About this research

Following the global financial crisis in 2008, policy makers, realising the need to rebalance the economy, began looking towards the manufacturing sector and industrial policy. However, the sector must overcome a number of hurdles if the rebalancing strategy is to succeed. Critically, despite success, manufacturing has a poor image among potential employees, investors, influencers, and policy makers.

Research by Professor Michael Beverland (University of Bath), Beverley Nielsen (Birmingham City University) and Vicky Pryce (Centre for Economics and Business Research) argues that the key to shifting perceptions of manufacturing is to reframe the sector as part of the ‘making’ economy (which includes the creative sector, industrial design, a renewed interest in craft, 3D printing, and the manufacture of digital mobile applications, among others). Drawing from the experience of the West Midlands (the home of UK manufacturing), the authors identify that the pursuit of brand-driven value underpins the success of UK manufacturers. Pursuing brand-driven value influences choices about what, where and how to innovate (giving rise to multiple innovation pathways), draws on and contributes to complex business ecosystems, and is part of a strategy to shape or take control over the business environment.
Research findings in context

Since the 1970s, efforts to revitalise UK manufacturing have focused on increasing productivity and predicting which technologies or firms will succeed. As manufacturing is often viewed as an extension of science, much industrial policy emphasises the need for investment in STEM (science, technology, engineering and maths) skills as a key means of adding value and competitive advantage. Clearly, innovation based on research and development, and sound business models are important. However, these factors are viewed in very narrow terms. This research proposes different ways of looking at the factors that lead to manufacturing success, suggesting how UK manufacturing policy can be reshaped to take advantage of lessons learned from the country's vibrant 'making' economy.

An image in need of a makeover

Structural changes that have shifted the UK towards a service-based economy have caused manufacturing to decline in relative terms since the post-WWII era (in 1970 manufacturing accounted for 23% of gross value added, whereas it was down to 12% in 2010).

Enduring perceptions of manufacturing as a factory production line plagued by plant closures, off-shoring and media headlines that frame manufacturing as a sunset industry in perpetual decline have resulted in a poor public image. This deters a potential future workforce of young people from seeking employment in the sector.

However, the UK now produces more manufactured goods than ever before (output is 9.5% higher than in 1979) and the image of the ‘making’ economy is at an all-time high. ‘Making’ economy start-ups attract investor support and cities across the country are seeking to be identified with the creative economy. Thus, although manufacturing accounts for less value-added and employment than it has in the past, the sector remains critical to the country’s economic resilience, regional employment and identity, export earnings, and investment in innovation. Overhauling the poor image of UK manufacturing is critical, particularly given that estimates indicate a need to attract 800,000 new employees to the sector by 2020.

Brand-driven value

The UK manufacturing sector can overcome its poor image, which is based more in myth than in reality, by realigning itself with the ‘making’ economy. Advocates for the sector must reframe their messages around manufacturing's positive attributes, including the diverse range of employment opportunities, enduring success, powerful brands, sustained export performance, and high value added.

Key findings

- The terms on which the success of the UK’s manufacturing sector are seen to be predicated are viewed too narrowly by policy makers and industry.
- UK manufacturing’s image as a sector in decline hampers its success, particularly in attracting a vital future workforce.
- Realigning UK manufacturing with the vibrant ‘making’ economy through branding and identity could help to revitalise its image and success.
- Views of manufacturing innovation in the UK are too narrow and must be expanded to encourage more comprehensive and indirect investment in the sector.
- Manufacturing benefits from more complex business ecosystems that both comprise a diverse range of stakeholders and take advantage of the UK’s industrial heritage.
- UK manufacturers can use branding and numerous distinct innovation pathways to create their own business ecosystems and environments to ensure success.

High value added is often equated with investment and innovation in technology. However, the UK’s performance in this area is patchy. The UK’s most successful small craft firms, such as Aga, the Morgan Motor Company, ACME Whistles, and Emma Bridgewater, employ a different approach and compete successfully in global markets through clever branding.

In this case, branding should not be confused with a logo-centric model, but as a means by which firms seek to shape their markets by employing a desired identity, usually in the form of a rich and compelling story. Since this identity defines everything the firm does, branding must also drive everything the firm does, including the ways in which it innovates.

There is no one best way of innovating in UK manufacturing, but multiple pathways are important, including STEM-driven, design-driven, craft-focused, customer-driven, process-based (or process efficiencies), and marketing-driven innovation. Equating innovation with the need for greater investment in STEM skills alone thus ignores the reality of many of the approaches
to innovation currently underpinning manufacturing success in the UK. For UK manufacturing to succeed, then, it is critical that policy recognises and supports multiple pathways to innovation.

Branding also drives the design of business ecosystems. While researchers point to the importance of an industrial commons or shared knowledge resource (involving university-based researchers, other manufacturers, maker labs, local enterprise partnerships, and access to finance and creative capital), they overlook the ‘symbolic commons’ – the latent symbolic power of many traditional manufacturing regions that add significant value to the brand. The heritage of the UK’s traditional industrial regions often remains untapped. Nevertheless, smaller heritage-driven firms provide a positive halo around “Made in the UK” that larger organisations are able to tap into. Given the importance of branding to company valuation and return on investment, investors are more likely to invest in a sector that emphasises these assets instead of focusing on efficiency gains, research and development, or new inventions. Policy design must therefore support such complexities in business ecosystems.

Shaping business environments

Leading UK manufacturers use brand identity to drive capability development, the type of innovation employed and relationships within their business ecosystem. In this way, they are able to shape their business environment to their own ends. For example, Dyson’s redesigns of established products mean they are a price-maker (rather than price-taker) and standard-setter in international markets.

Rather than viewing market categories as fixed, many of the entrepreneurs and employees at the centre of such export superstars view their environment and the desires of their customers as much more malleable than those firms that focus solely on increasing productivity, benchmarking performance, and competing on the basis of efficiencies and functional performance advantages. The Morgan Motor Company, for example, constantly redefines what a heritage sports car is, delivering outstanding performance and innovation in ways that defy its critics and seemingly outdated work practices.

Designing policy that will support growth in UK manufacturing requires a shift of focus from the complexity of global supply chains to how market environments can be enhanced. By incorporating the lessons of the UK’s manufacturing superstars into policy, the UK can revitalise the sector and its decaying image.

Policy implications

This research identifies a number of new policy initiatives focusing on building a sustainable manufacturing base in the UK that aligns with and benefits from association with the vibrant ‘making’ economy.

1. Since the brand’s identity or strategic position drives innovation choices (including what to innovate and, critically, how to innovate) innovation policy should recognise this by investing in the capabilities and skills necessary to ensure the UK’s leadership. This would be possible if STEM, design, craft, and business skills, such as meeting customer demands, improving business processes, and creative marketing practices were taken into account. A singular focus on investment in STEM skills is not enough: models of innovation that build long-term brand value through unique combinations of branding, design, business, research and development, and craft are needed.

2. Policy should exploit the UK’s manufacturing heritage and the complex reality of manufacturing ecosystems by creating hubs that connect manufacturers within regions, across industry divides, and between functional disciplines at all levels (including schools, colleges and universities) in order to share expertise and generate new ideas for manufacturing success.

3. Policy should develop the right capabilities and expertise for the manufacturing sector among the future workforce through building links between industry and university departments beyond STEM, and between alliances of universities with different traditions and areas of specialism.

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Methodology

This Policy Brief is based on the book *Redesigning Manufacturing: Reimagining the business of making in the UK*, by Michael Beverland, Beverley Nielsen and Vicky Price, published in the UK on 29 April 2015 by Palgrave Macmillan. The findings are based on multiple research projects including case studies of leading Midlands manufacturers, manufacturing firms within the rest of the UK and around the world, and a critical review of existing literature. The authors’ respective expertise includes brand management and design innovation (Beverland), manufacturing policy and practice (Nielsen), and economic policy analysis (Pryce).

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