DELIVERING DIGITAL SKILLS
A guide to preparing the workforce for an inclusive digital economy

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About this guide 4

Introduction
  Why governments should address the need for digital skills 7
  Five barriers to upskilling the workforce for digitalisation 12
  Nine steps to an inclusive and responsive learning ecosystem 14

Digital skills provision in practice: Examples from around the world 16
  The Additional Qualifications for Digital Competences Programme 18
  Digilyft Kickstart 20
  General Assembly 22
  Good Things Foundation 24
  Google Digital Garage 26
  Grande École Du Numérique 28
  SkillsFuture Singapore 30
  Skills Plus 32
  Social Builder 34
  Unionlearn 36

Conclusion: What we’re doing next and how you can get involved 38

Methodology, bibliography and acknowledgements 40
Who is this guide for?

**Policymakers**

Around the world, governments have begun to recognise the urgent need for adults to have better access to learning throughout their careers to ensure that they don’t get left behind, and are able to reap the rewards of digitalisation.

This guide has been created to help policymakers who have been tasked with finding ways to upskill the workforce.

How can this guide help you?

**You’ll be inspired by existing initiatives**

This guide includes ten case studies from around the world that have been designed and implemented to provide digital skills to adults. Each one contains insights that can be used to address your own policy challenge.

**It will help you to plan your policy or programme**

By identifying the key elements of an inclusive and responsive skills ecosystem, we provide a checklist of areas to explore and address when designing policy for digital skills.

**It gives you a framework to guide your collaboration with stakeholders**

You can use the framework in this guide to identify who you might partner with to deliver key services which support upskilling and reskilling.
In this guide, you’ll discover...

Five barriers to upskilling the workforce - pg 12
The challenges you need to keep in mind when designing policy.

Nine steps to an inclusive and responsive skills ecosystem - pg 14
The components you should combine and support to make sure the right skills are taught to the right people, in the right way.

Initiatives that have already helped people to learn digital skills - pg 16
Case studies of policies and programmes which highlight effective approaches that support upskilling and reskilling.

Valuable resources for further reading, indicated by this symbol -
Introduction
You have undoubtedly experienced the benefits of rapid digitalisation

The internet, which less than two decades ago was accessible only through the slow process of wiring and firing up a 52Kbps dial-up modem, is now frequently wireless, always connected and lightning-fast.

This high-speed development has touched the lives of people across the planet. Globally, it is estimated that ‘nearly half of the world’s population (that is, 3.7 billion people) make use of the internet’.

The capacity of digital tools to enhance our lives has led the internet to become the primary medium through which many of us read news, communicate with friends and colleagues, manage our finances, organise our travel, share our photographs, go shopping, submit our tax returns – and so on.

In business and the economy, digital transformation promises numerous rewards

The use of digital tools within workplaces has been shown to increase productivity, catalyse innovation, and improve the lives of workers.

We have seen how digital technologies can be used to launch global companies, grow incumbent firms, and create demand for new roles, such as data scientists and artificial intelligence specialists.

Looking forward, the development of Industry 4.0 holds the promise of more precise manufacturing, less strenuous working conditions, and increased efficiency.

For governments wishing to steer their countries towards a prosperous future, digitalisation represents a valuable opportunity for society and the economy.

Szabó, F. (2017) ‘Readie explainer: Industry 4.0’
But the benefits of digital transformation are accompanied by urgent challenges

The term ‘transformation’ itself articulates a key issue: the continuous development of digital technology is changing the world quickly, often in dramatic and unexpected ways.

New problems frequently emerge as a result of digitalisation, and existing inequalities are being intensified. These include the well-publicised challenges to jobs and the labour market. Following Osborne and Frey’s seminal 2013 paper, ‘The future of employment: how susceptible are jobs to computerisation?’ many reports have described the pressing threats that digitalisation and automation present to existing labour markets, and predicted that the world of work is set to experience seismic shifts.

Since even conservative projections anticipate that automation will have wide-ranging and potentially rapid effects on jobs, it is clear that governments should act now to foster a digital economy that is inclusive, humane, and supported by appropriately skilled workers.
Workplaces need skilled workers to survive in a constantly changing digital environment

If businesses and organisations cannot keep up with technological development, they risk losing customers and revenue to digitally-empowered competitors. To drive growth and remain resilient, employers need workers who can use digital tools efficiently and creatively, and adjust to the accelerated pace of change that accompanies persistent innovation.8

The demand for ICT specialists, such as data scientists and web developers, is therefore growing in organisations both within and outside of the technology sector. These occupations are forming a core part of the economies of the future.9

Yet ICT specialists are not the only workers who need digital skills. Whatever their role, people need to update their skills to deal with the wide-ranging transformations brought about by digitalisation.10

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The supply of digital skills is lagging far behind demand

38% of workplaces in Europe report that a lack of digital skills is harming their business.11

40% of employers claim that they struggle to find candidates for ICT roles.12

40% of people who use software at work do not know how to do so effectively.13
People who do not adapt to the dynamic demands of digitalisation will be left behind

Technological advancements will continue to change the world of work in ways that are not easy to predict. To keep up with and benefit from the opportunities that digitalisation offers, we all need to upskill throughout our careers. Job displacement arising from automation will mean that many people need to completely reskill to find a new role.

Some of the skills we will need to learn are technical, but it is important to note that people also require other ‘soft’ competencies, such as collaborative problem solving and a learning mindset, to thrive in a digital environment and complement the capabilities of computers.

Those that don’t learn new skills face exclusion from the workforce: according to one recent survey, over half of people with no ICT experience are now unemployed.

Definitions

**Upskilling** means the process through which an individual learns the skills to adapt to their current role as it is transformed. As digitalisation continues to change the work environment and economy, everybody will need to upskill frequently.

**Reskilling** refers to the process of preparation for work in a new role. People who do this will still need upskilling opportunities throughout their careers, as these new roles will also be subject to digital transformation.

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Mulgan, G. (2016) ‘Adult education will move from the bottom to the top of the policy agenda in 2017.’
Governments need to make sure that their country’s workforce has the right skills to contribute to the evolving digital economy

If citizens don’t develop the competencies they need to work in a continuously changing digital environment, countries risk high unemployment, increased inequality, and reduced growth.

Around the world, governments, NGOs and businesses have begun to recognise that adults need better access to learning throughout their careers.18

Through a variety of programmes, and often in collaboration, they are delivering services and interventions which support people in work to upskill and reskill as digital transformation progresses.

Drawing insights from initiatives around the world, this report provides a guide to the key steps needed to upskill and reskill workforces for digitalisation.

Policy must address five common barriers to learning

In an ideal world, businesses and individuals would recognise the importance of new skills, and have the resources to prioritise continuous learning.

In reality, governments need to overcome a number of obstacles if they are to foster a digitally skilled workforce.

Taking a broad view, Readie has identified five barriers that policy teams are likely to encounter as they design and implement policies to improve the provision of learning for adults in work.
Traditionally, most learning has taken place in the early part of a person’s life. With the changing demands of continuous technological development, however, individuals now need to take time to update their skills throughout their lives. In many societies, this will require a shift in the culture of work and learning.

Many people, from store managers to delivery drivers, do not see a need to learn new skills, despite the opportunities they afford. According to OECD analysis, this lack of awareness about the need for training is particularly acute among workers in occupations that are very likely to experience large changes as a result of digitalisation.

In order to prioritise the learning and use of digital skills, organisations often need to reform many of their processes. These changes require strong leadership and clear direction from those at the top.

Firms are organised to prioritise the delivery of goods and services in response to demand, and can struggle to divert resources to upskill their staff.

If they are not supported by their employers or others, individuals are likely to lack the time and money to take part in training outside of work.

Individuals and employers often need support to identify the courses which are relevant to them.

To meet the demand for training, effective courses must be available that teach appropriate skills and are easy to access.

<table>
<thead>
<tr>
<th>FIVE BARRIERS TO UPSKILLING THE WORKFORCE FOR DIGITALISATION</th>
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<td><strong>Culture of learning</strong></td>
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<tr>
<td><strong>Motivation</strong></td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
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<tr>
<td><strong>Resources</strong></td>
</tr>
<tr>
<td><strong>Access to training</strong></td>
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To become motivated to invest in upskilling, individuals and businesses need to recognise the benefits of learning the skills to adapt for digitalisation, and understand the risks of holding back.

To develop a digitally skilled workforce, governments should facilitate learning ecosystems for people in work that:

- Identify the skills they need
- Address the barriers that inhibit them from upskilling
- Help them to adapt to continuous change

We have identified nine elements that are crucial to such a system.

In practice, governments or individual organisations do not need to deliver all of these elements alone. The case studies in this guide show how public and private stakeholders often work together to create dynamic learning systems that are inclusive and responsive to changes to jobs.

In such partnerships, governments can use their powers to set standards and targets, coordinate collaboration and information sharing, ensure that programmes are properly evaluated, and identify where further funding and investment should be focused.
Teams wishing to foster the development of a digitally skilled workforce can use this framework as a checklist to plan policy for skills provision. The framework may also be used as a tool to discover gaps in the current learning system, and to identify other teams and organisations with whom it may be effective to collaborate.

**SKILLS FORECASTING**
To make sure that every individual learns skills that are relevant and useful, those designing curricula and delivering training need to forecast skill demands through up-to-date labour market data.

**CURRICULUM DEVELOPMENT**
The rate of change for digital technology and the skills individuals require means that curricula should be regularly evaluated and updated.

**PATHWAY GUIDANCE**
People need help to find and choose high quality training that fits with their career aspirations and the needs of the labour market.

**ASSESSMENT**
Different people have different abilities, and informal ‘on-the-job’ learning means that many have skills that they have not recognised. For an individual to get the right type of training, they need to identify what capabilities they already have, and understand where there are gaps in their skills.

**FUNDING**
Learning puts a strain on the already pressured resources of individuals and businesses. Many will need financial support or incentives to undertake and complete training.

**WRAPAROUND SUPPORT**
Many individuals need additional support and services that indirectly help and motivate them to complete their training. Such support may include childcare, coaching, networking, and time off from work.

**TRAINING DELIVERY**
Without the right training, people in work will not learn the skills they need. They need access to relevant, high quality training opportunities that fit their lifestyles and preferred approaches to learning.

**ACCREDITATION**
Learners need to know which courses to trust, while employers want to know that candidates and employees are competent in the skills they claim to have. Third party recognition is often necessary to provide this assurance.

**CAREER SUPPORT**
Individuals who have been reskilled will often need help to enter a new sector and put their skills to use.
Digital skills provision in practice
Examples from around the world
Ten case studies to inform your planning

The case studies in this guide present a catalogue of methods that address the nine key components of the learning ecosystem. They show how governments and organisations can work together to create upskilling and reskilling opportunities for people in work.
THE ADDITIONAL QUALIFICATIONS FOR DIGITAL COMPETENCES PROGRAMME

OBJECTIVE
Help workers develop digital skills by undertaking innovative practical projects

LOCATION
Berlin

TYPE OF PROGRAMME
Publicly funded

WHO THE TRAINING IS FOR
Apprentices and trainers (currently), professionals (planned)

COST
The cost of the programme has not yet been made public

LAUNCHED
2016

MAIN BARRIERS ADDRESSED

ABOUT THE ADDITIONAL QUALIFICATIONS FOR DIGITAL COMPETENCES PROGRAMME

The Additional Qualifications for Digital Competences programme aims to provide firms with the competencies they need to remain competitive in the digital economy, and give employees digital skills that they can apply and advance throughout their careers. Delivered by a consortium of two partners, the ABB Training Center Berlin GmbH and k.o.s GmbH, this government pilot is focused on apprentices, trainers and qualified employees. In the first phase of the project apprentices were the main target group.

In this approach, apprentices are challenged to create a digital innovation that adds value to their company, and given guidance over three months through a combination of workshops and online support. Completed projects include an internal server to store data securely, and a company intranet for apprentices. This method centres on self-organised learning, collaboration and creativity as core digital competencies, and lays the foundations for personal development while delivering tangible value through digitalisation.

HOW IS GOVERNMENT INVOLVED?
The programme was set up by the Berlin Senate as part of its Work 4.0 strategy, which aims for Berlin to become a model city for innovation in work. The project is supported by The Federal Ministry of Labour and Social Affairs, which has its own initiative for Industry 4.0.

OUTCOMES SO FAR
• 13 companies, 25 apprentices and 12 trainers have so far taken part in the pilot. Surveys of participants have shown high satisfaction with the process

NEXT STEPS
• Evaluate the pilot, and expand the project to establish a standard training offering

CHALLENGES
• Despite recognising a need for upskilling their workforce, firms are often hesitant to commit resources to do so

OUTCOMES SO FAR
• 13 companies, 25 apprentices and 12 trainers have so far taken part in the pilot. Surveys of participants have shown high satisfaction with the process

NEXT STEPS
• Evaluate the pilot, and expand the project to establish a standard training offering

WHAT YOU CAN LEARN FROM THE ADDITIONAL QUALIFICATIONS FOR DIGITAL COMPETENCES PROGRAMME
• Practical projects are an effective way for learners to develop a range of digital skills and deliver immediate value to their employers
• Employers recognise a need for training, but can struggle to divert resources to enable it
• Certification can make training more attractive for individuals and companies
WHAT THE ADDITIONAL QUALIFICATIONS FOR DIGITAL COMPETENCES PROGRAMME DOES

SKILLS FORECASTING
Skills identified through partnership with firms
Appropriate digital skills were identified through literature review and interviews with experts and local firms.

A combination of social and technical skills
36 key skills, including 12 social skills, are grouped under 5 modules covered by the programme:
- Foundations of digitalisation
- Learning and working in a digital world
- IT competencies
- Handling of data
- Systems and processes

ASSESSMENT
Self-identification of skills gaps through practice
Learners naturally identify gaps in their skills when they reach an obstacle in the development of their project.

CURRICULUM DEVELOPMENT
A practical, learner-led approach
The curriculum has been developed following the Social Workplace Learning Model. Its aim is to support learners to develop a digital project that adds value to their employer’s organisation. By challenging learners to create their own innovation, this non-didactic approach fosters the development of both technical and soft skills.

FUNDING
Government funded, free to firms and learners
The pilot is currently funded by the Berlin Senate. ABB provides resources via its own Training Centre. The long term funding is to be agreed after the pilot.

WRAPAROUND SUPPORT
Employer support
The initiative places employer support at the centre of the approach. This ensures that learners have the confidence to proceed with their projects alongside their day-to-day work.

TRAINING DELIVERY
Regular workshops
Training is delivered over a 3 month period through 4 workshops, which are between 4 and 6 hours long. The workshops include up to 15 apprentices from different companies. In Berlin, training has taken place in the ABB Training Centre.

Online collaboration
Between workshops, individuals pick a partner within their organisation to work on material provided via an online platform built using Moodle.

ACCREDITATION
Third-party accreditation
Accreditation is provided by the Berlin Chamber of Commerce. Against the expectations of the training provider, almost all participants signed up to take the additional exam required for the qualification.

Presentation-based examination
To gain the qualification, participants must give a 10 minute presentation of their project and answer 20 minutes of questions regarding its details. They are also questioned on two of the the modules covered in the programme, one of which has to be ‘Handling of Data’, due to the importance of that skill.
**OBJECTIVE**
To increase the use of digital technology among SMEs in the manufacturing industry

**LOCATION**
Sweden

**TYPE OF PROGRAMME**
Public partnership

**WHO THE TRAINING IS FOR**
Managers within SMEs in the manufacturing industry

**COST**
€2 million (from August 2017 to December 2018), funded by Tillväxtverket, the Swedish Agency for Economic and Regional Growth

**LAUNCHED**
A pilot ran during 2016-2017, and the programme is expanding during 2018

**MAIN BARRIERS ADDRESSED**
- Leadership
- Motivation

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**DIGILYFT KICKSTART**

**WHAT YOU CAN LEARN FROM DIGILYFT KICKSTART**
- Foster digital skills among SMEs by raising awareness and understanding at a leadership level
- Tailor training programmes to the needs of specific industries and business types by including relevant examples and opportunities to collaborate with similar companies
- Recognise that SMEs often lack time and resources to develop a digital strategy and may need external support to do so

**ABOUT DIGILYFT KICKSTART**
Digilyft is an initiative from the Swedish Agency for Economic and Regional Growth (Tillväxtverket) that aims to increase the use of digital technology in regional SMEs. In partnership with industry bodies, it delivers ‘Kickstart’ workshops over a number of days to motivate leaders in the Swedish manufacturing industry to adopt digital processes. The first full-day session introduces leaders to the business opportunities afforded by digitalisation. During two subsequent half days, leaders focus on their own companies and devise a plan for incorporating digital technology into their business.

**HOW IS GOVERNMENT INVOLVED?**
The ‘Kickstart’ initiative is supported by Tillväxtverket, the Swedish Agency for Economic and Regional Growth. It is also aligned with the Swedish government’s ‘Smart Industry’ strategy.

**CHALLENGES**
- Time is the most precious resource for SMEs. It is a challenge to motivate SME leaders to commit to attending workshops
- Some business leaders see digitalisation as a ‘buzzword’, and do not wish to engage with it

**OUTCOMES SO FAR**
- ‘Kickstart’ workshops have helped SMEs embark on digitalisation projects and develop new strategic outlooks.
- The programme has prompted businesses to collaborate and support each other to digitalise

**NEXT STEPS**
- Digilyft is expanding the ‘Kickstart’ programme to engage more than 1,000 companies by the end of 2018

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**LEADERSHIP**
- Motivation

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WHAT DIGILYFT KICKSTART DOES

LABOUR MARKET FIT
LEARNER FIT
DELIVERY SUPPORT
CAREER PASSPORT

SKILLS FORECASTING
CURRICULUM DEVELOPMENT
PATHWAY GUIDANCE
ASSESSMENT
FUNDING
WRAPAROUND SUPPORT
TRAINING DELIVERY
ACCREDITATION
CAREER SUPPORT

CURRICULUM DEVELOPMENT
Co-designed for specific SME learners
Digilyft’s ‘Kickstart’ workshops are designed and delivered in collaboration with industry partners, researchers and practitioners. The curricula are tailored to the needs of SMEs in the region, and inspirational stories from local businesses are integrated into the workshops.

PATHWAY GUIDANCE
Support to implement and develop digital skills and innovations
In the third ‘Kickstart’ workshop, business leaders are made aware of external resources, such as funding, which can support them after the programme.

FUNDING
Funded by multiple partners
Workshops are free for participants to attend. ‘Kickstart’ is funded by Tillväxtverket in partnership with industry bodies such as The Association of Swedish Engineering Industries (Teknikföretagen), IF Metall (a trade union) and the Research Institutes of Sweden.

TRAINING DELIVERY
Workshops are tailored to SMEs
The ‘Kickstart’ workshops take place over one full day and two half days to make them accessible for business leaders. They focus on what is possible and how companies can begin their digitalisation journeys, showcasing inspirational examples from local businesses and facilitating collaboration between SMEs.

Through homework activities, participants are encouraged to apply this knowledge to their own companies.
GENERAL ASSEMBLY

OBJECTIVE
To train individuals for digital specialist roles in response to labour market demand

LOCATION
Global

TYPE OF PROGRAMME
Private

WHO THE TRAINING IS FOR
Independent individuals, employees

COST
Approximately £3,000 (€3,400) per learner, per course

LAUNCHED
2011

MAIN BARRIER ADDRESSED

ABOUT GENERAL ASSEMBLY
General Assembly is a private company that provides training to individuals to create a supply of job-ready digital specialists in response to labour market demand. Learners are trained through short but intensive full- and part-time courses. The organisation works with over 2,500 corporations to ensure that the skills they teach are relevant to labour market demand. They also provide services to enterprise clients who need to reskill their current employees for digital specialist roles, such as web development and data science.

HOW IS GOVERNMENT INVOLVED?
General Assembly is a private, profit-making company, but has partnered with New York City’s Tech Talent Pipeline to provide a full-time 14-week programme of training in web development to New York City residents. Participants are trained to entry-level standard and helped to find an internship in the city.

CHALLENGES
• General Assembly admits that their training is only effective when a student is motivated to learn, and has the wraparound support to do so

OUTCOMES SO FAR
• Over 35,000 global alumni
• 99% of graduates get a job within 6 months of beginning their job search, based on verified placement data from the General Assembly 2016 outcomes report.
• More than 80 companies have used the online learning platform, ‘myGA’, to upskill over 24,000 employees

NEXT STEPS
• To partner with more social enterprises and charities to provide training to historically excluded groups
• Increased work with employers to upskill their present staff

WHAT YOU CAN LEARN FROM GENERAL ASSEMBLY
• Ensure that the skills taught are relevant for the local job market by collaborating closely with employers
• Individuals can be reskilled for digital specialist roles in a short period of time (~3 months), and at a lower cost to companies than hiring new people
• Build employer and consumer trust by making learning outcomes transparent. This also reduces the need for formal accreditation

ACCESS TO TRAINING
WHAT GENERAL ASSEMBLY DOES

SKILLS FORECASTING
Uses job advertisement data
General Assembly identifies in-demand skills in partnership with Burning Glass, a company that analyses live job advertisements.

Measures employment outcomes to gauge demand
By measuring alumni employment outcomes, General Assembly is able to gauge demand for specific digital specialists.

Standards Boards to identify skills
General Assembly has set up two Standards Boards with leading companies to identify the skills needed for digital marketing and data science.

CURRICULUM DEVELOPMENT
Revised twice a year
An ‘agile instructional design process’ is used to update each course at least twice per year, in response to technological development and labour market demand.

PATHWAY GUIDANCE
A guidance team
The General Assembly admissions team helps individuals to choose a course in preparation for their career development.

ASSESSMENT
Online learning and assessment platform
The ‘myGA’ learning platform provides online, assessment-led guidance to help employees of enterprise clients identify the skills they need. General Assembly then creates a learning programme aligned with the client’s goals.

FUNDING
Scholarships from partner organisations
General Assembly has partnered with private businesses and government agencies to offer 100% fully-funded scholarships to individuals in disadvantaged and under-represented groups.

Income share loans to improve access to training
In partnership with the NGO Opportunity@Work, General Assembly is launching an income share agreement programme. Students pay nothing upfront for training, but repay the fee as a portion of their income over time when they find a job.

TRAINING DELIVERY
Live training preferred
General Assembly champions immersive, face-to-face training, but online courses are also available which combine video instruction and live one-to-one mentoring.

Fits around different schedules
Learners can choose full-time or part-time courses to fit in with their own schedules.

Practitioner-led training
Instruction is provided by a faculty of practitioners who have commercial experience of the skills they are teaching.

ACREDITATION
Trust through collaboration
General Assembly is a licensed post-secondary education training provider, and works closely with employers to shape courses which meet their skills needs.

Transparent outcomes demonstrate effectiveness
Transparent employment outcomes mean that individuals and employers can evaluate the effectiveness of General Assembly’s courses.

CAREER SUPPORT
Career support team for better employment outcomes
A dedicated GA Outcomes team helps course graduates to find jobs through General Assembly’s network of hiring partners and alumni. They provide services which include career development workshops and interview training.
GOOD THINGS FOUNDATION

OBJECTIVE
“To support digitally and socially excluded people to improve their lives through digital”

LOCATION
United Kingdom

TYPE OF PROGRAMME
Independent charity

WHO THE TRAINING IS FOR
Individuals lacking basic digital skills

COST
£15 million (approximately €17 million) over 5 years for the Future Digital Inclusion programme

LAUNCHED
2010

MAIN BARRIERS ADDRESSED

ABOUT GOOD THINGS FOUNDATION
Good Things Foundation is an independent charity that supports a network of over 5,000 Online Centres and digital inclusion practitioners across the UK to help people acquire basic digital skills. Their work includes the research, design and evaluation of learning tools and resources, which enables the Online Centres Network to become more efficient and reduce costs.

Paid and volunteer tutors in the network are given training, guidance and access to Good Things Foundation’s online learning platform, ‘Learn My Way’. The platform helps instructors to assess learners’ skills needs, and makes it easier to teach basic digital skills.

HOW IS GOVERNMENT INVOLVED?
Good Things Foundation facilitates projects through the Online Centres Network on behalf of multiple UK government departments and local authorities, and its ‘Future Digital Inclusion’ programme is funded by the Department for Education. Good Things Foundation is also a member of the UK government’s national Digital Skills Partnership, a board which aims to facilitate sharing of best practice approaches to boost skills for the digital economy.

CHALLENGES
• Good Things Foundation has found that it is important for learners to use digital skills frequently in their daily lives. Without practice and continual development, skills can risk becoming redundant
• Support services are an important element of delivering effective training, but are often not factored into budgets

OUTCOMES SO FAR
• Over 2.3 million people have been helped to use the internet and learn basic digital skills since April 2010

NEXT STEPS
• Good Things Foundation aims to continue growing its reach and impact through more work with UK government departments, local authorities, and the private sector
• The organisation is expanding internationally, having just begun a project with the Federal Government of Australia

RESOURCES

ACCESS TO TRAINING

WHAT YOU CAN LEARN FROM GOOD THINGS FOUNDATION
• Increase the quality and scale of training by supporting local organisations with learning resources, such as online learning platforms
• Expand the availability of training by encouraging learners to share their skills
• Ensure that digital skills training is effective by factoring ‘soft’ outcomes, such as confidence and wellbeing, into programmes and budgets from the start
**WHAT GOOD THINGS FOUNDATION DOES**

### CURRICULUM DEVELOPMENT

Curricula are co-developed with specialist organisations
Good Things Foundation has developed over 30 basic digital skills courses in partnership with organisations such as NHS England, the UK National Careers Service and the Money Advice Service. They can be accessed through its ‘Learn My Way’ platform and teach skills including using a digital device, jobseeking and accessing public services online.

**Training for instructors helps to expand the network**
Good Things Foundation has also developed a curriculum to train tutors and volunteer Digital Champions.

### PATHWAY GUIDANCE

**Trusted guidance from trained instructors**
Tutors in Online Centres and Digital Champions work closely with learners to identify their skills needs and gaps in their current capability.

### ASSESSMENT

**Online self-assessment**
The ‘Learn My Way’ platform provides tools for learners to assess their own skills.

### FUNDING

**Facilitates funding for Online Centres**
Good Things Foundation secures and delivers funding for Online Centres for specific projects.

As community organisations, Online Centres can apply for funding from a range of organisations, including other NGOs, national government, and local authorities.

This funding enables them to provide their services free of charge to learners.

### WRAPAROUND SUPPORT

**A person-centred approach leads to better learning outcomes**
Good Things Foundation champions a person-centred, relationship-based model as the key to building confidence and supporting basic digital skills learning.

Online Centres are advised to focus on ‘soft’ outcomes, such as confidence, happiness and wellbeing, before addressing specific digital skills.

### TRAINING DELIVERY

**Blended learning supports tuition**
Training for basic digital skills is delivered through a blended model of online learning with personal support.

Tutors and volunteer Digital Champions are trained to become instructors through webinars, online training, and face-to-face tuition.

### CAREER SUPPORT

**Holistic support to expand the breadth of opportunity for learners**
Many Online Centres provide holistic support and help people to find jobs and move on to further learning.
OBJECTIVE
To help people and SMEs to use the internet more effectively

LOCATION
United Kingdom

TYPE OF PROGRAMME
Private, run by Google

WHO THE TRAINING IS FOR
Individuals and SMEs

COST
Training is free to individuals. Google has stated that the cost to them is ‘multi-millions’

LAUNCHED
March 2015

MAIN BARRIERS ADDRESSED

ABOUT GOOGLE DIGITAL GARAGE
Google Digital Garage offers a wide range of free courses to upskill people at multiple levels of digital competence, with subjects ranging from ‘First Steps Online’ to a 5-week coding course. Training is offered both in person and online, and learners can choose between short single workshops and longer courses consisting of multiple classes. One-to-one mentors provide additional support to help learners answer specific questions.

Launched in 2015, the programme evolved in 2017 with the introduction of physical learning spaces in town centres, known as ‘hubs’, which are open to the public seven days a week. By remaining in a visible position for a year or more, and offering a wide range of courses, Google Digital Garage Hubs have attracted people who may not normally consider looking for digital skills training.

HOW IS GOVERNMENT INVOLVED?
The programme partners with local authorities to identify locations for training hubs. They also provide additional support for jobseekers. The programme’s Public Policy Manager represents the programme in the UK government’s Digital Skills Partnership, a board which aims to facilitate the sharing of best practice approaches to boost skills for the digital economy.

WHAT YOU CAN LEARN FROM GOOGLE DIGITAL GARAGE
- Make training visible and accessible by placing learning centres in town centre locations
- Attract a wide range of individuals to training by creating a diverse set of courses
- Engage more learners by partnering with a recognisable brand

OUTCOMES SO FAR
- Over 200,000 people have been trained through Google Digital Garage
- 88% of SME participants have made changes to the way they run their businesses online
- 68% of learners attribute positive business results to changes made after attending training

NEXT STEPS
- Google Digital Garage plans to produce a framework for collaboration which will help public and private stakeholders to deliver digital skills training at a local level
CURRICULUM DEVELOPMENT
Adapted to local needs
Google's training is developed centrally, but adapted to local needs. For example, in the coastal town of Southend, Google's instructors reference uses of digital technology in the hospitality industry.

Diverse curricula increase reach
As Google has created more course options, they have seen attendance increase, both attracting more unique learners and increasing ‘return customers’.

PATHWAY GUIDANCE
Provides guidance through mentoring
Individuals are given access to one-to-one mentoring in Google Digital Garage Hubs, where programme staff help them to identify the skills they need.

Google has found that mentoring enhances the impact of training, giving learners the confidence to explore more specific questions.

ASSESSMENT
Online self-assessment
The online course in digital marketing offered by the programme has a self-assessment tool for users to check what skills they already have.

FUNDING
Free of charge for learners
The initiative is funded by Google and is free of charge for all learners.

TRAINING DELIVERY
Many topics and training for different schedules
Training is delivered through workshops, courses and one-to-one mentoring at Google’s Digital Garage Hubs, which are open daily.

Workshops cover a variety of topics, from ‘First Steps Online’ to ‘Social Media Strategy’. A longer 5-week course, ‘Intro to coding’, provides training for more in-depth skills.

Online training for digital marketing
Alongside its face-to-face courses, Google has an online library of courses which cover 26 topics relating to digital marketing. These combine animated videos and tests.

WHAT GOOGLE DIGITAL GARAGE DOES

LABOUR MARKET FIT
LEARNER FIT
DELIVERY SUPPORT
CAREER PASSPORT

SKILLS FORECASTING
CURRICULUM DEVELOPMENT
PATHWAY GUIDANCE
ASSESSMENT
FUNDING
WRAPAROUND SUPPORT
TRAINING DELIVERY
ACCREDITATION
CAREER SUPPORT
OBJECTIVE
To ‘meet the growing needs of the digital skills job market’ and promote the participation of under-represented groups

LOCATION
France

TYPE OF PROGRAMME
Public

WHO THE TRAINING IS FOR
Individuals

COST
• €15 million of government seed funding in 2015-2017 (new budget expected for 2018)
• An additional budget of €5 million per annum is provided by the Ministry of National Education for participants’ financial aid
• Additional funding provided by regional governments to support local training programmes

LAUNCHED
2015

MAIN BARRIERS ADDRESSED

ABOUT GRANDE ÉCOLE DU NUMÉRIQUE
Grande École du Numérique makes training for digital specialist roles more accessible by supporting and promoting a network of innovative courses across France. The organisation provides seed funding for courses, endorses them with a ‘label of excellence’ and provides learners with a catalogue of more than 400 training programmes across the country. It aims to respond to the growing need for digital specialists by making training available to those who have limited access to employment.

HOW IS GOVERNMENT INVOLVED?
The Ministry of Education, the Ministry of Labour, the Ministry for Youth and the Ministry of State in charge of Digital Affairs jointly launched Grande École du Numérique in 2015. Government funding is used to provide initial finance for new training programmes, which are further subsidised by funding from regional government. Training for jobseekers is funded by the government agency Pôle Emploi, with additional financial aid for decent living from the Ministry of Education.

CHALLENGES
• To align their training opportunities with labour market demand, Grande École du Numérique needs access to better data about the local demand for entry-level jobs in the digital sector
• The frequent revision of curricula is a challenge for traditional forms of accreditation. Without this, however, it is difficult to convince regional governments and other partners to offer sustainable funding for training

OUTCOMES SO FAR
• 230 training providers and 419 certified training programmes
• Between 8,000 and 11,000 students were trained by the end of 2017

NEXT STEPS
• Further work to gain more knowledge on labour market needs for entry-level jobs in tech
• Developing partnerships with recruiters to place learners into jobs

WHAT YOU CAN LEARN FROM GRANDE ÉCOLE DU NUMÉRIQUE
• Increase the availability and accessibility of training by supporting and promoting a network of high quality local providers
• Ensure that learners in vocational training are adequately supported, by removing financial barriers to their participation
• Use a label of endorsement to shape training providers’ objectives, and provide quality assurance to employers and individuals
WHAT GRANDE ÉCOLE DU NUMÉRIQUE DOES

LABOUR MARKET FIT
LEARNER FIT
DELIVERY SUPPORT
CAREER PASSPORT

SKILLS FORECASTING
CURRICULUM DEVELOPMENT
PATHWAY GUIDANCE
ASSESSMENT
FUNDING
WRAPAROUND SUPPORT
TRAINING DELIVERY
ACCREDITATION
CAREER SUPPORT

PATHWAY GUIDANCE
A national catalogue of quality training makes learning opportunities easy to find
Grande École du Numérique provides a catalogue of short courses (3 to 36 months) in the network, which are organised by region and job category. This gives participants a clear guide to the content, length, career outcomes and local availability of each training programmes.

FUNDING
Seed funding expands the network of training providers
Grande École du Numérique provides seed funding to training programmes within the network. This is only intended as initial support, and training programmes need to develop their own sustainable business models.

Champions access to funding for individuals who need it
People who are reskilling are funded by an industry body known as an OPCA, which redistributes companies’ financial contributions for training. In response to lobbying from Grande École du Numérique, learners in the network also have access to means-tested financial aid from the Ministry of Education.

TRAINING DELIVERY
Promotes training partners to make reskilling accessible
Grande École du Numérique currently has 419 certified training programmes across France, delivered by 230 providers. These programmes use approaches which enhance access and inclusion, for example, by using innovative pedagogy, partnerships and mentoring.

The programmes are identified through calls for proposals.

ACCREDITATION
Provides a label of endorsement
The Grande École du Numérique ‘label’ gives learners confidence in the quality of the training programme, and indicates to employers that alumni have the right skills to be recruited.

For a training provider to be endorsed, they must commit to using digital as ‘a lever for inclusion’, and must reapply for approval every three years.

Grande École du Numérique provides a catalogue of short courses (3 to 36 months) in the network, which are organised by region and job category. This gives participants a clear guide to the content, length, career outcomes and local availability of each training programmes.
SKILLSFUTURE SINGAPORE

OBJECTIVE
To make relevant, high quality training accessible to all citizens, encourage employers to recognise the value of skills, and create a strong culture of lifelong learning.

LOCATION
Singapore

TYPE OF PROGRAMME
Public

WHO THE TRAINING IS FOR
All Singaporeans

COST
S$458 million (€284 million) was provided in direct training subsidies (2016)

LAUNCHED
2016

MAIN BARRIERS ADDRESSED

ABOUT SKILLSFUTURE SINGAPORE
SkillsFuture is an ambitious initiative to provide learning opportunities for all Singaporeans throughout their lives, and help them adapt to industry’s changing needs. It is led by a dedicated organisation, SkillsFuture Singapore (SSG), which was founded in 2016 by the Singaporean government. Since then, it has restructured the nation’s lifelong learning system around the needs of citizens as learners. Through a variety of programmes, SkillsFuture Singapore has built awareness of the need for continuous upskilling among employers and individuals, and given citizens the resources they need to choose and access training that is relevant to labour market demand.

HOW IS GOVERNMENT INVOLVED?
SkillsFuture Singapore is a ‘statutory board’ under the Ministry of Education.

CHALLENGES
• In 2017, SkillsFuture Singapore discovered a number of fraudulent funding claims from individuals. As a result, they have altered their approach and now provide finance to training providers directly.

OUTCOMES SO FAR
• 418,000 individuals took up 950,000 training places in 2016.
• 93.2% of participants applied skills they learned on their training.
• Digital skills have emerged as some of the most popular courses for all age groups.

NEXT STEPS
• As digital technology changes, SkillsFuture Singapore recognises the need to continually update skills frameworks and expand the training that they offer.

WHAT YOU CAN LEARN FROM SKILLSFUTURE SINGAPORE
• Support citizens to upskill and reskill by considering their entire ‘journey’ as a learner, from raising their awareness of the skills they need to accrediting their training.
• Help individuals to choose training and jobs that fit with their career aspirations by providing accessible and up-to-date information.
• Foster a culture that values lifelong learning by engaging with employers and reaching out into the community.

CULTURE OF LEARNING
RESOURCES
WHAT SKILLSFUTURE SINGAPORE DOES

LABOUR MARKET FIT
LEARNER FIT
DELIVERY SUPPORT
CAREER PASSPORT

SKILLS FORECASTING
Regularly updated skills frameworks
Singapore’s Skills Framework ‘provides up-to-date information on employment, career pathways, occupations, job roles, existing and emerging skills, as well as relevant education and training programmes.’ Individuals and employers can use it to identify their skills needs.

Identification of priority skills areas
Through feedback from industry partners and Singapore’s Industry Transformation Maps, the organisation identifies ‘priority and emerging skills areas’ for inclusion in the curated SkillsFuture Series of training programmes.

CURRICULUM DEVELOPMENT
Co-development and customisation of curricula
SkillsFuture Singapore developed their ‘SkillsFuture for the Digital Workplace’ training initiative with support from the labour movement, employers and commercial technology partners.

While there is a central syllabus, the programme will be adapted for different contexts by seven training partners appointed by SkillsFuture Singapore.

PATHWAY GUIDANCE
An online portal for guidance
‘MySkillsFuture is a one-stop education, training and career guidance online portal’ which allows individuals to explore their interests and career aspirations, assess their skills, find training and jobs.

Industry-led careers advice
The SkillsFuture Career Advisors Programme is run in partnership industry bodies, such as Trade Associations and Chambers (TACs) and includes industry veterans as guides.

Workshops to highlight resources
SkillsFuture Advice delivers information and guidance for training and career planning through free workshops in the community.

ASSESSMENT
Online assessment
Assessment is provided by the ‘MySkillsFuture’ portal.

FUNDING
Direct credit for individuals to choose training
SkillsFuture Credit is a financial incentive for learning that can be used to pay for over 18,000 eligible courses. All Singaporeans aged 25 and above are entitled to receive an initial credit of $500 (approximately €310).

Subsidies for specific programmes
Funding is available for intensive skills training through the SkillsFuture Mid-Career Enhanced Subsidy and SkillsFuture Study Awards.

WRAPAROUND SUPPORT
Partnership with employers to create a culture of career learning
One of SkillsFuture Singapore’s main aims is to create a culture which supports lifelong learning. The organisation works with employers to identify how individuals can be encouraged and assisted to learn alongside their work.

TRAINING DELIVERY
Public and private providers make training easy to find
SkillsFuture Credit-eligible courses are provided by over 700 training providers, comprising both public and private providers. Massive Open Online Courses (MOOCs) form 12% of all the SkillsFuture Credit-eligible courses.

ACCREDITATION
Champions transparency to raise training quality
The SkillsFuture Credit directory lists over 18,000 courses. To ensure that individuals make informed choices, SSG has initiated a number of programmes to enhance the standards of training and increase the transparency of training outcomes. The SkillsFuture Series is also a curated list of short, industry-relevant training programmes that focus on the emerging skills identified by SSG.

SSG will progressively publish more course information on standards of trainers, course content, impact of training on job performance and customer service.

CAREER SUPPORT
Career guidance connects learners to jobs
SkillsFuture Singapore recommends that adults access career advisory services delivered by Workforce Singapore in centres across the island.
SKILLS PLUS

OBJECTIVE
To ‘give adults the opportunity to acquire the basic skills they need to keep up with the demands and changes in modern working life and civil society’

LOCATION
Norway

TYPE OF PROGRAMME
Public

WHO THE TRAINING IS FOR
Adult (16-65 year old) employees

COST
Approximately £20 million (€23 million) per year

LAUNCHED
2005

MAIN BARRIERS ADDRESSED

ABOUT SKILLS PLUS
Skills Plus is a government initiative intended to motivate Norwegian employers to upskill their workforce with basic digital skills by providing them with funding for training. The programme is run by the Skills Norway agency, which aims to capitalise on Norway’s high levels of internet access by increasing the population’s digital skills. They provide a centralised, regularly-updated skill competencies framework and funding for employers to access accredited training programmes for their employees.

HOW IS GOVERNMENT INVOLVED?
The Norwegian Agency for Lifelong Learning (Skills Norway) established the Skills Plus programme to support the development of reading, writing, numeracy and digital skills for adults. The programme is fully funded by the Norwegian government through the Norwegian Ministry of Education and Research.

CHALLENGES
• Skills Plus has not yet been able to evaluate the outcomes of their training programmes, due to insufficient data

OUTCOMES SO FAR
• Over 30,000 participants have received training since 2006
• Demand continues to grow. Participants and government funding have increased every year

NEXT STEPS
• The development of a framework for a digital career guidance system
• The creation of further tools for mapping skills and skills assessments
• A project to map the digital competencies of the population using statistical data
• Measurement of the outcomes of Skills Plus training

WHAT YOU CAN LEARN FROM SKILLS PLUS
• Incentivise employers to upskill their own workforce by providing government funding
• Help employers and individuals identify the skills they need by developing a regularly-updated competencies framework
• Ensure that funding isn’t wasted, by establishing a system to approve training programmes that align with employers’ key competencies and government objectives
**WHAT SKILLS PLUS DOES**

**LABOUR MARKET FIT**

**LEARNER FIT**

**DELIVERY SUPPORT**

**CAREER PASSPORT**

**CURRICULUM DEVELOPMENT**

The skills framework is regularly updated. Skills Norway has developed a framework to map basic digital skills for adults. There are four ‘Competence Goals’ levels, which map an individual’s ability to use basic ICT tools and systems, search and extend digital information, and produce and present digital information. The competencies are frequently updated to keep pace with changing digital skill needs.

**ASSESSMENT**

Self-evaluation of skills needs through digital tests. Skills Norway has developed digital tests to assess learners against the Competence Goals framework. They also have a simple self-evaluation tool for both individuals and teachers, which is used to highlight areas of strength and weakness. Teachers can use these results to map skills prior to the training.

**FUNDING**

Funding is targeted to achieve specific goals. The Skills Plus programme provides funding for Norwegian employers to upskill their workforce. Any business can apply for funding so that their employees can undertake courses in literacy, numeracy and digital skills. To qualify, training programmes must meet certain criteria; for example, they must ‘relate to the competence goals’ in Skills Norway’s Framework for Basic Skills and ‘strengthen the participants’ motivation to go on learning’.

**TRAINING DELIVERY**

A combination of public and private providers ensures that training is available. Skills Plus training programmes are delivered by public and private providers and study associations who have been accredited by Skills Norway. Approved programmes must relate to the government’s Competence Goals framework.

**ACCREDITATION**

State approval of quality training providers. Skills Plus accredits the training providers, but learners do not receive formal certification upon completion of the courses. Skills Norway also certifies the teachers to ensure they are delivering quality, relevant training.
OBJECTIVE
To encourage gender diversity in the digital economy and improve access to digital roles

LOCATION
Paris and Lyon, France

TYPE OF PROGRAMME
Social enterprise

WHO THE TRAINING IS FOR
Women (aged 25+) who are unemployed, from underprivileged backgrounds, or seeking to change careers

COST
The annual training delivery budget is €600,000. Training is free for participants, with funding provided by private companies, foundations and government.

LAUNCHED
2011
The focus on digital skills was adopted in 2015

MAIN BARRIERS ADDRESSED
- The French government does not currently provide funding for short training programmes
- The courses Social Builder offers are oversubscribed, with ten women applying for each place

ABOUT SOCIAL BUILDER
Social Builder is a start-up that tackles both unemployment and the lack of diversity in the tech industry by reskilling women for digital specialist jobs, and by working with companies to improve their organisational cultures. The company delivers free 4-month training programmes in Data Marketing and Digital Business Development which are designed to fit alongside the lives of working women. Training covers both technical and soft skills, such as collaborative problem solving and a learning mindset, and learners are given career guidance and wraparound support to prepare them for new roles.

HOW IS GOVERNMENT INVOLVED?
Social Builder receives funding from two government organisations: Grande École du Numérique, which facilitates a network of digital skills training programmes, and the former French President’s ‘La France s’engage’ (‘France Involved’) initiative, which supports socially innovative programmes. Funding is also provided by local government institutions, which allow Social Builder to offer free training for female jobseekers registered with the employment agency (Pôle Emploi).

CHALLENGES
- The French government does not currently provide funding for short training programmes
- The courses Social Builder offers are oversubscribed, with ten women applying for each place

OUTCOMES SO FAR
- 300 women are trained every year through Social Builder’s programmes in Paris and Lyon
- 85% of participants find a job at the end of the programme
- More than 1,900 people registered for Social Builder’s ‘Young Women & Digital’ forum in Paris in 2016

NEXT STEPS
- A chatbot is being developed to help women find out more about working in the tech sector
- Further collaboration with private companies who are looking to recruit women for digital roles

WHAT YOU CAN LEARN FROM SOCIAL BUILDER
- Foster diversity in the tech industry by providing upskilling opportunities for under-represented groups and those without STEM backgrounds
- Improve employment outcomes by including comprehensive wraparound support, career guidance and ‘soft skills’ coaching
- Support short-term and part-time training programmes by implementing funding models which enable their uptake
WHAT SOCIAL BUILDER DOES

SKILLS FORECASTING
Surveys employers to build a demand-driven model
Social Builder operates a demand-driven model, conducting surveys and collecting labour market data which is cross-checked against companies’ skills needs. This ensures that they are investing resources in developing the right training for future jobs.

CURRICULUM DEVELOPMENT
Co-designed curricula respond to labour market needs
Two training programmes are available: ‘Startup Sparks’ for women with a startup project, and ‘Booster Sparks’ for women who want to develop skills in Data Marketing or Digital Business Development. Social Builder designs their training programmes in cooperation with private companies and universities to ensure the components are relevant and responsive to labour market needs.

Support of leadership skills
Leadership skills are included in every programme, and include a focus on managerial skills such as innovation, collaboration and design thinking.

FUNDING
Free access through a combination of public and private funders
Social Builder’s training programmes are free for participants. The organisation is able to offer this through support from private companies, foundations and government agencies.

WRAPAROUND SUPPORT
One-to-one support and network building
Participants in Social Builder training programmes are provided with comprehensive wraparound support. In addition to leadership training and individual mentoring with industry professionals, learners participate in networking events, group coaching, and post-programme follow-up sessions. They are also connected with other learners for group social support.

TRAINING DELIVERY
Training designed for working women
Social Builder’s delivery model is designed to ensure that women can complete the programme whilst working. The training takes place outside office hours and uses a combination of online and face-to-face.

ACCREDITATION
Third-party endorsement from national initiatives
The Spark programmes are endorsed by Grande École du Numérique and François Hollande’s ‘La France s’engage’ (France Involved) initiative. Social Builder also provides access to training programmes that are accredited by France’s official accreditation body, the CNCP.

CAREER SUPPORT
Mentoring to identify and access career opportunities
Social Builder training programmes include individualised professional mentoring to help participants clarify their career trajectory, learn about job requirements and develop their professional networks.

Direct job placement in some programmes
For some programmes launched in partnership with private companies, women will be placed in contact with the firm’s recruiters.
UNIONLEARN

OBJECTIVE
To provide employees in all sectors with access to high quality learning opportunities

LOCATION
United Kingdom

TYPE OF PROGRAMME
Publicly funded partnership

WHO THE TRAINING IS FOR
Employees

COST
Approximately £12 million (€13.4 million) per annum. Employers absorb the costs for Union Learning Representatives to complete their training

LAUNCHED
The Union Learning Fund and Union Learning Representatives were launched in 1998; Unionlearn was launched in 2006.

MAIN BARRIERS ADDRESSED

ABOUT UNIONLEARN
The Unionlearn programme facilitates a network of Union Learning Representatives (ULRs) in companies across the United Kingdom who empower employees to access work-based learning.

ULRs are trained to identify skills needs in their workplaces and are given support to help their colleagues access relevant resources and training. They act as intermediaries between employees and employers, and help to foster conditions that are conducive to learning at work. The programme is led by the Trades Union Congress, a federation of unions in the United Kingdom.

HOW IS GOVERNMENT INVOLVED?
The Union Learning Fund is financed by the UK’s Department for Education, which oversees what types of training the funding can be used for. The fund’s priority areas are broadly aligned with the government’s strategic objectives, such as supporting social mobility.

WHAT YOU CAN LEARN FROM UNIONLEARN
- Empower employees to get essential, industry-relevant training by appointing dedicated workplace representatives to act as intermediaries and advocates
- Facilitate upskilling opportunities within the workforce by engaging and financing third parties to deliver key components
- Ensure that working conditions are conducive to learning by working with employers

OUTCOMES SO FAR
- 250,000 learners were supported in 2017, including 30,000 with digital skills.
- 82% of union learners have ‘become more confident in their abilities’
- 77% of employers say that ‘engagement in union learning has a positive effect in their workplaces’

NEXT STEPS
- Unionlearn will contribute extensively to the development of the UK’s National Retraining Scheme, which was announced in 2017

CHALLENGES
- Unionlearn needs to sustain a continuous flow of union learning activists to take up Union Learning Representative roles
Representative-led curriculum development
Union Learning Representatives (ULRs) identify the skill needs of employers and employees, and choose courses which respond to these requirements.

Union Learning Representatives complete a 1-week course to prepare for the role.

Employees are supported to build a learning plan
ULRs help their colleagues to identify which skills they need and find training that is relevant to them.

Training and resources for ULRs, such as the ‘Supporting learners at mid-life mini guides’ enable them to give appropriate support.

Unionlearn has also developed a piece of software called ‘Climbing Frame’, which ULRs can use to create personal roadmaps for the learners they work with.

Self-evaluation of skills needs through online assessment
Unionlearn has an online assessment tool called ‘SkillCheck’. The tool helps individuals identify skills gaps and future learning opportunities by assessing their own literacy, numeracy and ICT skills.

Financial support for Union Learning Representatives
The Union Learning Fund provides financial support for ULRs to facilitate workplace training. When undertaking their own training, ULRs are entitled to paid time off from their employers.

Unions within the Trades Union Congress can apply for funding from the Union Learning Fund for specific learning projects.

Projects have to specify learning outcomes and show evidence in support of their projects. They are also subject to regular evaluations.

Employer support is negotiated to improve conditions for learning
Union Learning Representatives act as intermediaries between employers and employees, collaborating with both to create conditions conducive to learning (e.g. time release for training).

More broadly, the unions reach agreements with employers to help to ‘embed learning in the workplace’ and ‘secure employer commitment to supporting lifelong learning and skills’.

Training takes place both online and face-to-face, and usually involves partnership with external training providers.

Dedicated learning centres improve access to resources
Unionlearn has established Union Learning Centres in local communities, workplaces and union offices to facilitate learners’ access to upskilling resources. For example, in some workplaces there are rooms with workstations dedicated to giving people access to ICT training.
Conclusion
What we’re doing next and how you can get involved
This guide highlights the key components for a skills ecosystem that supports adults in work to learn appropriate digital skills.

It is clear that businesses, start-ups and NGOs are innovating to find efficient and effective ways to deliver these steps and upskill individuals for digitalisation.

Where such initiatives exist, governments can and should engage with them to foster collaboration, establish standards, set targets, and identify where intervention is needed to make skills ecosystems more inclusive and responsive to labour market demand.

Where they find gaps in the ecosystem, governments should use their powers to incentivise and support new programmes to address them.

The framework we present is designed to help policy teams to cultivate a joined-up learning ecosystem for adults in work.

It is a tool that can be used to identify teams inside and outside of government who can deliver services as part of this system.

As a diagnostic lens to analyse existing programmes and policies, the framework reveals gaps that must be addressed, and helps to highlight innovative approaches that can enhance the outcomes of digital skills initiatives.

The case studies in this guide show how some of these approaches are applied in practice. Additional exploration and analysis of a wide range of initiatives will no doubt yield useful insights and enable further development of the framework.

Next steps

One of Readie’s main aims is to provide insights and guidance for policy teams tasked with improving the provision of digital skills to people in work.

To achieve this, we are committed to exploring how governments can effectively and efficiently support continuous learning for citizens throughout their lives.

This document is therefore intended both as a guide for teams that are addressing the digital skills gap, and as a call to action for policymakers, practitioners and researchers to engage with us and our work.

We will continue to contribute to this area by publishing case studies and developing additional analysis and tools. We would appreciate your feedback, suggestions for further research, or invitations to collaborate.

Please get in touch if you

- Would like more information on any of the case studies
- Know about an initiative or policy that we should explore
- Have any questions or comments regarding our analysis or framework

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Methodology

Interviews with policymakers and practitioners
Readie identified and corresponded with representatives from 29 programmes and policies around the world who are working to enhance adults’ digital skills.

Semi-structured telephone interviews were conducted with most of these organisations and then nine examples were chosen as case studies for this report. The projects selected are those which engage with, or are led by government, and support the provision of digital skills to people in work.

Desk research
Researchers at Readie conducted extensive desk research between September 2017 and February 2018, to understand the challenges and opportunities of digitalisation and automation.

Workshops
Readie conducted two workshops in 2017 which brought researchers and policymakers together to discuss digital skills. The first, in London in August, focused on the skills that the future workforce will require; the second, in Stockholm in September, aimed to identify the challenges faced by policymakers in this area.
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Workshop participants

Workshop participants, London, 20th July 2017
David Brown, Group Director of Strategy & Innovation at B&BÉ, UK
Ellen Heisler, London School of Economics and Political Science, UK
George Windsor, Nesta, UK
Grant Blank, Oxford Internet Institute, UK
Jan Krewer, Conseil National du Numérique / French Digital Council, France
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References


Accessed 30th November 2017


Accessed 30th November 2017


Case study references

The Additional Qualifications for Digital Competences programme

Interview with Anne Röhrig, 2nd March 2018

www.kos-qualitaet.de/media/de/ZQ_Digitale_Kompetenzen_Flyer.pdf
Accessed 9th March 2018

kompetenzen-digital.org
Accessed 9th March 2018

Digilyft Kickstart

Interview with Maria Rosendahl, 10th November 2017
Correspondence with Johanna Essemyr Pauldin, October-November 2017

www.kickstartdigi.se
Accessed 10th October 2017
hellobuzz.org/case/digilyft
Accessed 9th October 2017

General Assembly

Interview with Jonathan Pinet, 1st November 2017
Interview with Tom Ogletree, 14th November 2017

www.generalassemb.ly
Accessed 21st November 2017

General Assembly (2017) ‘Impact Overview’. Available from socialimpact@generalassemb.ly
Accessed 21st November 2017

Accessed 21st November 2016

Accessed 21st November 2017


Good Things Foundation

Interview with Tom French and site visit, 24th November 2017
Correspondence with Adam Micklethwaite, February 2018

www.learnnmyway.com
Accessed 12th February 2018
www.onlinecentresnetwork.org/ournetwork/learning-tools
Accessed 12th February 2018
annualreview.goodthingsfoundation.org
Accessed 12th February 2018

Google Digital Garage

Interview with Alina Dimofte, 23rd November 2017
Sheffield site visit, 24th November 2017
Accessed 23rd November 2017

Grande École du Numérique

Interview with Justine Mesnard, 9th November 2017
www.grandeecolenumerique.fr
Accessed 20th November 2017
www.grandeecolenumerique.fr/presentation-label
Accessed 20th November 2017

SkillsFuture Singapore

www.skillsfuture.sg/credit/about
Accessed 23rd January 2018
www.skillsfuture.sg/series
Accessed 23rd January 2018
www.skillsfuture.sg/myskillsfuture
Accessed 23rd January 2018
www.skillsfuture.sg/career-advisors
Accessed 23rd January 2018
www.skillsfuture.sg/skills-framework
Accessed 23rd January 2018
www.skillsfuture.sg/digitalworkplace
Accessed 23rd January 2018
www.skillsfuture.sg/enhancedsubsidy
Accessed 23rd January 2018


Skills plus

Interview with Eddie Pedersen, 29th November 2017
www.kompetansenorge.no/English/About-Skills-Norway
Accessed 30th November 2017
www.kompetansenorge.no/English/Basic-skills/odb=9958,9957 Accessed 30th November 2017

Social Builder

Interview with Emmanuelle Larroque, 28th November 2017
socialbuilder.org/social-builder-in-english
Accessed 23rd November 2017

Unionlearn

Interview with Iain Murray, 16th November 2017
www.unionlearn.org.uk/prospectus
Accessed 8th January 2018
www.unionlearn.org.uk/our-objectives
Accessed 8th January 2018
www.unionlearn.org.uk/publications/measuring-success-union-learning
Accessed 8th January 2018
www.unionlearn.org.uk/publications/why-labour-market-information-lmi-matters
Accessed 8th January 2018
www.unionlearn.org.uk/case-studies/unions-give-unionlearn-skillcheck-thumbs-after-trial
Accessed 8th January 2018
www.unionlearn.org.uk/union-learning-reps-ulsr
Accessed 8th January 2018

Social Builder

Interview with Emmanuelle Larroque, 28th November 2017
socialbuilder.org/social-builder-in-english
Accessed 23rd November 2017

All currency conversions are approximate and were calculated on 3rd March 2018.
Endnotes


Accessed 19th December 2017


Accessed 30th January 2018


10 - European Commission (2017a) op.cit.

11 - Ibid.


13 - OECD (2016a), op.cit.

14 - World Economic Forum (2018) op.cit


16 - OECD (2016a) op.cit.


18 - OECD (2016b) op.cit.


Accessed 14th February 2018

22 - Peate, A. and Impey, A. (2017) op.cit
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Cover page / General Assembly
Page 4 / General Assembly
Page 5 / General Assembly
Page 6 / General Assembly
Page 8 / Danielle Maibaum
Page 11 / Digilyft KickStart
Page 12 / Jacky Chiu
Page 14 / Google Digital Garage
Page 16 / Danielle Maibaum
Page 18 / Grande École du Numérique
Page 20 / Digilyft KickStart
Page 22 / General Assembly
Page 24 / Danielle Maibaum
Page 26 / Google Digital Garage
Page 28 / Grande École du Numérique
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Page 38 / General Assembly
Page 40 / General Assembly

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Our mission is to spark and grow new ideas to improve how the world works for everyone. We use our knowledge, networks, funding and skills to take on big challenges, working in partnership with others to make change happen.

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