
Full STEAM ahead

The Future of Creative and
Digital Skills in the UK

Dr. George Windsor, Nesta

Where do the Creatives cluster?



The Creative Economy ... (what, and where is it?)

In 2014, creatives accounted for approximately 6% of total employment across the UK

They tend to be **highly educated** individuals who hold skilled jobs that are less vulnerable to automation

Between 2011 and 2014 the % of workers employed in creative occupations rose by half a %, and the **creatives outnumber those working in STEM occupations** (science, tech, engineering and maths).

Organisations that underpin Creative/Tech Clusters

Explores the role and structure of organisations behind Creative/ Tech clusters in the UK.

Cardiff, Bristol and Manchester Media City - map the ways in which organisations like local government, promote connections that drive growth and incentivise innovation.

Case studies focus on **the role of organisational networks as structures that enable the flow of resources (such as knowledge, or capital) through organisations.**

Creative economy

Creative Class Manchester
Refined Creatives Manchester
Northern Quarter Tuesday Talks

Entrepreneurship and startups

Saturday Startup
Independent Professionals North West
Manchester Social Entrepreneurs
Start Up Manchester
Leanmanc - Lean Startup Manchester

Digital, tech and software

MotionNorth
McrUXD
NSManchester - A Meetup For iOS & Mac Developers
DevOps Manchester
GeekUp Manchester
Manchester Java Community
The Art of Smartphone Filmmaking - Manchester Meetup
Manchester React User Group
Northern Digital Project Managers (n-DPM)
Lean Agile, Manchester
North West Drupal User Group (NWDUG)
North West Tester Gathering
SEO Manchester
Meteor Manchester
Manchester Magento User Group
DevOps Manchester
ProductTank Manchester
Manchester Cassandra Users - by DataStax
Scala Developers in Manchester
Hadoop and Big Data in Manchester
Manchester R user Group
Ladies of Code (Manchester)
Hackspace Manchester

Tech North - Manchester

Design and publishing

BLAB
Manchester WordPress User
Group (MWUG)
Human Centred Design
Manchester

Broadcast, film and production

MediaCity TV/Film camera Meetup
HackerNest Manchester Tech Socials
Manchester Video Marketing
enthusiasts
Manchester Art Cinema Group
MediaCity TV/Film camera Meetup
The Manchester Film Fans Meetup
Group

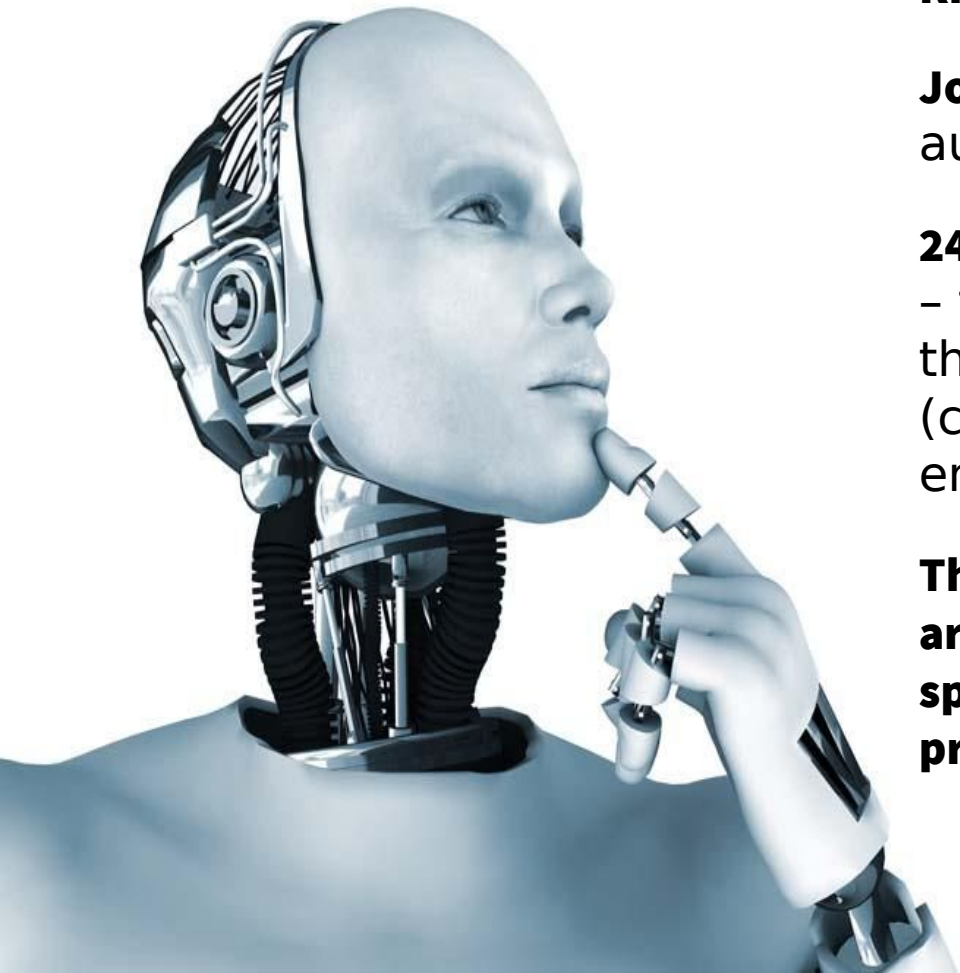
The Creative Economy and the *Future* of Employment

Rise of the robots?

Jobs for the future – probability of automation and creative probability

24% of UK employment is highly creative – that is, has a probability of more than 70 per cent of being creative (compared to 21% of US employment)

These creative occupations include artists, architects, web designers, IT specialists and public relations professionals.



The Creative Economy and the *Future* of Employment

The results strongly support the intuition that **creative occupations are more future-proof to technologies like machine learning and mobile robotics.**

In the UK, **87% of workers in the highly creative category are found to be at low or no risk of automation.** In the US, the equivalent number is 86%.

At the regional level, we see that **places with a higher proportion of the workforce in creative jobs, most obviously London, are also more immune to automation.**

Economies like the UK and US where creative occupations make up a large proportion of the workforce may be better placed than others to resist the employment fallouts from future advances in computerisation.

Top 30 Skills chart



STEM to STEAM

- The 'STEAM movement' argues that **arts are unique in aiding the development of creative skills.**
- They cite **growing demand for creative workers** from the STEM industries and point to successful individuals who embody this ideal.
- The movement also attempts to counter the idea that the **arts are in some way 'soft options'** that should be avoided by those wishing to attend top universities.
- Although the term 'STEAM' has been used in public discourse since at least 2010, it has recently begun to gain wide-spread attention.
- Last year Culture Secretary Maria Miller said that "the arts also have to be central in a child's education. And why I agree with those who say an A belongs in STEM."
- November last year the House of Lords held a debate to consider the case for arts education within schools.



STEM to STEAM



Thank you.

Questions?

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