Knowing what will count

Five scenarios of the future of the specialty chemicals industry

Björn Theis | June 27, 2019, Düsseldorf
Why a scenario project?

Increased volatility, uncertainty, complexity, and ambiguity

- Unexpected disruptions
- Shifts in competition
- Unpredictable geo-politics
- New feedstocks
- Emerging technologies
- Increasing price volatility

Many unanswered questions about the future

- How will advances in digital technology transform the industry?
- What would falling energy prices mean for the industry?
- Which feedstocks will we use in the future?

Scenarios are the best tool to address uncertainty
What are scenarios and what can they do?

Scenarios...are consistent, qualitative descriptions of potential futures.

...reflect different and even contrasting perspectives.

...together define the option space, the boundary of foreseeable developments.

...are developed in a structured process.

...are not forecasts.
A stringent method: A four-phase approach to scenarios

1. Environmental scanning
2. Key factor analysis
3. Projections development
4. Scenario construction

Which shaping factors influence the future of the specialty chemicals industry?

What are the most influential factors?

Which developments (contrasting developments in some cases) are plausible for the key factors?

Which consistent combinations of projections lead to scenarios?
Scenario 1

Deceptive Calm

- The world has changed, but slowly and gradually.
- Geopolitically, technologically, and socially, however, there have been no major leaps. Over the short and medium term, global economic growth will remain strong.
- The search for solutions for the major global problems has been a half-hearted effort, and the negative consequences are becoming all the more serious.
Scenario 2

Sustainability
Paradigm

- Sustainability is the guiding economic principle of the global economy.
- Processes, products and business models of industry are becoming sustainable – for economical reasons – without waiting for global regulation.
- The ecological transformation has been completed – thanks to digitalization, biotechnology and cheap electricity from renewable sources.

Illustration: Dave Hänggi
Scenario 3

Digital Champions

- The global digital champions have made use of their knowledge and their enormous resources to penetrate traditional sectors.
- They have filled the customer interfaces and captured significant parts of the added value of the old industries.
- Horizontally networked and closed ecosystems dominate the markets.
Scenario 4

Turbulent Times

- Growing nationalism worldwide has led to de-globalization and decreasing international solidarity.
- Replacing the liberal world order is a conflict-loaded, multipolar order.
- Societies are extremely polarized. Populist, authoritarian governments have pushed back democracy, free press and an independent judiciary.

Illustration: Dave Hänggi
Scenario 5

Chinese Dream

- China has risen to become a global superpower and the first eco-civilization.
- The country is a cultural, political, military and environmental protection leader.
- China’s long-term strategic plan “Made in China 2025” is working – Chinese companies are leaders in key technologies in the world market.
What follows the view of the future?

Scenario project summary

- Shows an option space for the future of specialty chemicals up to 2040
- Extends the action framework for strategic innovation planning

Next steps

- Implementation of Future workshops in the different units of Evonik, including lines of business, regions
- In-depth analysis of the influence of the scenarios on the innovation field, business models, customer expectations, the working world, and material flows