



# WILL AI REPLACE ME?

## Research and Development Director

*Information Technology, Telecommunications, and Security*

The role of a Director of Research and Development is central to defining and implementing a company's strategic vision for innovation. While AI can help optimize certain research processes or process massive datasets, the ability to steer a team towards a vision, make decisions based on calculated risks, and collaborate effectively with other departments involves deeply human judgment and experience. Moreover, a nuanced understanding of market needs, company culture, and industry-specific nuances cannot be entirely automated. Thus, while AI can be a valuable tool for a Director of R&D, their role is unlikely to be replaced but rather complemented by this technology.

Automation degree: 13.33%

Limited impact of AI on the Job.



13.33%

## Main tasks

This section reviews the 3 main tasks associated with the job studied and assesses the potential level of automation induced by AI (« **AI Automation Impact** »). The modeling uses 8 criteria detailed on the « **Methodology** » page.

Tasks	AI Automation Impact
Define and drive the company's R&D strategy in alignment with its commercial and technological objectives.	Very High
Supervise research teams in the design, development, and validation of new products or solutions.	Moderate
Work closely with other departments, such as production and marketing, to ensure successful market launches of innovations.	Moderate

## Impact on skills

At-risk Skills ↓	
Dependence on a Specific Simulation Technique	With the advent of advanced simulation tools, the R&D Director needs to have a comprehensive understanding of the strengths and weaknesses of each technique. As software evolves, the level of manual input required may decrease, but the expertise in different simulation techniques remains crucial for accurate interpretation and informed decision-making.
Specialization in Proprietary Software	Dependence on proprietary software can become a problem if it is replaced by an open-source alternative or a new proprietary solution. The flexibility to adapt to new software or technologies is essential as it ensures that the organization remains up-to-date with the evolving technological landscape.
Future-proof Skills ↑	
Identifying Project Constraints	Identifying constraints early on provides better visibility into potential risks, enabling the implementation of mitigation plans. While automation can help in systematically identifying and tracking constraints, human insight is critical for anticipating and strategizing around these constraints.
Mastery of Problem-Solving Techniques and Continuous Improvement	Regardless of the field or technology, every project will have constraints. Be it a project in biotechnologies, AI, mechanics, electronics, or others, there will always be limitations to acknowledge and manage. Mastering problem-solving techniques and continuous improvement methodologies is vital to navigate through these constraints and drive project success.

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