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Future Skills Needs in Micro and Craft(-type) Enterprises up to 2020

Highlights of an international comparative research project with Austrian participation

Micro and craft(-type) enterprises make up not only the vast majority of SMEs in Europe, they are also the main source of job creation. Although they face similar problems to those encountered by all other SMEs, their size creates a number of specific challenges, in particular related to the (future) availability of skilled staff.

Background and study goals¹

It is a well-known fact that Small and Medium size Enterprise (SMEs) are the most important form of business organization in Europe. What is much less known is that most SMEs in fact are micro enterprises with less than ten employees. These enterprises, often run by the owner and operating in craft and artisan sectors, employ around one third of the total European workforce.

Although they face similar problems to those encountered by all other SMEs, their size creates a number of specific challenges, in particular related to the (future) availability of skilled staff. Many micro and craft enterprises are facing severe recruitment difficulties, mainly due to the shortage of skilled labour as a consequence of demographic trends, but partly also for other reasons: craft and micro businesses appearing to be less attractive employers than larger companies, especially to young people, recruitment policies of craft and micro businesses and specific skill profiles may need to be adjusted to attract new target groups and to provide them with the skills and qualifications needed.

Against this background, the European Commission, DG Enterprise and Industry, commissioned a study focusing on the identification and analysis of future skill needs in micro and craft(-type) companies.

¹ This research brief is a short version of the summary of the final report: Buschfeld Detlef, Dilger Bernadette, Hess Luisa Sabine, Schmid Kurt, Voss Eckhard: „Identification of future skills needs in micro and craft(-type) enterprises up to 2020.“ Final report for the European Commission, DG Enterprise and Industry, Unit F.2 – Small Businesses, Cooperatives, Mutuals and CSR. Cologne, Hamburg, Vienna, January 2011.

Methodology

The study consisted of both qualitative and quantitative analyses, including an online survey of micro and craft enterprises, business organizations and professional and VET institutions in Austria, Bulgaria, Denmark, France, Germany, Italy, Poland and UK. The identification and documentation of case studies and a comparative evaluation of existing information and practical experience regarding micro and craft (-type) enterprises in Europe were also part of the study.

An online survey was conducted, resulting in over 800 datasets documenting the perspectives of companies, business organizations and training providers on the evolution of 38 defined skills in the past and future. Additionally, the methods and instruments used to forecast future skill needs was asked for. The effects of changes in future skill needs and how companies react to these were also included. To deepen the information nearly 90 interviews were conducted with individual companies, representatives from business organizations and training institutions. Based on the interviews, case studies reflecting practice within companies were identified and documented.

To achieve a certain analytical depth, the study focused on **three** different and distinctive **sectors (interior construction, food and personal/health services)**. Alongside the focus on the 8 countries, this broadened the country view by illuminating different contexts of skills needs and skill development, vocational training and business environments.

Micro and craft(-type) enterprises in Europe - sector context and trends

The analyses of the eight countries involved shows that there are major differences with regard to national frameworks and contexts of corporate governance and enterprise organisation in the field of micro and craft enterprises. A legal definition of crafts exists only in a minority of EU Member States and national craft policy frameworks are very much shaped by economic, social and legal traditions.

In all countries the **interior construction sector** is economically a very important sector, with micro and craft(-type) enterprises the dominant form of enterprise organisation and size. Construction can also be regarded as a “barometer of economic vibrancy” with a broad range of drivers of change illustrating both current and future skill needs and challenges in this context.

In contrast to the interior construction sector, the dominance of micro and/or craft enterprises in the **food sector** (meat, dairy and bakery production) is weaker in most countries. Though a large part of the sector’s workforce is employed in micro companies, the sector is characterised by a dual structure of industrial oriented enterprises and products on the one hand and more craft oriented ones on the other.

Personal / health services as the third sector are by far the most heterogeneous one. This “sector” is very diverse and must be seen as separate parts. The manufacture of medical aids and instruments is high-tech and often operating internationally. By contrast, activities in the social area often have lower qualification profiles. Furthermore the role of crafts and craft occupations varies significantly within certain sub-sectors.

The sector analysis of skill needs revealed that not only country-specific but also a number of sector-specific drivers of change and future skill needs exist - such as the importance of standards or competitive innovation structures. Though these are not necessarily connected solely to micro and craft(-type) companies, their impact on such companies is much stronger than on larger companies.

Frameworks and challenges in the field of vocational education and training and skills development

Analysis confirms the significant variety of IVET (initial vocational education and training), continuous vocational education and training (CVET) and skill development systems in Europe. One quite striking result of the analysis is that there is a clear division of countries into two groups with regard to the role of social partners and professional organisations in the development and implementation of IVET. Those countries and sectors

with strong stakeholder involvement are also the ones where apprenticeship training is important (e.g. in Austria, Germany or Denmark) whereas in countries with a lower involvement of the social partners the apprenticeship training is seen less important (e.g. in Bulgaria and Poland, but also the UK). This is certainly the case in countries where vocational qualification is provided solemnly in full-time schools or through non-formal or informal learning.

In continuing vocational training, involvement of social partners and professional bodies is usually high – “irrespective” of the country’s underlying IVET system – as they are often important training providers in their own right, and/or continuing vocational training is regulated by collective bargaining agreements. Moreover, social partners and professional bodies often act as CVET promoters in companies, setting up sectoral funds for subsidising training and/or acting as professional bodies certifying qualifications.

Though the variety of occupations, qualifications and skill profiles in all of the countries surveyed is usually rather high and national parameters have a significant influence on the way competencies and skills are provided, one can still observe rather similar structures with respect to the division of labour and the degree of vertical and horizontal job differentiation.

The national context analyses in the eight countries show that pronounced differences exist in the national understanding and concepts of what constitutes a profession/occupation. While in the approach based on occupational standards (“Berufskonzept”) formal training is oriented towards qualifications matching specific work processes, the approach of having qualifications provided by VET schools usually has a wider scope, with instruction being provided in a range of applied subjects. In the latter approach, specific qualifications and skills have to be provided through non-formal (intended but not formally certified) and/or informal (basically non-intentional by daily life experience) on-the-job or off-the-job training.

The national analyses show that both non-formal and informal training are very common in micro and small enterprises, where many employers see it as the best form of specific training available - it is easily taught, highly specific, can be applied at the exact time and place needed and enhances the productivity of employees and therefore the company immediately. In addition, many small companies just cannot afford to send people off on training.

In countries with a strong role of individual and on-the-job qualification pathways, transparency with respect

to qualifications and skills is low. This in turn has stimulated the development of industry-wide qualification standards.

In some countries (e.g. Bulgaria and the UK) significant skill mismatches exist, i.e. formal educational degrees are not synonymous with skills needed at the workplace. This is especially the case in countries where qualification is either exclusively provided by full-time VET schools or through non-formal and informal training. By contrast, countries like Germany and Austria with their well-established apprenticeship systems report just minor or no problems with respect to skill mismatches. This may be due to the fact that apprenticeship training has a built-in adaptation mechanism. Consequently, countries where apprenticeship training plays a strong role are more demand-driven with respect to adapting to future skill needs, whereas countries with a high share of VET-school graduates are substantially supply-driven.

There is an overall tendency in all countries for IVET to be less attractive to young people than general higher schools and tertiary education. Countries are responding by opening up pathways to university or other tertiary education institutions for apprenticeship graduates.

Skills and future skills needs in micro and craft (-type) enterprise

Though there was already a general increase in skill needs over the last decade, needs are expected to increase even further over the next ten years. Skills combining work processes and market activities, together with organizational skills and technical/legal skills have a high requirement for constant and continuing vocational training. The need for improved communication and personal skills is increasing as well but with a lower intensity.

Overall, the following skill needs are seen as increasing in the future: customer and market orientation, working in cooperative and collaborative international work structures, and management skills.

Different top-10 lists were compiled. One is showing the **skill needs** set to **increase most** already in the past but ongoing in the future (Top 1: Customer service communication – 79.4% (frequency of increase), Top 2: Developing new services, broaden range of offered products – 78.5%, Top 3: Analyzing known tasks 77.2%). In the table you can see the top-10 from different perspectives (companies, business organizations, training institutions) and how their perspectives are overlapping.

The other list showing the **largest difference in ranking between past and future needs**. This list shows the

present emerging skills needs, which are seen as more important in the future (Top 1: Developing knowledge about foreign markets – 35.3% (Difference between past and future increases), Top 2: Communicating with customers and employees in foreign language – 27.7%, Top 3: Securing own innovations and patents – 25.4%).

There is a consensus in all three perspectives (companies, business organizations, and training institutes) on the need to increase skill levels in the future, though different perspectives emphasise different skills. Companies and business organizations highly rate skills related to core work processes and management aspects. In their evaluation, business organizations highlight work organization skills, whereas training institutions put a greater emphasis on personal skills.

The company perspective on future skill needs is often sector-specific. The *interior construction sector* gives prominence to the alignment of work processes with external regulations/standards as well as with customer demands. The *food sector* highlights skills needed to meet customer requirements and integrating the managerial aspect of work. The *personal / health services sector* ranks integrative management aspects and customer orientation highly.

Future skill needs within a sector are closely linked to the sector's key factors in driving change. A comparison of the evolution of skill needs between the last 10 years and the coming 10 years shows common trends transgressing sector boundaries. Orientation toward foreign markets is driving skill needs in all sectors. This is resulting in companies needing language skills for analysing foreign markets and communicating with foreign partners.

Future skill needs are important and need **planning**. Companies are aware of this requirement and its relevance, and there is general consensus that more systematic approaches would be useful. However this is not reflected in practice. The driving forces for company activities in this field are mainly spontaneous, in reaction to customer or employee demands as well as being guided by personal assumptions. Companies prefer direct contact with and information from market players. They either try to cope with skills demand internally or through working in strategic networks with other companies.

Figure 1: Future skills needs in micro and craft(-type) enterprises up to 2020

Work process Core process –	Technical -	Orga. / legal	Social	Personal
Acquisition of new customers	Evaluating material	Problem solving	Customer service communication	Multi-tasking
Managing quality	Adequate handling of tools	Documenting and monitoring tasks	Negotiating with suppliers and producers	Working under pressure
Sector specific knowledge	Implementing work process technology	Calculating costs	Leading co-workers	Developing creative ideas
Identifying trends	Implementing ICT	Dealing with legal norms / standards	Training (untrained) workers	Managing risk
Analyzing known tasks		Meeting new health and safety requirements	Cooperating with enterprises	Self motivation / self engagement
Broaden range of offered products		Complying with environmental standards	Communicating with foreign partners	Willingness to continue learning
Knowledge about foreign markets		Securing own innovations and patents	Using ICT in communication	Balancing business and family
			Working in project groups and team structures	Time management
				Entrepreneurial thinking
				Motivating employees in their job
				Assuming new tasks or new responsibilities
				Willingness to travel and to be mobile

Increasing future skills needs (top 10) from the perspective of the three groups (yellow: companies, red: business organisations, green: training institutions, blocked: common perspective)

Source: Buschfeld / Dilger / Hess / Schmid / Voss 2011

Based on the results of the study, a number of recommendations can be derived for different areas and groups of actors: *forecasting future skills, communicating future skill needs and integrating future skills in training programmes.*

These recommendations and further relevant results can be seen in the full study which can be obtained [online](#).