

**MIND4
CHANGE**



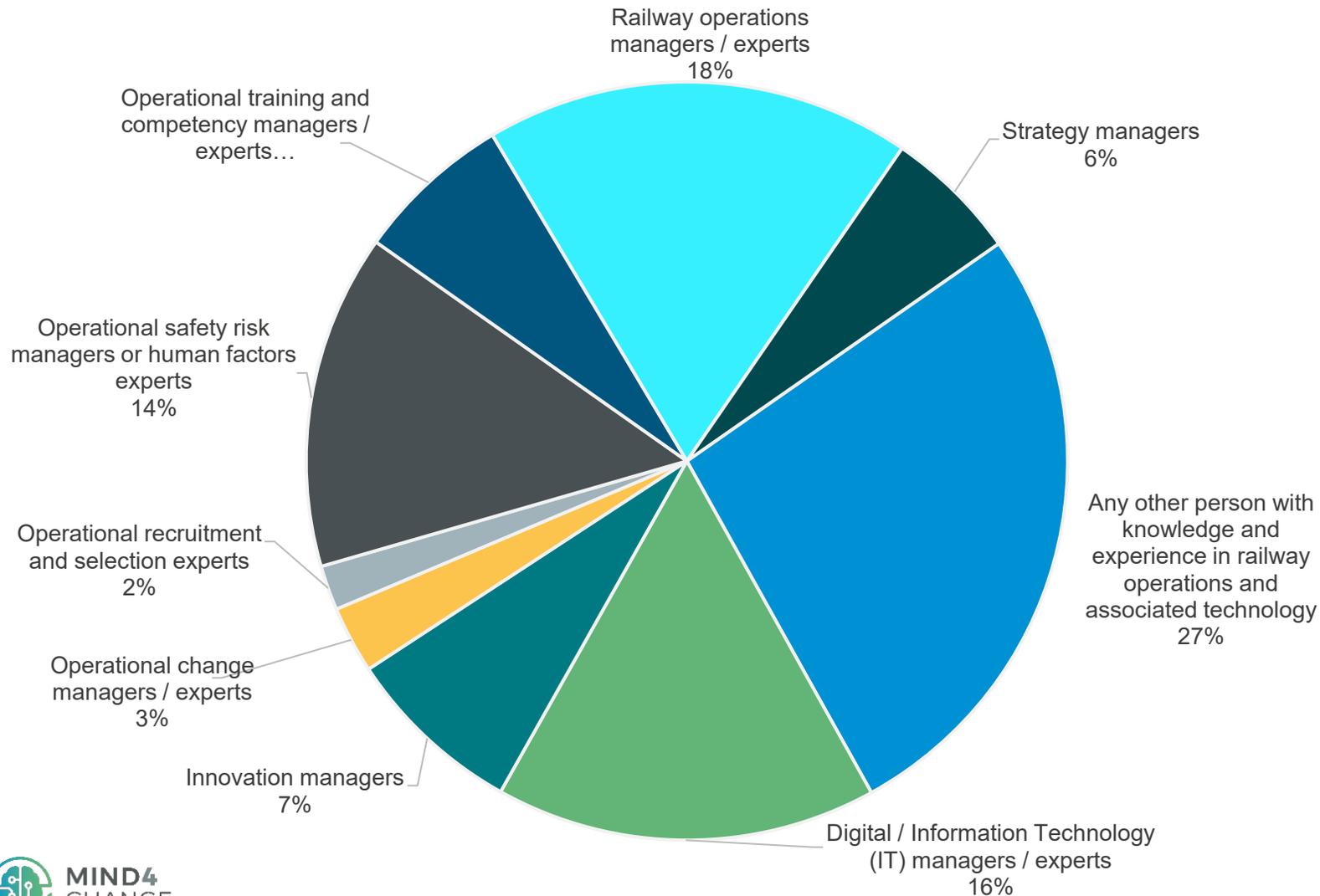
INTERNATIONAL UNION
OF RAILWAYS

Survey results: Your perception on what is happening

DECEMBER 2025



Respondents' job profiles



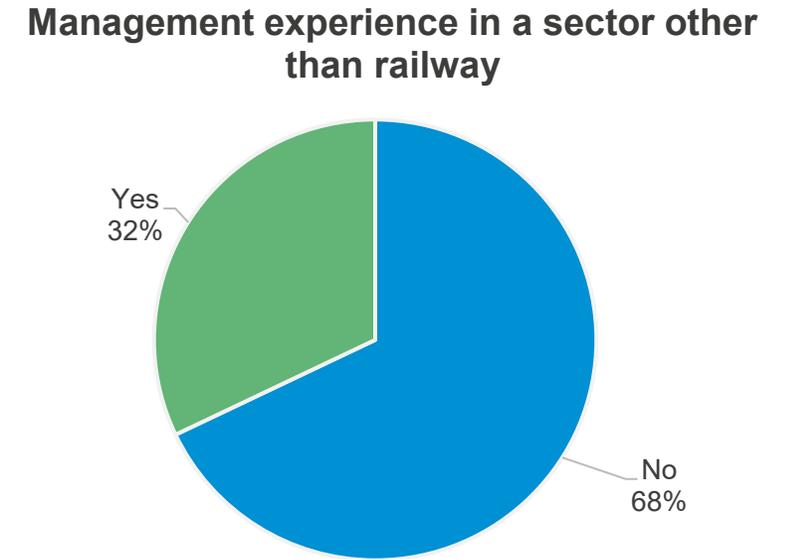
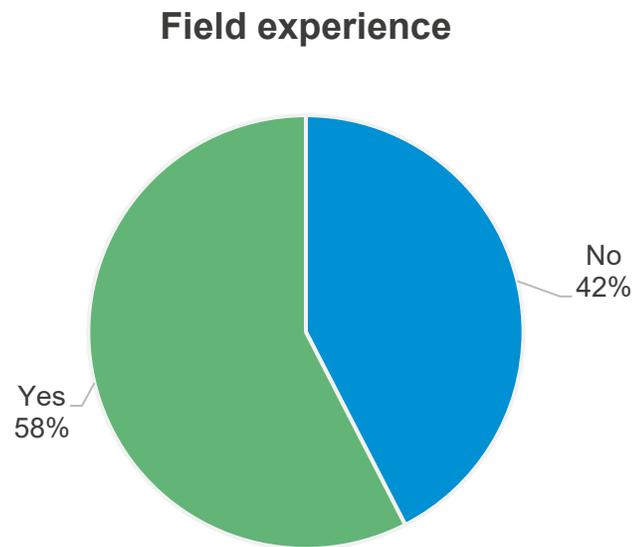
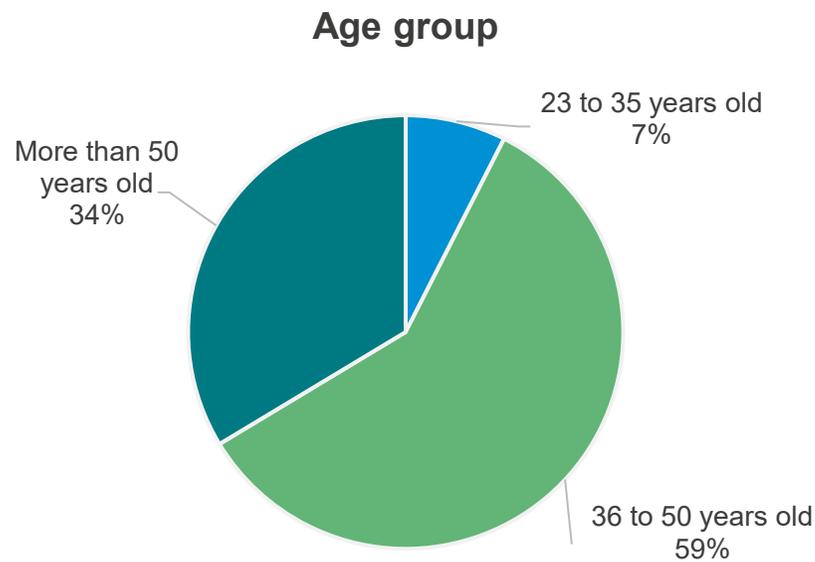
280 experts answered the survey from 7 different railway companies

The respondents' panel is largely composed of **railway operations and technical experts**, with over 60% coming from core operational, digital/IT, and technology-related roles.

This ensures that the survey results reflect **operational experience** and technology-driven perspectives.

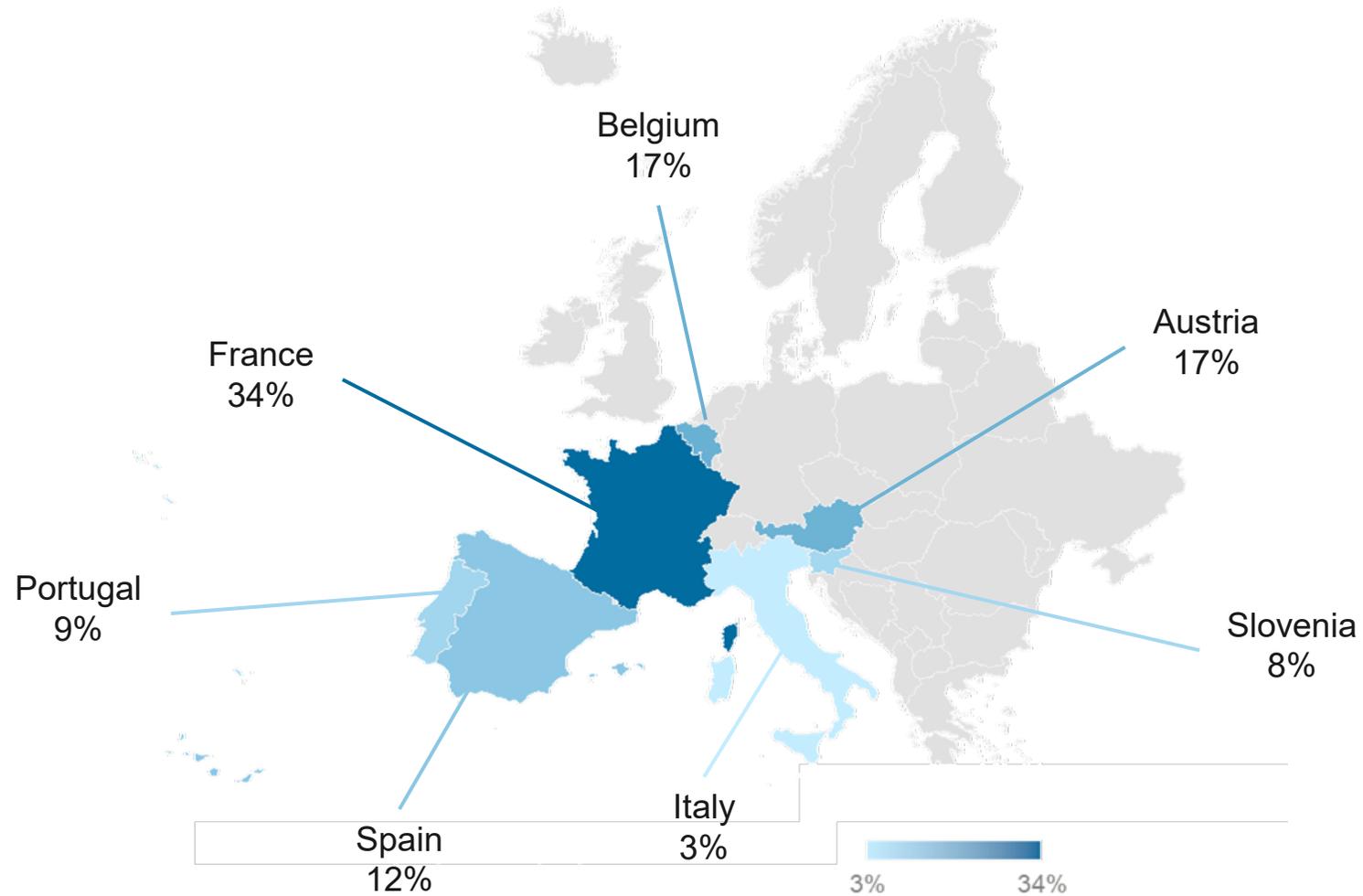
Safety, risk, and human factors specialists also represent a significant share, reinforcing the sector's focus on reliability and risk management.

Level of experience of survey respondents

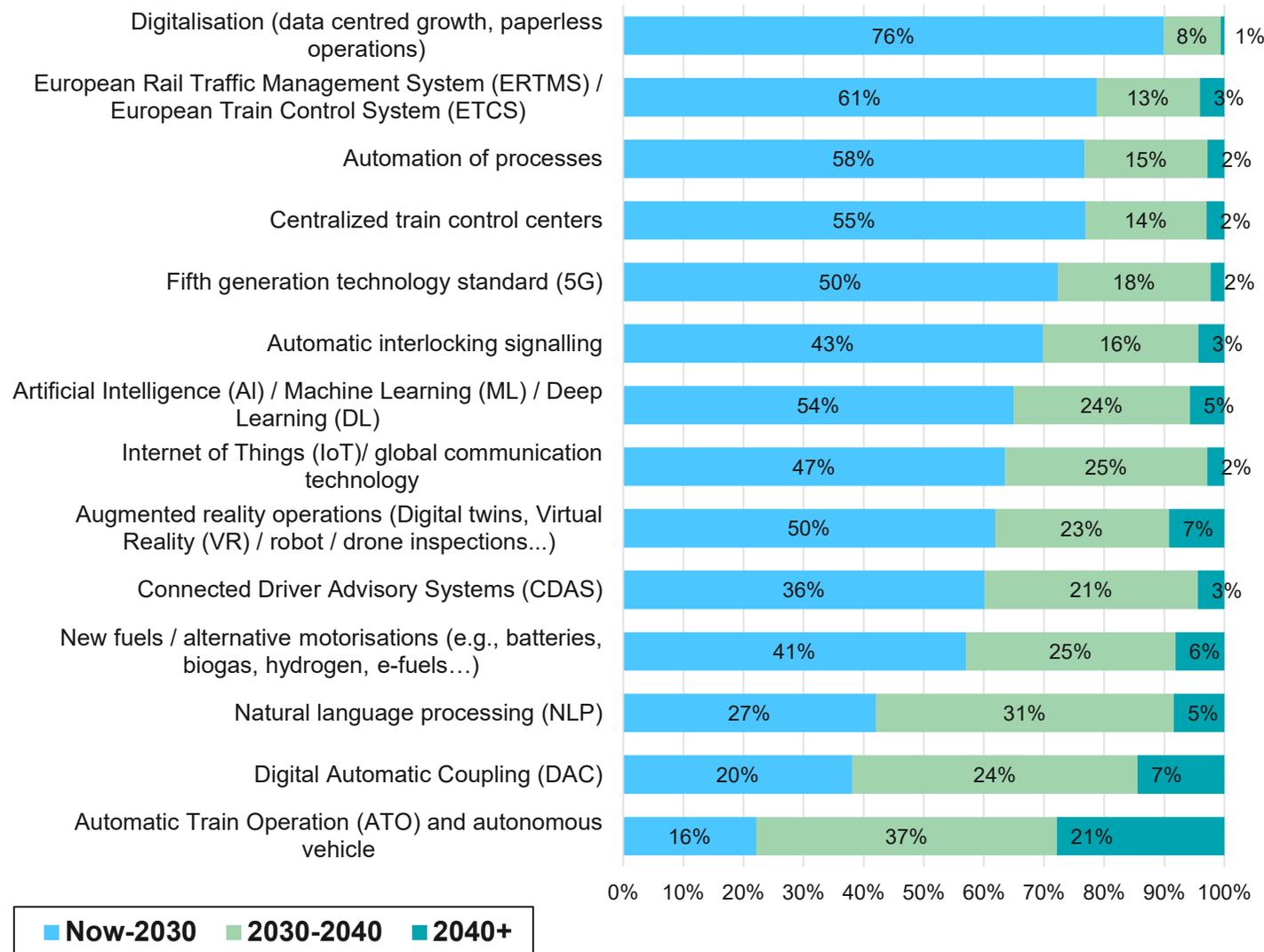


The respondents' panel is predominantly composed of **experienced professionals**, with 93% aged over 35 and a strong concentration in the 36–50 age group. A majority (58%) have **direct field experience**, reinforcing the operational grounding of the survey. Most respondents (68%) have no management experience in other industries, suggesting that the findings mainly reflect an **internal railway-sector point of view**, complemented by some cross-sector managerial exposure.

Location of respondents' company's head offices



Key technological changes that will be companies' priority



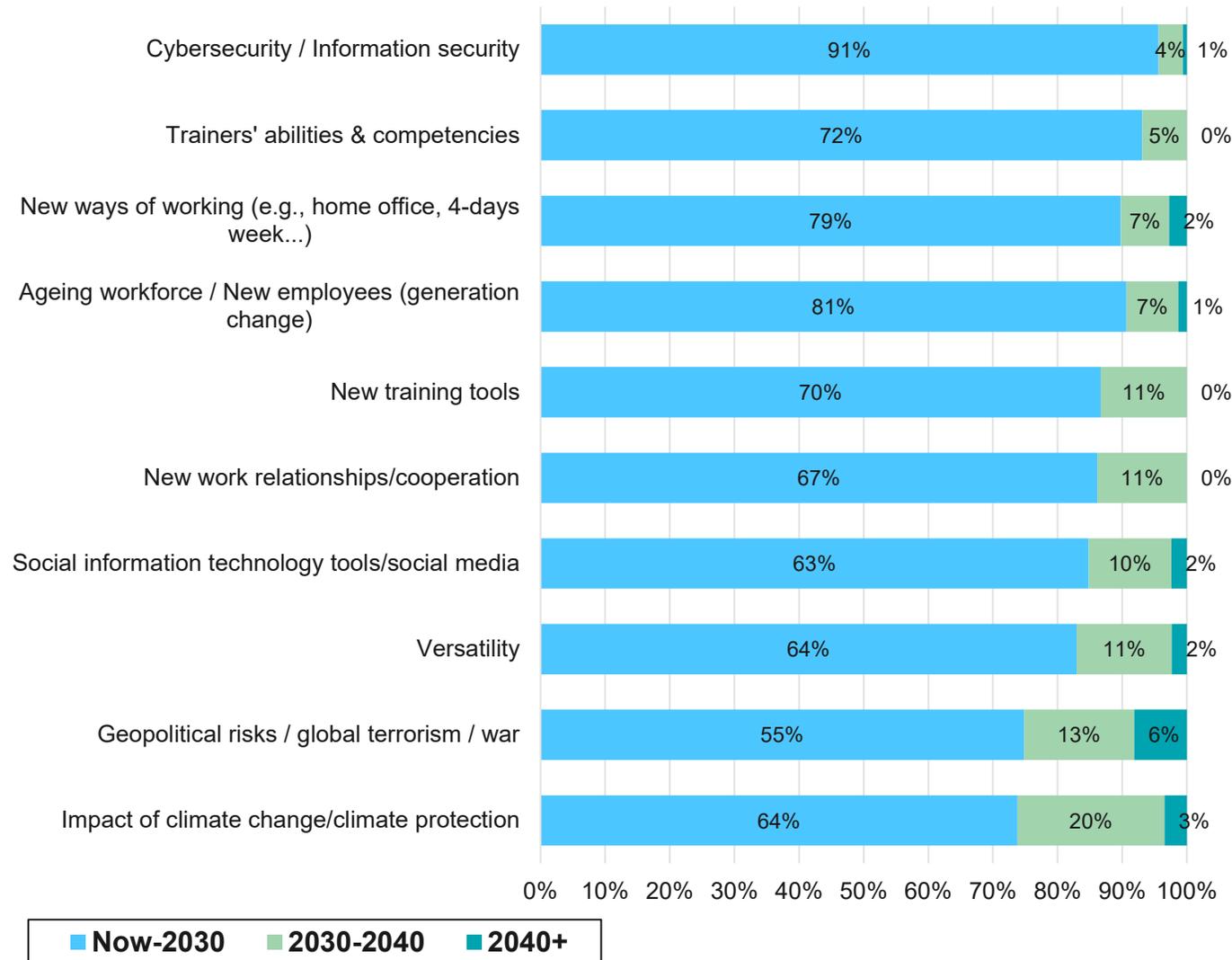
Based on survey respondents' perceptions:

In the **short term** (now-2030), digitalization will be the most prioritized technological change, followed by ERTMS & ETCS, and automation of processes.

In the **medium term** (2030-2040), connected and AI-related technologies are expected to be prioritized (AI, ML, DL), as well as NLP, IoT and CDAS.

In the **long term** (2040 +), autonomous trains & operations will be the most prioritized technological change, alongside DAC and augmented reality operations.

Key societal & organizational changes that will be companies' priority

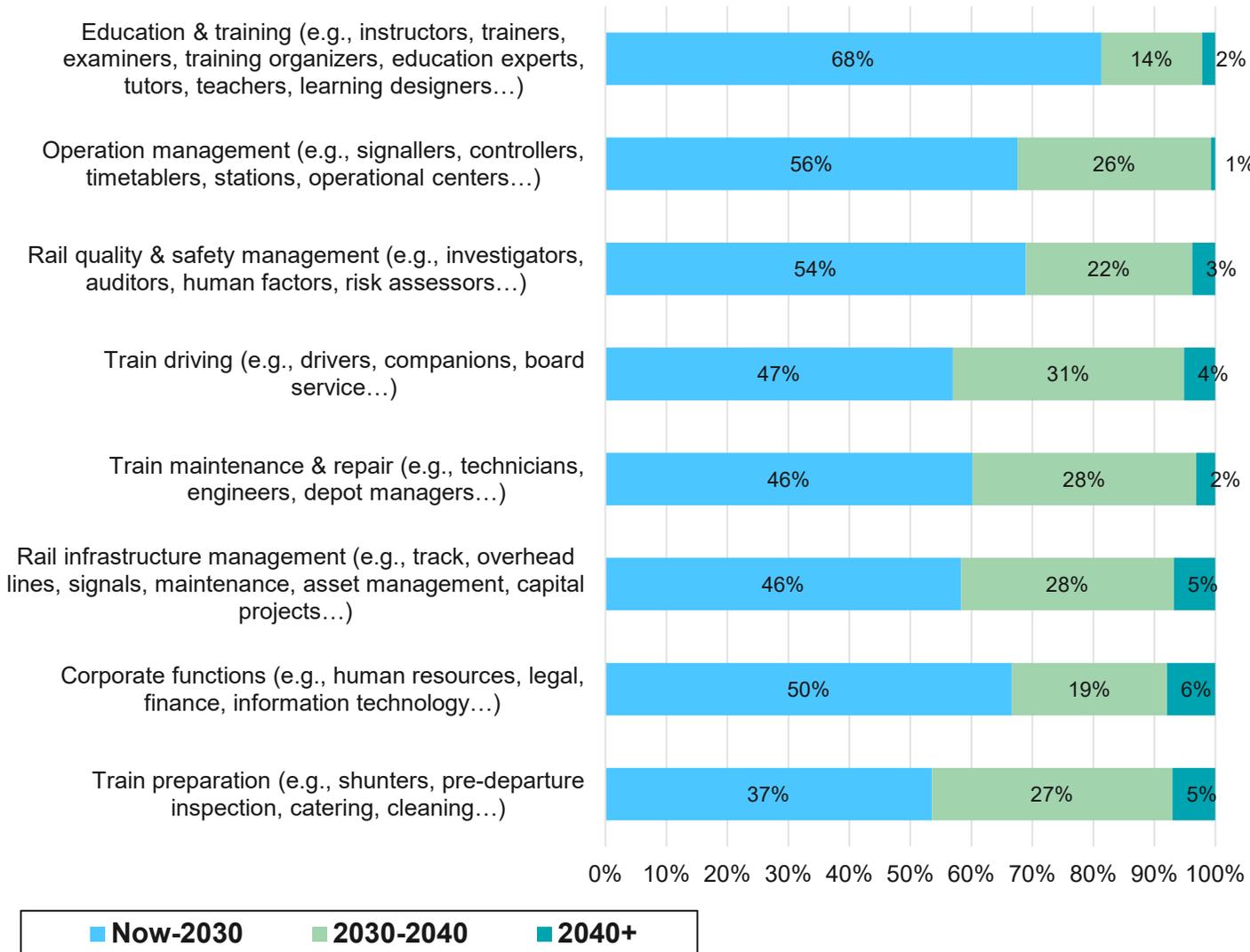


Based on survey respondents' perceptions:

Focus on **Short-term priorities** (now–2030), with cybersecurity and information security standing out as the most critical issue, followed by human capital and organizational transformation topics such as ageing workforce, new ways of working, and skills development.

Medium and **long terms** (2030–2040 and beyond) are less emphasized overall, although climate change impacts and geopolitical risks show a more pronounced medium- to long-term dimension compared to other topics.

Key target groups that will be the most impacted by these changes



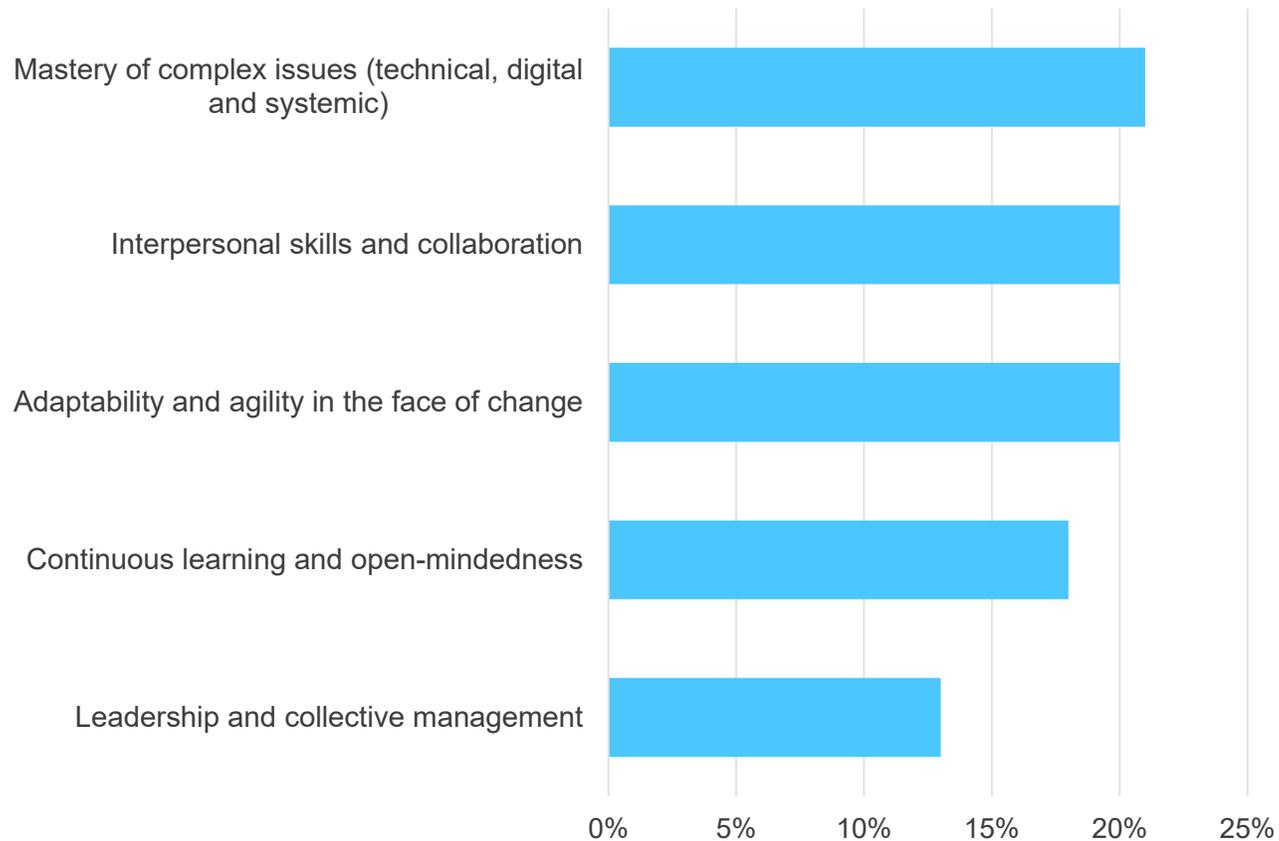
Based on survey respondents' perceptions:

In the **short term** (now-2030), the most impacted groups are education and training staff, followed by operations management and rail quality and safety management.

In the **medium term** (2030-2040), train driving staff are expected to be the most impacted, alongside rail infrastructure management and train maintenance.

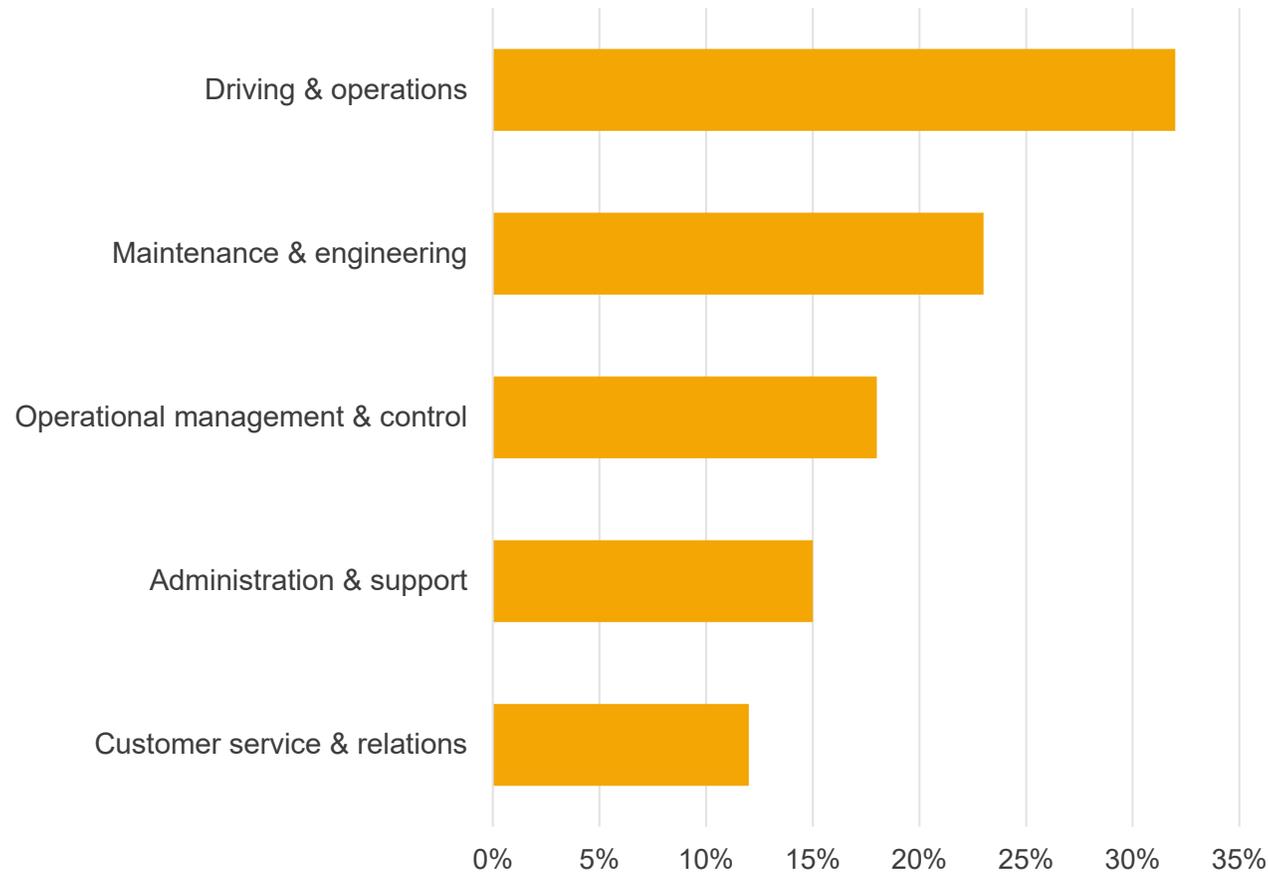
In the **long term** (2040 +), corporate functions will be the most affected, together with train preparation and rail infrastructure management.

The main **COMPETENCIES** that would be required by the staff to face these changes



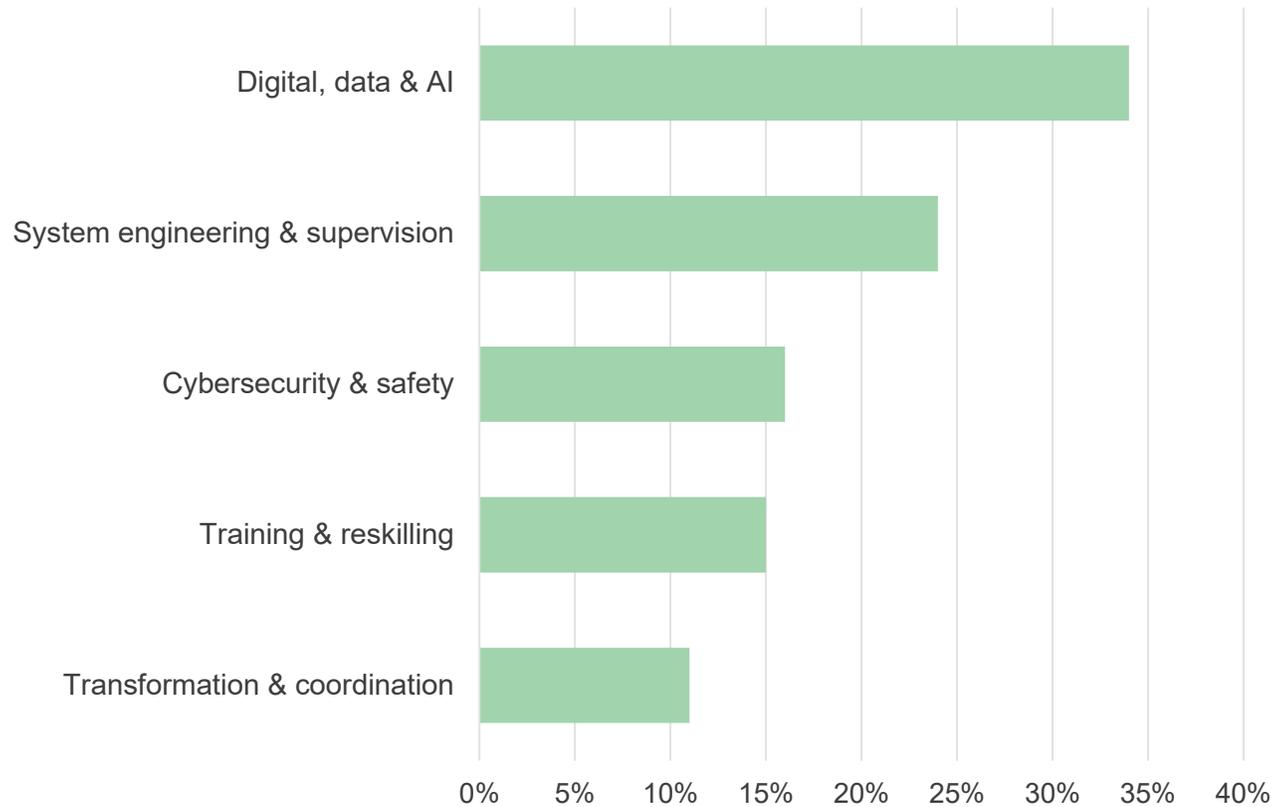
1. **Mastery of complex issues** reflects the ability to resolve issues that arise from change and adapt solutions. It covers troubleshooting, creative thinking, and resolving complex issues.
2. **Interpersonal skills and collaboration** includes teamwork, communication, and working across networks or with AI-based tools.
3. **Adaptability** encompasses openness to change, flexibility, and the ability to manage uncertainties. It highlights flexibility, openness to change, and the ability to adjust in a dynamic environment.
4. **Continuous Learning** reflects the willingness to learn, learn-to-learn mindset, and the need to acquire new knowledge. It reflects ongoing education, training, and skill development in digital and technical fields.
5. **Leadership** highlights the role of leadership in driving change and managing teams. It emphasizes leadership qualities like guiding teams, managing change, and inspiring collaboration.

3 specific roles/jobs that the respondents think will **DISAPPEAR** due to these changes



1. **Driving & operations** covers roles related to driving, conducting, and managing train operations, including attendants.
2. **Maintenance & engineering** includes train maintenance, repair, and inspection tasks. It covers both preventive and partial maintenance tasks for trains.
3. **Operations management & control** covers management roles in rail operations, infrastructure, and traffic. It includes train preparation and roles focused on pre-departure inspection, quality, and safety oversight.
4. **Administration & support** reflects corporate and support roles in areas like IT, HR, logistics officers, and legal services.
5. **Customer service** reflects roles such as ticket sellers, travel agents, and on-board staff.

The 3 specific roles/jobs that the respondents think will BE CREATED due to these changes



1. **Digital, Data & Artificial Intelligence** roles cover professions focused on data analysis, software development, and AI applications supporting railway operations, maintenance, and decision-making.
2. **Systems engineering & supervision** covers technical and engineering functions related to integrated railway systems, automation, and centralized traffic supervision.
3. **Cybersecurity, safety & risk management** roles cover roles dedicated to protecting railway systems, operations, and data, while ensuring safety, compliance, and operational continuity.
4. **Training & reskilling** roles cover professions focused on developing skills, supporting workforce adaptation, and accompanying technological and organizational change.
5. **Transformation & coordination** covers positions responsible for coordinating change initiatives, managing projects, and supporting innovation across railway organizations.

Focus groups with experts were held to deep-dive on these results

50

experts agreed to be contacted again for the focus groups

7

different focus groups were held, one for each company

The focus groups objectives were to:



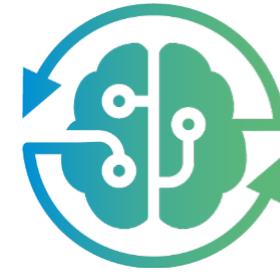
Determine UIC members' companies' level of maturity with regard to new technology mindset, and their specific needs,



Gather UIC members' expectations on what the future Mind4Change Learning Lab platform could contain.



The results of these focus groups are available via the following link: [UIC member's expectations](#)



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Thank you for your attention



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