

One-Page Summary

Digital transformation in the workplace of the European Chemicals Sector

A sector-specific study of the European chemical, pharmaceutical, rubber and plastics industry



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"Digital transformation in the workplace of the European Chemicals Sector – A sector-specific study on the European chemical, pharmaceutical, rubber and plastics industry" is a study conducted on behalf of the European Chemical Employers Group (ECEG) and industriAll European Trade Union. The study was tasked to provide answers to the following questions:

- Which are the sector-specific transformations through digitalisation and Industry 4.0?
- What are potential impacts of the digital transformation on skills, qualifications, working patterns and health and safety?
- How digitally mature is the European chemical, pharmaceutical and rubber & plastics industry?

The study builds upon a **strong empirical basis**, including a comprehensive online-survey with 500 respondents from across the European Member States, more than 20 expert interviews, two conferences and additional steering group discussions, desk research and trend analysis. The research was conducted between March 2018 and December 2018. Based on the extensive research, **six overall conclusions on the digital transformation in the workplace of the European chemicals sector** have been drawn and are explained in more detail below:

Overall conclusions



1. The 1st wave of the digital transformation (i.e. digitising analogue data and integrating cloud solutions) is successfully accomplished in the European chemicals sector. However, the implementation rate increases with the company size: especially the implementation rate of digital solutions in micro and small enterprises (<50 employees) is lagging.</p>



2. The 2nd wave of the digital transformation will be driven by the Industrial Internet of Things, Big Data, Artificial Intelligence, automation and augmented reality – and it will come into effect in the near future (within the next 5 years). The transformation around AI might cause more drastic implementation gaps between very large enterprises and SMEs.



3. A shift in skills in the European chemicals sector is clearly visible – basic digital skills are broadly existing in the sector. However, more advanced digital skills & transversal skills require attention by all stakeholders in the industry. Especially SMEs currently lack dedicated training programmes for digital upskilling and rate their digital skills less positive than larger firms.



4. The **working environment** in the chemicals sector is predominantly changed through mobile working with greater employee autonomy but also an increased level of multitasking. Close attention needs to be paid to the level of psychological stress, which is expected to increase significantly due to digitalisation, especially in larger firms.



5. Collective agreements need to pay greater attention to the issue of mobile working & working-time arrangements and qualification. Other sensitive issues linked to the digital transformation (data protection, performance monitoring) also need to be addressed with collective agreements or accompanied by other initiatives (e.g. open dialogue processes).



6. Change management and the involvement & support of employees is currently the biggest challenge in the digital transformation process of the European chemicals sector. It is decisive to address this to allow for a successful transformation. The digital maturity assessment shows little variance across Member States and sectors. Southern and Eastern Europe are more likely to have greater challenges. In these regions the issue of employee participation seems to be addressed less by collective agreements at national, regional or sectoral levels.

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Imprint

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