

3D printing to transform the economy, UK report claims

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The Government needs a plan for the arrival of 3D printing, to ensure that the UK can reap the full economic benefits of this revolutionary technology and to address risks such as illegal gun production.

[3D printing](#) will put major strains on the UK's [legal framework](#), and the Government must move quickly to adopt supportive policies so that the UK does not get left behind.

This is according to a report published by the business-backed Big Innovation Centre, an initiative of The Work Foundation and Lancaster University, which sets out the first comprehensive policy framework for 3D printing.

3D printing – the ability to translate a digital file into a physical object – is set to transform key British industries with a combined GVA of nearly £70 billion – more than half of all UK manufacturing – over the next decade. 3D printing could bring a host of benefits to the UK, including shifting manufacturing jobs back to Britain, reducing the environmental impact of the goods we consume, and offering consumers far greater choice.

It will also challenge the traditional model of mass production in manufacturing, enabling many objects to be made close to where they are needed. The industries most likely to be disrupted by these changes include textiles and clothing, pharmaceuticals, rubber and plastics, machinery and furniture industries.

Radical thinking will be required if government policy is to keep pace with the development of the technology. The report raises serious concerns about the UK's readiness to cope with 3D printing, including the need for a more flexible intellectual property system, incentives for investors and designers and the need for regulation so that the Government can prevent 3D printers being used to produce guns and illegal objects.

Andrew Sissons, report co-author and researcher at the Big Innovation Centre, said: "3D printing will place major strains on laws and government policy in the UK. The Government must begin planning a policy framework for 3D printing, one which promotes innovation and prepares the ground for a mass market in 3D printing.

"The Government must adopt a smarter and more flexible approach to intellectual property rights and regulation so that companies can function profitably in our digital age. 3D printing will shatter the barrier between the internet and the physical world, and the law will no longer be able to distinguish easily between the two. If the Government wants to regulate guns and other dangerous items in the age of 3D printing, it will need a radically different approach.

"The experience of the music industry should act as a warning for policy makers here. [Government policy](#) was slow to adapt to the digitisation of music and it enforced outdated copyright laws rather than seeking reforms that promote innovation. Manufacturing, the industry that 3D printing will disrupt, is far more important than the music industry and the risks have far more serious implications so the Government cannot afford to ignore these issues for any longer."

Spencer Thompson, report co-author and researcher at the Big Innovation Centre, said: "The potential economic implications of the technology are huge. 3D printing will play to the UK's strengths in

design, retail and digital industries, putting Britain in a strong position to be a world leader. It could also shake up the way we do manufacturing, replacing [mass production](#) with localised manufacturing and potentially bringing [manufacturing jobs](#) back to the UK.

"From the production of household goods to transplanted organs, the possibilities are endless. The [Government](#) must not ignore this opportunity to inject some much needed growth into the UK economy."

The report, "Three Dimensional Policy; Why Britain needs a policy framework for 3D printing" examines what 3D printing markets might look like in the future, outlining how they are likely to be used in homes, 3D printing shops and existing factories with wide-ranging repercussions.

More information: www.biginnovationcentre.com/Re... icy-framework-for-3D

Provided by Lancaster University

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