

Futures and Foresight in SMEs – a qualitative Study (ISPIM Conference 2024 in Tallinn)

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Introduction and Issue

The German economy faces the challenge of mastering a large number of transformation processes simultaneously. Transformations and changes are imperative in order to successfully emerge from disruptions such as digitalisation, decarbonisation, demographic change and (de)globalisation. This also applies to companies in Rhineland-Palatinate, which are facing enormous upheaval, particularly with regard to digital and ecological transformation. According to a study by the "Institut für deutsche Wirtschaft", Rhineland-Palatinate is only at the lower end of the country comparison with an average digitalisation index of 105. In the same survey, only 28% of the companies surveyed stated that they make extensive use of digital data (Büchel & Engels, 2022). The labor market is also facing a fundamental upheaval: around 291,200 STEM specialists reach retirement age every year, compared to an annual supply of only around 135,000 new STEM specialists (Malin, 2021). Furthermore, achieving climate neutrality is also a crucial goal for companies in Rhineland-Palatinate to counteract climate change's effects (as in July 2021 in the Ahr Valley). The disruptions listed above threaten the future readiness of companies - especially SMEs (definition in this research: between 50 and 250 employees). However, they often do not have the time or financial resources to deal with maintaining their own future readiness. In addition, there is currently no standardised understanding of the "future readiness of companies" and relevant determinants. Due to the lack of conceptual clarity, companies are unable to assess their own future readiness, even if they have the time and resources to do so. For this reason the Ministry of Economic Affairs, Transport, Agriculture and Viticulture Rhineland-Palatinate funded a qualitative interview study, where the current and future key challenges of SMEs in Germany and their understanding of future readiness were analysed in more detail.

Methodology

In the qualitative interview study the current and future key challenges facing SMEs in Germany, as well as their understanding of future readiness and relevant areas of action were examined. After a literature analysis, a total of 13 experts were interviewed in the study. These included managing directors and other managers of SMEs (n=5) as well as experts from the field of "future readiness of companies" (n=6), such as specialists from the "Corporate Foresight" department of larger companies (n=2). The semi-structured interviews with an average duration of 48 minutes were conducted in person and via video conference. Due to the different interview target groups, the questions asked differed in some cases. However, all of the interviews consisted of the parts: 1. introduction and presentation of the research project; 2. current challenges and focus topics; 3. dealing with current challenges and focus topics; 4. understanding the future readiness of companies / corporate foresight; 5. conclusion. The transcripts of the interviews were examined using qualitative content analysis and the resulting category system served as the basis for the further investigation of the main challenges of SMEs and for the development of a possible framework for the future readiness of SMEs (Mayring, 2015).

Results I: Challenges for SMEs

A key component of the interviews conducted was to examine the current problems and challenges faced by the companies surveyed. The aim of this part of the survey was to analyze the main current challenges and how companies deal with these key issues. In addition, many of the challenges are not only relevant for today, but will also influence the business world in the coming financial years (e.g. decarbonisation, use of artificial intelligence) and thus also the future readiness of companies. Six key challenges emerged from the interviews:

Economic and geopolitical crises

10 of the 13 respondents named economic and/or geopolitical crises and their effects as a key challenge for SMEs. The effects on energy costs and the impairment of supply security were mentioned most frequently. The respondents referred to the increased dependence on suppliers.

Skill & labour shortage

Almost all of the experts surveyed (12 out of 13) cited the shortage of skilled labour as a particularly major challenge for SMEs. The retirement wave of the baby boomer generation, as well as a shortage of apprentices due to demographic change and the increasing educational aspirations of teenagers and young adults, are driving this further.

Sustainability reporting

10 of the respondents stated that compliance with sustainability guidelines and sustainability reporting are further key challenges for SMEs. Even if the companies themselves are not obliged to prepare a sustainability report due to their size, many of the companies supplied are obliged to do so and require input from the supplying company.

Digitalisation and AI

For all (13 out of 13) of those surveyed, the topic of digitalisation and artificial intelligence was another key challenge for SMEs. Digital solutions and the use of AI are primarily seen by the experts as an opportunity to relieve skilled workers of standard tasks and repetitive tasks and then make them available for other uses. This is particularly relevant in light of the shortage of skilled labour. However, the financial and time commitment required to carry out such a transformation was mentioned in this context. The experts stated that SMEs simply had no free resources for such processes, especially in comparison to larger companies.

Bureaucracy

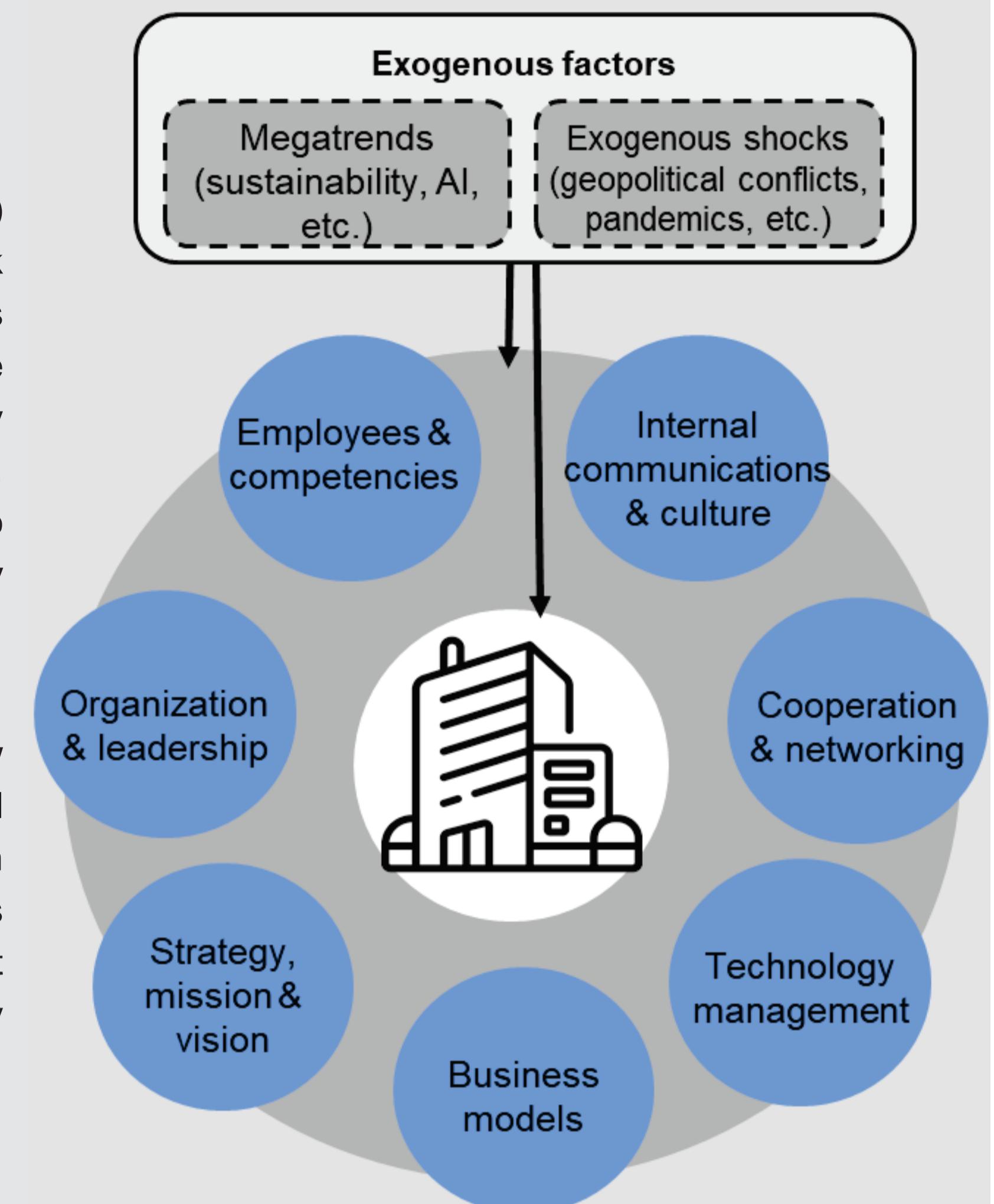
8 of the 13 experts surveyed cited increasing bureaucracy as another key challenge. Potentially available resources for future topics are tied up by regulations. Future topics, such as artificial intelligence use, are often additionally burdened with bureaucracy, e.g., due to data protection issues.

Transformation of Business Models

Finally, 8 out of 13 experts surveyed cited the transformation of business models as a key challenge. The experts stated that the business world is constantly evolving at a rapid pace. Companies need to be able to adapt quickly so that they can continue to survive in the market. Some experts also warned that some smaller companies have so far paid little attention to the transformation of their business model because business has been going well so far.

Results II: Determinants of future readiness

Based on a literature analysis and the results of the qualitative interview study, a possible framework for the future readiness of SMEs was developed (Rohrbeck et al, 2015). Exogenous influences such as megatrends (sustainability, AI, etc.) but also exogenous shocks that are more difficult to predict (wars, pandemics) have a direct influence on companies and an indirect influence on the company via the seven identified determinants of future readiness:



Technology Management:

The implementation and use of (digital) technologies enables companies to work more efficiently, develop innovative products or services that are better tailored to the needs of customers and react more quickly to changing market conditions. However, this use of (digital) technologies also requires investment in data security measures.

Business models:

Companies must be able to react to new challenges or opportunities to be successful in the long term. A continuous examination of their business model enables companies to adapt to changing circumstances, market conditions, technology and sustainability requirements or customer preferences.

Organization and leadership:

The organization and leadership inside companies play a key role in ensuring they can act flexibly and are innovative and resilient. Flat hierarchies can promote the exchange between employees and teams and thus the implementation of new ideas. If managers create a space for creativity and encourage employees to pursue new approaches, the entire expertise of the workforce can be utilized.

Employees and competencies:

Employees are a central component of a company's future readiness. If employees have the willingness and skills to adapt to new challenges or circumstances, this contributes to the adaptability and resilience of a company. With the increasing use of (digital) technologies, employees need the right skills to deal with them and work effectively.

Internal communications and culture:

A suitable corporate culture and effective internal communication have a significant influence on the success and continued existence of organizations. In particular, organizational adaptability, which is becoming increasingly important due to geopolitical conflicts, is significantly shaped by how effectively communication takes place within the organization. Transparency and clear communication can reduce resistance to change and thus shorten response times, which makes organizations more competitive. Given the shortage of skilled workers and demographic trends, an appreciative corporate culture that promotes employee development is also becoming increasingly relevant for attracting and retaining talent.

Strategy, mission and vision

A clear corporate strategy, vision and mission form the basis for strategic decisions, create a common direction and identification and promote the long-term growth and success of a company. A strategy that promotes innovation contributes to the development of new technologies, products and business models.

Cooperation and networking:

Involvement in networks and cooperation can enrich companies in many ways. Established networks offer members the opportunity to exchange knowledge across company boundaries. By collaborating with other companies, research institutions or other external partners, companies can optimize the use of resources such as technologies, infrastructure and expertise. This involves not only established forms of collaboration, such as the exchange of best practices at network meetings, but increasingly also forms of cooperation, such as joint research and development or shared production.

Conclusion and further steps

As part of the study, an initial possible framework for the future readiness of SMEs was developed. This consists of seven key determinants and is influenced by exogenous and endogenous factors. In addition, the main challenges that companies are currently facing were examined in more detail and possible solutions for dealing with them were identified (e.g. open up the organization to different stakeholders, networking, agile and interdisciplinary communities for new topics).

The next step in this research is the validation of the seven determinants in a quantitative study and the item and scale development for measuring the future readiness. Together with different project partners, a free web-based tool for SMEs is planned. SMEs can then check their own future readiness for free and receive automatically derived suggestions for improvement.

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