Production and specialised services managers: skills opportunities and challenges (2016)

12/2016 Finance & insurance, ICT services, Professional services, Manufacturing, Managers, Technical managers, EU, Skills opportunities and challenges in occupations

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Summary

Production and specialised services managers have a range of responsibilities regarding the production of the goods and the provision of specialised professional and technical services provided by an enterprise or organisation, including: detailed planning, setting of standards and objectives; quality assurance; managing and controlling budgets and costs; overseeing the selection, training and performance of staff; and representing the organisation in negotiations with other agencies and at public events.

Key facts:

- Production and specialised services managers are employed in all sectors.
- The five key skills required for these managers are communication, learning, problem solving, planning and teamwork.
- Employment in this occupation is projected to grow at about 9% between 2015 and 2025, a growth similar to the one for the 2005-2015 period.
- The five key skills required for these managers are communication, learning, problem solving, planning and teamwork.
- Replacement demand is expected to account for almost 9 out of 10 of the total projected new jobs over the next decade.
- Production and specialised services managers share a core set of generic management skills relating to the key responsibilities of the occupation.
- Evolving legal and regulatory frameworks necessitate managers to be able to react and adapt to them.

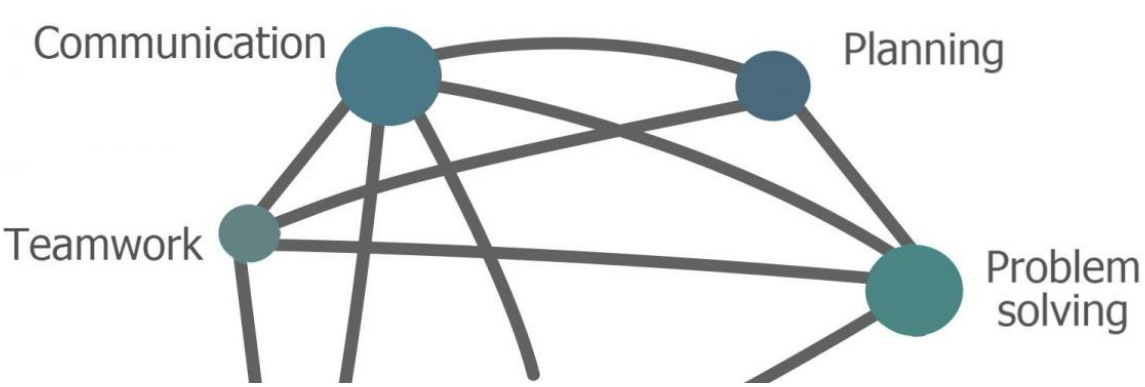
Who are they?

Production and specialised services managers1 have a range of responsibilities regarding the production of the goods and the provision of specialised professional and technical services provided by an enterprise or organisation, including: detailed planning, setting of standards and objectives; quality assurance; managing and controlling budgets and costs; overseeing the selection, training and performance of staff; and representing the organisation in negotiations with other agencies and at public events.

What skills do they need?

According to Cedefop's European skills and jobs survey (ESJS), the key 5 skills for production and specialised services managers are **communication, learning, problem solving, planning** and **teamwork**. These skills could support employees in this occupation to also tackle anticipated future skill challenges (see drivers of change below).

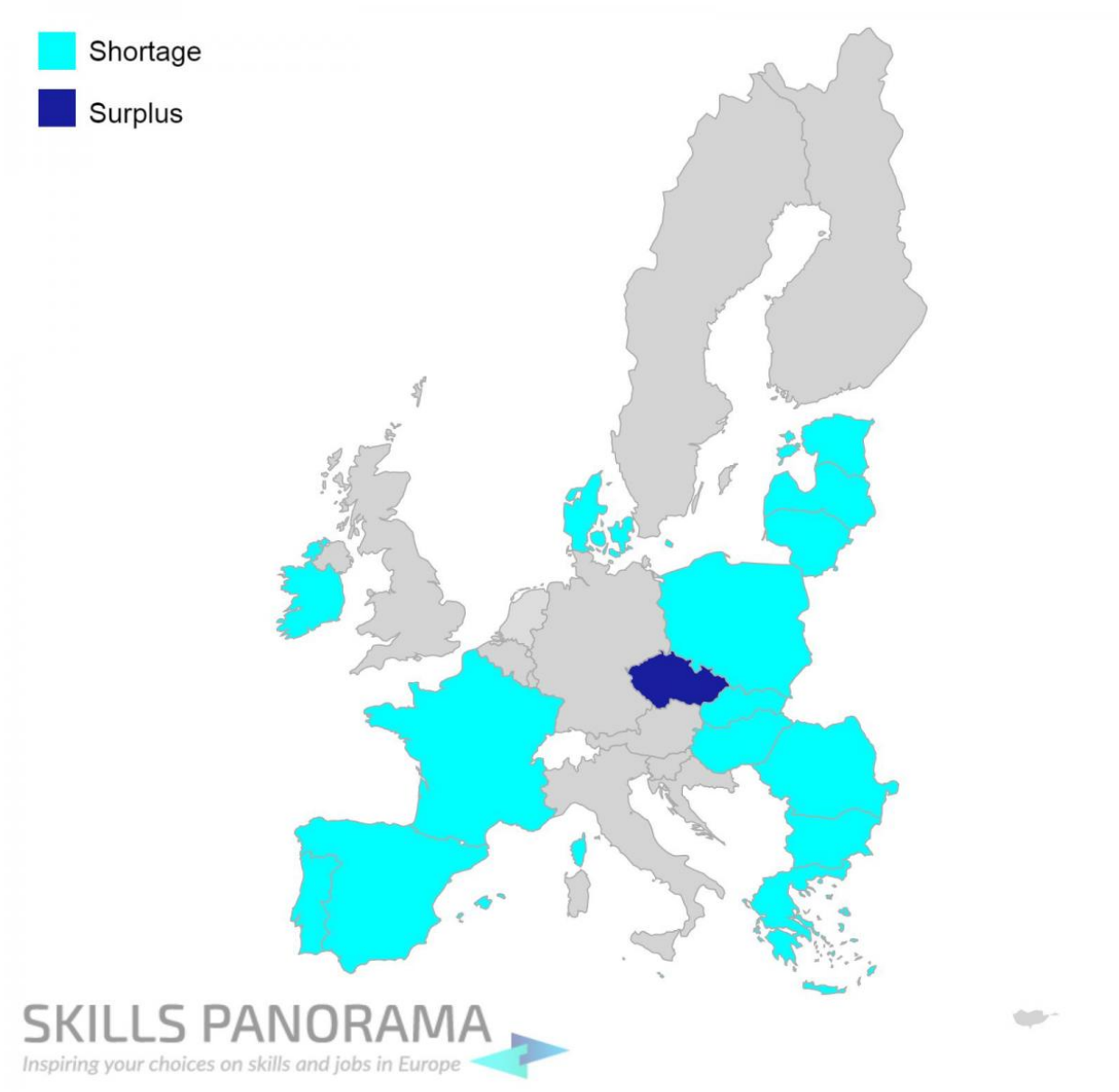
Figure 1: Most important skills required for production and specialised services managers



Where are they mostly in demand?

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

Figure 2: Shortages and surpluses for production and specialised services managers across the EU



Cedefop's results show significant shortages for production and specialised services managers. *ICT managers* are the most required occupation within the group, with 15 countries suffering from skills shortages (Belgium, Denmark, Estonia, Greece, Ireland, Spain, France, Latvia, Lithuania, Hungary, the Netherlands, Poland, Portugal, Romania and Slovakia). In contrast, Czech Republic reportedly risks surplus of project managers and managers in agriculture.

What are the trends for the future? [2]

Employment in this occupational group is projected to grow at about 9% between 2015 and 2025, a growth similar to the one for the 2005-2015 period. Replacement demand[3] is expected to account for almost 9 out of 10 of the total projected new jobs over the next decade.

Production and specialised services managers are employed in all sectors. In the next decade, legal, account & consulting will lead the employment growth in this occupation (expected increase of about 50%), architectural & engineering (37% increase), research & development (almost 30% increase) and warehousing and postal services (around 25% of increase). Construction will absorb almost 16% more production and specialised services managers by 2025, remaining the largest employer for this occupation. Aside from the projected growth of managers in services, it is worth noting that robust growth is expected in agriculture (about 18%), as well. As expected, jobs in this occupational group demand for high qualifications. It is estimated that more than two thirds of these managers will hold high qualifications in 2025 (almost 60% in 2015), while shares both for medium and low-level qualified managers will decrease.

Which drivers of change will affect their skills?

Production and specialised services managers share a core set of generic management skills relating to the key responsibilities of the occupation. Additionally, there is a demand for technical skills relevant to the specific industries in which they work.

- Regardless of their sector or line of work, all managers will need to adapt their managing styles and human resource management to the new pool of employees: the **demographic structure of workforces**, following that of European societies will simultaneously incorporate a new generation of workers**,** while the median workforce age will climb. Young(er) employees (will) have grown up in a hyper-connected world [4], which shapes the way they perceive communication, speed, teamwork etc. Simultaneously, older employees will have different values and ways of communication and commitment. Being responsible for the corporate or their team's culture and operability, production and specialised service managers will need to have strong yet agile leadership, human capital development and emotional intelligence skills.
- Also in relation to demographic change, businesses and organizations will have to cope with **increasing shortage of talent** [5]**.** Production and specialised services managers will be challenged to make better use of sources they will have at their disposal and to address these shortages by further automation or

use of sources they will have at their disposal and to address these shortages by further automation or outsourcing.

- **Evolving legal and regulatory frameworks** necessitate managers to be able to react and adapt to them [6]. Regulatory and legal challenges will be greater for managers in certain sectors, such as financial services, in which more stringent regulation since the financial crisis has brought structural challenges to the sector.
- **Technological advances** (such as 3D printing, self-optimising production systems) and **advances in computer power and Big Data** require managers to have technological skills, such as: understanding and deploying an array of new technologies and methodologies; applying new technologies to the organisation's context; and effective use of ICTs. For example, in the furniture industry there will be a shift in production techniques from handicraft to machine and robot manufacturing [7]. Subsequently, managers of furniture factories will have to understand how the new manufacturing processes will affect work plans, design etc. Correspondingly, managers in other sectors will have to effectively utilise different technologies depending on the sector in which they operate.
- **The growing trend towards outsourcing of production** in advanced manufacturing industries in particular will call for better business management, sourcing and supply chain skills, purchasing, contract negotiation and large scale project management to complement technical skills. [8]
- **Fast industrialisation of innovative technologies** will require production managers to master the full innovation life cycle in a manufacturing context, from the laboratory assessment stages to large scale production. [9] Furthermore, innovation of product and process technologies creates intellectual property that managers must be able to identify, protect and monetise in order to extract their full value.

> 'Several companies are developing skills programmes specifically targeted at their current and future leaders, aiming to develop skills such as empowerment, courage and foresight. Leadership can be a fairly broad term in these cases, covering everyone from team leaders to senior Board directors. Often led by the HR function, external providers are also commonly involved in devising and sometimes also delivering these types of programmes. Two companies also incorporated process reviews with these training programmes to ensure sustainability is incorporated into the objectives, job descriptions and performance management of the top ranks'.
>
> Source: Skills for a Sustainable Economy: The Business Perspective [10]

- **Climate change** effects have increased pressures through legislation, changes in consumption and competition for resources that will profoundly change operational management and structure of organisations [11]. For example, waste management practices will shift away from land filling and waste incineration to recycling. Managers may need retraining in "green" technologies as they replace older production methods. The core "green" skills that managers will require include environmental awareness and willingness to learn about sustainable development [12].
- **Globalisation** will continue to expand the global reach of firms' operations, requiring managers to adapt to dealing with new customers, laws and regulations. Future growth opportunities in emerging markets may also require managers in production to be skilled in creating trade partnerships, better understanding better social and cultural differences of regions in which their companies operate [13] and also to possess better language skills.

How can these skill needs be met?

Skill challenge responses can come from within companies, governments or employer's associations. Companies should aim to address skill gaps by training current staff, though in some cases they may have to look to external recruitment to address internal skills gaps.

For the purpose of preparing current staff to take on management roles, potential candidates within companies for management positions need to be identified at an early stage and entered into a suitable development programme. [14] Some basic management training is required for the development of core management and leadership skills. This can be in-house or external, but is also commonly learnt on the job, and thus can be improved by a mentoring or job-shadowing system. Governments can also have a role in the development of management skills, by providing funding support to SMEs, who often lack the resources to train staff [15].

Aside from core management and leadership skills, production and specialised services managers require specialised training depending on the sector in which they operate. Production managers in more technical roles will often require STEM qualifications. To better prepare STEM graduates for future management roles in industry, the gap should be closed between 'what schools teach and what the job front needs' [16]. For example, access to industry experience in universities could be improved by introducing senior industry professionals into visiting lecturer roles [17]. While not all managers will be expected or required to have as deep technical knowledge as some of their more specialist staff, they will require a good grounding in order to understand the challenges and requirements that their staff must meet.

References

[1] Defined as ILO ISCO 08 group 13 production specialised services managers. ILO (2012)International Standard Classification of Occupations ISCO-08. More information on the occupation can be foundhere.

[2] Cedefop 2016 forecast.

[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 here.

[4] Lund, S., Manyika, J. & Robinson, J., 2016, "Managing talent in a digital age", *Mc Kinsey*, March 2016, accessed 6 June 2016.

[5] Strack, R., Baier, J., Marchingo M. & Sharda S., 2014, "The Global Workforce Crisis: $10 Trillion at Risk", *bcg.perspectives,* 2 July 2014, accessed 6 June 2016.

[6] EU Skills Panorama 2014, *Managers in services and production, Analytical Highlight*

[7] European Commission 2012, *Investing in the Future of Jobs and Skills – Scenarios, implications and options in anticipation of future skills and knowledge needs – Furniture.*

[8] UK Commission for Employment and Skills 2015, *Sector insights: skills and performance challenges in the advanced manufacturing sector.*

[9] Skevi, A, Szigeti, H, Perini, S, Oliveira, M, Taisch, M & Kiritsis D 2014, "Current Skills Gap in Manufacturing: Towards a New Skills Framework for Factories of the Future", Volume 438 of the series IFIP Advances in Information and Communication Technology, pp. 175-183.

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[11] International Labour Organization 2012, *Greening the global economy – A global view.*

[12] ibid

[13] UK Commission for Employment and Skills 2015, *Sector insights: skills and performance challenges in the advanced manufacturing sector.*

[14] BIS 2012, *Leadership & Management in the UK – The Key to Sustainable Growth.*

[15] ibid

[16] Skevi, A, Szigeti, H, Perini, S, Oliveira, M, Taisch, M & Kiritsis D 2014, "Current Skills Gap in Manufacturing: Towards a New Skills Framework for Factories of the Future", Volume 438 of the series IFIP Advances in Information and Communication Technologypp. 175-183.

[17] European Wind Energy Technology Platform 2013, *Workers Wanted: The EU Wind Energy Sector Skills Gap.*