



Readiness for Global SMEs

Redefining Academic and Vocational Education

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Abstract

The German Mittelstand with around 3 million small and medium-sized enterprises has evolved to a role model for sustainable growth for many political and economic leaders in the world. Rapid changes in business models, technology and work environments challenge those SMEs – especially when they are growing globally (Global SMEs). At the moment the digital transformation puts extra pressure on the development of skills and recruitment of talents.

One of the big competitive advantages for the development of Global SMEs in Germany has always been a tailor-made practical academic and vocational education which is close to practice, compact in knowledge transfer and regionally available. The need for more higher education KNOW HOW in Global SMEs on the one hand as well as for continuing DO HOW skills on the other hand sets however the need for redefining academic and vocational education.

The new approach comprises the combination of academic and vocational education. Universities are required to provide enterprise experiences, involvement of practical experts, living business planning and international perspectives. This type of education does not happen once in life, but at different levels of experience and also in different formats, such as full-time and part-time, in presence and online, in cohorts or a la carte. New education will be through programmes which respect the ex-ante measurement of skills (soft skills, vocational skills, digital skills). Diagnostic tools can help to identify needs and make progress visible.

Challenges and opportunities for new academic and vocational education will be discussed, best practices shown and national as well as international experiences at Fachhochschule des Mittelstands (FHM) will be shared.

1. SMEs – Definition and Challenges

1.1. SMEs – DEFINITIONS AND CHARACTERISTIC ATTRIBUTES

Small and medium sized enterprises (SMEs) can be generally defined by quantitative and qualitative criteria. Definitions vary slightly, depending on the emitting institution.

The German Institut für Mittelstandsforschung¹ (2016) defines the quantitative criteria for an SME as an enterprise that employs between 10 to 499 people and presents an annual turnover between 10 and 50 million Euros. The European Commission chooses a smaller number for the staff headcount for SMEs in the EU recommendation 2003/361. According to that definition, an enterprise belongs to SME when it employs a maximum of 250 employees and presents a maximum annual turnover of 50 million Euros and/or a balance sheet total not exceeding 43 million Euros. Both definitions subdivide SMEs into micro, small and medium sized enterprises.

Besides, SMEs can also be characterized by qualitative attributes. One central attribute is that SMEs are local and owner-led, often even family-owned businesses. In SMEs ownership, management, liability and risk go hand in hand. As most important characteristics associated with SMEs should be mentioned the entrepreneurial mindset, specialized know-how, customized high-quality products and services and high customer satisfaction through personal and close relationships with the customers.

Most SMEs are strongly regionally embedded. In times of globalization many SMEs are at the same time growing globally and therefore internationally oriented. These Global SMEs present the same quantitative and qualitative characteristics as non-global SMEs, except that the former are transnational business entities based on *internal growth* (through exports, cooperation management, start-ups in international target markets) and *external growth* (through international expansion and mergers and acquisitions).

¹ Institute für SME Research

1.2. SMEs IN GERMANY, THE EU AND THE WORLD

The **German Mittelstand** with 3,46 million small and medium-sized enterprises has evolved to a role model for sustainable growth for many political and economic leaders in the world. SMEs in Germany present a revenue of 2,27 trillion Euros, which is more than one third (35,3 %) of the overall German turnover in 2016. Besides, they generate 208,2 billion Euros in export turnover, which is 17 % of the total German export turnover. These figures show the economic relevance of SMEs for the German economy, as they sum up a total of 53,5 % of the net value added of all enterprises in 2016.

The relevance of SMEs is also present in relation to human resources. As such, a total of 17,18 million employees in SMEs are subject to social insurance contributions (equivalent of 58,3 % of all employees subject to social security) in the same year. Besides, 82 % of all German trainees worked in SMEs, which shows the relevance of SMEs in the development of skills and the recruitment of talents.

With 9,4 billion Euros, SMEs accounted for a share of 11,9 % of the total expenditure of research and development (R&D).²

The economic importance that German SMEs play for the German economy, is equally valid on the European level. **Europe's SMEs** are the backbone of Europe's economy, providing the majority of all newly generated jobs. According to EUROSTAT statistics (2018)³, SMEs (<250 employees) represent 99,8 % of all enterprises in the non-financial business economy in Europe (EU, Norway and Switzerland) in 2015. European SMEs contribute 55,8 % of the total turnover in the EU and 66,3 % of all EU employees were employed at SMEs that same year.

² Institut für Mittelstandsforschung (2016). Mittelstand im Überblick, [online] <https://www.ifm-bonn.org/statistiken/mittelstand-im-ueberblick/#accordion=0&tab=0> [08.08.2018].

³ EUROSTAT (2018): Statistics on small and medium size enterprises, [online] http://ec.europa.eu/eurostat/statistics-explained/index.php?title=Statistics_on_small_and_medium-sized_enterprises [08.08.2018].

When scaling up to a broader level and taking into account statistics from the OECD (2017)⁴, these trends are repeatedly reflected. According to the statistics, 99 % of all firms in the OECD area are SMEs, generating between 50 and 60 % of the total value added. Although the SMEs in the OECD area tend to be under-represented in international trade, they represent more than half of total exports in value added terms when considering SMEs' indirect contribution to exports. Besides, OECD SMEs account for about 70 % of all jobs in the OECD area.

⁴ OECD (2017): Enhancing the contributions of SMEs in a global and digitalized economy [online], <https://www.oecd.org/mcm/documents/C-MIN-2017-8-EN.pdf> [08.08.2018]

1.3. SECRETS OF GERMAN MITTELSTAND

1.3.1. INTERNAL SECRETS

The German Mittelstand disposes of unique characteristics that bear high potentials. The concept of the Mittelstand is of course regionally embedded, but increasingly internationally oriented. SMEs have to learn faster than large companies in order to capitalize profitably on regional market advantages. In this sense, most SMEs present a high degree of flexibility and innovative spirit.

Many German SMEs belong to the so-called “hidden champions” in their market sector and therefore position themselves as global market leaders for their product or service.

The success of small and medium-sized enterprises is based on a conservative financial conduct, loyal and well-trained staff and a long-term perspective, as SMEs generally think in generations and not in quarters.

1.3.1. EXTERNAL SECRETS

Besides, there are external basic conditions which contribute to the success of the German Mittelstand. To be mentioned is, on the one hand, the excellent regional education that helps providing well-trained staff to SMEs. On the other hand, the well-developed infrastructure and the high quality of life in rural areas helps SMEs to strengthen the personnel’s ties to the region.

Last but not least, adequate, regional financing and effective, competent local administrations build favorable conditions for the success of German small- and medium-sized enterprises.

1.4. CHALLENGES

SMEs are caught between regional responsibilities, national and international markets. According to recent OECD studies some of the most relevant challenges are as follows:

- Digitalization: Changing business models, technology, work environments, developments of skills and recruitment of talents
- SMEs lagging behind in digital transition
https://www.cornerstoneondemand.co.uk/blog/digital_transformation/future_of_work/the_jet_lag_effect
<https://www.oecd.org/mcm/documents/C-MIN-2017-8-EN.pdf>
- “Skill shortages, poor management practices and workforce training limit SME productivity and innovation” (OECD 2017: 16)
<https://www.oecd.org/mcm/documents/C-MIN-2017-8-EN.pdf>

This leads to new demands and needs in academic and vocational education.

2. Redefining Academic and Vocational Education

2.1. BASIC IDEAS FOR NEW EDUCATION AT FHM

The FHM prepares their students in a practical way to gain new academic and vocational education results. The **FHM-Competency Model**, **The KODE-Test**, Continuing Education, **Coaching**, **the Digital-Readiness-Test: Competency Index 4.0** and **the Study Programme Development** are key for the developments of skills for talents.

The **FHM – Competency Model** provides the tuitional concept of the FHM. It has the claim to encourage independent, entrepreneurial plus global thinking and acting and support the development of personality in its entirety. Every FHM study programme is built on four competence areas. So specific modules in every study programme exist, where the competences of students are further elaborated, like “presentation & moderation”, “teambuilding” or “strategic career management”. In addition to the individual professional competence, every student receives a basis business competence, furthermore personal and social competences and also activity and action competences. This competence variety qualifies FHM graduates for specialist and executive staff in Global SMEs.⁵

KODE® stands for competence diagnostic and development. It is an instrument with which interdisciplinary competences can be diagnosed. Thereby four different competence dimensions are ascertained: The personal competence, activity and action competence, the functional and the methodological responsibility and as well the social-communicational competence. With its combination 64 key competences like capacity for teamwork, self-responsibility or purposive leading can be developed. At that point competence characteristics were analyzed under usual and difficult conditions. On that basis it is possible to extrapolate among other things the stress management strategy of a person.⁶

⁵ FHM-Kompetenzmodell

⁶ KODE® und KODE®X Kompetenzdiagnostik

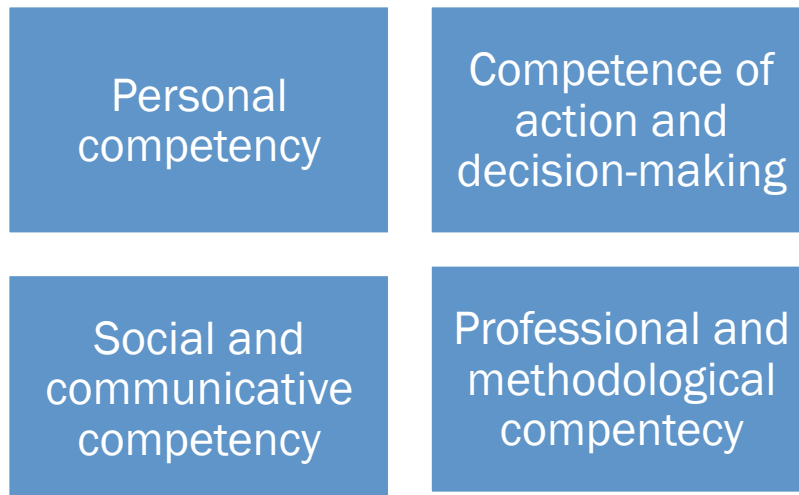


Figure 1: KODE® competence diagnostic

The seminar **My First Coaching** is directed to future students in the secondary education II. Competences and wishes of young's are analysed. Out of different modules and a flexible range of services an individual coaching will be generated. Many questions will be clarified: Should I to do a vocational apprenticeship or should I study, but what? In the research area of career orientation the FHM is the leading expert in Germany.⁷

The **Digital – Readiness – Test: Competency Index 4.0** asks the question: How high is the digital competence of my staff? The daily progress of digitalization is a challenge for politics and business, but as well for educational institutions. To remain competitive in the long run, it is necessary to develop the competences of the employees in the company as well. To develop measures aimed and precisely fitting and utilize it is an relevant information to gather the actual condition of digitalization. The Competency Index 4.0 of the Fachhochschule des Mittelstands measures the digital competence of individuals.⁸

Study Programme Development: What kind of knowledge will our students need in 5 years?

⁷ My First Coaching

⁸ Competency Index 4.0

FHM looks at providing the skills and knowledge which graduates do not only need now, but more important in 3 -5 years of time.

2.2. INSTITUTIONAL INFRASTRUCTURE

The institutional infrastructure at Fachhochschule des Mittelstands (FHM) enhances the development of skills and recruitment of talents for tomorrow.

The Fachhochschule des Mittelstands (FHM) contains the Career Service Center, the Institute for Business Foundation (IUG), the Center for Sustainable Governance (CSG) and the Institute for Further Education and Competency Development (IWK).

Career Service
Center (contact
point for students)

Institute for
Business Foundation
(IUG)

Center for
Sustainable
Governance (CSG)

Institute for Further
Education and
Competency
Development (IWK)

The **Career Service Center** (CSC) at FHM is a contact point for students. It supports students before and after their successful completion of a course of study, to be perfectly prepared for a fast and professional career entry, and to develop themselves respectively. Because it is important to start with the preparation for the entry into professional life as early as possible, the programme of the Career Service Centre already begins with the start of the study and provides a rich workshop-offer from Assessment Centre to Rhetoric-Training. Experienced staff lends students their advisory support

and assist to have a good start into an internship or a job. An individual care and help with the wish of an overseas practicum or course of study by the International Office complete the offer.⁹

The **Institute for Business Foundation (IUG)** is as an institute integrated at the Fachhochschule des Mittelstands (FHM). In practically relevant seminars and personal coaching's opportunities appear from founder knowledge to concepts of subsequent regulations.

The subsequent regulations have a significant importance for the preservation of small and medium sized economic structure and maintaining existing jobs.

If we ask wherefrom added value, jobs, regional dynamic and with it economic growth comes, only one answer remains after critical inspection of all theories and historical experiences: They are entrepreneurial thinking humans, who take the important function.¹⁰

The **Center for Sustainable Governance (CSG)** at FHM does have the key subject: sustainability within small and medium sized enterprises. Together with involved companies the CSG goes an individual and innovative way of business-close research and teaching.

The aim of the CSG is to make for the entrepreneurial area the existing, but abstract ecological, social and economic criteria for sectors and enterprises more concrete, track the adherence to check the development.

With the sustainability compass is it possible to project the transparency and systematic assessment of different sustainability criteria relevant to the different level of action.¹¹

The **FHM-Institute for Further Education and Competency Development (IWK)** is focused within its research on small and medium-sized business relevant topics of professional recruiting, especially in transition between school and job. Thereby were analysed, developed, implemented and evaluated instruments for competence diagnostics.

With this background vocational education and training becomes fine quality.¹²

⁹ Career Service Center (CSC)

¹⁰ Institute for Business Foundation (IUG)

¹¹ Centre for Sustainable Governance (CSG)

¹² Institute for Further Education and Competency Development (IWK)

2.3. TEACHING APPROACHES

- Studies In Practice (SIP) → internship with academic mentoring
- Mandatory Business Plan in all study programmes
- Practitioner Colloquia / Company Visits / Guest Lectures
- Living Projects (embedded in lectures), e.g. exhibitions
- Foundation Chairs (Chairs funded by Foundations or Companies)

ADD-ONS

- Vocational Trainings (SAP, Excel, How to dress for business... etc.)
- Start-Up/Spin-Off Support
- Alumni Network
- Expert Circle
- Student involvement in Corporate Research Projects
- Bachelor/Master Thesis embedded in Business Company
- Career Day –university fair
- Job Portal

Literature

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