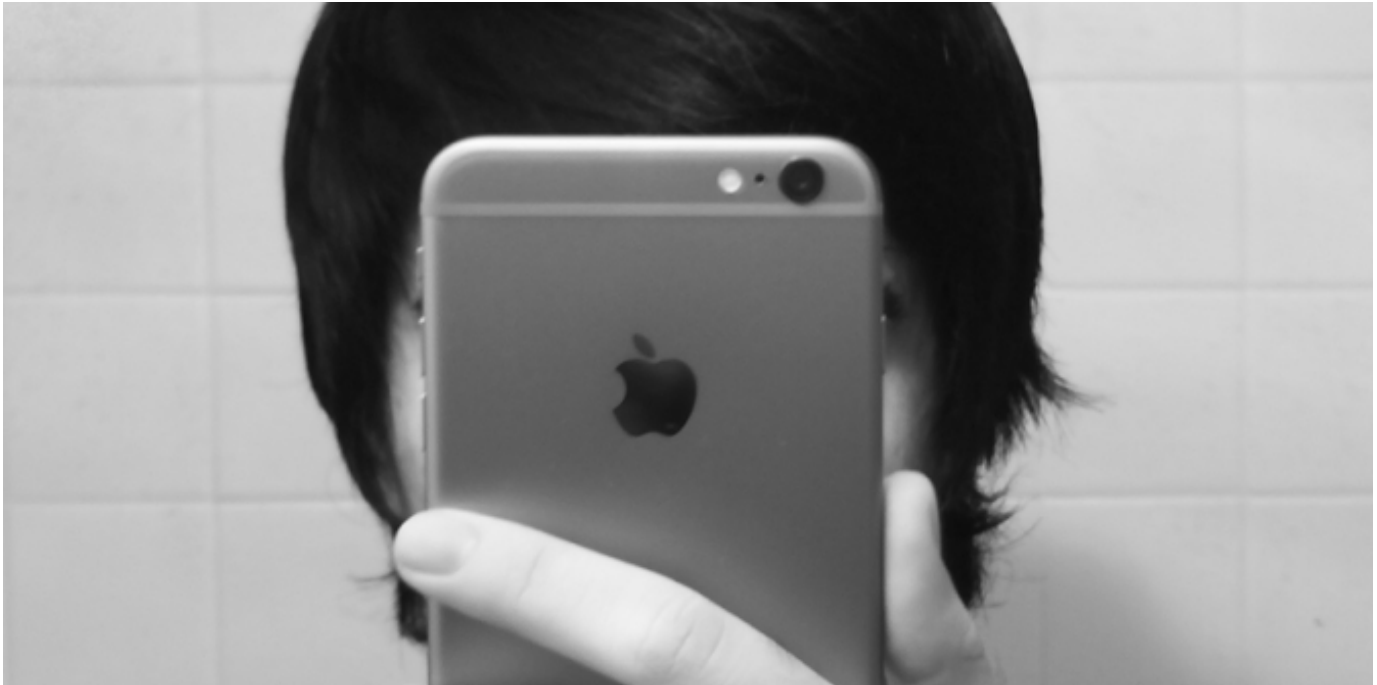


# Future of work: making a living from cutting our own hair?

 [blogs.lse.ac.uk/businessreview/2017/04/12/future-of-work-making-a-living-from-cutting-our-own-hair/](https://blogs.lse.ac.uk/businessreview/2017/04/12/future-of-work-making-a-living-from-cutting-our-own-hair/)

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There is currently much debate on the future of paid employment in light of technological advancements within a range of areas, such as speech recognition, [robotics](#), artificial intelligence, etc. Evocative imagery is presented ranging from a rather prosaic future of self-driving cars and lorries to the digital immortality of bodiless beings. I wish here to emphasise more immediate and broader concerns, which will relate to the onslaught of new digital technologies, but which will critically also relate to the organisation and choice of human activities in relation to these digital technologies.

The current technological landscape marks a particular configuration of three interrelated elements in a global infrastructure that closely integrates end-users (notionally the demand-side), with technology innovators (notionally the supply side):

- Computing-in-the-small is made up of a variety of user-near-smart and user-friendly digital devices, such as smartphones, digital tablets, Wi-Fi enabled thermostats, robot vacuum cleaners, oyster cards, smart light bulbs, etc;
- Computing-in-the-large connects all of these devices through personal, local, and global telecommunication networks; and in particular to
- Computing-at-scale, which denotes the servers, central databases, and globally distributed data centres leveraging the [exponential growth](#) of computational capabilities to do the heavy lifting. Apple's Siri, Amazon's Alexa, and Google Assistant are all novel services that depend critically on combining this global infrastructure.

This generative [digital infrastructure](#) supports the distributed generation of newness, both in terms of new complements (think new apps for smartphones and new services for the home-automation gadgets), but also the establishment of new types of complements not anticipated by those coordinating the process.

One of the most important ways in which this generative infrastructure is aligned with changes to business practices

is in establishing automated self-service. Here, the ongoing service-journey can to a higher degree of customer self-serviced engagement than before. This can significantly reduce the paid human effort and instead more directly link the end-user to digital services. The digital technology can constantly listen to the end-users expressed changes in needs and desires, and when needed [directly engage](#) them in the fulfilment of the service.

There are many examples of this, ranging from the ATMs introduced in the 1980s, to the self-check-out counters in shops. The smartphone app store offers a particularly compelling example. Here, smartphone users and app developers engage in globally distributed complex coordination of the creation and installation of millions of possible apps on hundreds of million smartphones in highly individualised configurations. Furthermore, the arrangement supports the distributed negotiation of what types of innovations are accepted within the curated walls of the app store platform – It is [generative](#).

This change from paid effort to customer self-service is developing rapidly. Food shopping was until the 1950s characterised by shopkeepers guarding stock behind counters. The supermarket then began allowing customers to touch and select items themselves. In the early 2000s Internet shopping allowed selections to happen from home, and the 2010s introduced self-check-out counters, which are now spreading rapidly. [Amazon Go](#) marks this year the experiment of a shop where the customer simply registers their identity through their smartphone for then to walk in and grab what they like and walk straight out with items being registered automatically.

The first book I read when starting my university education in 1982 was titled; “We cannot live off cutting each other’s hair”, alluding to the need for Danish society to produce butter and bacon for the British market, and hopefully other physical goods for other markets as well. We have since learnt how to make money from a great variety of services, other than cutting each other’s hair. Digital transformation is currently extensively automating ongoing service relationships to the extent that the end-users become responsible for managing their own complex and continuously varying service journeys.

Apple, Google, and Facebook do employ a lot of people, but most of us do not yet have personal social media managers, smartphone IT supporters, or personal web-search assistants. This raises the question: “How do we live off cutting our own hair?” There can be many possible answers to this question, and most of these are yet to manifest themselves clearly.

Furthermore, a long and unresolved debate still contains a gap between those warning of extensive unemployment from automation, and those arguing that human ingenuity will invent new types of work in the wake of automation. In the short to medium term, what seems quite clear is that even when we are happily cutting our own hair, we may at times need someone else to do it, but we will unlikely be willing to pay much for the pleasure – unless it is particularly nicely done. Robert Reich [makes the argument](#) that in the US automation has not yet resulted as much in unemployment as in a lowering of wages.

If the rapid successions of digital transformation of the music industry is anything to judge by, then we could very well be in for a lengthy period of significant industrial reconfiguration. It is already challenging to hope for a stable working life with long-term employment in one or two organisations. Amongst our students here at the LSE there seems each year to be a growing interest in searching for a decentralised career solutions, and perhaps a career focusing on doing something that gives meaning to life, and to gain entrepreneurial skills and experiences.

A person’s ability to engage in flexible and ever-shifting working arrangements will certainly be at a premium even if later on they are employed within a large organisation. Increasingly decentralised efforts relying on small-scale global reach does seem to be one viable way of learning how to make a living when much effort is shifting from paid work to be self-serviced. When a novel idea can reach a few hundred people globally, even very strange ideas can be a viable business.

The investment can even be footed by the customers through up-front payments organised on [Kickstarter](#) or [Indiegogo](#). If we manage to reconfigure how we engage with each other in leaner, and more decentralised ways, we

may be able to significantly redefine how we work, play, and exist. We may even be able to invent a range of [new ways of engaging](#) in networks of service exchange. However, in the short to medium term, the challenges and disruptions will be a major challenge and there are not many new job categories directly in sight.

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Notes:

- *This blog post is co-published with The Fabian Society's Changing Work Centre website, and draws on the author's work on digital innovation documented in a range of [papers and reports](#).*
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