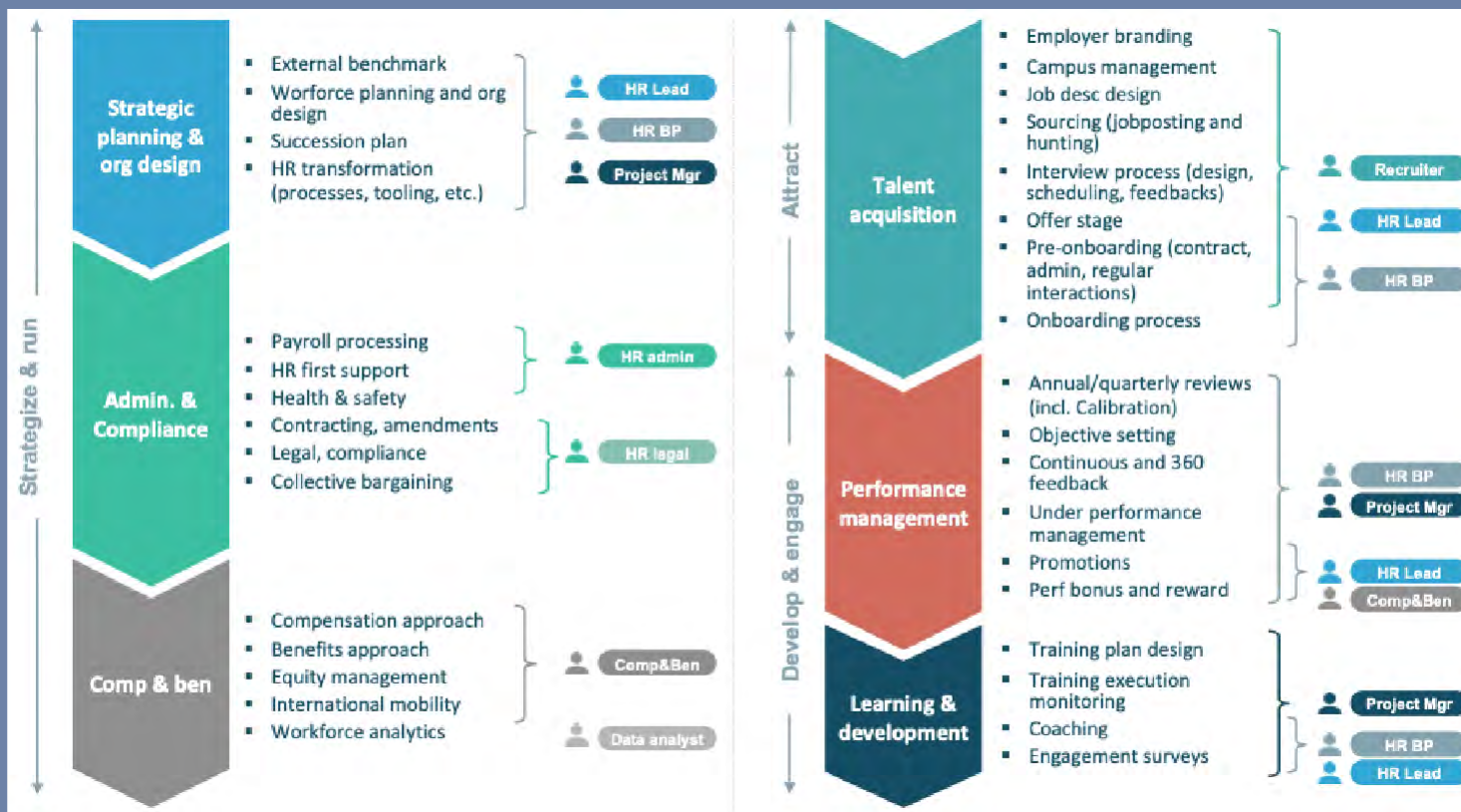
Focusing on 6 primary activities within the HR domain, this study identifies 8 distinct collaborator profiles, as illustrated in exhibit 1. These activities typically involve complex tasks and human-centered processes, heavily reliant on a plethora of unstructured data.

The potential of AI in improving the HR function primarily lies in its capability to process such data and produce understandable content based on it.

HR PROFESSIONALS COLLECTIVELY ACKNOWLEDGE LACK OF TOOLS, INSUFFICIENT ANALYSIS AND TIME SCARCITY

Key challenges reported by the 40 surveyed HR professionals include: the lack of efficient tools for identifying rare profiles and talent spotting (35% of HR tasks), the absence of a robust tool facilitating comprehensive analysis of all quantitative and qualitative HR data (20%), and the time consumed aligning with business objectives (15%).

Exhibit 1: HR function's key activities with 8 different employee profiles



Source: Emerton Data analysis

«The main challenge in my current position lies in managing data and setting quantifiable objectives for a team of 200 people. »

HR Collaborator - Large pharmaceutical group

Twenty-one key use cases leveraging AI will span across the 6 activities of the HR function, addressing the observed challenges. These are elaborated in exhibit 3 on page 6.

- In the context of **strategic planning and organizational design**, AI will enable the **automation of labor market monitoring**, tracking real-time changes in recruitment and compensation policies among various stakeholders, notably competitors. This will allow the company to **adjust its recruitment policy to align closely with market conditions**.
- Within the scope of **administrative management and compliance**, an example use case involves the development of an **HR Chatbot designed to retrieve administrative information and automatically classify all HR documents**, resulting in significant time savings for administrative personnel.
- Concerning **compensations and benefits**, an application of AI is the **automated positioning of candidates within the internal compensation grid** based on information extracted from CVs and interview feedback.

- With regards to **talent acquisition**, candidate sourcing is an extremely time-consuming and costly process. AI will save valuable time by **automating candidate search and assisting in CV preselection**. Beyond the undeniable time savings, this use case also has the potential to further improve recruitment performance, consistency, and diversity.
- For better **performance management**, AI will enable the quick **detection of overperforming or underperforming subjects within teams**. In the context of performance evaluation, an example is an assistant helping managers **draft their feedback**.

«A bottleneck arises from the lack of tools to manage and oversee HR data such as average age, turnover rate, etc. »

VP People & Culture - Scale-up in software development

- Lastly, concerning **training and development**, AI has the potential to be a powerful tool for **personalizing training journeys**. For instance, one application involves creating a personalized assistant for employee training based on performance reviews. Moreover, the technology could be applied to analyze employee satisfaction surveys to **identify engagement trends and attrition risks**.

«We face challenges when seeking out profiles that are different or less visible to foster diversity within our teams. »

Recruiter - Scale-up in financial services

A 30 TO 40% OPTIMISATION IS EXPECTED THANKS TO THE DAILY DEPLOYMENT OF USE CASES

The impact of the 21 identified use cases on the HR function is threefold: **doing things faster** (50-60% of the use cases), **doing things better** (20-30% of the use cases), and **doing new things** (10-20% of the use cases). Productivity gains covering the majority of use cases are the subject of further detailed study.

From the interviews with HR experts, we were able to estimate the proportion (in %) of each activity in the total HR headcount. The productivity gains per HR activity, shown in exhibit 2, are estimated[2] on the basis of existing studies, internal analyses and interviews.

To estimate the productivity gains for the HR function as a whole, we weight the productivity gains for each activity by the number of employees involved.

«We've managed to trade hours spent talking to managers with a personalised virtual assistant that simplifies the induction process by automatically generating the job description, messages, and recruitment scorecard in response to a few specific questions I ask it.»
 HR Manager - Scale up in financial services

Overall, we can expect a 30% to 40%[2] increase in productivity, with most significant gains in talent acquisition, administration and compliance, due to the automation of common HR tasks such as answering administrative queries and identifying candidates. Other HR activities will benefit from a significant improvement thanks to more qualitative data, thereby strengthening HR's corporate understanding. In addition, new capabilities are anticipated across all HR functions.

Exhibit 2:
 Estimated productivity gains by HR activity and overall

HR activity	% HR function	Est. productivity gain per activity	Total productivity gain
Strategic planning & org. design	10.0%	25%	2.5%
Admin. & Compliance	20.0%	40%	8%
Compensation & benefits	5.0%	30%	1.5%
Talent acquisition	35.0%	50%	17.5%
Performance management	15.0%	25%	3.8%
Learning & development	15.0%	30%	4.5%
TOTAL HR			30-40%

Source: Emerton Data analysis

1 Use cases can generate various types of gains. Here, we highlight the use cases for which the associated type of gain is the most significant.

2 The estimate of productivity gains is based on the assumption that tailor-made, well-tuned AI engines are used, offering good performance.

THE GAINS ASSESSMENT IS NOT SUFFICIENT TO FORESEE THE IMPLEMENTATION ROADMAP FOR AI IN THE HR FUNCTION

The **feasibility and user acceptance of this technology** also need to be studied. Taking productivity gains and level of acceptance together, the use cases that appear to be priorities are those that enable HR processes to be speeded up by automating tasks, with immediate gains in productivity and efficiency. These are as follows:

- Most of the use cases related to **administrative management and compliance** (generation of automated statistics, automation of administrative procedures, development of Chatbots to respond to administrative and legal queries);
- **Automated positioning of candidates on the internal remuneration grid** based on information extracted from CVs and interview feedback;
- Most of the use cases linked to **talent acquisition** (generation of up-to-date and accurate job descriptions and assessment grids, automation of candidate searches and CV pre-selection, automated sending of personalised messages to potential candidates, summary and reformulation of interview notes and candidate feedback);
- Development of a **writing and reformulating assistant** to facilitate performance reviews that are in line with the company's management culture.



HR CHATBOT: CASE STUDY

Implementing an HR chatbot offers the promise of efficiency and security. Using advanced technologies, it **automates tasks, optimises document organisation and guarantees data confidentiality**. Its seamless integration with existing HR systems provides rapid access to information, alleviating the administrative burden.

The results of the study confirm the feasibility of implementing the HR chatbot, supported by the wide-ranging and abundant data available to train the underlying model:

- **Employee data:** Personal information such as names, positions, departments, dates of employment, performance appraisals.
- **Payroll data:** information on wages, hours worked, benefits, deductions, holiday pay.
- **Leave and absence data:** leave dates, absence requests, leave balances, leave policy.
- **Training data:** Training taken by employees, certifications, training dates.
- **Evaluation data:** Feedback from supervisors, performance appraisals, development plans.
- **Recruitment data:** Applications, job openings, recruitment process.

"I no longer have to provide basic information to employees. Thanks to this tool, I have saved 30% of my weekly time."

HR admin

"I can get all infos in seconds: my holidays balance, saving plan, etc."

Employees

EXHIBIT 3: AI USE CASES IN THE HR FUNCTION

The table below shows the results of the study for the 21 use cases analysed.

Category	Use case	Feasibility	User acceptance	Potential productivity gains
Strategic planning & org. design	1 Workforce market, competitors' recruitment & compensation benchmarking	Low	Low	Low
	2 Automated identification of employee skills based on resume & performance to enable workforce planning	Low	Low	Low
Admin & compliance	3 Automated statistics on structured data (headcount, gender parity, average age, retention, arrivals, departures etc.)	High	Low	Low
	4 HR chatbot for administrative information retrieval & autoclassification of all HR documents	Low	High	Low
	5 Automated administrative procedures (tax returns, vacation requests, medical insurance forms, etc.)	Low	High	Low
	6 Legal compliance chatbot continually updated with legal texts & precedents	Low	Low	Low
	7 Q&A chatbot to assist employees with HR related queries (i.e., vacation requests, health plan questions, onboarding etc.)	High	High	Low
Compensation & benefits	8 Automated positioning of candidates in the internal compensation grid based on resume and interview feedbacks	High	Low	Low
	9 Statistical control of performance & compensation alignment to ensure equity across all teams	Low	Low	Low
Talent acquisition	10 Information gathering from the candidate's manager to generate up-to-date & accurate job description & score card	Low	Low	Low
	11 Automation of candidates sourcing & resume screening to increase recruitment performance, consistency & diversity	Low	Low	Low
	12 Automated outreach of tailored messages to prospective candidates based on their experience and skills	Low	Low	Low
	13 Robot-led video interviews assessing candidate motivation with viewable recordings, scores & feedback for HR	Low	Low	Low
	14 Summarization & reformulation of interview notes & candidate feedbacks	Low	High	Low
Performance management	15 Performance assessment chatbot to help managers write their feedback & synthesis of stakeholders' evaluations	High	High	Low
	16 Feedback reformulation assistant to enable managers to give feedback fitting company's management culture	High	High	Low
	17 Integrated "view" of performance in the company	Low	Low	Low
Learning & development	18 Assessment & recommendation of trainings to create a personalized training plan aligned with career path	Low	Low	Low
	19 Generation of custom and interactive training material easy to create and edit	Low	Low	Low
	20 Generation of custom tests to ensure proper knowledge acquisition	Low	Low	Low
	21 Topic extraction from employee survey verbatims to generate statistics, analyze engagement & identify attrition risk	Low	Low	Low



Source: Emerton Data analysis

RESHAPING ROLES AND SKILLS

Now that the productivity gains offered by the incorporation of AI have been assessed, we can anticipate **two main categories of transformation in terms of the roles and skills of the HR function**. One is that there will be a **systematic reduction in the number of HR headcount** in certain positions. On the other hand, we can expect to see a **change in the skills required for other positions**. It is becoming clear that **AI is playing a key role in redefining HR responsibilities**.

As shown in exhibit 4, integrating AI into the HR function generates **between 20% and 40% productivity gains**[3] for each of the 8 employee profiles involved. In terms of HR headcount reduction, a decrease in administrative and legal positions is driven by AI's potential to **free up time on time-consuming, repetitive administrative tasks**. However, not only do these gains impact working time, but they also lead to a redefinition of the scope of the functions assigned to them.

AI enables all employees to **refocus on the strategic dimension of their function and on tasks that generate greater added value**. What's more, by making it easier to process unstructured data, AI allows precise analyses to be produced on an extremely vast field of data. This transformation thus calls for an **improvement in analytical skills**, particularly for HR directors and HR business partners, administrative roles, compensation and benefits managers, data analysts and recruiters.

Last but not least, the performance and talent management data analysis **enhances consulting skills, i.e. the ability to guide individual career paths within the company**. This is particularly true for HR business partners, compensation and benefits managers, and project managers.

With AI disrupting the roles and skills of HR personnel, a robust transformation and change management program is needed.

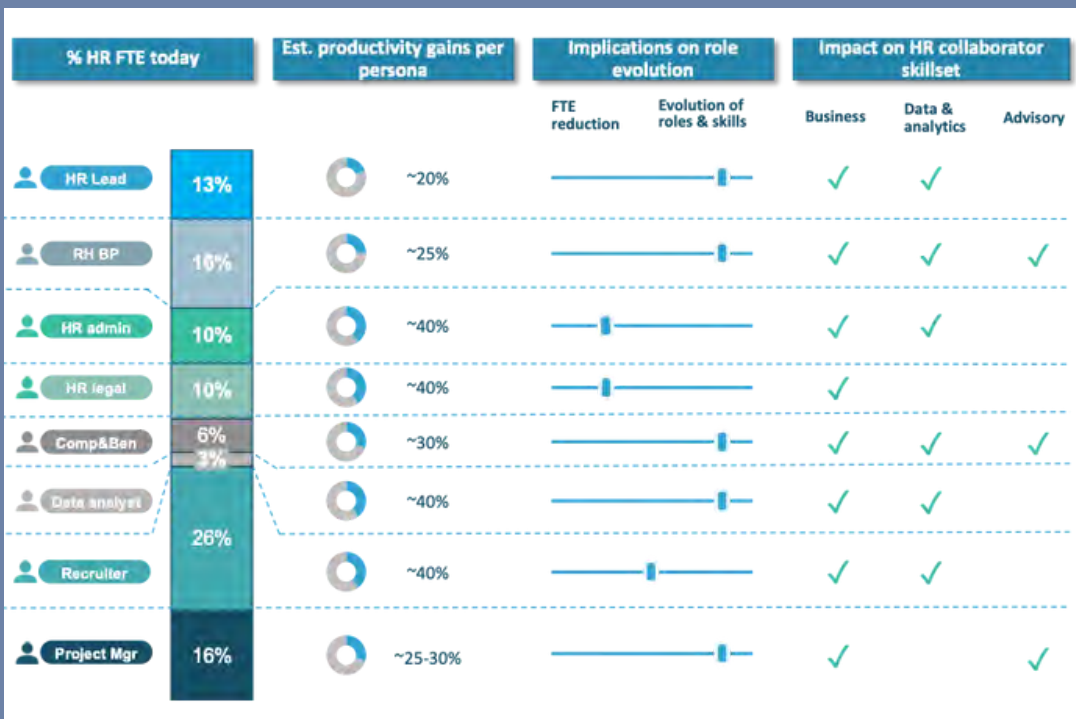


Exhibit 4:
Productivity gains for all HR key actors, with an impact on headcount and functions

Source: Emerton Data analysis

[3] The estimate of productivity gains is based on the assumption that tailor-made, well-tuned AI engines are used, offering good performance.

CONCLUSION

Overall, the study shows that **productivity gains are likely to range from 30 to 40% for the HR function, and will be most substantial for administrative and talent acquisition activities.**

Together, they will allow HR professionals to refocus on the strategic dimension of their function, with an evolution of their skills in data analysis, strategic thinking and consulting.

Thus, **AI will not make the HR function disappear**, but rather enable it to grow in power, making it an essential partner in corporate strategy.

This outlook needs to be tempered, however, in the **context of European regulation on AI.** The AI Act introduces a risk-based approach to the use of AI, distinguishing several categories of applications according to their level of potential risk to individuals and society.

Alongside biometrics, critical infrastructure, education, access to essential public and private services, justice and migration management, **AI applications in the field of employment are identified as highly sensitive.**

Use-cases concerning recruitment, performance management and employee training could therefore be considered high-risk systems, due to their **potential impact on both fundamental rights and employment decision-making.**

Should this be the case, **companies will need to adhere to strict data governance practices**, guarantee the **quality and accuracy of training datasets**, and be **registered with the new EU Artificial Intelligence Office**, which, together with the relevant national authorities, will monitor effective implementation and compliance.

While regulation is essential to ensure the safe development of AI, it could introduce obstacles to a rapid transformation of the kind envisaged by the players interviewed for the study.

ABOUT EMERTON DATA

Emerton Data is the artificial intelligence and advanced data analysis subsidiary of the Emerton Group, an international strategy and transformation consulting firm, renowned for its global expertise in the infrastructure, industry and high-tech sectors. Emerton Data offers a unique combination of business expertise, particularly in HR, and technical expertise in software development and data science.

www.emerton-data.com

Press contact: pr@emerton-group.com

Main contributors:

- Aimé Lachapelle, Managing Partner of Emerton Data: aimelachapelle@emerton-data.com
- Julie Pichoud, Consultant at Emerton: julie.pichoud@emerton-group.com
- Anastasia Saprykina, Associate Consultant at Emerton: anastasia.saprykina@emerton-data.com

Panel characteristics

Observation period: **nov 2023 - feb 2024**

40 interviews :

- 40% leadership level
- 60% operational staff
- 55% entreprises < 5000 employees
- 45% entreprises > 5000 employees