

“Our Future Workplace – Digital Transformation in the Chemical Industry”

Final Conference of the European Chemical Social Partners

7/8 November 2019 - The Hague, Netherlands

Industry under double pressure to adapt

Digitalization  **transformation in industry**  **CO² reduction**

Changes in skill requirements and employee qualifications are the biggest issue in the digitalization of the working world and ecological transformation.

What is the right approach to continuing education and training?

All players basically agree that continuing education and training is important.

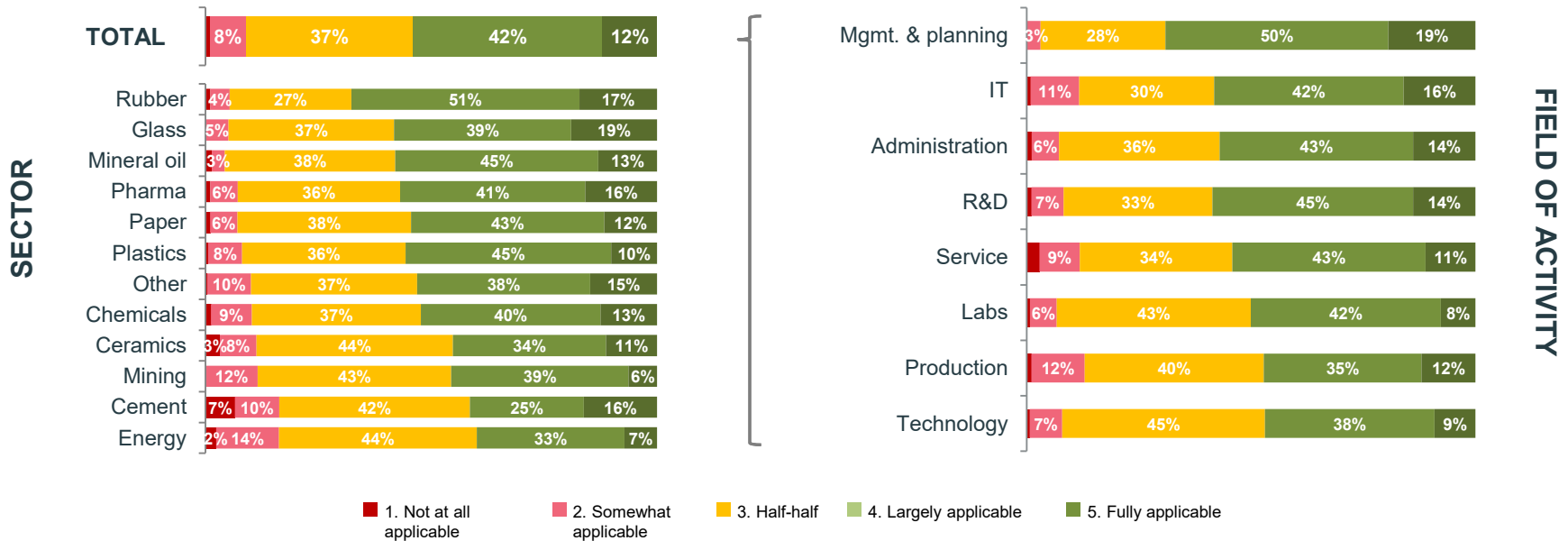
But...

... the more abstract the discussion about this issue becomes, the less agreement prevails. There is major uncertainty about the actual content and the financing of continuing education and training.

And...

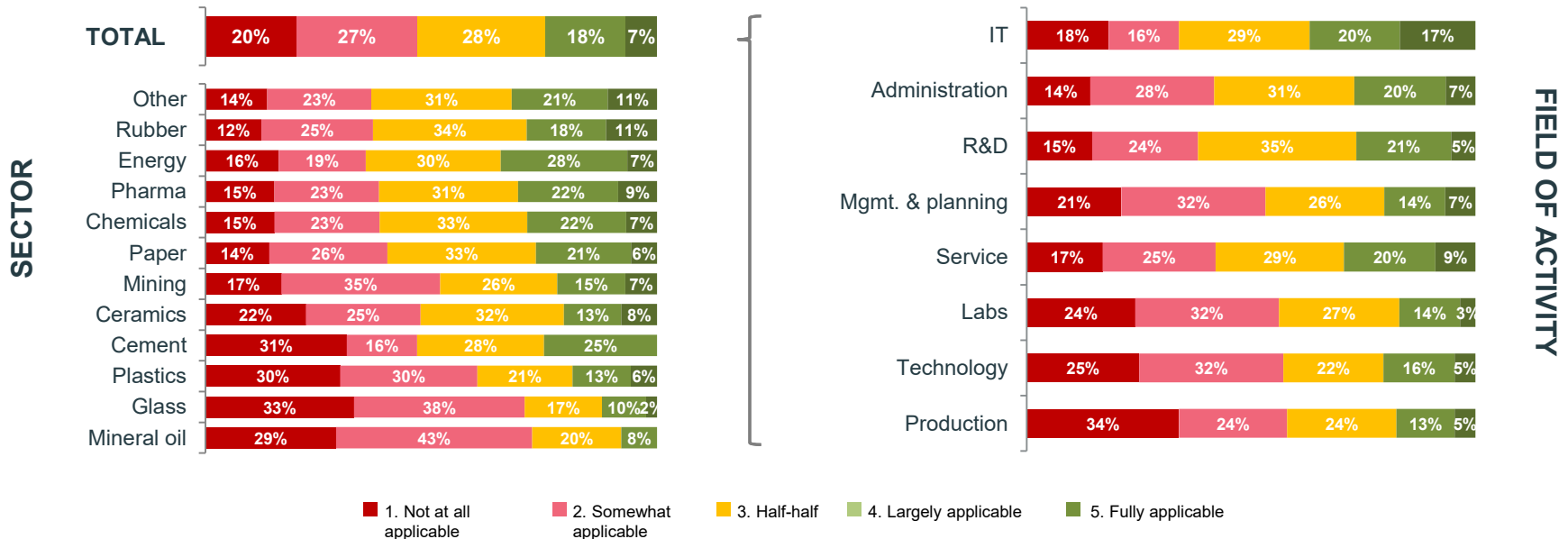
... without knowing what direction things are heading, it is hard to pursue continuing education and training.

Questions about: Openness to change, personal added value from changes at the workplace arising from digitalization



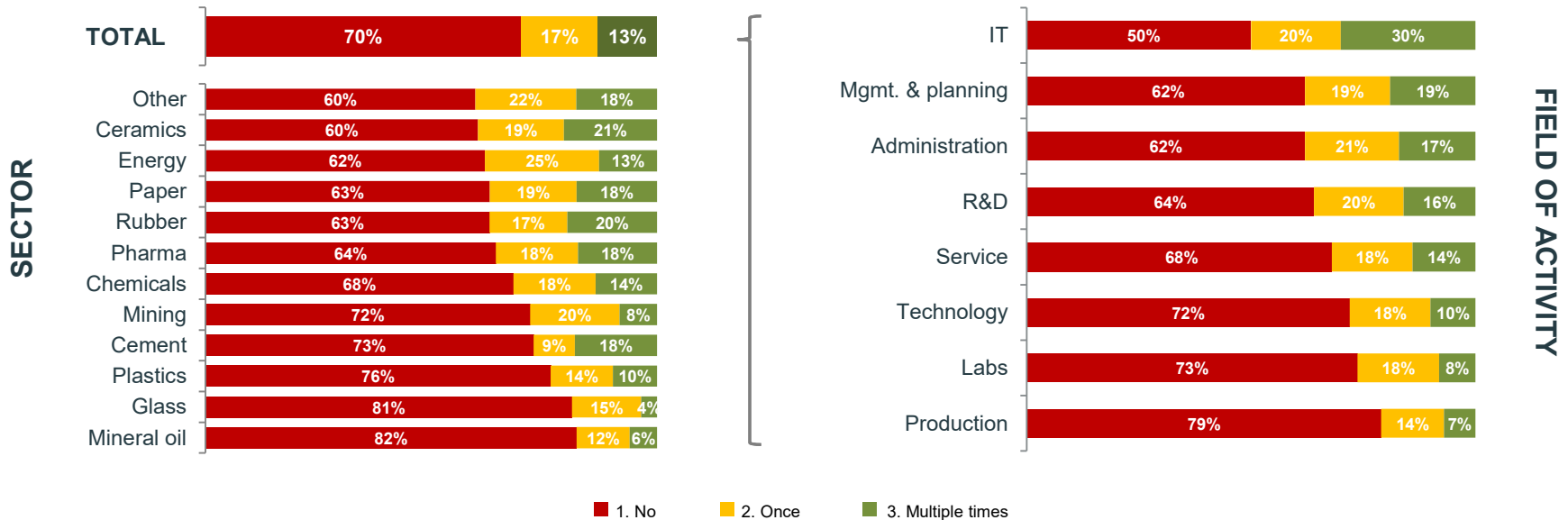
- ▶ Those surveyed have a predominantly **positive** attitude towards **change at the workplace**. Differences among the sectors are statistically insignificant.
- ▶ Employees in **technology and production** are somewhat more reserved. All areas report a **positive attitude** towards **changes**.

“If I want to undergo continuing education and training on digitalization, my company has basic conditions in place that enable me to do so.”



- ▶ **Basic conditions at the company** for enabling continuing education and training in digitalization are rated by those surveyed as **mediocre to unsatisfactory**.
- ▶ **Production, technology and labs** are the main sectors with a lack of opportunities at companies for continuing education and training.

“Have you taken part over the past two years in continuing education and training courses involving work with digital technologies?”



- ▶ **Only a few employees** have taken part in **continuing education and training courses related to digitalization** over the past two years.
- ▶ **IT employees** are the most likely to report having taken part in continuing education and training on digitalization. No participations are reported by a majority in all other sectors, especially **in those related to production and technology**.

Digitalization at Evonik in Marl



chemiepark-marl.de

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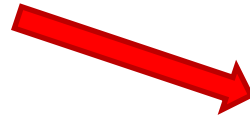
- Evonik is planning to upgrade various plants in the chemical park in Marl to be fit for the future.
- Developing a degree of digitalization *actual* – *desired*
- Question: What technology is needed for which plant?

How does data go from the lab to the control room?



hzdr.de

Planned: Technology for creating a digital network between the lab and the control room



chemanager-online.de

Digitalization at Evonik in Marl

New processes lead to new requirements

Question: What (new) qualifications do employees need?

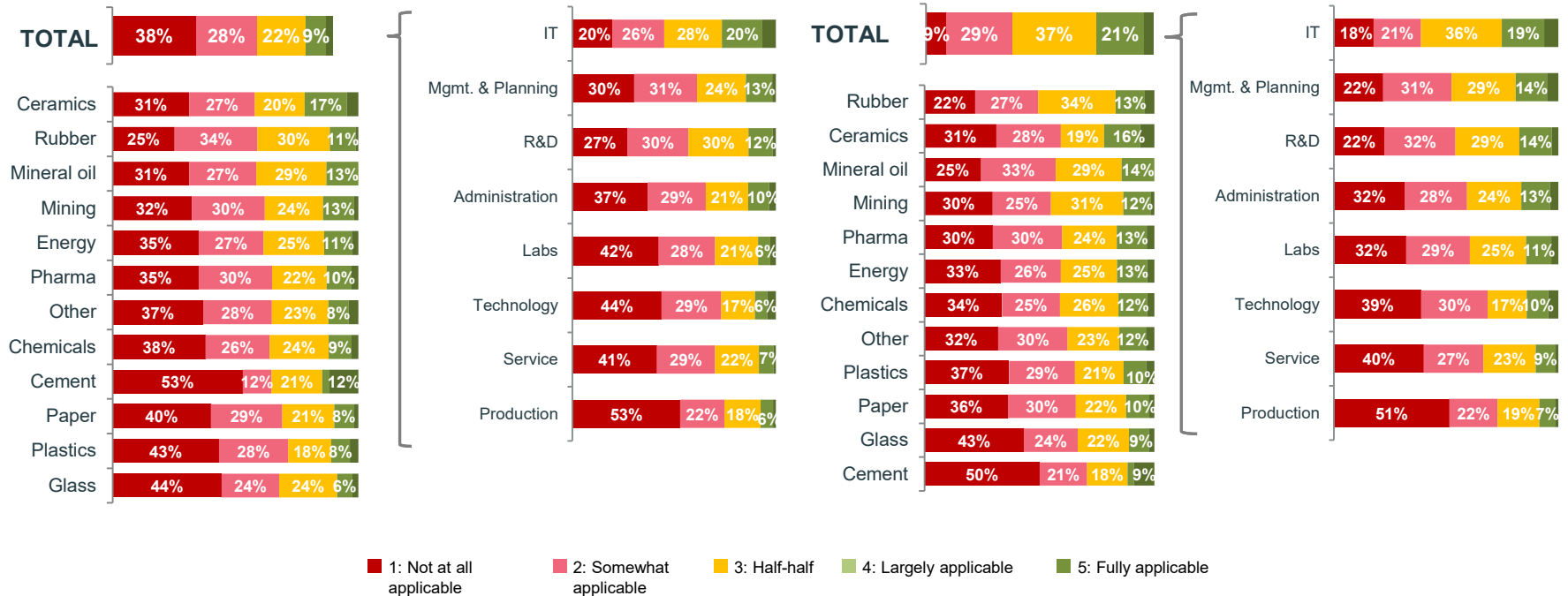
- Technical command of new technologies
- Handling errors and malfunctions
- Little contact with colleagues
- Greater self-reliance required

Are targeted qualifications necessary? Or would learning on the job suffice?

Are there differences among the categories of employees?

“I have a say in issues regarding the **introduction** of digital technologies at my workplace.”

“I have a say in issues regarding the **use** of digital technologies at my workplace.”



- ▶ In general, the **introduction** and **use** of digital technologies in all sectors **involve a rather low level of co-determination by employees.**
- ▶ In nearly all areas of activity, co-determination by employees is rather low, especially in areas involving production and technology. Only **IT employees rate participation somewhat more positively.**

The bottom line:

- It is difficult to predict exactly what the future requirements will be. That depends largely on the technology involved.
- An environment that encourages learning and enables employees to acquire new knowledge quickly is more important than the search for the perfect types of continuing education and training.
- Employees are open to technological changes and should be given opportunities to have a say in the introduction and use of new technology.
- Motivated employees with good education and training are also in a position to acquire new knowledge quickly.

Thank you for your kind attention!