



Which way to go?

Strategic scenarios for consulting engineers in times of high uncertainty

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Strategic scenarios for consulting engineers
in times of high uncertainty

Agenda

1. Introduction
– Benoît Clocheret and Jeff Seeck
2. Presentation of the scenario report
– Prof. Dr. Torsten Wulf
3. Comments and Discussion
– EFCA Future Trends Committee

1. Introduction – Welcome address from EFCA’s President and the Chair of the Future Trends Committee



Benoît Clocheret

President EFCA and
CEO ARTELIA



Jeffrey Seeck

EFCA Chair of
Future Trends Committee and
MD Spiekermann Ingenieure /
Dorsch Group

Industry environments are becoming increasingly uncertain; this is also reflected in the challenges that consulting engineers face

Uncertainty drivers

Top 10 uncertainties for 2022

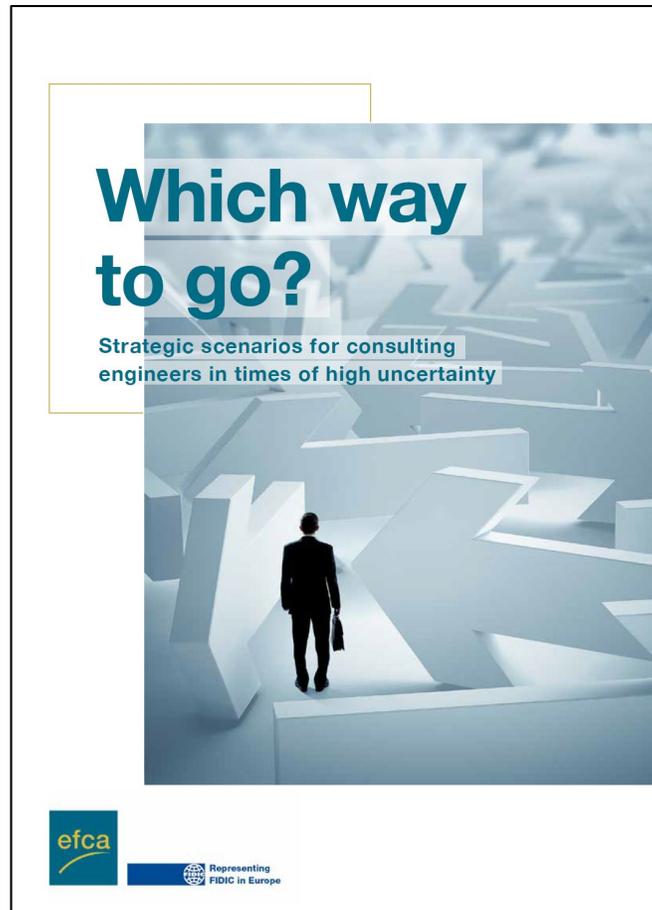


- The lack of COVID-19 vaccination in developing countries triggers new variants that are potentially more contagious and lethal
- Russia attacks Ukraine
- As China peaks, its economy sputters—sparking global disruptions
- Oil tops \$100 per barrel
- The world fails to meet its climate goals from the inconclusive Glasgow summit
- A bifurcated world emerges, but it's not a repeat of the Cold War with the Soviets
- Food insecurity worsens, propelled by COVID-19, climate change, and conflict
- More countries slip from their current fragile state into failure
- Western efforts to revive the Iran nuclear agreement fail
- US democracy further decays

Key Challenges for Consulting Engineers

- **Regulation:** Extensive standards, complex regulations and limited benefits of scale
- **Economy:** Lockdowns, travel restrictions, and health and safety protocols as a disruption for construction activities, leading to strong output declines, supply chain bottlenecks and price increases
- **Technology:** Fast adoption of digital technologies (BIM, 3D, smart building, drones etc.)
- **Sustainability:** Reducing waste and introduction of circular business models

2. Presentation of the scenario report

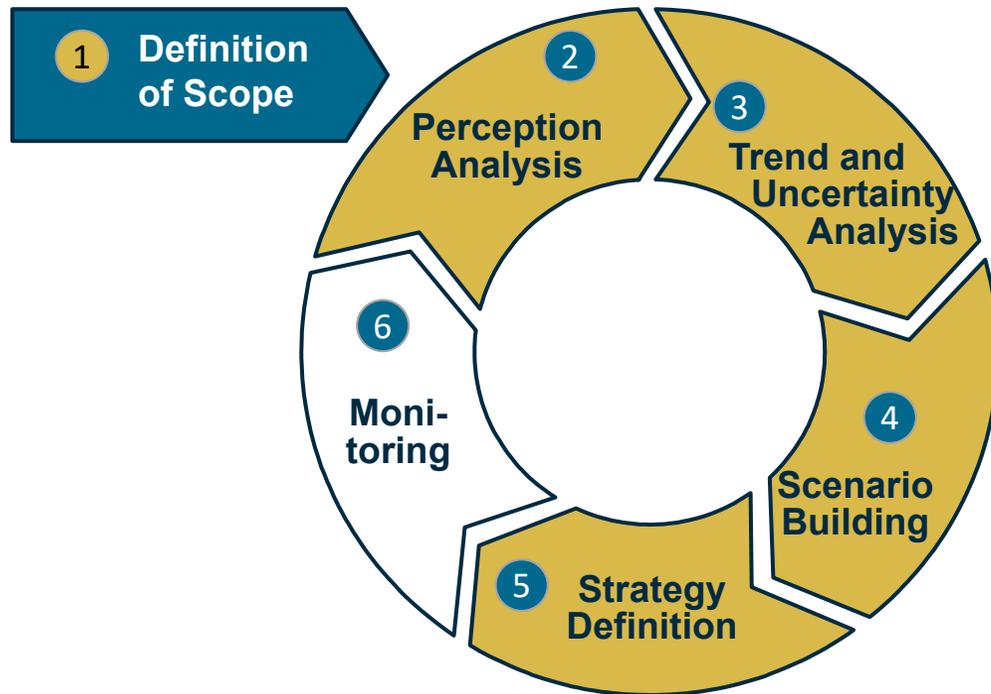


Prof. Dr. Torsten Wulf

Academic Director at the HHL Center for Strategy and Scenario Planning, Leipzig, and Professor at Philipps-University Marburg

The project was guided by the HHL-Roland Berger Approach to scenario-based strategic planning

Process and project scope

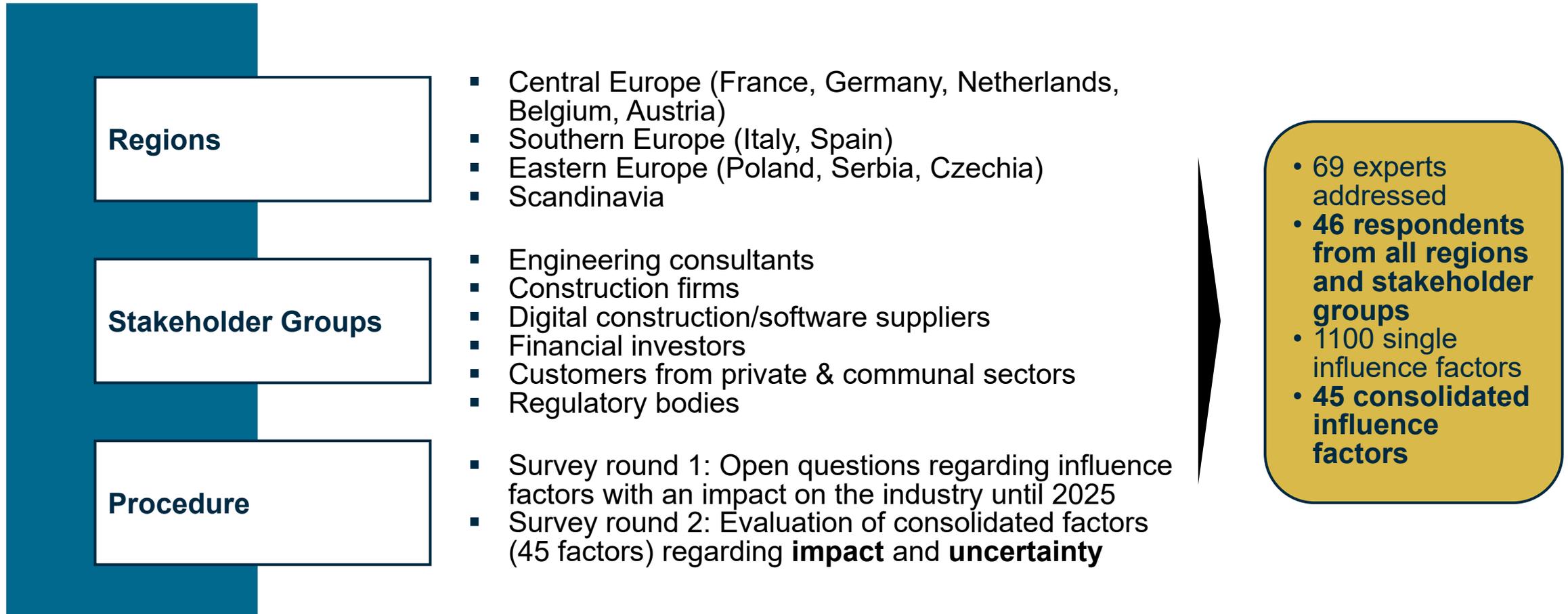


Project Scope

Objective	<ul style="list-style-type: none">▪ Development of four distinct scenarios▪ Identification of key trends and cause and effect relationships▪ Providing guidance for the members of the EFCA
Strategic level of analysis	<ul style="list-style-type: none">▪ Holistic perspective on an industry level▪ Focus on the key European regions (Central, Eastern, Southern Europe and Scandinavia, ~90% of European construction market)
Time horizon	<ul style="list-style-type: none">▪ 2025 (four years)
Participants	<ul style="list-style-type: none">▪ EFCA Future Trends Committee▪ HHL Center for Strategy and Scenario Planning

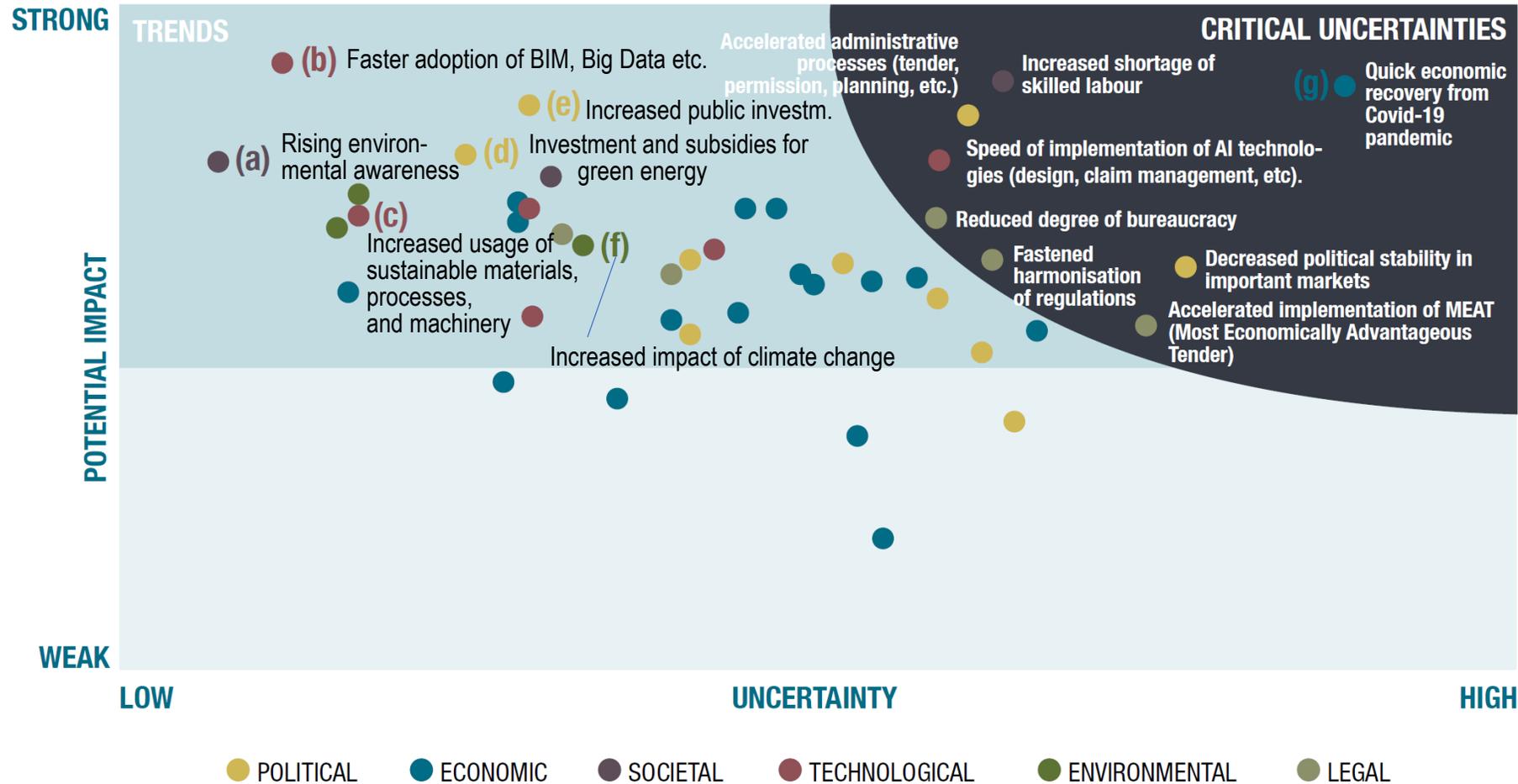
We analyzed important trends and uncertainties on the basis of two comprehensive surveys that involved relevant industry experts

Design of 360° Stakeholder Feedback



Industry experts have identified eight important uncertainties, reflecting the harmonization of the industry as well as the economic prospects

Impact-Uncertainty Grid for the Engineering Consulting Industry



Critical uncertainties addressed by experts reflect:

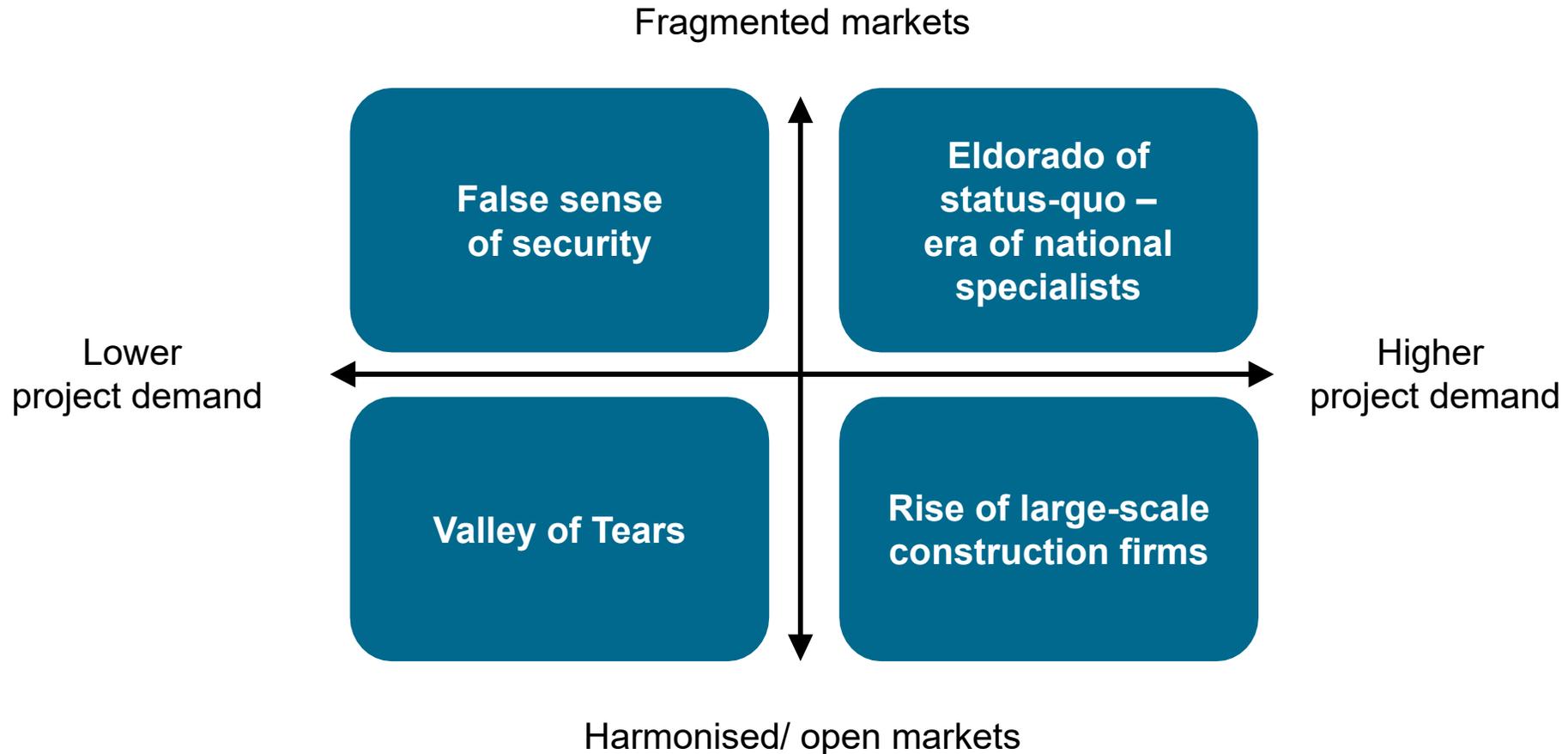
- Harmonization of industry regulation in Europe
- Economic development/project demand

- Sustainability and
- Digitization

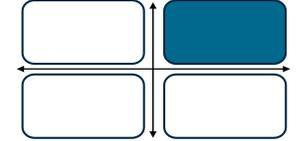
are trends, not uncertainties

From the identified uncertainties, four scenarios result for the Engineering Consulting Industry

Scenarios for the Engineering Consulting Industry in 2025 - overview



Scenario A: Eldorado of the status quo – Newspaper headline 2025



15th April 2025

European Markets

It's a long honeymoon for small domestic engineering firms

Productivity has risen by 4% for the fifth year in a row and order books are still full but slow progress in harmonising regulations and standards to open up the EU construction and engineering sector means only small domestic firms are still enjoying a post-covid honeymoon.

Low borrowing costs, substantial subsidies for digitisation, and fragmented markets have combined to create another encouraging year for construction and civil engineering. While large companies are not gaining much through economies of scale, SMEs are flourishing under post-covid protectionism.

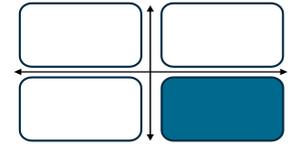
The sector took a serious blow in 2020 with some EU Member States feeling the heat when their market all but collapsed under lockdown policies and disrupted inter-national supply chains. Immediate action on interest rates by the European Central Bank, and investors able to borrow at 2%, helped create huge 'recovery funds' which have pushed digitisation and a greener, more efficient built environment. The sector has been bouncing back since as far ago as 2021, when the use of sub-contractors was the best it had been for 20 years, and job creation reached levels not seen for seven years.

Demand rocketed for residential and commercial building alike; a consequent rush on supplies pushed up prices including those of subcontractors. Inflation for goods and raw materials reached a 25-year high.

It has been the rise in nationalist politics, however, that have served small businesses at the expense of their larger domestic competitors. In counties like Spain, Italy, Germany and Sweden federal elections were won on the back of protectionist promises. The EU market has not been welcoming to international players. A complex regulatory environment and numerous standards have held them at bay. "We're in a veritable El Dorado of status quo," says Mathieu Renault, CEO of a small French firm of consulting engineers, "and an era of national specialists."

Scenario B: Rise of large-scale construction firms

– Newspaper headline 2025



15th April 2025

Engineering Today



EU super firms see off Chinese competition



EU ‘super firms’ are expecting another year of high returns and are successfully pitting themselves against foreign comp-editors who have been eyeing up the newly harmonised European market.

The construction sector was quick to respond five years ago when renewed collaboration amongst Member States led to a massive investment in healthcare and a €720 billion green recovery fund – much of which targeted greening buildings and infrastructure.

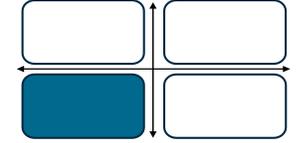
Productivity in the sector is up by 7% in 2025, not least because of a rapid digital-isation, and particularly by large firms. Building information modelling (BIM) has been central

for increased innovation, collaboration and efficiencies. Other technologies are also becoming mainstream – drones for project oversight, artificial intelligence for design and claim management.

With less bureaucracy, and streamlined standards, regulations and even technical language, the European market has been transformed into one of dynamic growth – and opportunity. But only for large firms which can take advantage of economies of scale and build their capacity by buying it up.

Chinese firms have been circling. They cannot compete on innovation but as more EU companies are having to move to Eastern Europe to find low-cost services, their competitive labour costs may help them find a foothold yet.

Scenario C: Valley of tears – Newspaper headline 2025



15th April 2025

Civil Engineering News

Investment in digital technologies could be the key to survival

Construction and engineering firms who strategically invested in digital technologies prior to 2023 are managing to keep their share of the pie in an ever-shrinking European market.

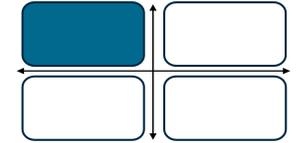
Despite the best efforts of many EU Governments implementing a sleuth of economic policies and market support measures, the construction sector has been in growing turmoil since 2022 when market demand dropped by 6%. Although the European Commission made a big effort to harmonise regulations and building standards, and Member States approved huge sums to be made available for green investment, lockdowns and other major disruptions have been taking their toll and demand has been steadily falling at a further 3% per year. It is still early days to comment on the

success of the EU €1.8 trillion stimulus package announced in 2021, but industry sources say clients are keen to maximise their green credentials in new projects.

The use of digital technologies, however, appears to be an indicator of financial health. Those players, large or small, that didn't invest in technologies like BIM (3D, real-time digital modelling) or modularisation, and didn't find the 4% improvement in productivity, are largely facing insolvency or acquisition. Pressure is also coming from foreign, digitised companies keen to access the liberalised market.

If there is good news for domestic firms, it is that there is no longer a shortage of skills. As market demand for construction falls, the cost of human resources, raw materials and energy, is falling too, by about 2% a year.

Scenario D: False sense of security – Newspaper headline 2025



The Daily Construction News

15th April 2025

Fragile recovery for construction but small firms still on danger list

Construction and engineering firms without the means, the motivation or the public support to digitise, could be balancing on a cliff edge, enjoying early signs of recovery but unaware of competitive foreign players ready to move in when demand picks up

A new report published this week reflects the optimism amongst smaller construction and engineering companies in the EU – that the recession is over and brighter days lie ahead. The economy is finally back on track, growing at 1% so far this year, compared to

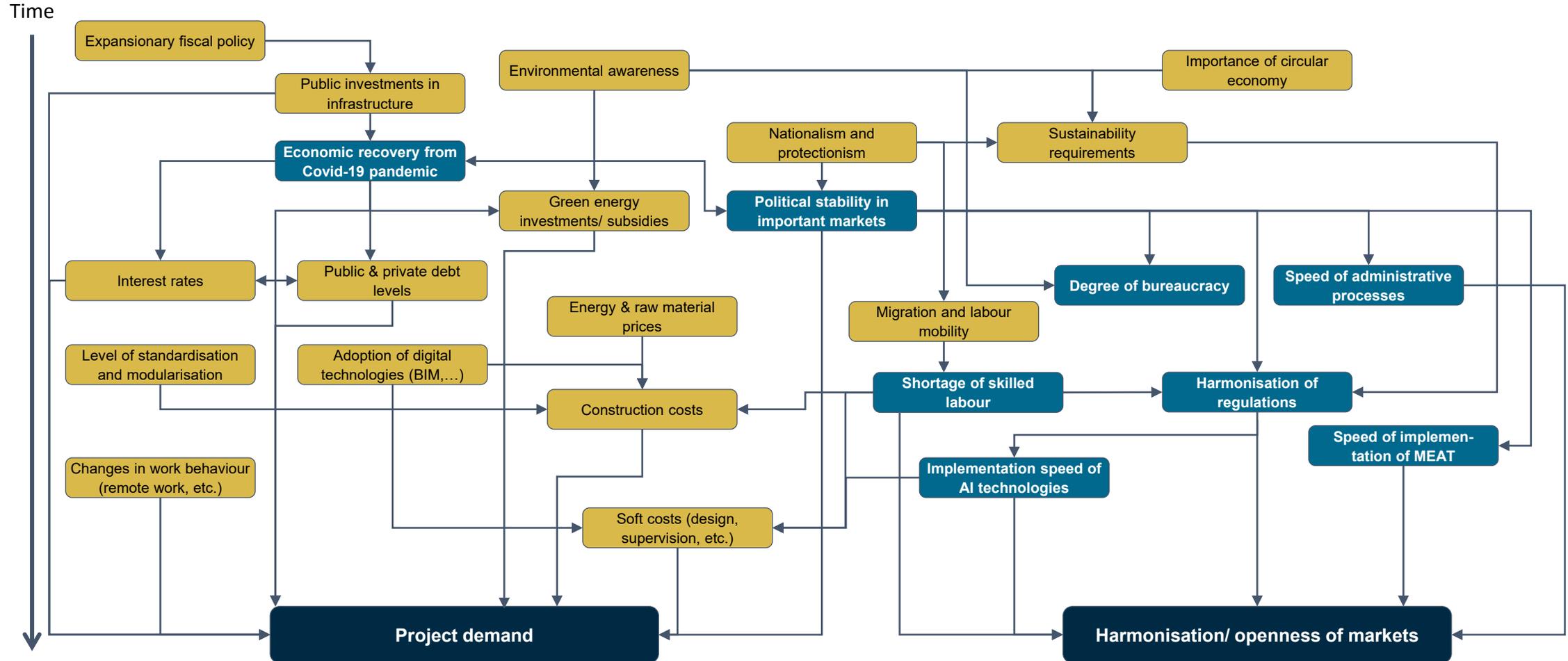
the 5% contraction back in 2021 – mirrored by the construction sector. So they could be right.

When covid forced a re-evaluation of market positioning in 2021, progressive companies, based more in north and central Europe, sought to further digitise. But SMEs in particular, especially those falling under austerity policies further south, experienced a more fatal squeeze on costs and many folded. Many were unable to bear the costs of digitalisation.

Those that survived have largely been protected by a fragmented European market and low demand which made the European market unattractive for international competition. The danger of rising demand, if accompanied by regulatory harmonisation, is that it could open the European market next year and there will be no shortage of highly digitised foreign companies to slip in.

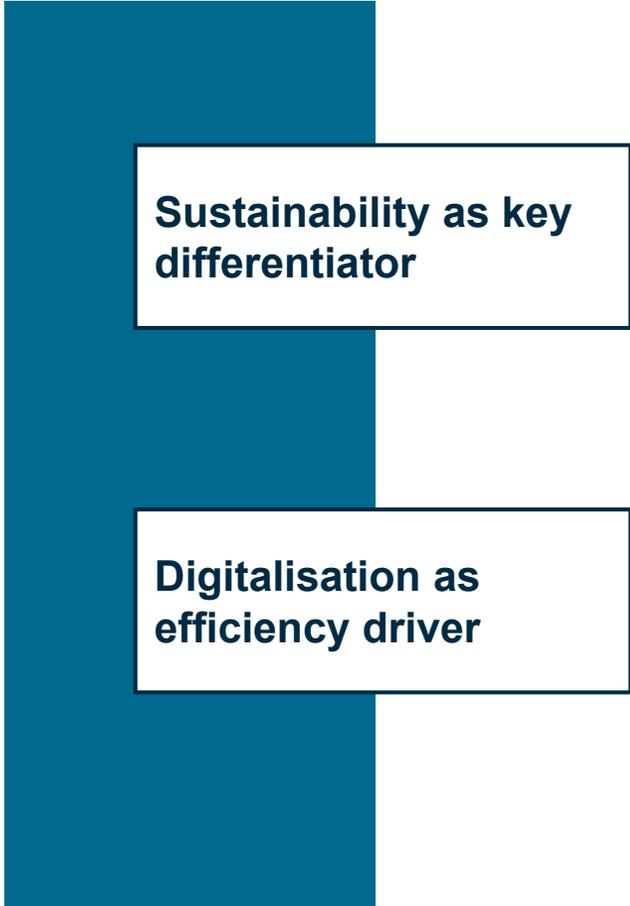
The scenario narratives are based on an influence diagram that depicts the relationships between the main trends and uncertainties in the industry

Influence diagram for the Engineering Consulting Industry until 2025



Our analysis highlights that activities towards sustainability and digitilisation are imperative in all four scenarios

Robust strategy implications for consulting engineers



Sustainability as key differentiator

Digitalisation as efficiency driver

- Increasing attention to diverse aspects of sustainability such as reduction of greenhouse gas emissions, biodiversity or circular economy is a trend, not an uncertainty
- Quickly integrating this trend in the company's strategy provides opportunities to develop competitive advantages

- Digitalisation can help overcome the industry's long-stagnant productivity
- Digitalisation goes beyond BIM and 3D printing to include also Big Data analyses, AI, or administrative automation
- Digitalisation provides opportunities to develop competitive advantages

Additionally, specific recommendations can be derived for small and medium-sized as well as large firms in the industry

Specific strategy implications for engineering consultants

Small and medium-sized companies

- Invest particularly strongly in digital technologies and know-how
- Gain a competitive advantage by focussing on a niche market and specialising
- Be aware of and handle the increasing costs of software
- Create partnerships and alliances with players in other industry segments

- Specialise
- Digitise
- Cooperate

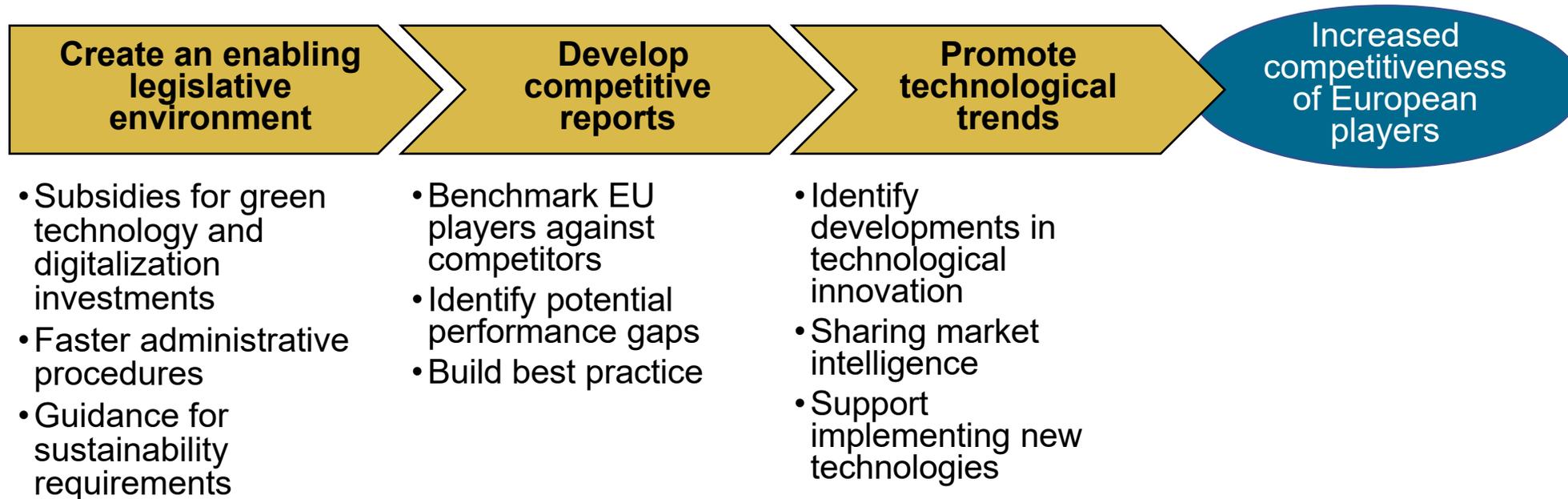
Large companies

- Analyze internal capabilities and the competitive landscape to define your playing field: Competing in multiple customer segments and across the construction value chain, offering highly integrated end-to-end solutions, and/or competing in specialized niche markets
- Make use of potential benefits of scale through M&A or alliances
- Perform benchmarking to identify best practices from elsewhere in the industry, but also performance gaps

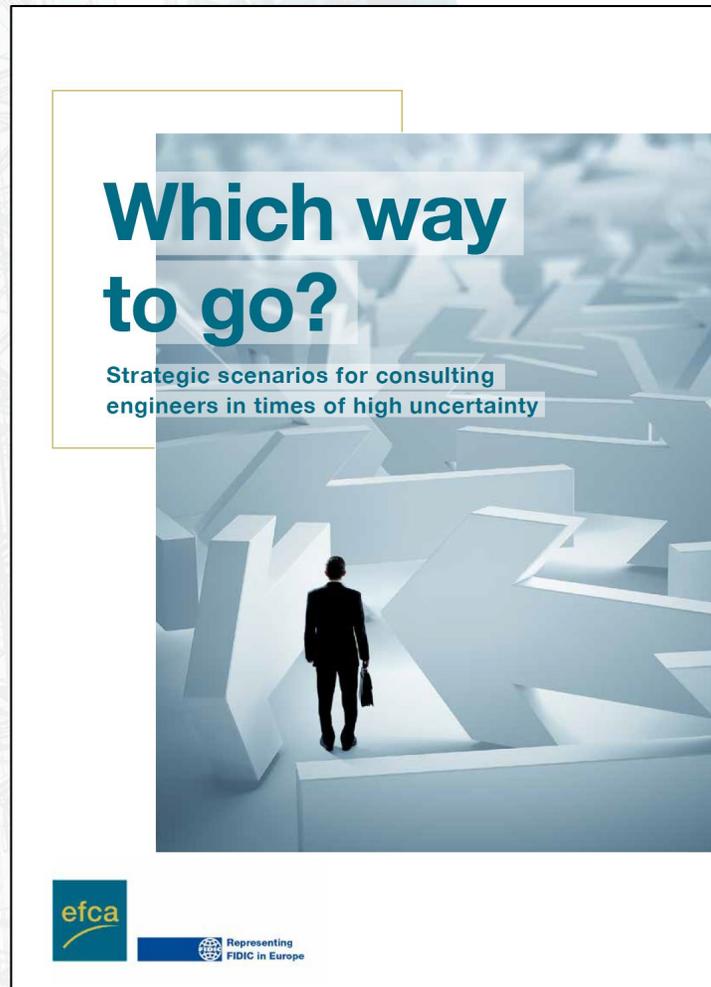
- Diversify
- Extend the value stream
- Flexibilize

Associations such as EFCA need to extend their role to help strengthen EU players competitiveness

Implications for EFCA



The scenario study “Which way to go?” is available on EFCA’s website



or

<https://www.efcanet.org/news/efca-launches-which-way-go-strategic-scenarios-consulting-engineers>