RTR

Artificial Intelligence in Human Resource Management

Findings from a representative business survey in the context of the European AI Act

2025

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Rundfunk und Telekom Regulierungs-GmbH
Mariahilfer Straße 77–79 | 1060 Vienna | Austria
Phone: +43 1 58058-0 | Mail: rtr@rtr.at | www.rtr.at

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01 Preface

Dear Reader,

This report addresses the use of artificial intelligence (AI) in the human resources sector in Austria.

Whether in recruiting new staff or in managing and developing the existing workforce, AI offers tremendous potential for improving both productivity and quality. On the other hand, the risks inherent in some AI systems require them to be classified as high-risk under the EU's AI Act. The responsible handling of such risks is therefore a key precondition to the successful and productive use of AI in the context of human resources.

The first part of this report looks at the current state of play for AI deployment within the human resources sector in Austria. Results are also presented from a survey covering the steps taken to date by HR departments to deploy AI, followed by an overview of the current AI market in terms of products and suppliers. To ensure the report provides a comprehensive picture of the topic in question, these survey data are then supplemented by the qualitative opinions of several experts drawn from the fields of human resources, technology and employment.

As the AI Service Desk at RTR, our main goal in producing this report was to further contribute to good practice in AI, particularly when deployed in the kinds of high-risk environments found in HR management systems.

The use of AI may potentially impact an individual's career prospects, livelihood and rights as a worker. It is therefore unsurprising that the AI Act classifies „systems used in employment, workers' management and access to self-employment" as high-risk AI systems. Accompanying measures able to ensure the responsible use of AI are therefore essential if AI is to be deployed in a safe and responsible manner. Such measures will need to guarantee compliance with duties to keep employee representatives informed and ensure human-in-the-loop oversight.

Yet to what extent are such systems already being used, and what action is being taken to ensure deployment in accordance with the AI Act? To obtain concrete data on the current situation, we therefore commissioned the abovementioned survey of Austrian businesses as part of our work at the AI Service Desk. The representative survey brings to light how companies are deploying AI systems: to assess job applicants or appraise employee performance, or for knowledge management. The survey involved telephone interviews with representatives of over 700 businesses, each with at least 50 employees, conducted in November and December 2024. The main respondents targeted were the enterprise heads of human resources.

On reviewing the data we recognised just how many Austrian companies are already utilising AI systems in human resource management. Others are planning to do so in future and are currently in the process of clarifying the legal implications of the AI Act for their companies. As companies undergo this rapid transition, it is essential that they are provided with the information they need, while promoting and deepening the conversations taking place among representatives of business, research and employees interests, and other stakeholders. Our report, which includes a number of articles from guest contributors, represents a significant step towards meeting these needs.

As the AI Service Desk, we also see this as part of our legal duty to highlight opportunities and offer guidance on managing the associated risks. This report is just one publication within our programme of information relating to the AI Act, available from the AI Service Desk website (ai.rtr.at). Beyond merely an AI knowledge repository, our website is also designed as a forum where we provide prompt responses to queries relating to all facets of AI. In so doing, our aim is to encourage knowledge gleaning and exchange, while at the same time helping to move forward implementation of the AI Act and gathering feedback for improvement. The underlying goal is to support businesses and consumers alike on the path towards a future where AI is deployed safely and responsibly, unleashing its potential to the greatest benefit for all. Here we recognise tremendous opportunities, especially in the human resources sector.

We intend the information and insights in this report as a useful starting point for evidence-based regulatory action. This includes encouraging decisions, based on fact, that strike a balance between the requirements raised by business and regulatory concerns. Our goal is to minimise risk, but without unnecessarily limiting the freedom so vital for innovation.

Here, on behalf those responsible for this report, I wish to express my sincere thanks to our guest authors for the unique perspectives and insights they have contributed. Supplementing the empirical results obtained by our survey, these guest articles allow us to fully comprehend the exciting yet complex scenario that is emerging from the use of AI within the field of human resources.

Thanks to our expertise and the work of our AI Service Desk, RTR is well prepared to provide support for navigating these developments. Our goal is to support a regulatory approach that strikes a balance between the needs to promote innovation and to minimise risk, in this way utilising the full potential AI offers to society at large.

As you turn the pages of this report, I sincerely hope you will engage with its findings and insights. I also look forward to the interesting conversations to ensue, in the hope that perhaps even in this way we can help build a better future through the use of artificial intelligence.

Vienna,
April 2025

Klaus M. Steinmaurer

Managing Director
Telecommunications and Postal Services Division
RTR

02

Data basis

02 Data basis

This report is based on data from a representative survey of businesses in Austria conducted in November and December 2024. The underlying questionnaire was developed by the Artificial Intelligence Service Desk, established at RTR. The survey was carried out by the *Institut Market*[1] through telephone interviews using CATI (computer-assisted telephone interviewing). Given the focus on internal human resources (HR) management, the survey targeted businesses with 50 or more employees.

The market research institute conducted a random sampling of businesses and applied weighting adjustments to ensure representativeness. A total of 701 interviews were conducted with the selected businesses.

The interviews were directed at the head of the department responsible for HR. Prior knowledge of artificial intelligence or the AI Act was not a prerequisite for participation.

The raw data, data descriptions, the German questionnaire, and this report are freely licenced under CC BY 4.0[2] and are available on the publication's website.

To ensure the analyses presented in this report are easily comprehensible, the figures reference the corresponding question numbers from the questionnaire.

In this report, results from survey questions with fewer than 20 business respondents are not presented separately due to result variability. Results based on observations ranging from 20 and 100 businesses are additionally marked with an asterisk (*).

This English report is an abridged translation of the German version. As the survey was conducted in German, this report serves as non-binding translation.

To contextualize the surveyed group of businesses within the Austrian corporate landscape, Table 1 presents data from the Austrian Federal Economic Chamber on the number of businesses and employees by size category. Excluding one-person businesses and businesses with fewer than 50 employees, the total population comprises approximately 7,060 businesses (framed in Table 1), representing around 64% of employed workforce (non-self-employed) in Austria.

[1] https://www.market.at/

[2] See also https://creativecommons.org/licenses/by/4.0/legalcode.en

Table 1: Businesses and Employees 2023

Size category (Employees)	Businesses	Employees	
	Number	Number	Share in %
0-4 (incl. one-person businesses)	479,938	179,342	7
5-9	27,405	180,326	7
10-19	16,981	228,866	9
20-49	11,356	343,186	13
50-99	3,528	244,508	10
100-149	1,192	143,524	6
150-199	650	112,563	4
200-249	398	88,307	3
250-499	785	274,341	11
500-999	297	200,726	8
1,000 and more	210	560,246	22
Total	**542,740**	**2,555,935**	**100**

Source: WKO, adapted: Statistical Yearbook 2024, available in German at https://www.wko.at/oe/statistik/jahrbuch/jahrbuch-2024.pdf, p. 76, as of December 2023. A difference to the population results from the different consideration of marginally employed persons.

03

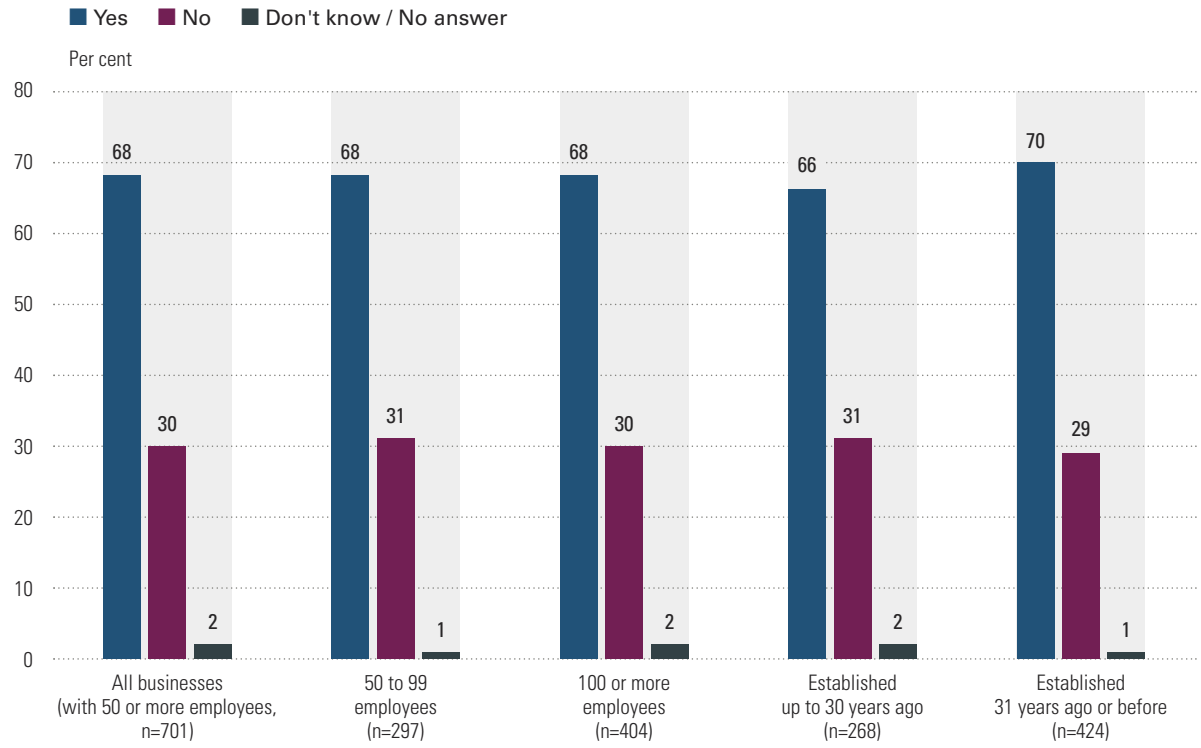
Results

03 Results

3.1 Artificial Intelligence in Human Resource Management: Overview

→ Question (derived)

Does your company or an external service provider acting on your behalf utilize AI in the field of HR?



→ Further information on the calculation

Derived from the indication of at least one active area of application in Question 5.

3.2 Specific areas of application

The businesses surveyed were provided with the following introduction for orientation when asked about the areas of application of AI:

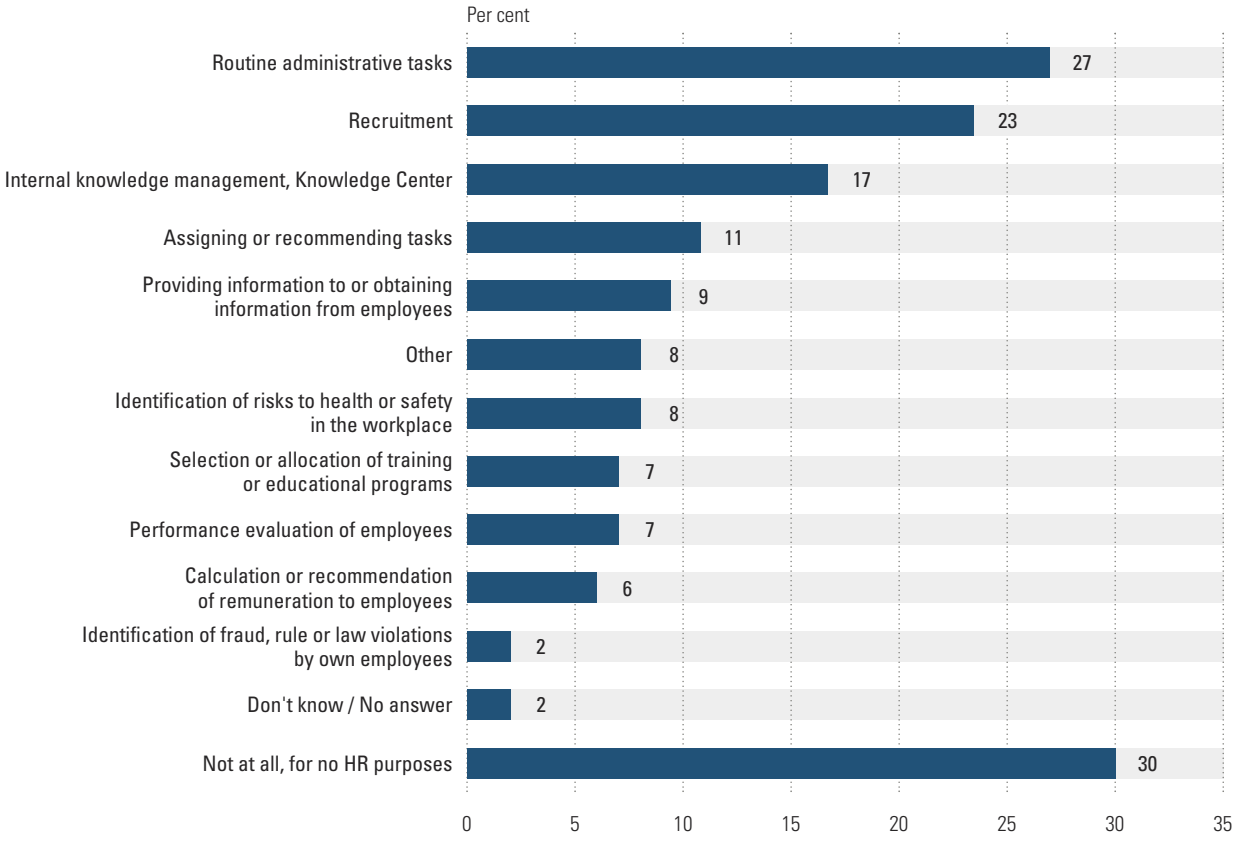
> Artificial intelligence (AI) consists of applications that operate autonomously, can adapt, and make predictions or decisions, provide recommendations, or generate content such as text or images. AI enables problem-solving to achieve a specific objective in an automated manner. Well-known AI applications include, for example, ChatGPT or Microsoft Copilot. Please also consider the use of AI in connection with HR metrics, such as data-driven approaches in the field of HR or People Analytics.

If respondents requested further clarification on specific areas of application, the interviewer provided concrete examples for the following categories:

- **Recruitment:**
  Writing job advertisements with generative AI, filtering job applications, or chatbots for applicants
- **Employee performance evaluation:**
  Personalised processes, analyses, reports or recommendations regarding promotions, people analytics
- **Calculation or recommendation of remuneration for employees:**
  Salaries, bonuses or commission-based compensation for individual work assignments
- **Task assignment or recommendation:**
  Allocation of individual work tasks to employees, workforce planning
- **Selection or allocation of training courses or educational programmes:**
  Personalised recommendations on training, skills development, competency management, and career planning
- **Identification of risks to health and safety in the workplace:**
  Recognition of fatigue
- **Providing information to employees or collecting information from them:**
  Chatbots for answering routine queries, gathering summarized feedback, updating employee records
- **Routine administrative tasks:**
  Automated documentation of absences, personnel file management, HR self-service
- **Internal knowledge management, Knowledge Center:**
  Access to expert and methodological knowledge or information from internal databases, instructions, manuals, guidelines

→ Question

For what purposes does your company, or an external service provider acting on your behalf, utilize AI in the area of HR?



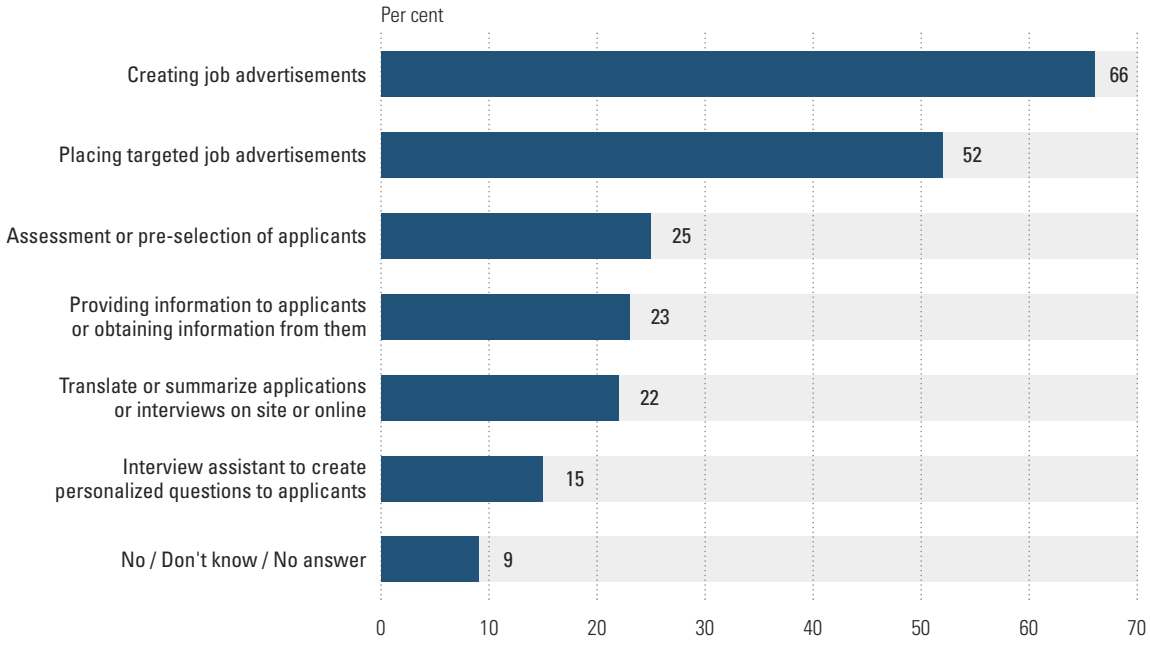
→ Further information on the calculation

Question 5, multiple answers.
Basis: All businesses, n=701.

3.3 Focus on Recruitment

→ Question

For what purposes does your company, or an external service provider acting on your behalf, utilize AI in the field of recruitment?



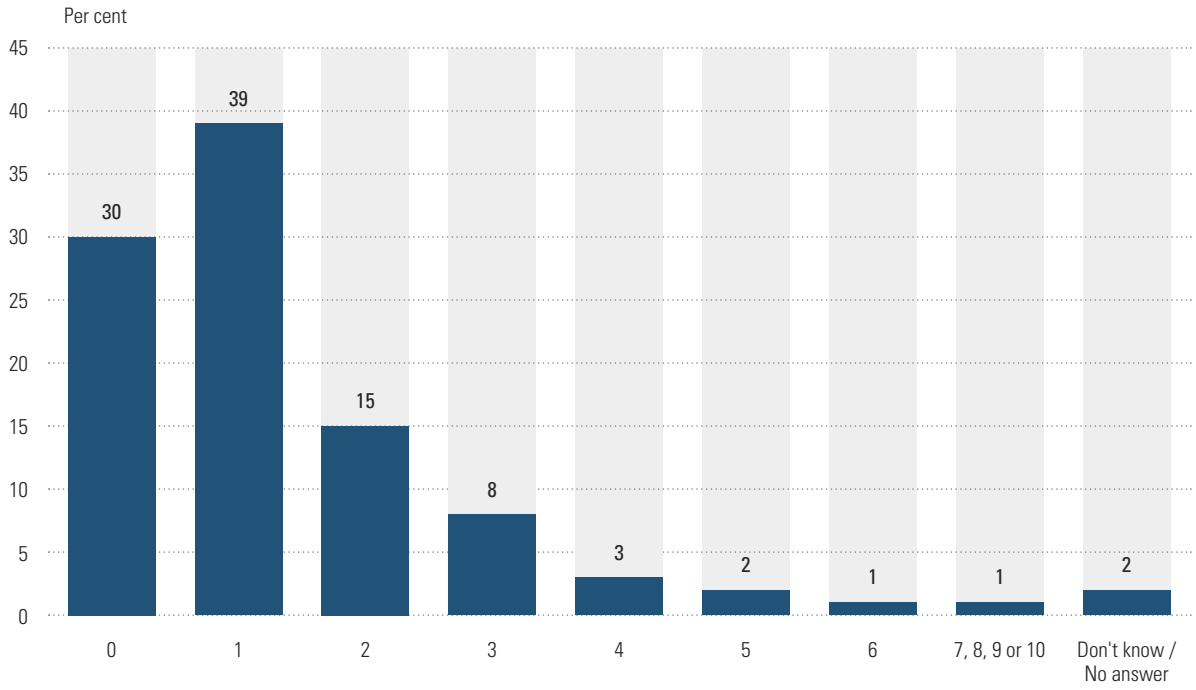
→ Further information on the calculation

Question 6, multiple answers.
Basis: Businesses utilizing AI in „Recruitment“ as indicated in Question 5, n=172.

3.4 Number of active areas of application

→ Question (derived)

In how many areas does your company, or an external service provider acting on its behalf, utilize AI in Human Resources Management?



→ Further information on the calculation

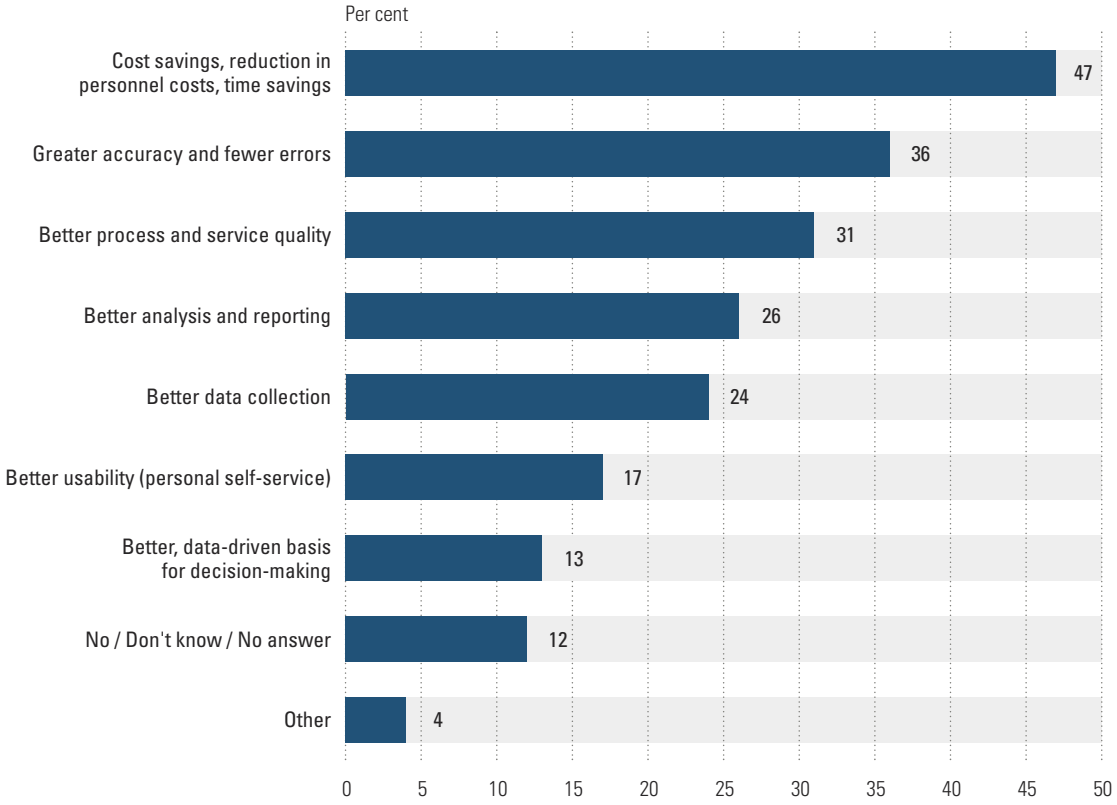
Derived from the number of areas of application mentioned in Question 5.
Basis: All businesses, n=701.

In the calculation, the areas of application specified in Question 6 (e.g. „Creating job advertisements“ or „Placing job advertisements“) are grouped and counted as a single area of application under „Recruitment“.

3.5 Reasons for using AI

→ Question

Why does your company use AI in HR?



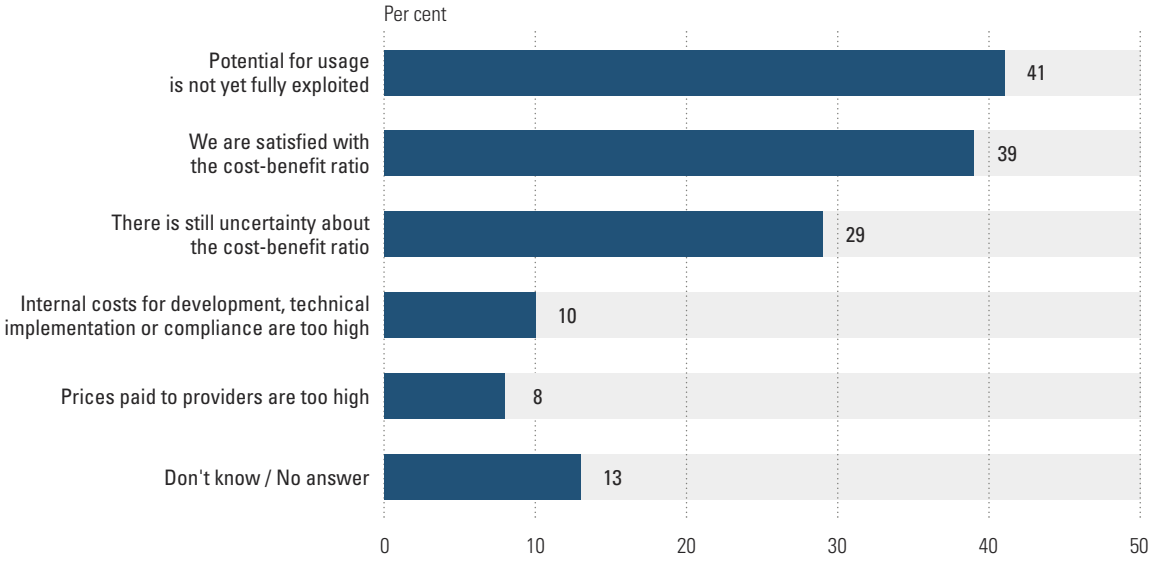
→ Further information on the calculation

Question 19, multiple answers.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

3.6 Cost-Benefit ratio of AI applications

→ Question

We now present a few statements regarding the cost-benefit ratio of the AI applications used. In your opinion, which of these statements are correct?



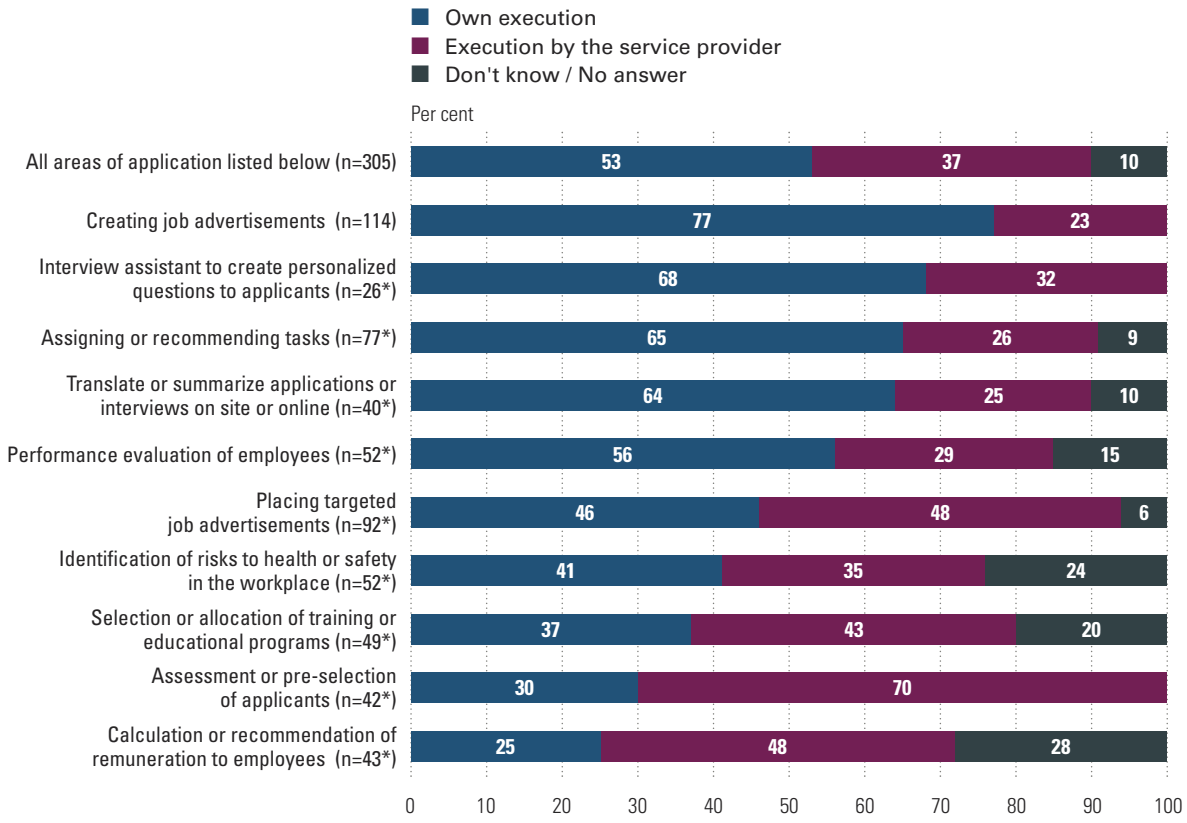
→ Further information on the calculation

Question 24, multiple answers.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

3.7 Execution of AI applications

→ Question

Does your company execute the AI application itself or does an external service provider do this for you?



→ Further information on the calculation

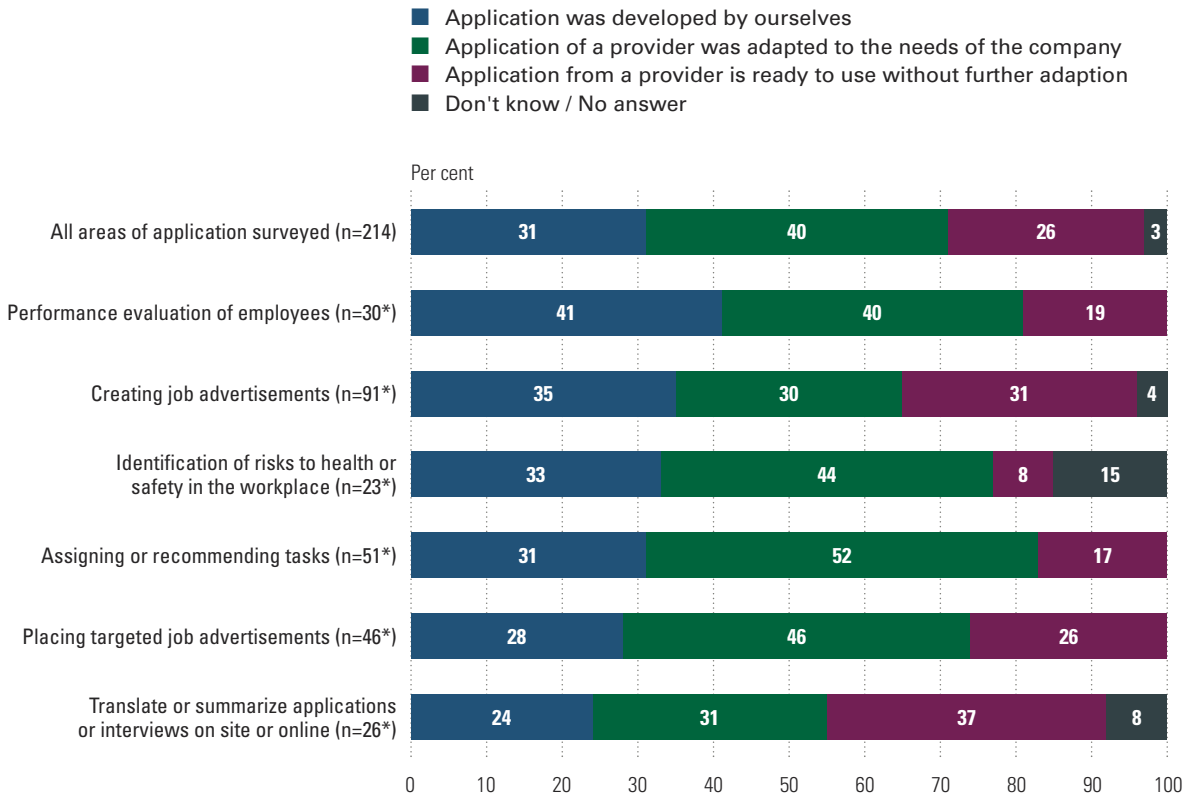
Question 7, multiple answers.
Basis: Businesses with mentioned[3] active areas of application as indicated in Question 5.

[3] Further questions on individual areas of application are only asked for selected areas of application.

3.8 Development of AI applications

→ Question

There are various ways AI can be utilized in businesses. Which of the following options best describes to the development or usage of the AI application in your company?



→ Further information on the calculation

Question 8, single response for individual areas of application.
Basis: Businesses with active areas of application and self-execution of the AI application, as indicated in Questions 5, 6 and 7.

In addition to the areas of application listed in the figure, „All areas of application surveyed“ also includes „Calculation or recommendation of remuneration to employees“, „Selection or allocation of training or educational programmes“, „Assessment or pre-selection of applicants“ and „Interview assistant for creating personalised questions for applicants“. These areas are not displayed due to the small number of cases (n<20).

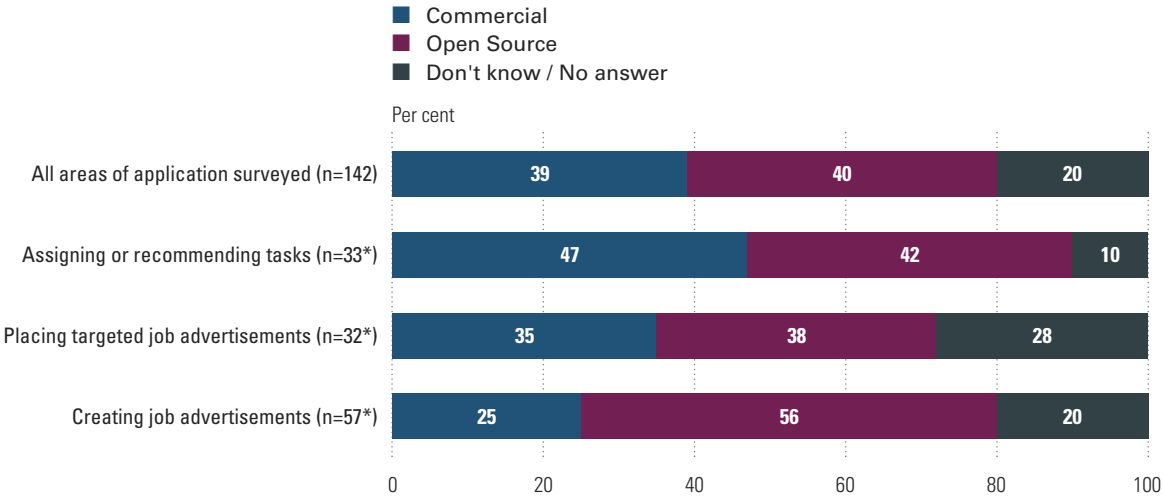
3.9 Open-Source-Software

→ Question

Is the AI application a commercial product or open-source-software?

Note to interviewed businesses in case of inquiry

Open-source: source code and functionality are publicly available and can be customised



→ Further information on the calculation

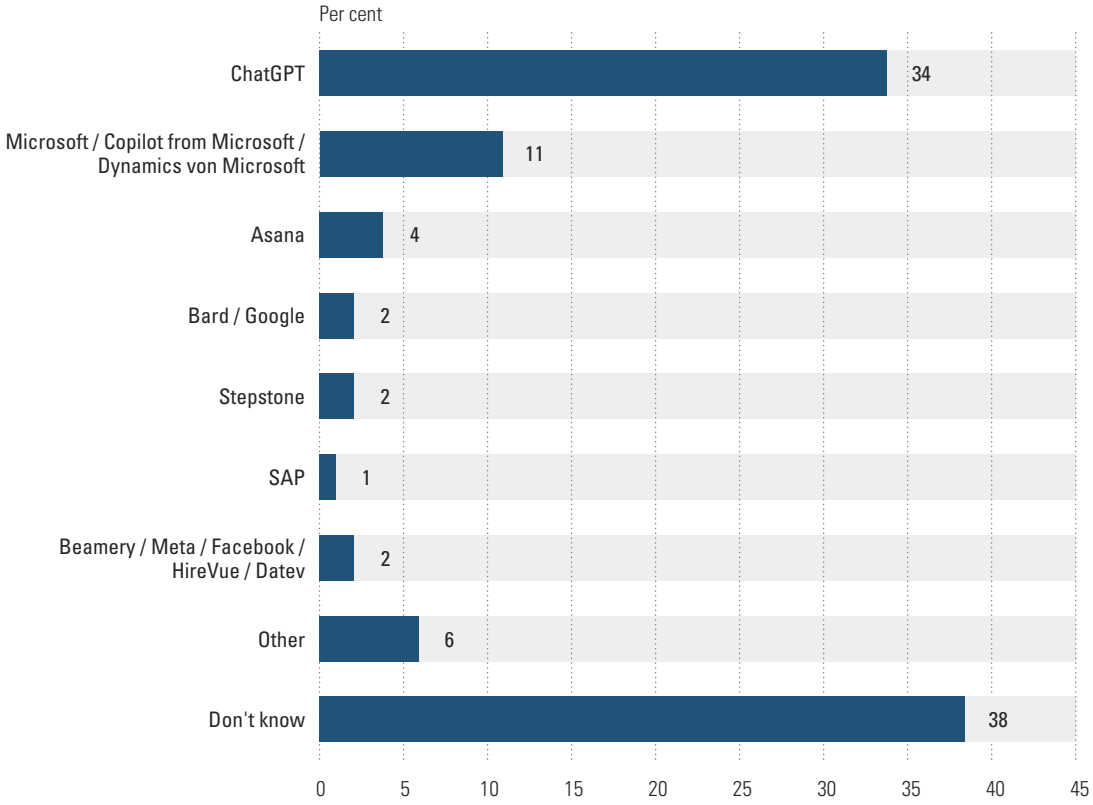
Question 9, single answer for individual areas of application.
Basis: Businesses that reported active areas of application and own execution of a provider's AI application, with or without adaption, as indicated in Questions 5, 6, 7 and 8.

In addition to the areas of application listed in the figure, „All areas of application surveyed“ also includes „Performance calculation of employees“, „Calculation or recommendation of remuneration to employees“, „Selection or allocation of training or educational programmes“, „Identification of risks to health or safety in the workplace“, „Assessment or pre-selection of applicants“, „Translate or summarize applications or interviews on site or online“, and „Interview assistant to create personalised questions for applicants“, which are not displayed due to the small number of cases (n<20).

3.10 Providers of AI applications across areas

→ Question

What is the name of the provider of the AI application?



→ Further information on the calculation

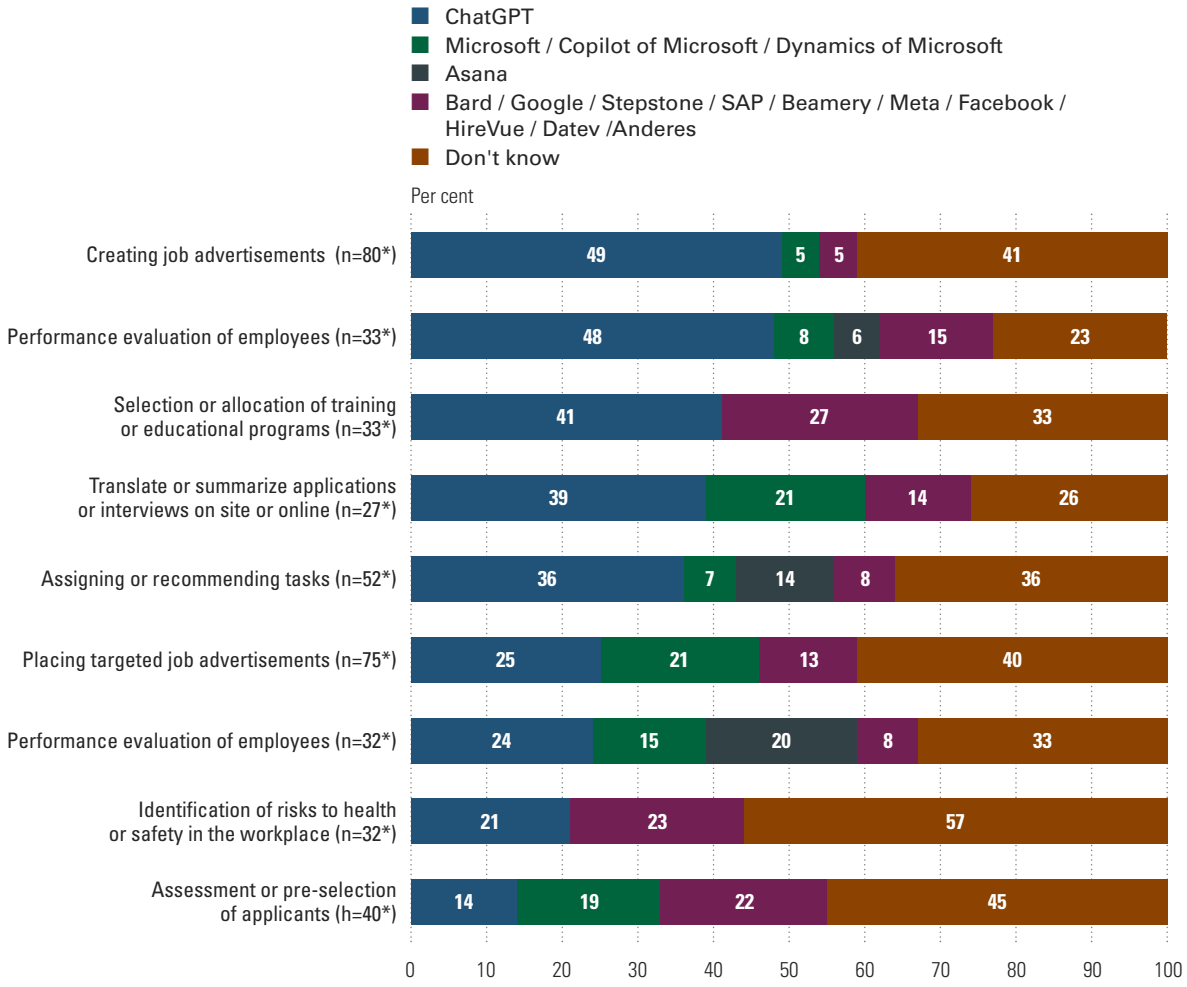
Question 10, single answers for individual areas of application, percentages calculated across individual areas of application[4], slashes indicate summarised answers.
Basis: Businesses that reported at least one active area of application with self-execution of a provider's AI application, with or without adaption, as indicated in Questions 5, 6, 7 and 8, n=229.

[4] Providers are included depending on the number of answers in different areas of application. If, for example, a provider is mentioned by a company in two different areas of application, the answer is also counted twice. The basis for the percentages is the number of answers (i.e. naming a provider, „Other" or „Don't know"), which amounts to approximately 405.

3.11 Providers of AI applications in individual areas

→ Question

What is the name of the provider of the AI application?



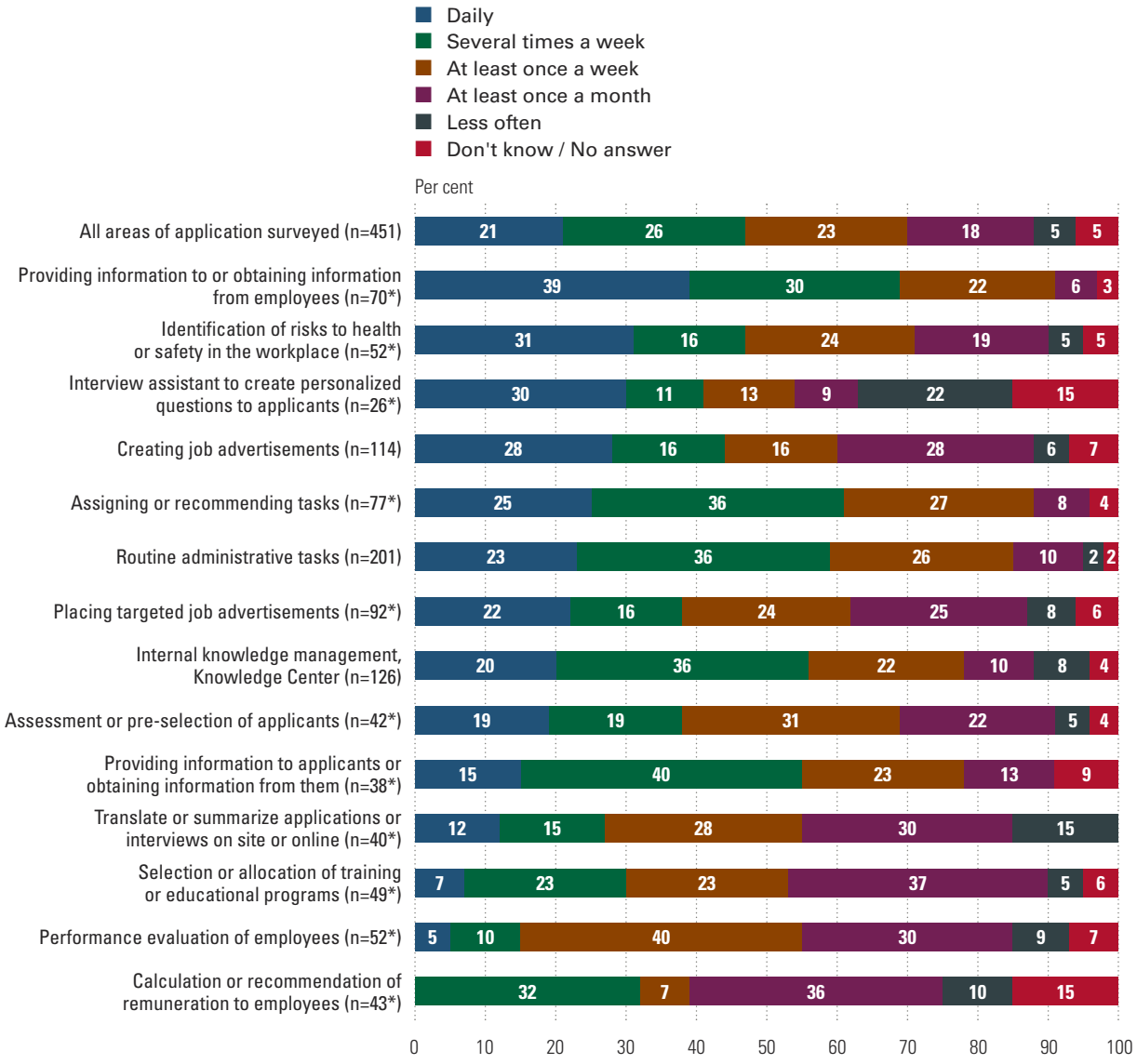
→ Further information on the calculation

Question 10, single answers for individual areas of application, slashes indicate summarised answers. Basis: Businesses that reported active areas of application with own execution of a provider's AI application, with or without adaption, as indicated in Questions 5, 6, 7 and 8.

3.12 Frequency of AI application Usage

→ Question

What is the approximate frequency of use of AI applications?



→ Further information on the calculation

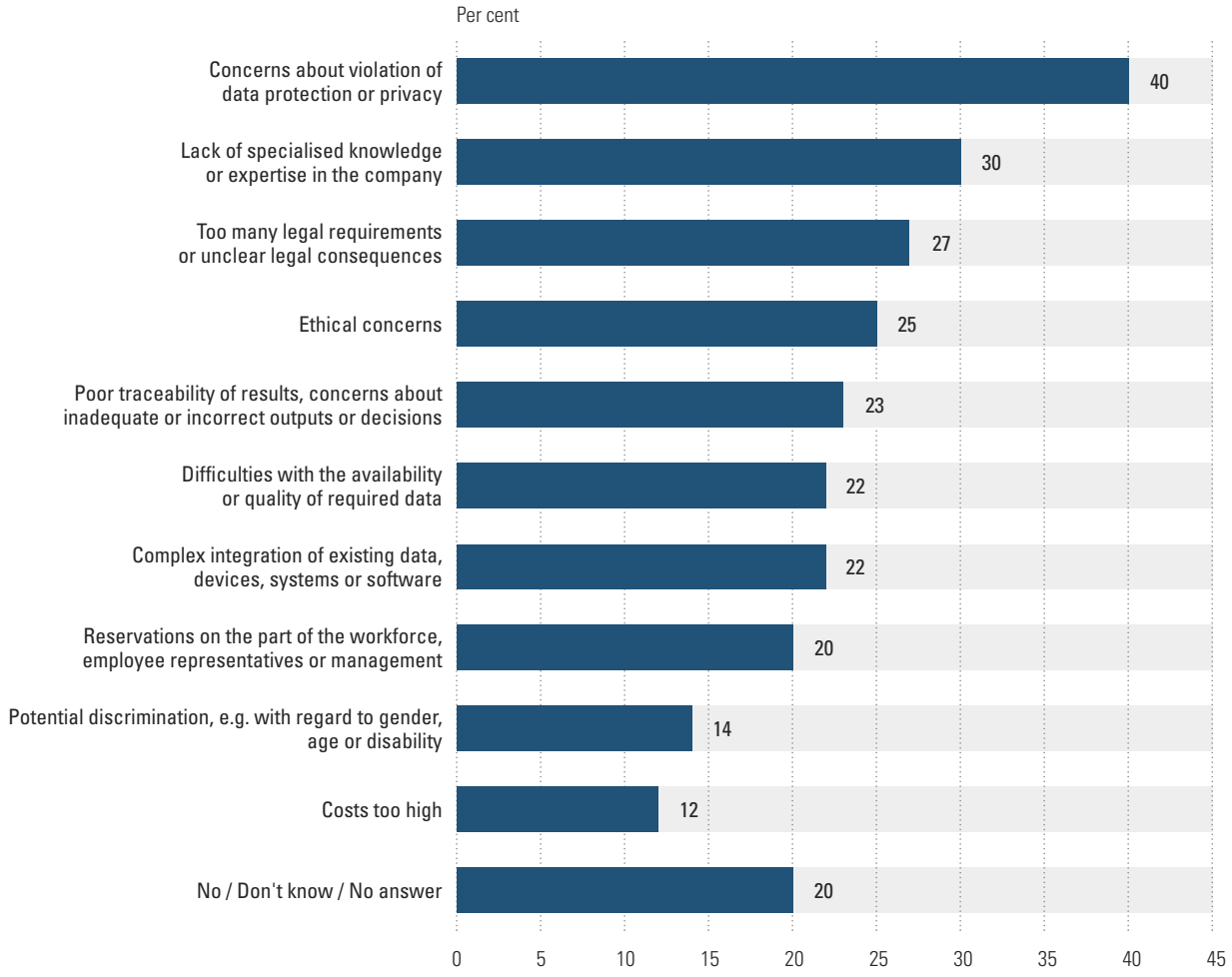
Question 16, single response for individual areas of application.
Basis: Businesses that reported active areas of application.

In addition to the areas of application listed in the figure, „All areas of application surveyed“ also includes „Identification of fraud, rule or law violations by own employees“, which is not displayed due to the small number of cases (n<20).

3.13 Barriers to AI Usage

→ Question

What barriers do you identify in the use of AI in HR?



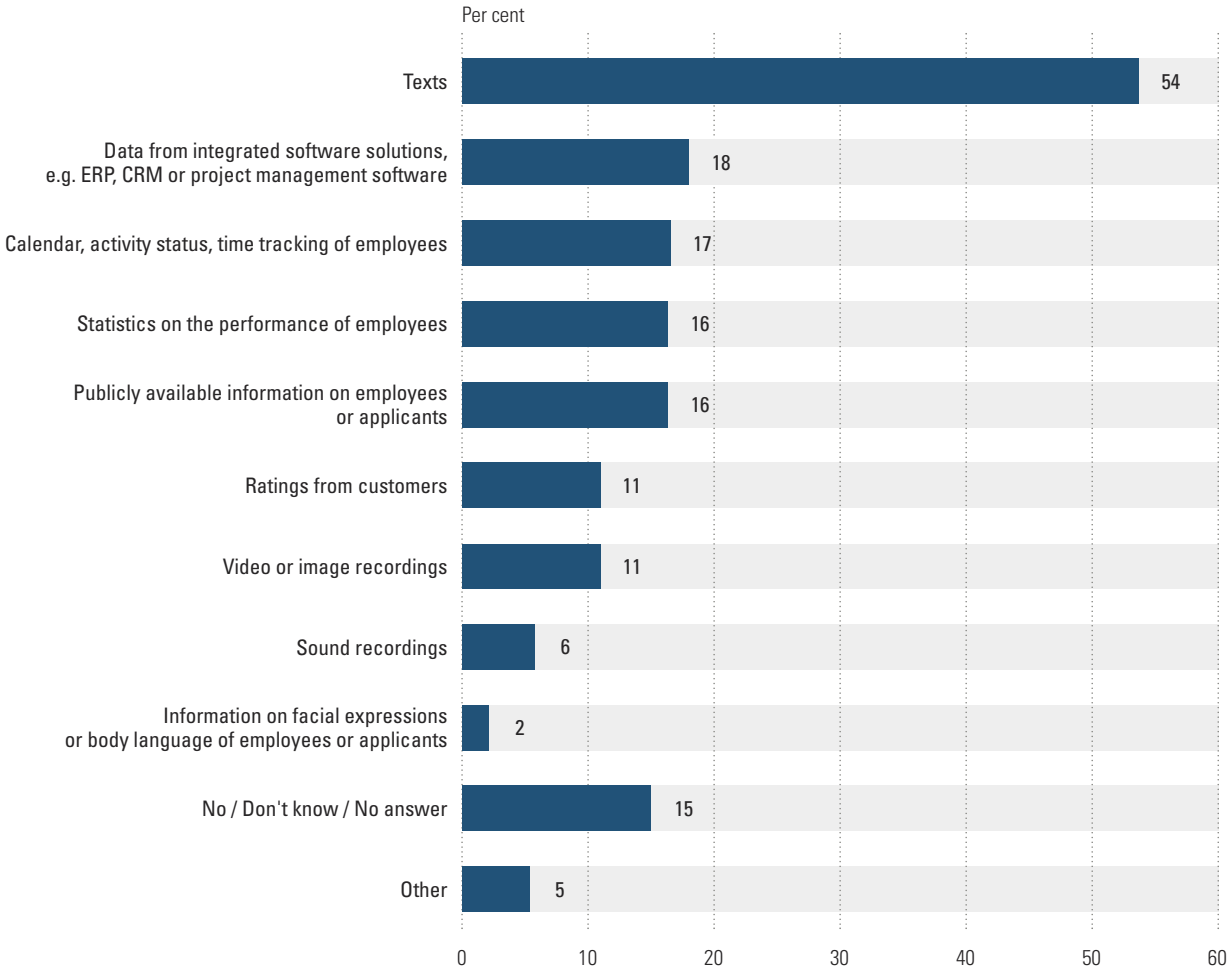
→ Further information on the calculation

Question 23, multiple answers.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

3.14 Data used by AI applications

→ Question

What data do the AI applications have access to?



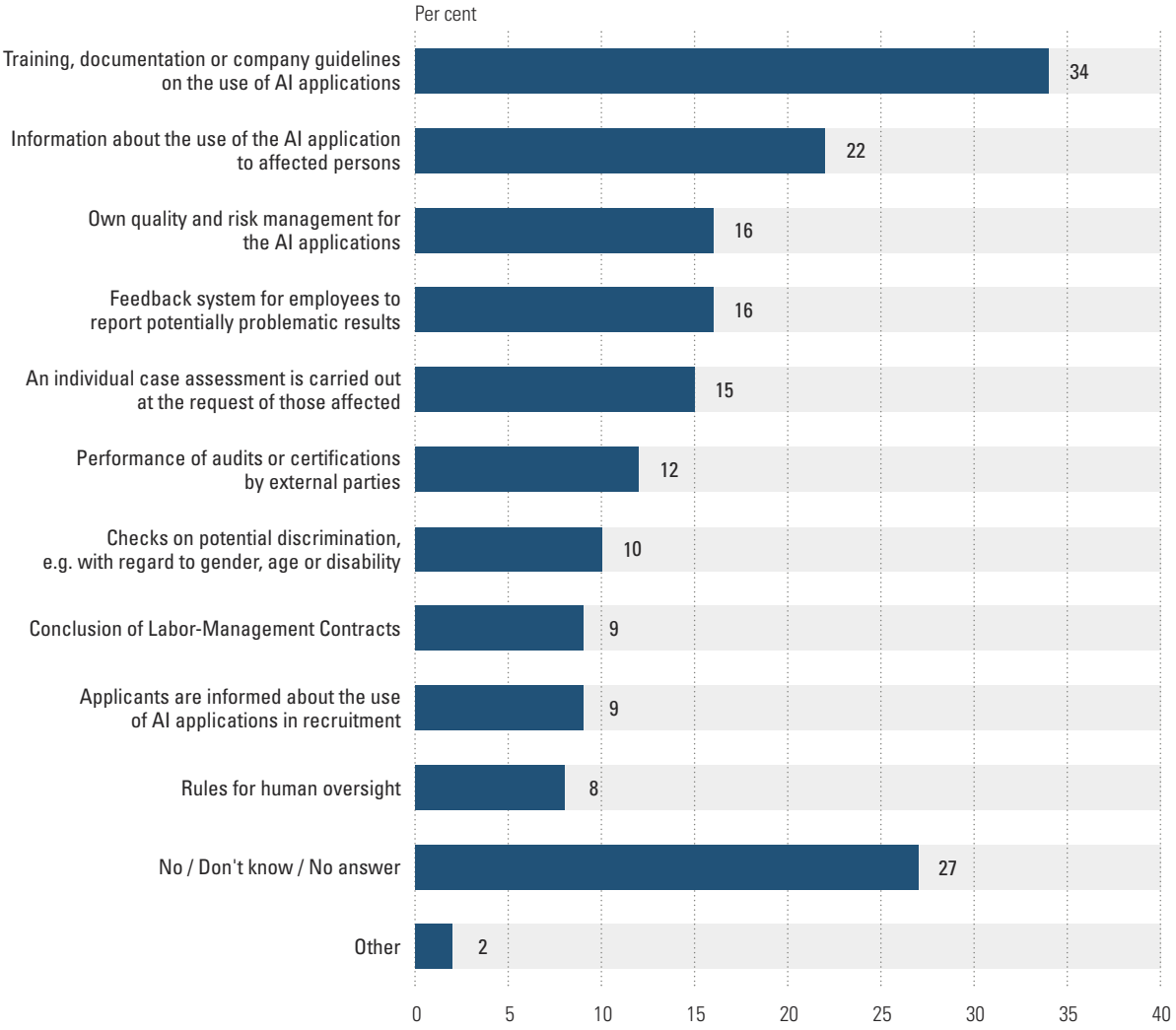
→ Further information on the calculation

Question 18, multiple answers.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

3.15 Measures related to AI applications

→ Question

Which of the following measures does your company implement in relation to AI applications?



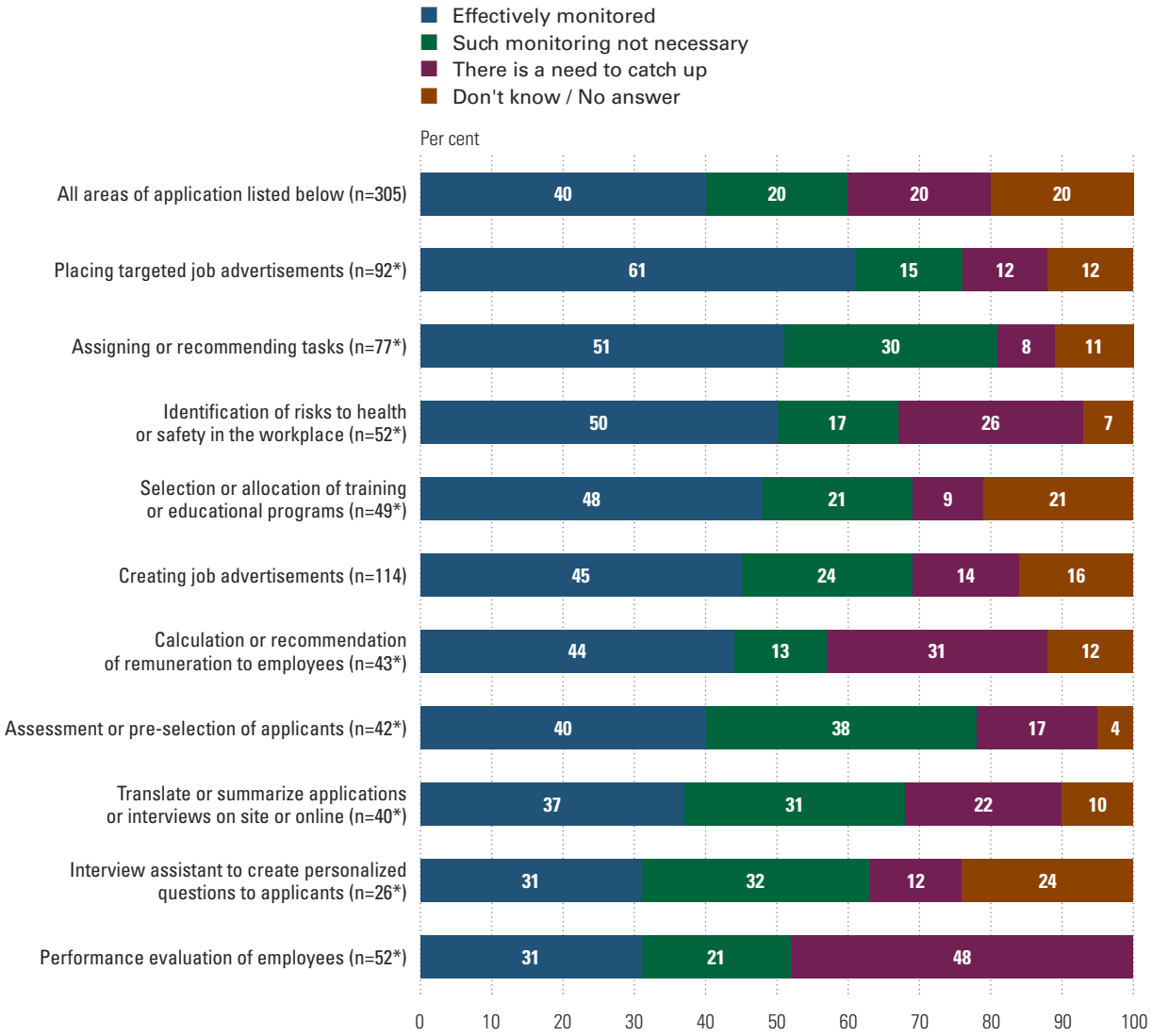
→ Further information on the calculation

Question 20, multiple answers.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

3.16 Human oversight

→ Question

In your opinion, is the usage of the AI application effectively monitored by at least one qualified employee, is such monitoring not necessary or is there a need to catch up in the monitoring of AI applications?



→ Further information on the calculation

Question 11, single response for individual areas of application.
Basis: Businesses that reported active areas of application.

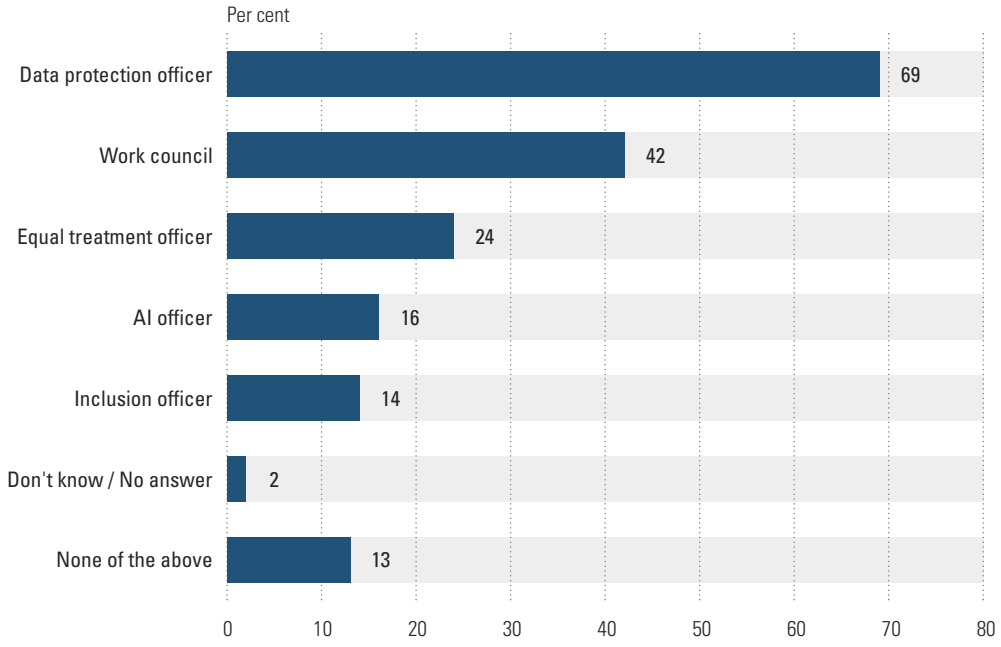
3.17 Work Councils and Officers in businesses

→ Question

What roles are present in your company?

Note to interviewed companies in case of enquiry

This also includes external personnel performing the roles listed below



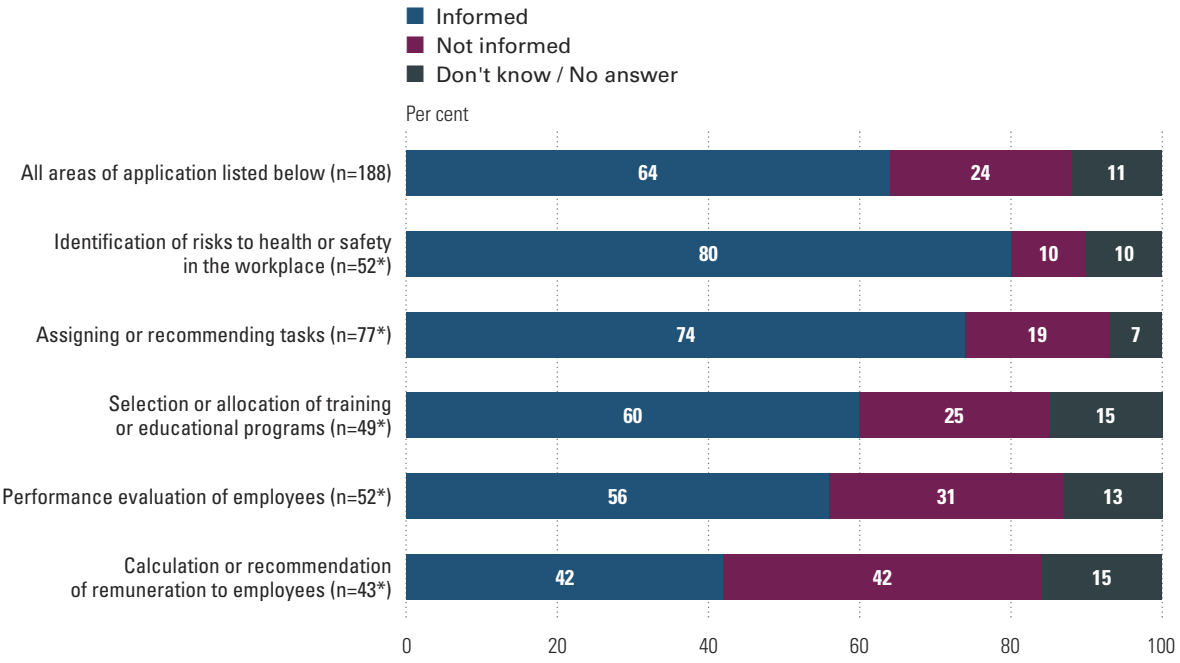
→ Further information on the calculation

Question 12, multiple answers.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

3.18 Information to Employees

→ Question

Have employee representatives and the affected employees been informed about the usage of the AI application, or have they not been informed?



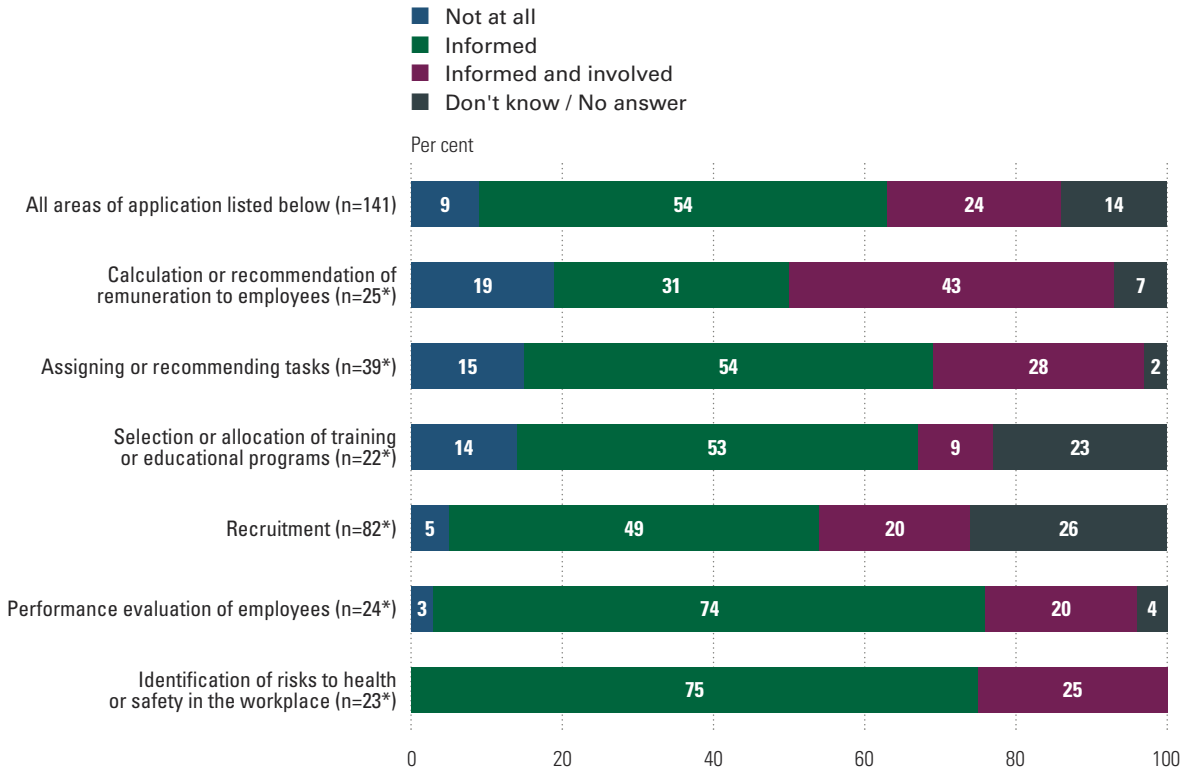
→ Further information on the calculation

Question 13, single response for individual areas of application.
Basis: Businesses that reported active areas of application.

3.19 Involvement of Work Councils

→ Question

How was the work council involved in the design of the AI application?



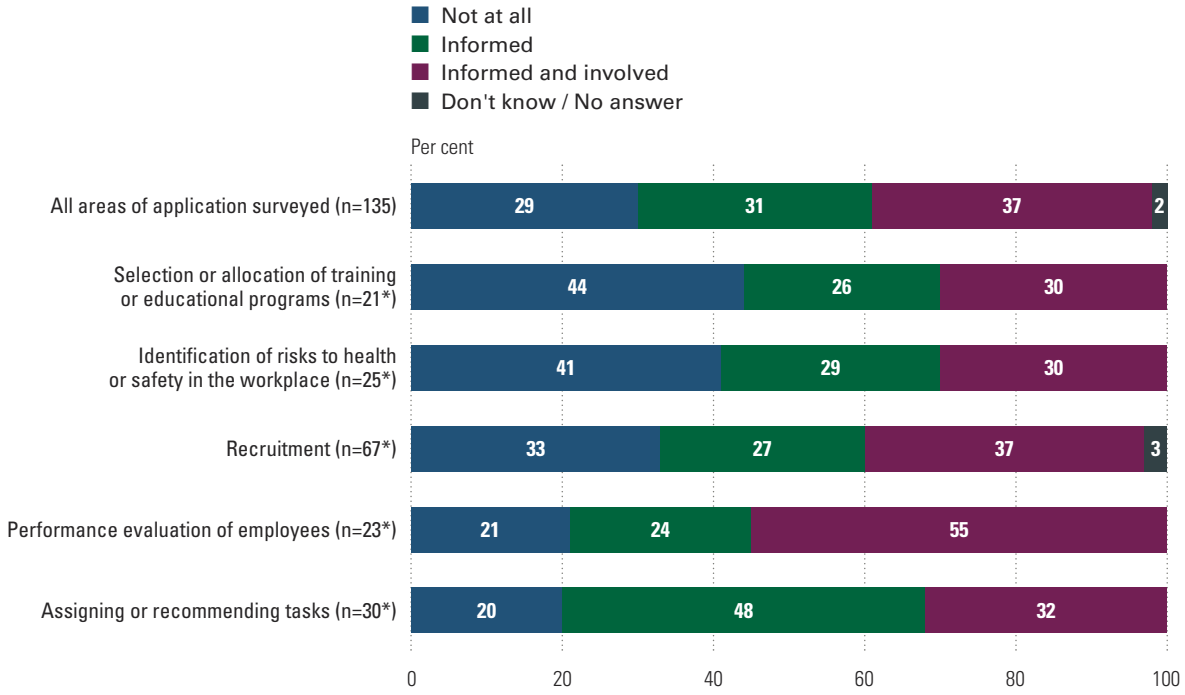
→ Further information on the calculation

Question 14, single response for individual areas of application.
Basis: Businesses that reported active areas of application, with a business work council, as indicated in Questions 5 and 12.

3.20 Involvement of Officers

→ Question

How were data protection, equal treatment, or inclusion officers involved in the design of the AI application?



→ Further information on the calculation

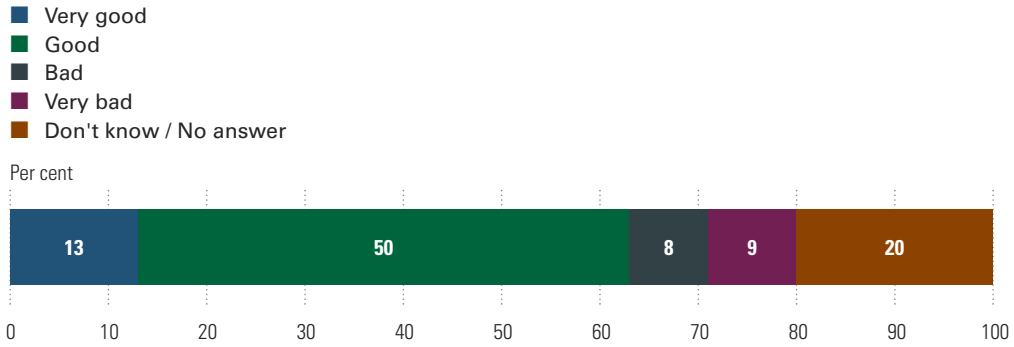
Question 15, single answer for individual areas of application.
Basis: Businesses that reported active areas of application, without a work council, but had a data protection officer, equal treatment officer, or inclusion officer, as indicated in Questions 5 and 12.

In addition to the areas of application listed in the figure, „All areas of application surveyed“ also includes „Calculation or recommendation of remuneration to employees“, which is not displayed due to the small number of cases (n<20).

3.21 Understanding the data used by the AI applications

→ Question

To what extent can employees using AI applications understand which data the applications can access, based on the provided documentation?



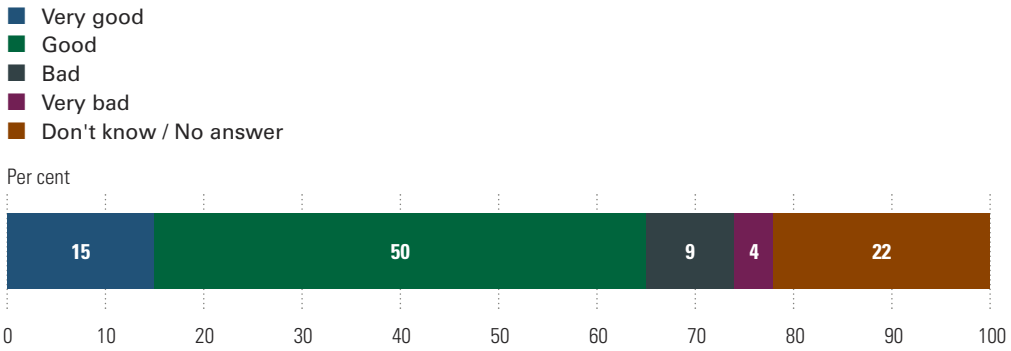
→ Further information on the calculation

Question 21, single answer.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

3.22 Understanding the output of the AI applications

→ Question

To what extent can employees using AI applications understand the output (e.g. decisions and recommendations) of the applications based on the provided documentation?



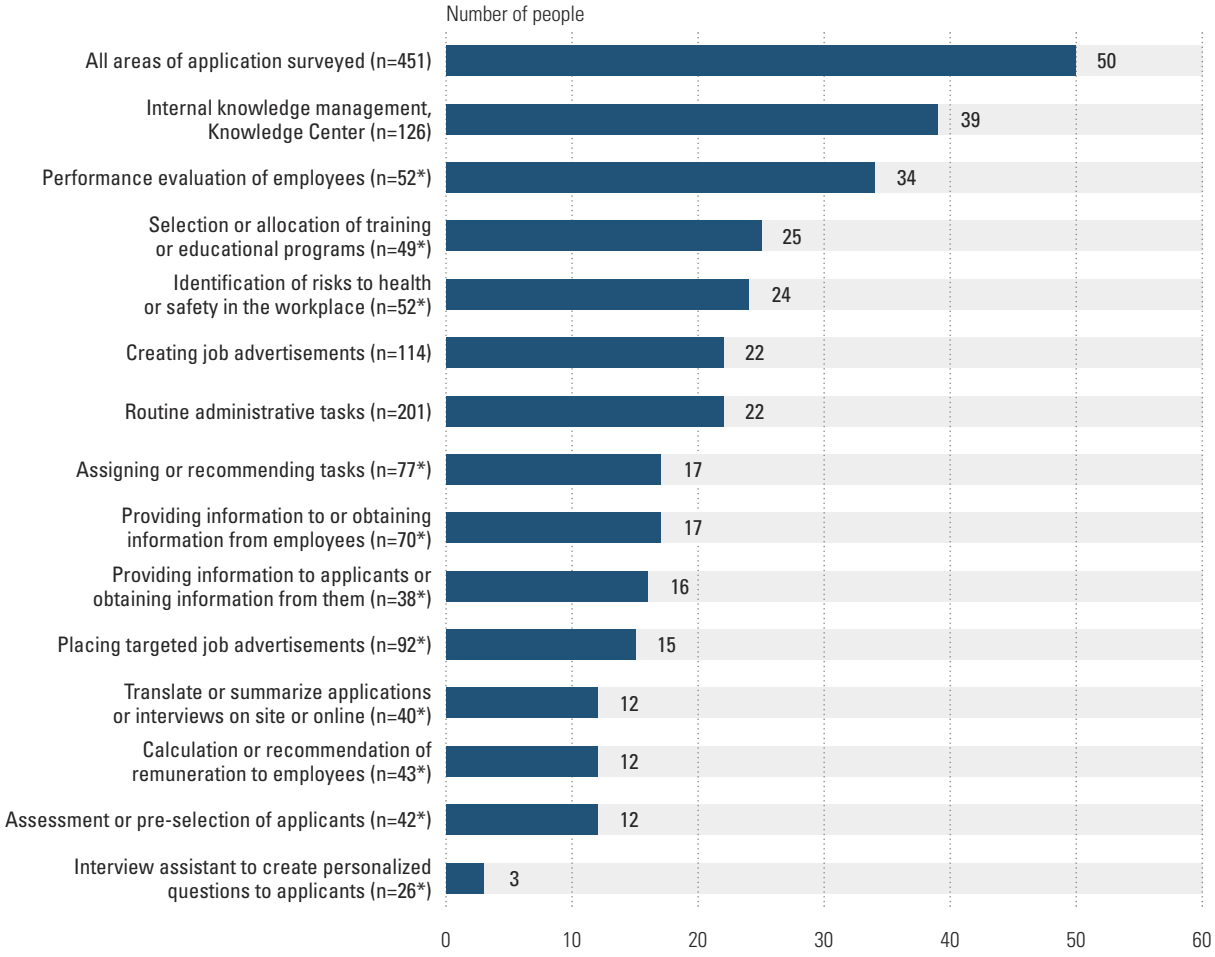
→ Further information on the calculation

Question 22, single answer.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

3.23 Affected individuals by AI applications

→ Question

How many individuals, such as employees or applicants, are directly impacted by the AI application you use in Austria each year?



→ Further information on the calculation

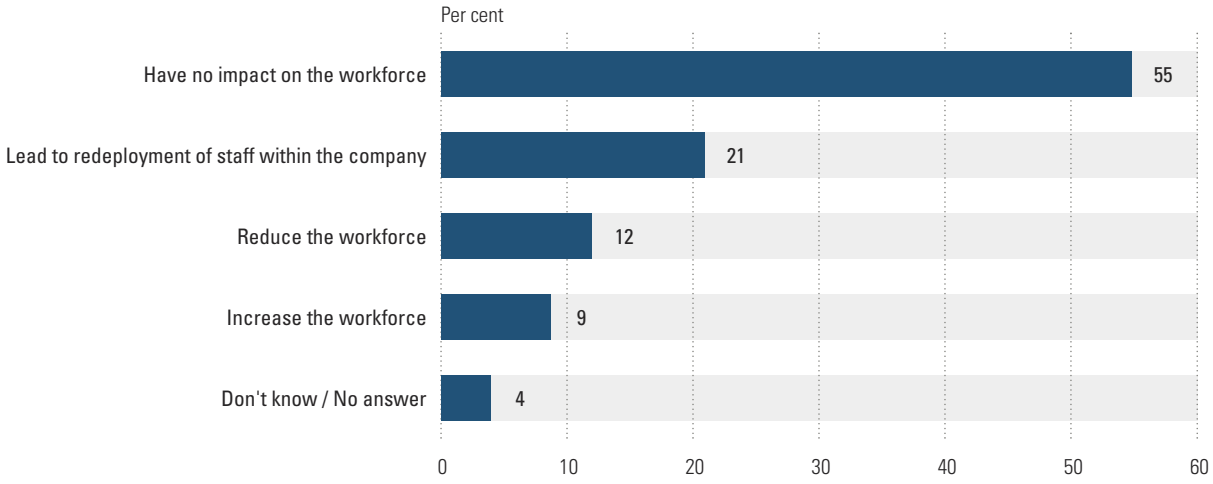
Average of the number of individuals mentioned, Question 17, indicating a numerical value.
Basis: Businesses that reported active areas of application.

In addition to the areas of application listed in the figure, „All areas of application surveyed“ also includes „Identification of fraud, rule or law violations by own employees“, which is not displayed due to the small number of cases (n<20).

3.24 Impact of AI on the workforce

→ Question

Which of the following statements do you agree with the most? The usage of AI in my company will increase the workforce in the long term, lead to the redeployment of staff within the company, reduce the workforce, or have no impact on the workforce.



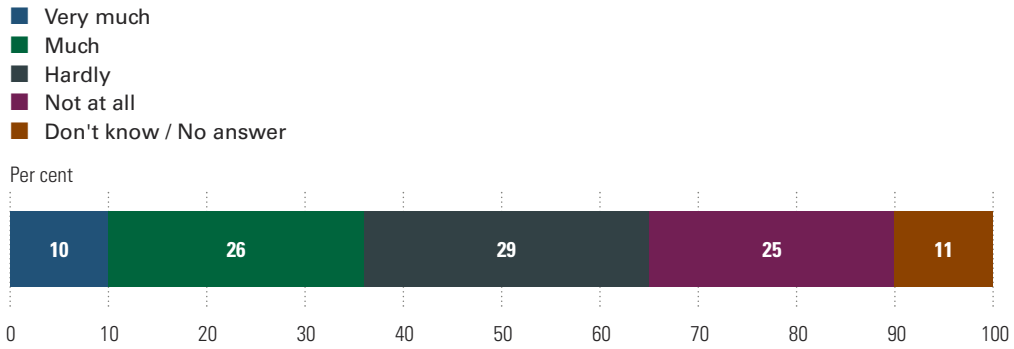
→ Further information on the calculation

Question 25, single answer.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

3.25 Dealing with the AI Act

→ Question

To what extent has your company already dealt with the new regulation on the usage of AI, the European AI Act [original expression in German language], often referred to simply as the AI Act?



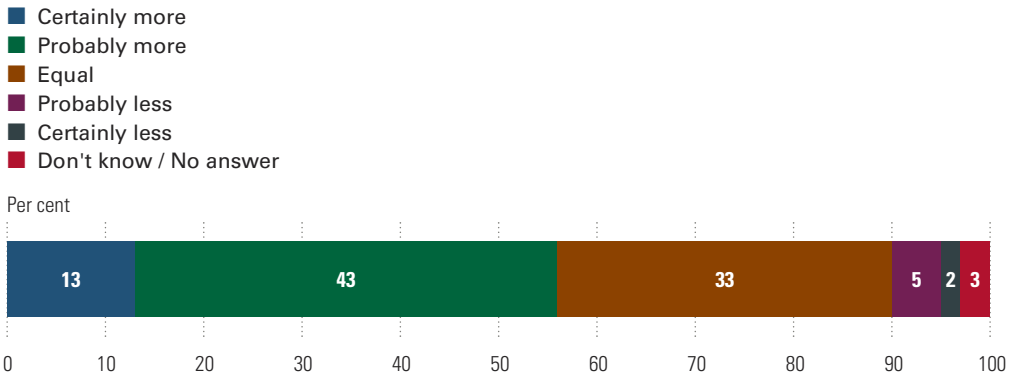
→ Further information on the calculation

Question 27, single answer.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

3.26 Future usage of AI

→ Question

Will your company increase or decrease its use of AI in HR next year?



→ Further information on the calculation

Question 26, single answer.
Basis: Businesses using AI in Human Resources as indicated in Question 5, n=500.

04

Concluding Remarks

04 Concluding Remarks

The Artificial Intelligence Service Desk, established at RTR in early 2024, serves as a point of contact and information hub for the general public on AI-related matters. Additionally, it supports the implementation of the European AI Act.

As part of its mandate under Art. 194a of the Austrian Telecommunications Act 2021, the Service Desk's tasks include advising the public, particularly with regard to AI already in use in high-risk areas, as well as promoting the development and exchange of knowledge on AI and the markets for AI applications, in particular by conducting studies, analyses and events.

With the AI Act, the EU is one of the world's pioneers in the regulation of artificial intelligence. The AI Act takes a risk-based approach to introducing a proportionate, effective and binding regulatory framework for AI systems. AI systems are categorised according to their risk potential into unacceptable, high, low and minimal risk.[5]

According to Annex III item 4 AI Act, AI systems in employment and workers' management that are to be used, for example, for the recruitment or selection of natural persons, in particular to place targeted job advertisements, to analyse and filter job applications and to evaluate candidates, or AI systems that are used to make decisions affecting terms of work-related relationships, the promotion or termination of work-related contractual relationships, are also classified as high-risk AI systems.

Depending on the role of the AI value chain,[6] different obligations will apply to the providers or operators of these high-risk AI systems, essentially from 2 August 2026.[7]

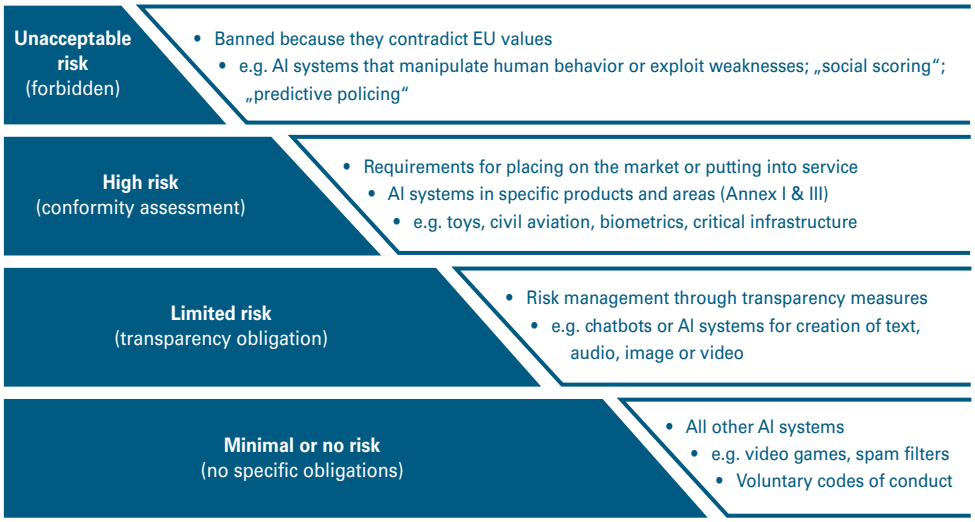
This report provides an initial overview of how AI systems are already being used in these areas in Austria, what motivates companies to use AI, and how various internal stakeholder groups are involved in these decisions and in governance.

The English website of the Service Desk ai.rtr.at provides further information on the regulatory framework governing the use and development of artificial intelligence.

[5] https://www.rtr.at/rtr/service/ki-servicestelle/ai-act/risikostufen_ki-systeme.en.html
[6] https://www.rtr.at/rtr/service/ki-servicestelle/ai-act/actors.en.html
[7] https://www.rtr.at/rtr/service/ki-servicestelle/ai-act/Zeitplan.en.html

AI Act: Risk levels for AI systems

Not all AI systems fall into the regulated area - the higher the risk, the stricter the rules



AI Service Desk ai.rtr.at RTR

AI Act: Deployer obligations

The scope of obligations decreases according to the risk classification of the AI system

	High risk AI system	AI system limited risk	AI System minimal risk
AI literacy	Art. 4	Art. 4	Art. 4
Transparency towards downstream actors	Art. 26 (11)	Art. 50 (3), (4)	
Use of the AI system according to the instructions for use	Art. 26 (1), (3), (4)		
Human oversight	Art. 26 (2)		
Monitoring of the AI system	Art. 26 (5)		
Reporting of serious incidents	Art. 26 (5), 73		
Record-keeping	Art. 26 (6)		
Where relevant, data protection impact assessment	Art. 26 (9)		
Cooperation with competent national authorities	Art. 26 (12)		
Right to explanation of individual decision-making	Art. 86 (1)		
Information towards employee representatives *if employer uses high-risk AI systems in the workplace*	Art. 26 (7)		
Registration obligations *if EU institutions, EU bodies and other EU agencies*	Art. 26 (8), 49		
Authorisation by a judicial or administrative authority *if AI-system is used f or post-remote biometric identification*	Art. 26 (10)		
Fundamental rights impact assessment *if i.a. public bodies and private entities provide public services*	Art. 27		

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The information provided aims to be an accessible and user-friendly resource, offering information on risk levels and obligations for AI deployers under the AI Act presented visually, with examples shown above. Frequently asked questions to the Service Desk are collected and addressed in the FAQ section. Additionally, the website provides an overview of various projects and initiatives that support the Austrian AI ecosystem, as well as key information on the work of relevant international organisations in the field of AI. The offer is continuously being expanded.

This report was presented at an event on 7 April 2025. Both the report and all raw data, as well as the slides used, are available on the website of the service Desk ai.rtr.at.

Imprint

Owner, editor and publisher
Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR)
Mariahilfer Straße 77–79
1060 Vienna, Austria
Phone: +43 1 58058-0 | Mail: rtr@rtr.at
www.rtr.at

Responsible for the content
Klaus M. Steinmaurer, Managing Director for Telecommunications and Postal Services
Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR)

Concept, text and illustrations
Robert Kiraly
Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR)

Realisation and layout
Johannes Bulgarini Advertising Agency
Gföhl 8, 3053 Laaben, Austria

RTR

Rundfunk und Telekom Regulierungs-GmbH

Mariahilfer Straße 77–79 | A-1060 Vienna | Austria
Phone: +43 1 58058-0 | Mail: rtr@rtr.at

www.rtr.at