BRIEFING NOTE

FUTURE OF SKILLS

RESEARCH AND RECOMMENDATIONS FOR
THE EXECUTIVE COUNCIL OF AMCHAM EU

AmCham EU
SPEAKING FOR AMERICAN BUSINESS IN EUROPE

MERCER

CONTENTS

Acronyms used within this report
AI – Artificial Intelligence
AM – Additive Manufacturing
CPA – The Personal Activity Account
EIB – European Investment Bank
EU – European Union
EVP – Employee Value Proposition
GMCA – General Manchester Combined Authority
ICT – Information and Communications Technology
NASSCOM – National Association of Software and Services Companies
SSC – Sector Skills Council
STEM – Science, Technology, Engineering and Mathematics
VET – Vocational Education and Training

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INTRODUCTION

Human talent, rather than capital and technology, is the key factor linking innovation, competitiveness and growth in the 21st century. People, rather than robots or artificial intelligence (AI) software, will continue to brainstorm new ideas, inspire others and drive organisations to succeed.

We are experiencing the most monumental societal shift since the Industrial Revolution: transformed business models, reinvented jobs and accelerated skills changes. Skills shortages have led to a war for talent that will only become more acute. Add to this that today's workforce has very different expectations as opposed to their predecessors; action is clearly needed to ensure people and workplaces are sufficiently flexible and equipped to meet these challenges.

Although we do not know the full effect of these disruptions, the time it takes to build the necessary skills means organisations cannot afford to delay their response.

Yet many business leaders and policy-makers have a blind spot when it comes to the extent of these workforce issues, the competitive advantage they could create with the right actions, and – conversely – the negative impacts on their business and society if they do nothing.

This briefing note sets out our insights regarding the future of skills within the EU and provides our recommendations for action. It is the outcome of a comprehensive review of European and global workforce trends, and our projections on how these are likely to impact companies, governments and citizens in Europe.

We consider the future of skills in three parts:

1

The 10 workforce disruptions that every business and political leader should be aware of and the subsequent impacts on the future of both jobs and talent.

2

How businesses should respond – what unique requirements are needed – and how to apply the five lines of defence to respond to skills shortages in Europe.


3

How AmCham EU can inform European policy-makers and institutions on reforms needed to support businesses navigating the new skills agenda, to the ultimate benefit of the EU, Member States, businesses and citizens.

FUTURE OF JOBS

DEMAND DISRUPTIONS IMPACTING WHAT ORGANISATIONS *NEED*

CHANGING CUSTOMER NEEDS AND EXPECTATIONS

- Customers are demanding a higher level of self-service and a more intimate, personalised experience based on **changing lifestyles**.

- **75%** of companies made it their top innovation objective to improve customer experience.[1]

- **63%** of operations leaders agree that understanding what customers value is a challenge for their companies' operations.[2]
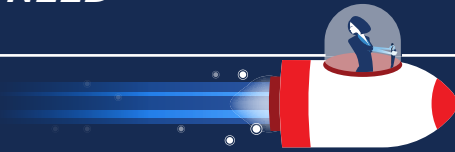
Impact on people

Human skills – customer connection, innovation, influencing, creativity, design thinking and problem solving – will become critical for all workers. Technical competency requirements will change rapidly and frequently, and will become more difficult to predict.

Blindspots
Business
Some are not recognising the need to equip and upskill their entire workforce in human skills. Not all recognise that human (not technical) skills will become the means to compete.

Policy
Education systems and qualifications are focused on technical skills and do not place sufficient emphasis on human skills.

ROBOTICS AND COGNITIVE AUTOMATION

- Between **20%** and **50%** of roles and/or tasks will be displaced.[3]

- Over **60%** of jobs have at least one-third of activities that could be automated today.[4]

- Over **2.5 million** industrial robots will be at work in 2019.[5]

Impact on people
While certain jobs (redundant roles) and tasks (redundant work) will be completely automated, many roles will be augmented by a new 'people + robots' reality (augmented work), where automation provides opportunities for improved productivity by allowing people to focus on higher-skilled, higher-quality tasks.

Blindspots
Business
Automation is by no means a synonym for work extinction.[6] The key issue is about labour reallocation, not job destruction, and organisations need to understand clearly which jobs/tasks will be automated, what they will be replaced by and what the new need for people will be. Managing talent in this context will become more, not less, difficult.

Policy
The support and systems in place are insufficient to re-train workers whose roles will become redundant in the future. Education systems are not sufficiently preparing people for the new reality of augmented work.

ANALYTICS, AI AND DIGITAL

- More than **one-third** of skills that will be needed in the future are skills not considered crucial today.[7]

- The number of unfilled vacancies for information and communication technology (ICT) professionals is **expected** to almost **double** to **756,000 by 2020**.[8]

- Only **6%** of European organisations consider themselves 'digital organisations'.[9]

Impact on people
The digital revolution is changing entire industries, and new skill sets are critical to its success. Organisations will shift their thinking from the job they need to the skill they need, and will ask individuals to work within a multiple project-based setting rather than a traditional role. To create an augmented work future, the workforce must be involved in shaping the digital transformation journey. There must be a close link between digital, workforce and learning strategies.

Blindspots
Business
Businesses need individuals with a mix of business aptitude and technical ability. Many of these skills already exist in latent talent in organisations. The solution to the digital skills crisis, for many, will be re-training existing employees, not hiring new 'digital talent'.

Policy
Education systems and qualification frameworks are not keeping up with the emerging skills required. Policy is mostly focused on younger workers, but new skills are needed for people of all ages.
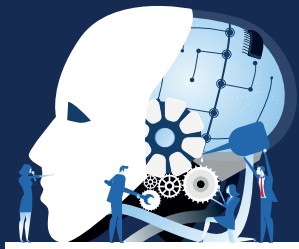
3D PRINTING/ADDITIVE MANUFACTURING

3D printing/additive manufacturing (AM) will revolutionise the

€10 trillion
global manufacturing sector, and is expected to disrupt

€3-5 trillion
in economic value over the next five to 10 years.[10]

Impact on people
Traditional manufacturing employees will require upskilling for the 3D digital environment. Focused efforts are needed on undergraduate engineering programmes for AM to develop design, manufacturing and process engineers, as well as plastics and metallurgy engineers able to create products in 3D.

Blindspots
Business
Currently, AM is focused largely on rapid prototyping and high cost, low volume production. It will require additional breakthroughs and investments to scale to larger batch manufacturing and widespread adoption. New 3D engineering curricula should focus on design, mechanical engineering, materials (plastics and metal) and processes.

Policy
Public-private partnerships are needed to address key technical challenges to AM, create regional innovation hubs and train advanced engineers through research.

University and vocational programmes should have access to industrial 3D printers for use in design and training.
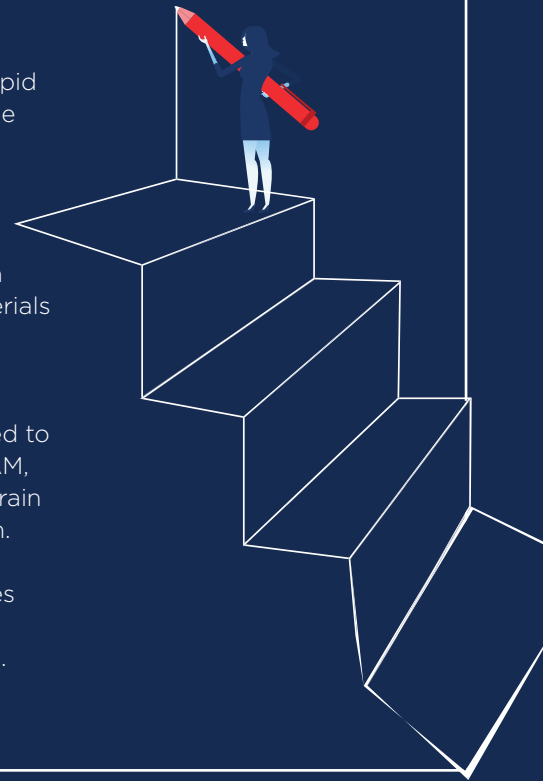
AGILITY, SIMPLICITY AND COLLABORATION

61% of leaders agree it is difficult for their operations to change direction when markets, customer needs or enterprise strategies change.[11]

9 out of 10 executives are planning some form of organisational redesign in the next two years. The main reason for those changes are:[12]

1. Greater efficiency (62%)
2. Increased agility (41%)
3. Greater customer intimacy (29%)

Impact on people
The world now requires rapid responses focusing on creativity, innovation and design, rather than solely on delivery. To achieve this, work will increasingly be project-based rather than segmented by department, and will need to take place across teams and silos. As a result organisations will be less hierarchically organised and defined, and experience will count over job titles or span of control.

Blindspots
Business
Only 4% of executives describe their company as 'change agile'. Leaders need to adapt their capabilities to lead across the organisation, not just within their span of control. There will be an increasing need to introduce organisation-wide systems, ways of working and incentives to enable collaboration.
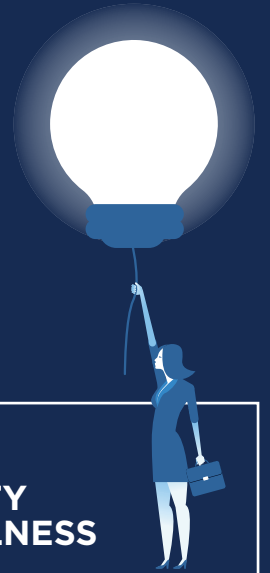
Policy
Education systems are not agile and are not set up for continual adaption to needs and changes.
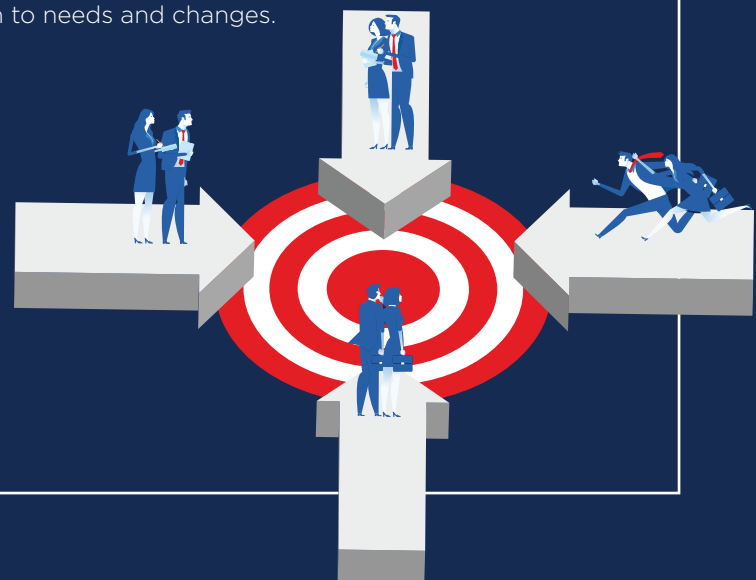
FUTURE OF TALENT

SUPPLY DISRUPTIONS IMPACTING
WHAT HUMAN CAPITAL IS *AVAILABLE*

CROWD-WORKING AND FREELANCING

- A high proportion of the population (ranging from **9% in Germany and the UK** to **22% in Italy**) has done crowd work (outsourced work through online platforms).[13]
- **20% to 30%** of the working age population has already been part of the gig economy.[14]

Impact on people
To attract a highly sought after and highly mobile workforce, organisations must have a strong and compelling value proposition for independent and non-traditional workers.

Blindspots
Business
The entire talent ecosystem, not just traditional regular employees, requires investment. Non-traditional workers need access to training, learning and other employee benefits.

Crowd-working may greatly reduce/eliminate the need for middle managers. However, we rely on this role to drive change and culture.

Policy
Legislation should provide more coverage and certainty to freelancers.

Policy must keep up with the needs of atypical workforce types. Education systems need to support micro-credentials (mini-certifications in a specific area of study or professional development).

EMPLOYEE FLEXIBILITY AND WELLNESS

- **53%** of employees want their company to focus more on their health and wellness.[15]
- **56%** of employees want their company to offer more flexible work options.[16]
- Only **43%** of employees profess excellent or very good health.[17]

Impact on people
It is necessary to embrace the 'whole person' and support their financial, emotional and physical well-being. People want their unique needs to be recognised based on their individual situation and context. They want recognition in a number of ways, including greater flexibility, investment in their development and reward for a wide range of contributions.
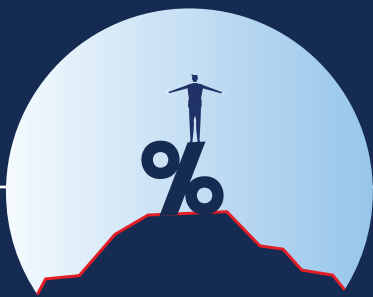
Blindspots
Business
Companies need to treat each employee as an individual, not as one of a mass workforce. Employee health and well-being has a direct impact on organisational productivity, for example by managing absenteeism and presenteeism.

Policy
There is a need to support flexible working, including parental leave.
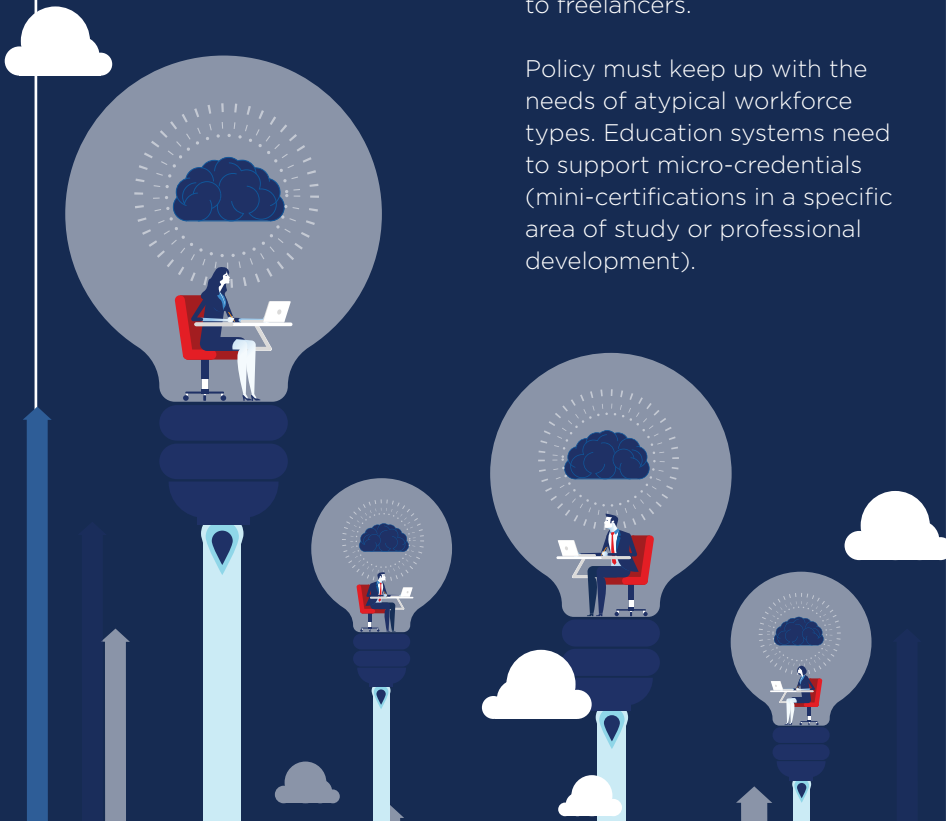
THE POWER OF PURPOSE

- **80%** of employees report an improvement in job satisfaction if they feel their job aligns with the organisation's core values.[18]

- Thriving employees are **three times more likely** to work for a company with a strong sense of purpose.[19]

Impact on people
More than ever, people are looking for purpose in their work and in the values of their organisations.

Blindspots
Business
In an environment where 'purpose' is highly important, and market competitive compensation and benefits are increasingly expensive, organisations must develop a compelling and differentiated employee value proposition (EVP) to attract and retain key talent, which includes elements of purpose, affinity and pride.

SKILLS SCARCITY AND EXPERIENCE GAPS

- **40%** of European employers have **difficulty finding people** with the skills they need to grow and innovate.[20]

- **Half** of the **EU population** lacks basic digital skills.[21]

Impact on people
The EU is facing an unprecedented shortage of workers and skills. Senior positions will become harder to fill as cognitive automation hollows out the middle of the professional career path. The linear transition from education to training, to work and retirement is now outdated, meaning career paths require acceleration and must become more flexible.

Blindspots
Business
Automation will not negate the impending workforce shortages, and skills scarcity will still impact across industry. Ramping up graduate programmes will not be sufficient to mitigate the lack of people available to recruit.

It will be necessary to look to non-traditional talent to avoid skills scarcity and fill experience gaps. Diversity and inclusion is a core solution to fill this gap.

Policy
Automation will not create an oversupply of workers. Instead, aging demographics will create a significant lack of workers. Education systems and qualification frameworks need to keep up with the emerging skills required, and governments need to encourage inactive workers to enter the workforce. Displaced workers should be retrained to keep them in the workforce. Industries that have historically lacked female representation need to raise awareness and incentivise women to tap into this potential workforce.

LEADERSHIP GAPS

- **59%** of executives ranked leadership as the number one area of **talent shortage** over IT, marketing, sales and service delivery.[22]

- **30% – 40%** of organisations feel that their staff **lack management and leadership skills.**[23]

Blindspots
Business
Traditional careers and skill sets will no longer be the criteria for leadership. Leaders will need to humanise the workplace through recognition, openness, acceptance, respect and focus.

Policy
Many leadership gaps result from companies not investing in leadership development during times of economic crisis. Policy should encourage continued investment. Education systems and qualifications are focused on technical skills and do not place sufficient emphasis on leadership skills.

Impact on people
Leaders will need to learn new skills such as virtual leadership, connecting diverse skill sets and managing people with deeper and different technical skill sets. A more human kind of leadership is needed, rather than technical expertise.

HOW BUSINESS SHOULD RESPOND

Businesses are taking a more positive and action-oriented approach to ensure a thriving and sustainable workforce, thinking differently about skills and talent scarcity. They understand that change is constant and they cannot wait for the wave of workforce disruptions to settle. Uncertainty, not stability, is the new normal.

SKILLS RESPONSE READINESS AUDIT

To be ready to create a meaningful skills strategy, organisations must have insights into the issues set out in the table below.
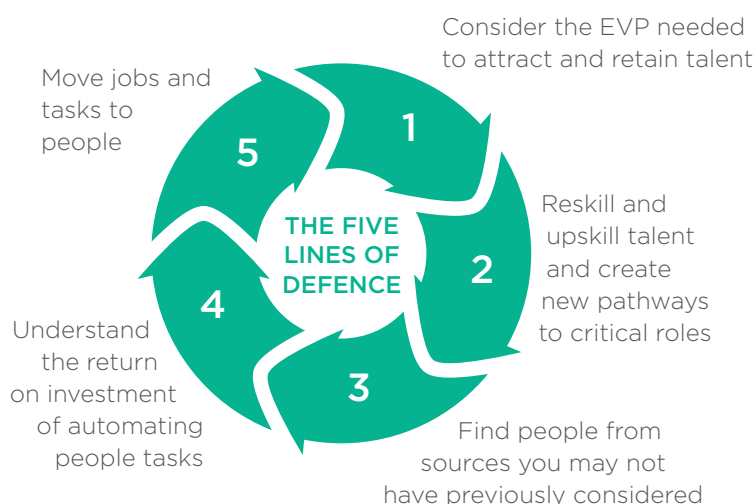
INSIGHTS NEEDED

- ✔ We have a good understanding of what digital and technical skills we need now and in the future.

- ✔ We have a good understanding of what human skills we need now and in the future.

- ✔ We have a good understanding of the extent to which traditional hiring will allow us to access the skills we need.

- ✔ We have a good understanding of the extent to which traditional development will allow us to access the skills we need.

- ✔ We have a good understanding of the extent to which automation will impact our workforce needs.

- ✔ We have a good understanding of our retirement risks, including loss of knowledge and skills, and we have a succession plan in place for the transfer of institutionally valuable knowledge.

- ✔ We have the infrastructure and culture in place to fully leverage a diverse talent pool.

- ✔ We know how to avoid the risk of reduced productivity that could arise from an ageing workforce, employees feeling overwhelmed or a culture of presenteeism.

- ✔ We have strong knowledge-management structures in place to enable employees to easily find the most relevant content.

- ✔ We are able to measure and fully leverage the performance of our entire talent pool, including freelance associates, contractors and joint-venture partners.

- ✔ We know how to create competitive advantage through the development of skills and capabilities, even if employees no longer want a 'lifetime contract'.

SKILLS RESPONSE PLAN

Organisations affected by skills shortages should create a Skills Response Plan using the five lines of defence described below. These Skills Response Plans can be presented as best practices to policy-makers and businesses across Europe, and it can be recommended that the European Commission creates a European platform to share best practices.

Companies should:

- **Review business strategies and plans for growth** to understand the volume of jobs, roles and experience needed by location, factoring in the known investments in automation.
- **Use external labour market data** to determine whether there is a shortage of needed skills in each area of business.

Consider the EVP needed to attract and retain talent

Move jobs and tasks to people

Reskill and upskill talent and create new pathways to critical roles

Understand the return on investment of automating people tasks

Find people from sources you may not have previously considered

THE FIVE LINES OF DEFENCE

1. **Line of Defence #1: Review existing staff strategies** (hiring, development, retention, contingent staffing) and assess how sustainable these will be in the future. Consider what employee and broader talent value proposition is needed to sustain them.
2. **Line of Defence #2: Plan to make 'local jobs for local people'** by building the skills and experience needed through apprenticeships, new talent pools and partnerships with local educational institutions.
3. **Line of Defence #3: See how the internal demographics and diversity profile compare** with those of the local market and consider how changing the minimum requirements of the job (contract type, hours worked, years of experience) may open the labour market up to new workers.
4. **Line of Defence #4: Consider ways in which productivity, automation and job re-design** may help decrease your demand for skill sets that are extremely difficult to obtain.
5. **Line of Defence #5: Investigate if work can be moved** to where available talent lies, including through crowdsourcing platforms and new ways of accessing skills.
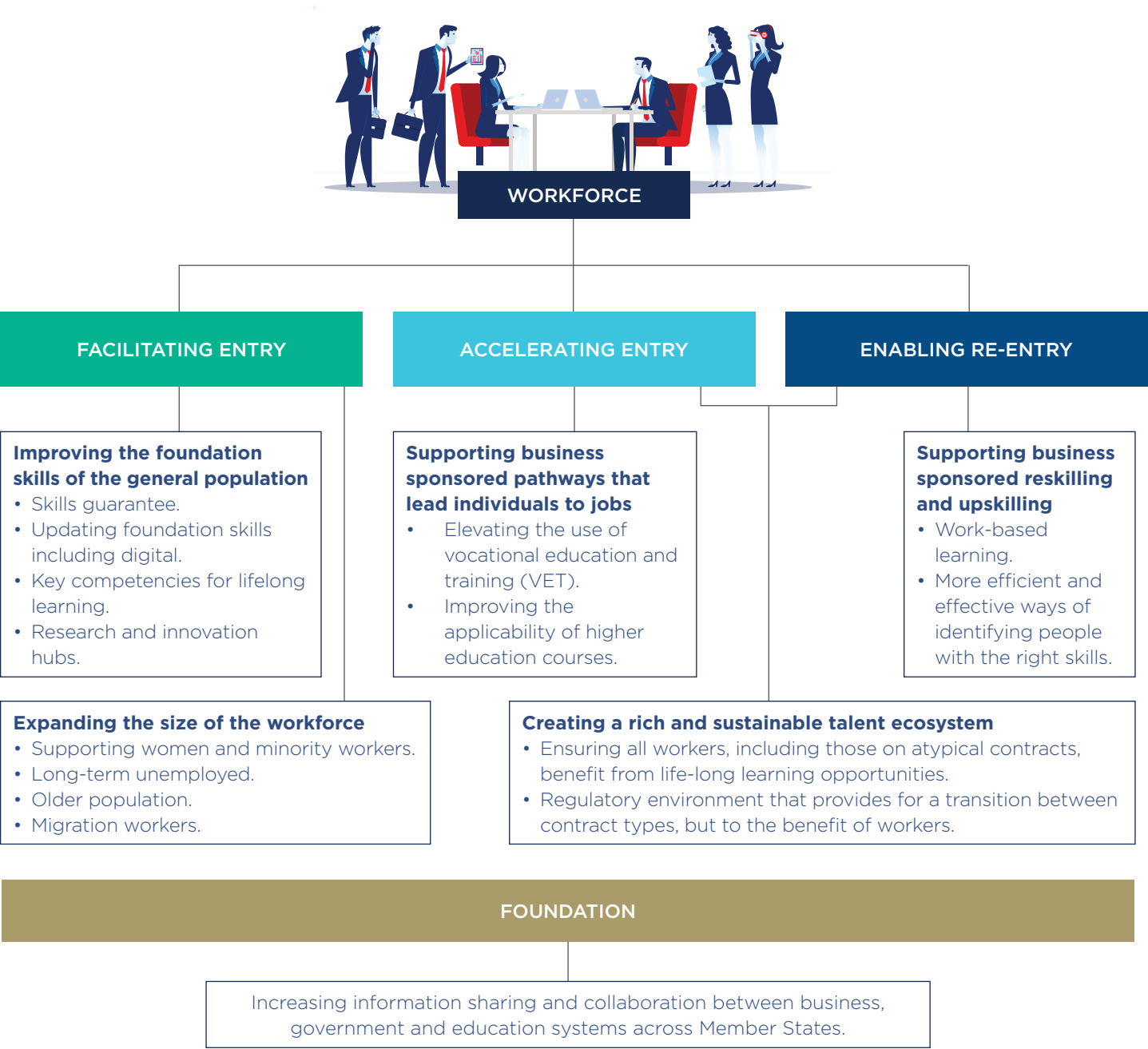
POLICY ACTIONS NEEDED

Having a population with the right skills is fundamental to Europe's future growth and viability, its attractiveness for business and the consequent benefit to society. We need a European-level review of how human capital is developed. Member States cannot solve the issue effectively alone.

The EU and Member States already have a number of excellent initiatives in place to tackle skills gaps. This includes the recently launched recommendations on key competencies for lifelong learning and common values, inclusive education and the European dimension of teaching, as well as a Digital Education Action Plan. However, ad hoc initiatives alone will not be sufficient. Providing a better match between the needs of business and the availability of skills will require a comprehensive, co-ordinated and joined-up strategy. This requires the involvement of numerous actors: the European Institutions, Member States, local governments,

employers, unions, educational institutions, workers and others who contribute to society. While 'education' and the competencies for teaching, education and training systems lie with Member States, the EU Commission has considerable influence on, and involvement in, a range of initiatives required to tackle the skills crisis. For maximum impact, it is imperative that it take a leading role in co-ordinating the overarching strategy.

AmCham EU advocates that policy action is required across all of the following areas to bridge the gap between both short-term and long-term skills mismatches.

WORKFORCE

FACILITATING ENTRY	ACCELERATING ENTRY	ENABLING RE-ENTRY

Improving the foundation skills of the general population
- Skills guarantee.
- Updating foundation skills including digital.
- Key competencies for lifelong learning.
- Research and innovation hubs.

Supporting business sponsored pathways that lead individuals to jobs
- Elevating the use of vocational education and training (VET).
- Improving the applicability of higher education courses.

Supporting business sponsored reskilling and upskilling
- Work-based learning.
- More efficient and effective ways of identifying people with the right skills.

Expanding the size of the workforce
- Supporting women and minority workers.
- Long-term unemployed.
- Older population.
- Migration workers.

Creating a rich and sustainable talent ecosystem
- Ensuring all workers, including those on atypical contracts, benefit from life-long learning opportunities.
- Regulatory environment that provides for a transition between contract types, but to the benefit of workers.

FOUNDATION

Increasing information sharing and collaboration between business, government and education systems across Member States.

SUMMARY OF RECOMMENDATIONS

1
INCREASING INFORMATION SHARING AND COLLABORATION

EU
- Continue and expand the Blueprint for Sectoral Cooperation on Skills.
- Increase coordination and best practice sharing between all players on curricula development and private-public partnerships in skills development.
- Provide information and data on forecasts of labour market needs.

Member States
- Create a framework for continuous curricula review and updating.
- Broker multi-stakeholder alliances for regional economic revitalisation.

Employers
- Partner with ministries and education providers to ensure that curricula development is informed by in-demand skills.

2
IMPROVING THE FOUNDATION SKILLS OF THE GENERAL POPULATION

EU
- Increase inter-ministerial coordination on youth education and development in schools and vocational training.
- Increase inter-ministerial coordination on STEM and digital skills and employability skills.
- Support education and training incentives through the European Investment Bank (EIB) and European Fund for Strategic Investments to boost private sector investment in core skills.

Member States
- Align micro-credentials with national standards and qualifications frameworks.
- Promote private sector participation in teacher training and upskilling.
- Incentivise teachers to actively participate in lifelong learning.
- Mandate digital literacy in teacher training.
- Support ICT infrastructure in educational institutions.

Employers
- Design interventions that strengthen STEM and digital skills and needed non-cognitive skills such as social-emotion skills.
- Provide workplace exposure to educations.
- Develop skill-based employee volunteering programmes.

3
EXPANDING THE SIZE OF THE WORKFORCE

EU
- Provide policy guidance and coordination around initiatives that target youth, women, older workers and low-skilled employees.
- Establish the equivalent of the European Alliance for Apprenticeships to facilitate work-to-work transitions for experienced workers.

Member States
- Incentivise employers to provide access to childcare solutions.
- Support the Women in Digital strategy for all ages.
- Continue to support the Youth Guarantee.
- Incentivise employers to provide flexible work arrangements for older workers.

Employers
- Provide flexible work arrangements including workplace nurseries and other assistance programmes for working parents.
- Provide flexible work arrangements for older workers.
- Provide assistance to people that are returning to work after a period of absence.

4

SUPPORTING BUSINESS SPONSORED PATHWAYS THAT LEAD INDIVIDUALS TO JOBS

EU
- Address the VET stigma and promote VAT career pathways.
- Promote VET careers through public campaigns.

Member States
- Promote coordination between employment services on the availability and suitability of the applicant pool.
- Promote VET careers through public campaigns.
- Introduce vocational tracks in upper secondary education.
- Encourage private sector VET infrastructure investment.

Employers
- Organise work-based learning for students.
- Partner with ministries and education providers to ensure that curricula development for younger people is informed by in-demand skills and specific business requirements.

5

CREATING A RICH AND SUSTAINABLE TALENT ECOSYSTEM

EU
- Update European labour statistics reporting to reflect all forms of work.
- Update and review regulatory classifications of different types of work.
- Provide a framework so that traditional employment benefits move with the worker through all forms of work contracts.

Member States
- Update national labour statistics to reflect all forms of work.
- Increase the flexibility of social security systems to suit diverse needs.

Employers
- Update HR policies to address the needs of the entire workforce including atypical contracts.
- Increase flexibility and provide options in company-provided benefit packages.

6

SUPPORTING BUSINESS SPONSORED RESKILLING AND UPSKILLING

EU
- Align micro-credentials with European standards and qualifications frameworks.
- Promote the recognition of micro-credentials in Member States.

Member States
- Align micro-credentials with national standards and qualifications frameworks.
- Recognise work-based learning in micro-credentials.
- Incentivise and support individuals to pursue lifelong learning, including through individual training accounts.
- Incentivise employers who provide ongoing learning opportunities for their staff.

Employers
- Support employees to engage in lifelong learning and re-education.
- Support on the job learning through individual training modules in partnership with education and training providers.
- Recognise the emerging system of micro-credentials.
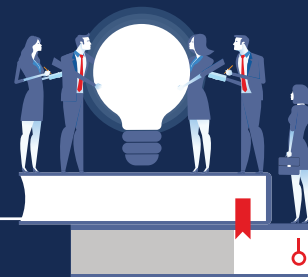
RECOMMENDATIONS

1 INCREASING INFORMATION SHARING AND COLLABORATION

Europe needs an interdisciplinary approach that brings together policy-makers, education and learning providers, businesses, social entities and individuals. To ensure wide-ranging implications are factored into policy-making decisions, the European Commission must play a key role in bringing together these groups and increasing information sharing. Some work has begun in this regard in the form of the Blueprint for Sectoral Cooperation on Skills,[24] which is part of the New Skills Agenda. However, a broader range of sectors should be included and the Blueprint must be actionable, have sufficient long-term funding and have tangible outcomes.

The Blueprint must ensure education curricula are:

1 Influenced by labour market insights and forecasting of future trends in skills needs and skills supply.

2 Developed and revised collaboratively with input from all relevant stakeholders.

3 Subject to regular, ongoing review, avoiding major but infrequent overhauls.

4 Open to innovation and experiments for identifying effective new models of skills development.

SINGAPORE:
SkillsFuture initiative

Employers in the city-state spell out the changes they expect to happen over the next three to five years and identify the skills each sector will need. These create 'industry transformation maps' designed to guide individuals on what skills they should be developing.

SWITZERLAND:
### Public-private partnerships

The Swiss vocational and training system is managed as a public-private partnership. Business, state governments and the federal government work jointly to define curricula and skill sets and to set standards for occupations across the country.

UK:
Skills forecasting

In the UK, LinkedIn and the Greater Manchester Combined Authority (GMCA) have collaborated to analyse local vacancies and local LinkedIn users' skills and employment data to create a snapshot of the skills in Greater Manchester. The GMCA is now developing training modules based on this information.
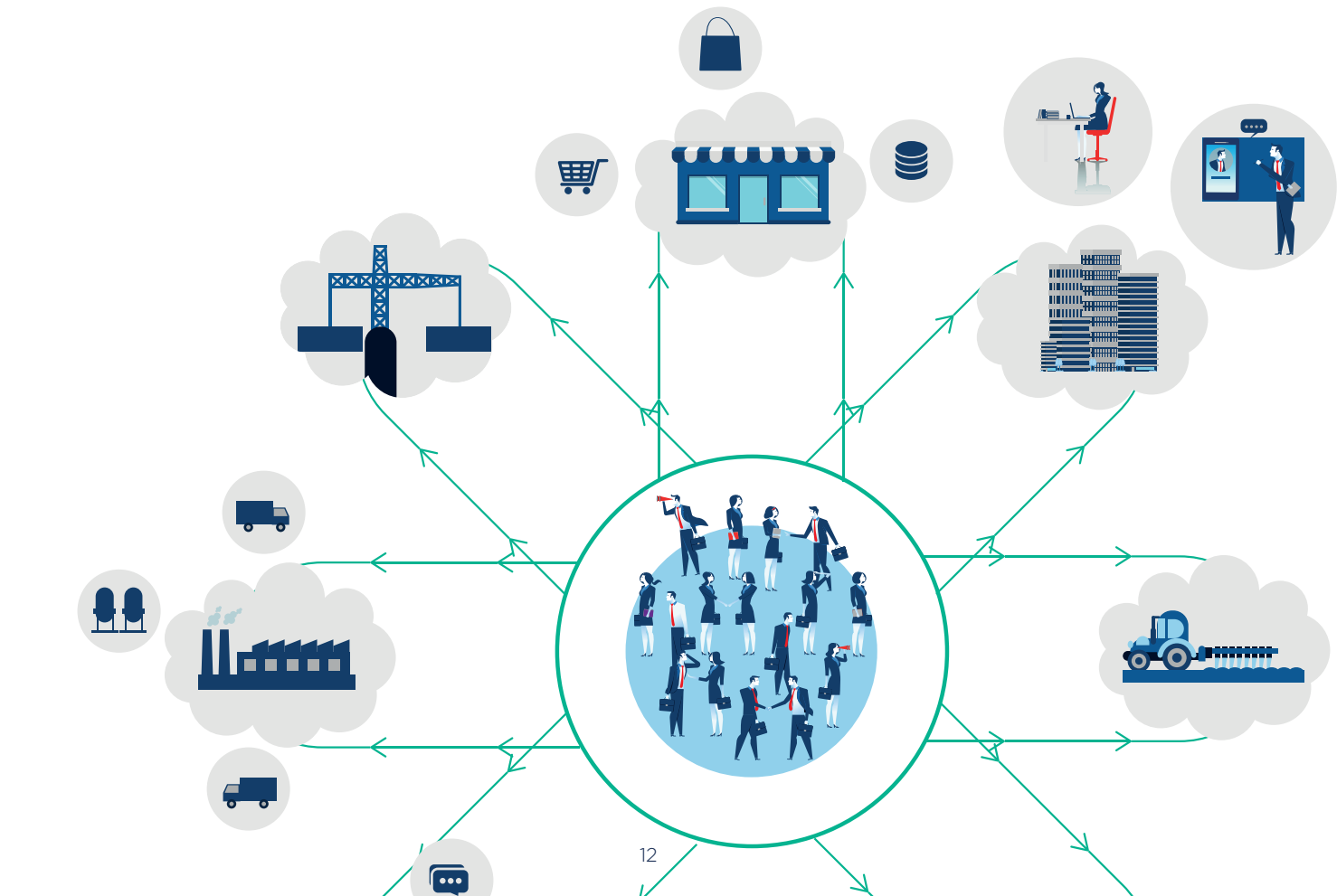
2 IMPROVING THE FOUNDATION SKILLS OF THE GENERAL POPULATION

The European Commission and Member States need to work together to support education and training institutions in core foundation skills to ensure that the general population across Europe is developing with these skills. This has two components:

COGNITIVE SKILLS DEVELOPMENT

Key skills in literacy, numeracy, science, digital, languages and financial literacy are essential. Focus is needed to improve the quality of these subjects. Current teaching methods ignore the connections between science and humanities, focusing on theory over application and do not include sufficient experiential learning.

The following European Commission initiatives should be continued and expanded:

- Digital Skills and Jobs Coalition,[25] ensuring all age-groups, not only young people, are targeted.
- In consultation with business, additional competency frameworks beyond the Framework for Developing and Understanding Digital Competence in Europe.[26]
- Programmes that target skills development related to technologies driving the Fourth Industrial Revolution (additive manufacturing, robotics, AI, big data, etc.).
- Through the EIB and European Fund for Strategic Investments, funding to boost private-sector investment in skills development.

NON-COGNITIVE SKILLS DEVELOPMENT

Employers need a workforce with inter-disciplinary profiles (the ability to combine work across different fields) and transferable skills such as creative and critical thinking, problem solving, adaptability, curiosity and learning and the ability to work in a team. However, current education systems do not place sufficient emphasis on developing these skills in curricula and these skills are not part of formal assessment methods.

The following European Commission initiatives should be continued and expanded:

- European Reference Framework for Entrepreneurship.[27]
- Development of social-emotional skills for the labour market, such as the practice model proposed by the World Bank, 2014.[28]

Improving the quality of the teaching profession is key to supporting the general skills development of the European population. Specific investment is needed if teaching is to become a high-quality, highly-respected and productive role. Educational institutions and Member States need to ensure that the quality and standards of the teaching profession are improved and to involve teachers in their own professional development.

FINLAND:
Future-ready foundational education

The Finnish education system is based on a number of core principles:

- Emphasis on teacher education (considered an elite profession).
- Light-touch approach to standardised curricula (trusting high-quality teaching delivery).
- Emphasis on inclusion and diversity.
- Regular updates to the national curricula.
- Even levels of school quality, de-emphasising the importance of testing selection.

Finland has recently introduced 'phenomenon-based' teaching – a move away from 'subjects' and towards inter-disciplinary topics. This more collaborative approach allows students to be involved in curricula design and aims to equip children with the skills necessary to help them flourish in the 21st century, such as working across subjects and applying critical thinking.

US:
New York innovation zone

The New York City Department of Education's innovation zone (iZone) initiative assigns a small number of schools with 'lab' status and tasks them with the job of reinventing education. These schools are prototypes for new models of learning.

INDIA:
ICT and digital skills development

The National Association of Software and Service Companies (NASSCOM) is a public-private partnership for the ICT industry. The ICT Sector Skills Council (SSC) works in partnership with the country's National Skills Development Corporation. The SSC is identifying future skills requirements for ICT across industries, and NASSCOM works with members and academic institutions to create pre-defined qualification standards that are transferrable across sectors, and validated and modified annually. The NASSCOM Foundation, in partnership with NGOs and the Government of India, has also built National Digital Literacy Centres across the country to support training in digital literacy.

RECOMMENDATIONS

3 EXPANDING THE SIZE OF THE WORKFORCE

The European Commission and Member States must work together to encourage people back into the workforce, specifically:

Women
Women represent 60% of new graduates, but their employment rate remains below that of men. Women tend to work in different sectors to men, in jobs more susceptible to automation.[29] It is critical that the EU implement the Women in Digital strategy outlined before the European Parliament in 2018,[30] as well as other initiatives to increase gender diversity. However, its focus should be expanded to include women of all ages, not just those at school-level.

Younger workers
Younger workers without the requisite experience should also be encouraged into the workforce. Member States must continue to support the Youth Guarantee with policy guidance and financial support from the EU.

Older workers
Older workers must be supported more, for example by establishing a transition guarantee (including policy guidance and financial support) and the equivalent of the European Alliance for Apprenticeships to put more focus on apprenticeships that facilitate work-to-work transitions (not only school-to-work transitions).

Low-skilled and long-term unemployed
Low-skilled and long-term unemployed people also need assistance. Europe must continue to strengthen the foundation created by programmes focused on under-skilled individuals, including upskilling pathways and upskilling long-term unemployed individuals. Many of those already in the workforce lack both the confidence and the capability to make the switch.

GERMANY:
Youth at Work!
Close cooperation between government, local employers and education providers created a programme that helps young people make the transition from education to employment, and aligns the support provided by each stakeholder to avoid gaps. The programme includes learning about work as part of regular schooling and supports young people during vocational training.

US:
Skills and jobs development in Detroit
Through the Detroit Jobs Alliance, a non-profit community organisation, public agencies, education and business are working together to create better opportunities for the community through training. This is a collaborative model aimed at creating a collective impact. Specifically, business and government representatives work together to bridge Detroit's digital divide in vulnerable populations.

UK:
Attracting women and minority ethnicity Londoners into digital careers
This programme, funded through London Enterprise Panel and the European Social Fund, offers free industry-approved digital skills training as well as training on gender equality to more than 1,000 people, with a focus on those from diverse ethnic and disadvantaged backgrounds. The programme encourages industry to take a greater role in developing talent and potential, and also offers training for 400 teachers and training providers to help them improve their digital skills and confidence.[31]

4 SUPPORTING BUSINESS SPONSORED PATHWAYS THAT LEAD INDIVIDUALS TO JOBS

To efficiently and effectively match people with employment opportunities, the European Commission and Member States also need to implement policy in the following areas:

1 Recruitment information
We need better coordination between public employment services to provide information on the availability and suitability of the potential applicant pool available. This requires information on the skills employers need and how this compares with the skills of jobseekers.

2 Education and qualification information
Organisations must be able to provide information on the mix of knowledge, skills, competencies and attitudes they need from education and VET programmes. They must become more involved in the design of curricula and take an active part in assessing learning outcomes. In particular, policy-makers should develop quality-assured qualifications that certify the specific skills needed.

3 Quality and reputation of VET/work-based learning
The quality of VET programmes is uneven: employers and industry bodies do not have sufficient input into the design of technical qualifications, and training institutions do not have sufficient access to high-quality teachers, facilities and infrastructure. The European Commission must play a central role in improving the social status of VET by ensuring employer input in both the design and delivery of programmes, improving certification, and encouraging policy-makers, investors and politicians to create a more even balance between academic and VET education reform and funding.[32]

SCOTLAND:
Regional skills assessments
In Scotland, the Modern Apprenticeship programme ensures that apprenticeships are closely linked to areas of economic growth and job opportunities.

GERMANY:
Dual-path VET
In Germany, the Vocational Training Act provides for 500,000 company-based training contracts a year. Apprentices divide their time between classroom instruction and on-the-job training, usually spending four days a week at a company acquiring practical skills and real-world experience. During the apprenticeship, trainees are paid for their time.

SWITZERLAND:
Public-private partnerships
Swiss vocational training involves three to four years of training combined with classroom instruction. An apprenticeship salary is paid for the time spent at work. After graduation, in addition to working, apprentices can earn a university degree or take additional classes to obtain further certifications.

UK:
Apprenticeship levy
The apprenticeship levy came into effect in 2017, impacting all organisations with a salary bill over £3 million per year. The levy funds apprenticeship training and assessment with allowances given to organisations that run their own apprenticeship programmes. The UK government adds 10% to the funds paid by an organisation. Almost 900,000 funded apprentices participated in the 2015 to 2016 academic year, and the government has set a target of 3 million new apprenticeships by 2020.

RECOMMENDATIONS

5 **CREATING A RICH AND SUSTAINABLE TALENT ECOSYSTEM**

Most social safety nets, labour statistics, financial services and adult education systems in advanced economies are unprepared for a growing de-formalisation of work. The European Commission can play a critical role in creating an open and fair talent ecosystem, benefitting both workers and businesses alike. As part of the follow-up to the European Pillar of Social Rights, the European Commission has adopted a proposal for a new directive for more transparent and predictable working conditions across the EU. This directive provides the opportunity for the Commission to create an effective talent ecosystem, which should include the following areas:

1 Creating comprehensive data and standards on the different forms of work.

2 Providing tools and information to help workers and individuals to be self-resilient.

3 Providing access to upskilling and reskilling that have currency in the job market by:

- Facilitating intra- and cross-industry collaborations to provide training and benefits, especially where small companies might be less able to invest in reskilling given lack of budget.
- Providing incentives to individuals to 'own' their learning path (eg, through individual training accounts and credits).
- Moving beyond multi-year degrees to a system of accreditation based on 'micro-credentialising'.
- Providing standardised certifications for such programmes to enhance their recognition and return.

4 Developing new partnerships and mechanisms to connect workers with jobs and jobs with workers.

5 Providing a legislative framework that eases the transition from employment to freelancing by providing more security to gig workers, for example by establishing a framework where benefits attach to the individual worker, following the worker from job to job across contracts.

FRANCE:
CPA – Personal Activity Account
The Personal Activity Account (CPA) allows working people to call upon their social benefits (training, support to start a business, shift to part-time work, early retirement) in the forms of points, regardless of employment status. These points are adjusted to correct for different inequalities.

US:
Freelancers Union
The Freelancers Union addresses the needs of freelance workers in the US. It includes a transferable benefits network for members, provides advocacy services, and allows members to purchase benefits such as health insurance at a group rate.

GERMANY:
Rating of online talent platforms
Fair Crowd Work Watch is an online platform created by the IG Metall labour union to provide crowd-workers with a neutral space to exchange experiences with different online talent platforms and provides a repository of applicable laws and regulations.
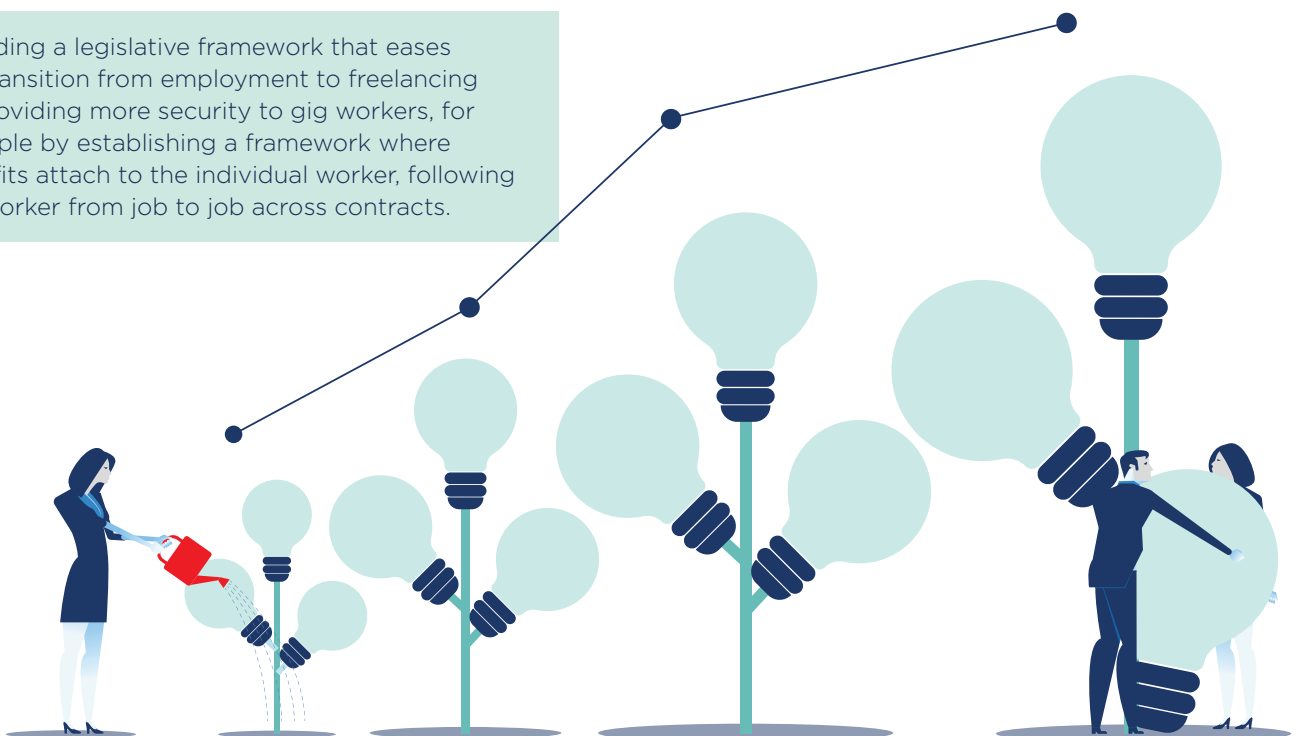
6 SUPPORTING BUSINESS SPONSORED RESKILLING AND UPSKILLING

Today, children and young adults are the largest recipients of publicly-funded education. The focus of education policy and investment must expand to include workers of all ages. Adult learning systems are often niche and not systemic. A systemic, collective training system is needed – one that is capable of reskilling and upskilling whole workforces on an ongoing basis.

The Pillar of Social Rights rightly recognised lifelong learning as a basic right for European citizens. The European Commission and Member States should build upon this initiative to prioritise adult learning policies, funding and reform, as this is one of the biggest gaps in the future skills agenda. Areas for attention include:

1 Shifting the default from early education only to learning at all stages of life. This includes changing the rhetoric around schemes (eg, moving from 'education for employment' to 'education for employability').[33] Policy is needed to ensure that VET schemes and other forms of education are applicable for all ages and experiences.

2 Creating a more robust system of 'micro-credentialing' of skills and experiences. The European Commission should set up competency-based credentials and recognition systems based on input from industry, business, unions and education systems.

3 Recognising the training and skills development that occurs inside companies (eg, courses, mentorship, and practical experience). Skills development in this way needs official recognition by labour ministries. This would add value to these investments and incentivise companies to increase the availability of these programmes.

4 Transferring ownership of learning to workers/learners, (eg, through individual training accounts). This should be coupled with stronger employer incentives and support, as employees juggle the tension between short-term efficiencies of productivity and long-term intellectual growth.

5 Creating a system that encompasses all formats of learning, including informal, digital, self-paced, community-based and workplace learning and co-funded colleges.

6 Supporting work-based learning tailored to specific organisational requirements. Policy is needed to encourage and foster the role of the private sector in providing training through company academies. Financial incentives could include tax incentives, grant schemes for enterprises, loan schemes, subsidies for individuals or enterprises, learning accounts and training funds.[34] As these areas are complex, the European Commission has a pivotal role in providing a mechanism for Member States to learn from each other's practices so that relevant experiences (for instance in lifelong learning and long-term employability) can be adapted to national characteristics.

SINGAPORE:
SkillsFuture initiative

SkillsFuture, an initiative by the Ministry of Manpower in Singapore, seeks to develop skills by providing tailor-made training courses and fostering a culture that supports lifelong learning. Every Singaporean above the age of 25 has been given a S$500 credit to pay for approved training courses. In addition, generous subsidies of up to 90% are available for Singaporeans aged 40 and over. The programme currently has a budget of S$600 million a year, due to rise to S$1 billion within three years.

UK:
Offering apprenticeships to all

Utility company Centrica removed the age limits for its apprenticeship programme in 2006, and since then older applicants have been encouraged to apply. Centrica actively recruits older workers and continually invests in developing employees' skills. The company's graduate recruitment programme also seeks to include mature graduates.

FRANCE:
Commitment to lifelong learning

All private-sector employees in France have a personal training account which they retain even when they change jobs or become unemployed. Courses must meet the anticipated needs of the economy and benefit the employee by safeguarding their career path. The list of recognised qualifications is set by social partners and sector representatives.

The GRETA network involves public educational establishments (schools and general, vocational and technical colleges) that group together depending on their geographical proximity and pool their skills to provide ongoing training for adults.

In addition, the Ministry of Labour issues a certificate for internal company training. Participating employees appear in front of a panel or jury to demonstrate newly acquired skills through a testing method, after which they receive a certification equivalent to that of a university.

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