

Digital futures

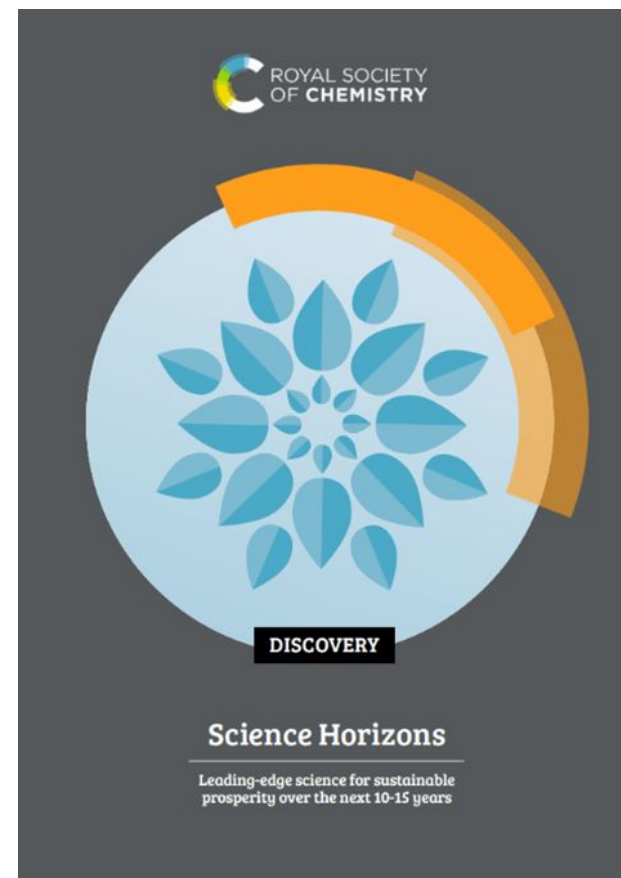
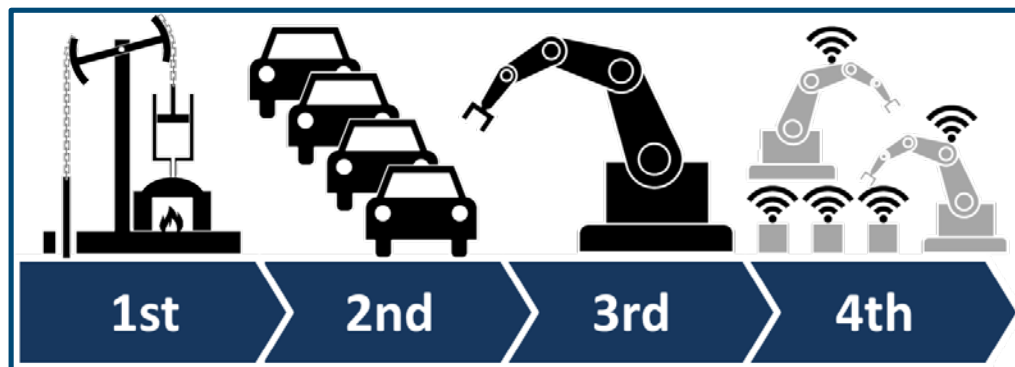
Formulation 4.1

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Digitalisation



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Key questions

How transformative is the use of digital technologies
in science R&D?

Is this a revolution or is it hype?

Activities

Strategic Advisory Forum (Sept 2019)

1-day roundtable meeting with 14 experts

- Chemistry, materials, biology, engineering, statistics, computer science
- AstraZeneca, BASF, Johnson Matthey
- IBM, Nokia Bell-Labs, ELIXIR
- UK, US, Germany



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Key findings

Digital tools extend and augment scientists' capabilities

“Data and digital technologies have great potential to improve the quality of work in science. Like having a higher resolution microscope or a faster computer, they open new paths to help generate and digest information, to create knowledge and then to manage knowledge. Ultimately, digital techniques are tools to help our smart people. An algorithm can deal with ten parameters better than a human brain, but knowing which ten and how to combine them is where you need a person.”

Dr Horst Weiss, Vice President, Knowledge Innovation, BASF SE

Key findings

Digital tools enable scientists to deliver new benefits for society and the economy

- Faster, more efficient science discovery and invention
- New molecules and materials for energy, environment and health
- Smart and resource efficient manufacturing
- Enhanced diagnostics and decision-making for environment and health

Key findings

What needs to happen

- Lifelong training in digital skills for chemists
- Roles and career progression for digital experts in research
- Fostering multidisciplinary collaborations and communities
- Supporting and enabling data sharing
- Leadership and advocacy (funding, skills, outreach)

Digital futures



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Digital Futures
15 videos • 1,771 views • Last updated on Jul 6, 2020

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Thank you