Handicraft and printing workers: skills opportunities and challenges (2016)

Summary
Handicraft workers use high-level technical skills to apply both traditional and contemporary methods in the design and production of jewellery, pottery, or textiles, along with many other articles.

Key facts:
- Handicraft workers use high-level technical skills to apply both traditional and contemporary methods in the design and production of jewellery, pottery, or textiles, along with many other articles.
- The five key skills required for these workers are teamwork, job-specific skills, problem solving, learning and communication.
- They are a shortage occupation in just two EU Member States; surpluses are reported in five EU countries.
- Between 2005 and 2015, employment in this occupational group fell by about 30%.
- This occupation regularly demands medium-level qualifications (about half of employees both in 2015 and 2025).
- The changing nature of employment in the creative sector is likely to heavily impact on those working in handicraft and printing trades, who are likely to focus more on portfolio working, rather than having a full-time job with set hours.
- While many craft trades will remain heavily centred on human input, emerging technologies are increasingly being used to facilitate the design and production processes within this occupational group.

Who are they?
Handicraft workers use high-level technical skills to apply both traditional and contemporary methods in the design and production of jewellery, pottery, or textiles, along with many other articles. Expertise is also required to operate specialist equipment in these crafts for shaping glass, ceramics, wood and other materials. Printing trades workers operate specialised equipment to set type prior to printing, configure and operate printing processes, prepare stencils or operate screen-printing equipment.

What skills do they need?
According to Cedefop’s European skills and jobs survey (ESJS) the key 5 skills for these workers are teamwork, job-specific skills, problem solving, learning and communication. These skills could support employees in this occupation to also tackle anticipated future skill challenges (see drivers of change below).

Figure 1: Most important skills required for handicraft and printing workers
Where are they mostly in demand?

The labour market dynamics for this occupation differ across EU Member States:

*Figure 2: Shortages and surpluses for handicraft and printing workers across the EU*
According to Cedefop, Malta and the Netherlands report a *shortage* of all craft and related workers. Contrariwise, a *surplus* of handicraft and printing workers concerns France, Spain, Austria, Poland and Slovenia.

**What are the trends for the future?**

Between 2005 and 2015, employment in this occupational group fell by about 30%. This trend will be mitigated in the forthcoming decade, although employment will continue to shrink. Job opportunities will exist, but only stemming from replacement demand. Moreover, there are a number of sectors that will still see employment growth in this occupation over the next ten years, which can be attributed to a variety of drivers described below.

The decline in employment for handicraft and printing workers will be felt in a number of different sectors. Of the five largest, in terms of employment, it is forecasted that four will see a significant reduction in the number of staff: *wood, paper, print and publishing* by 32%; *rubber/non-metal and mineral products* by about 25%; *other manufacturing* by 20%; and *wholesale and retail* by approximately 14%. Employment is expected to also fall in medium-sized sectors/employers, such as *media* (about 25%
decline). However, employment is expected to increase by 45% in the textiles, clothing and leather sector, upgrading the sector from the fourth to the second largest employer of this occupation from 2015 to 2025.

This occupation regularly demands medium-level qualifications (about half of employees both in 2015 and 2025). However, the proportion of high-level qualified employees is forecast to increase by 5 percentage points (to about 17%), which can be attributed to the growing complexity and diversity of both developing production techniques, new forms of employment and different business management techniques.

Which drivers of change will affect their skills?

- The changing nature of employment in the creative sector is likely to heavily impact on those working in handicraft and printing trades, who are likely to focus more on portfolio working, rather than having a full-time job with set hours. In order to manage part-time jobs, short-term contracts and periods of self-employment, it is crucial that those working in these occupations have an array of enabling soft skills, such as self-motivation, time-management, self-reliance and an ability to work and learn independently. Entrepreneurial skills are also important for such occupations: an ability to market oneself, communicate and collaborate with others, and focus on ‘job creation’, rather than ‘job seeking’.

- While many craft trades will remain heavily centred on human input, emerging technologies are increasingly being used to facilitate the design and production processes within this occupational group. Relevant to handicraft workers, examples of these technologies include computer-aided design software and metal cutting devices. While evolving technical skills are important in enabling craft producers to integrate these new methods into their practice, other increasingly prevalent business practices driven by technology, such as e-commerce, will also require high levels of adaptability and business acumen, especially given the move towards portfolio working and self-employment. As for printing workers, 3D printing is far more than another technological advancement. With applications relevant to a wide range of sectors (manufacturing, health equipment etc.), mastering 3D printing devices and processes will be an indispensable set of skills for workers in relevant sectors and industries.

- The growing use of social media provides handicraft workers with a valuable tool with which to market products, network with other businesses and interact with customers regarding product design, development and general performance feedback. Holding the skills that will enable craft workers to fully optimise their use of social media will be vital: negotiating resolutions with customers regarding issues and complaints; interpreting input provided by customers on potential product development; and creating distinctive marketing campaigns in an extremely competitive environment.

- Environmental sustainability is becoming a higher priority for many consumers across the EU, who are increasingly aware of the impacts of their own consumption practices. An increasing number of workers in craft trades are adopting similar values, like strong awareness of sustainable and locally sourced materials, “fair trade” approach as well as more sustainable production processes that minimise resource use and even recycle materials as much as possible. Being able to employ these
Participation of the customer is likely to become a more common feature in future design and handicraft occupations, where the customer has previously only been “offered a product or service”. Smart Industry and the corresponding concept of network-centric production will allow active participation in design and production. It will enable customers to discuss the options, even bringing in own designs (e.g. for 3D printing), and to share information while using the product... Flexible production will even allow input from the customer to make adjustments during production”.

Source: Smart Industry Project Team- The Netherlands

The rapidly evolving needs of consumers and businesses for more bespoke and individualised products mean that employees in handicraft professions must have the appropriate skills to remain flexible in changing environments. Many larger manufacturing companies may continue to look to craft trade businesses and workers to meet these changing needs by collaborating on one-off items, or working in partnership to boost brand image. Workers must possess the flexibility and positive risk taking mentality required, to effectively capitalise on these new opportunities. Cross-disciplinary competences are also important, which must be substantiated by a wider understanding of business-to-business operations. Furthermore, a proficiency in mathematics and literacy is critical to managing effective links with other businesses, along with a strong ability to process new information and integrate it into handicraft workers’ own practices.

Regulatory changes that are made in response to changing market conditions, which include intellectual property rights and taxation, are likely to create a greater demand for sector-specific regulatory expertise, so that workers can comply with shifting rules and capitalise on any new opportunities.

How can these skill needs be met?

Directing people towards online training courses can be extremely useful in promoting skills in business,

social media management and technology, including e-commerce. 'Anytime-anywhere' learning allows people to engage with courses when their busy schedules allow. In-work training and internships/apprenticeships can also provide a valuable opportunity for less experienced workers in this occupational group to learn new skills and enhance their portfolio.

Several of sub-occupations pertinent to handicraft and printing workers call for creativity skills. Such skills can also be developed through training opportunities and preferably at young age. Partnership schemes have proven successful in encouraging children to develop their creative skills and demonstrating some of the potential career prospects in different sectors: for example, the Creative Partnerships programme in the UK ¹⁵, where professionals from the creative industries would visit schools, provide lessons and set challenging tasks for pupils to utilise their creativity, which would in turn help in developing other important soft skills including flexibility and problem solving. The “Kulturagenten für Kreative Schulen” programme in Germany ¹⁶ is another inspiring example, where artists work in schools and build relationships between schools and cultural institutions.

References


[3] The need to replace workers leaving a profession for various reasons, such as retirement. For more information on replacement demand and how it drives employment across sectors, can be found on the Skills Panorama: [en/analytical_highligths/focus-replacement-demand-driving-millions-job-openings-across-eu](/en/analytical_highligths/focus-replacement-demand-driving-millions-job-openings-across-eu)

[4] Under this sub-sector, the forecast covers manufacturing of furniture, jewellery, toys, musical instruments, medical and dental instruments and protective equipment.


FME 2014, *Smart industry Dutch industry fit for the future*.

