

Target beneficiaries

The CareerTech Challenge is designed to support people who are most vulnerable to the impact of job automation. This beneficiary information is designed to support applicants to understand the target user group/s their solutions needs to be geared toward.

Beneficiaries need to meet all of the following criteria:

- Working in role most susceptible to change due to automation
- Employed, self-employed or working part time in England
- Aged 24-65 years old
- Without a qualification at degree level
- Earning below £35,000 p.a.

Examples of roles in sectors most likely to experience shrinkage include (but are not limited to):

- Retail roles, including sales assistants, vehicle trades and elementary sales, records, administrative and finance roles
- Logistics roles, including vehicle trades and elementary administrative, records and finance roles
- Manufacturing roles, including process, assembly, plant and machine operatives and Metal forming, welding and related trade roles.

We would encourage applicants to consider whether their solution should be aimed at this whole population group, or a specific target group within this.

Additional variables that may be useful to consider are:

- **Awareness of changes to jobs:** The majority of workers do not believe that automation will affect their job, with a particularly low awareness of job changing among lower skilled workers ([Onward, 2019](#))
- **Access to technology:** Not all people in the target beneficiary group will have dedicated access to a laptop, but they are likely to have a smartphone
- **Attitude to learning:** Low confidence and negative experiences of learning often prevent adults from seeing themselves as capable learners. This self-image is frequently the 'real obstacle' to uptake of learning opportunities. (CEDEFOP, 2016)
- **Motivation to learn:** The NRS cohort is widely heterogeneous, including in their motivation to both think critically about their future career, and to translate this into proactive attempts to access IAG and develop their soft skills online.
- **Family commitments:** Among women in particular, learning is perceived as taking time away from necessary family commitments (Kantar Public and Learning and Work Institute, 2018)
- **Peer support:** Support from family may be difficult to achieve among lower-income households, in which learning can be perceived as using financial resources that are important to providing a 'stable financial environment' (Kantar Public and Learning

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and Work Institute, 2018)

- **Return on investment:** It is not always clear which skills will be relevant to work or in demand in the labour market, or how training will enable learners to develop these skills. This uncertainty about the outcomes of training limits willingness to learn among low educated workers (CEDEFOP, 2016).
- **Time and funds:** Reasons for low-skilled employees not engaging in training can be: family commitments (for both men and women); illness; lack of suitable courses; possible costs; and lack of time. The main barriers as to why employees would be unable or unwilling to undertake (further) work related training can be extrinsic costs: cash fees for training (perceived to be a barrier for 54 per cent of all employees in both sectors), or time costs (24 per cent) (UKCES, 2012).

ADDITIONAL RESOURCES

The CIPD has published research on **employees views of working life:** https://www.cipd.co.uk/Images/employee-outlook-focus-on-skills-and-careers_tcm18-10995.pdf

The review of **post-16 qualifications at level 3** and below includes information on shift in earning potential by increment of qualification level:

https://consult.education.gov.uk/post-16-qualifications-review-team/post-16-level-3-and-below-qualifications-review/supporting_documents/Post%2016%20level%203%20and%20below%20qualifications%20review%20%20Case%20for%20Change.pdf

The Office for National Statistics has high level data relating to **internet usage and preferences:**

<https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/articles/exploringtheuksdigitaldivide/2019-03-04>

The UK consumer digital consumer index sets out the **digital and financial capability of people in the UK:**

https://drive.google.com/drive/folders/1XjVTqBl61w5y7Y_oIU9cN4VwWJTXfgQv

In 2012, the former UK Commission on Employment and Skills published a report on **Engaging low skilled employees in workplace learning** <https://dera.ioe.ac.uk/14577/1/evidence-report-43-engaging-low-skilled-employees-in-workplace-learning.pdf>

The Office for National Statistics published information earlier this year on the **characteristics of people in jobs most at risk** of automation, <https://www.bbc.co.uk/news/business-47691078>

OECD's report on engaging low-skilled adults in learning: <http://www.oecd.org/employment/emp/engaging-low-skilled-adults-2019.pdf>

For information about motivation to learn, you may wish to explore some of Nesta's recent [Evidence Safari](#) and our rapid evidence assessment, [What motivates adults to learn?](#)

OfCom has published statistics on media use and attitudes:

https://www.ofcom.org.uk/data/assets/pdf_file/0021/149124/adults-media-use-and-attitudes-report.pdf

OfCom also has an annual communications and markets report: <https://www.ofcom.org.uk/research-and-data/multi-sector-research/cmr/cmr-2019>

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Career adaptability

'Career adaptability', and 'career adaptability skills'¹ are terms we use to describe a set of capabilities people need, to be able to adapt to changes to their work and the job market.

Feeling motivated, being able to reflect and identify suitable next steps, ask for and have access to support, and confidence to take up and complete learning are all increasingly important characteristics for our career.

Why is it important that interventions build career adaptability?

As new technologies are brought into different industries and workplaces, people will need to be able to adapt to new ways of working and learn new skills to do so. The rate of change makes it likely that people will increasingly need to retrain and change jobs multiple times throughout their lives.

What are the indicators of career adaptability?

There are five elements to career adaptability:

- **career concern** - a person thinks critically about what their future will be like and prepares for it.
- **career control** - a person feels a sense of agency and responsibility to make decisions that impact on their career.
- **career curiosity** - a person explores a variety of options for future roles and skills development before making a choice that builds on/are appropriate to their skills and aspirations
- **career confidence** - a person's perception that they have the ability to solve problems and overcome obstacles in order to pursue their career goals/aspirations.
- **career commitment**² - a person displays resilience and overcomes challenges to achieve their goals.

Through building career adaptability skills, people develop the ability to:

- Prepare for the future and be aware of the educational and vocational choices to make
- Make decisions and take responsibility for actions relating to career development
- Investigate options before making a choice
- Work to their ability
- Learn new skills
- Take care to do things well
- Overcome obstacles to learning.

¹ The term was first proposed by the careers researcher Mark Savickas in the early 2010s, and has since been adopted by a number of academics around the world

² Jenny Bimrose of Warwick University has suggested that an additional element - commitment - is also important.

Motivation to learn

While reasons people choose to learn often appear to be individual and complex, and in many ways they are, research has shown that there are some common factors which contribute to motivation. Motivation is particularly important in the context of a learner's journey because it often feels harder to keep going after the first 'rush' of commencing something new evaporates. Motivation to learn is often placed into one of two categories: extrinsic motivation and intrinsic motivation.

- **Extrinsic motivation** is generated by an expectation of external rewards or fear of threats. Examples include where learning is perceived to be worthwhile, or whether there is support and/ or encouragement from peers and employers.
- **Intrinsic motivation** describes a desire to learn that is not driven by an expectation of external reward, but by an experience of stimulation or pleasure that comes from the learning itself. It's often about how someone feels during a learning experience (e.g. how fun or interesting it is to the learner) or that they are fulfilling a personal goal.

For the purposes of the CareerTech Challenge we are interested in motivation of learners to complete their course or qualification given high drop out rates for online learning.

Why is it important that we support solutions that build learners motivation?

A person's motivation to learn is shaped by their capabilities and the opportunities available to them. What may sometimes appear as a lack of motivation is sometimes the result of opaque or non-existent opportunities; for example, a person is unlikely to seek out learning experiences if it is not clear what benefit learning will have.

Learning is a challenging process that requires commitment and support. Without a personal sense of motivation, learners are less likely to take up or complete training. As previously mentioned, online learning also has historically high drop out rates so we are especially interested in exploring solutions that motivate people to complete courses/ qualifications.

What are the indicators of 'motivation to learn'?

We're interested in **behavioural and attitudinal indicators** as proxies to measure motivation to learn.

In addition, online learning platforms offer an environment in which behaviour can be measured through engagement data such as progression through a course or time spent on the platform.