

Global Lessons from Studying at a Local Scale

Emerging Themes from Bristol RDM|RSC Network

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🔥 What evidence is there of a local redistributing of manufacturing?

- Quantitative data are patchy and unreliable
 - Maker walks to test data quality
- Qualitative case study data describe what is possible
 - Interview-based
 - Workshop meetings
 - Relatively low take-up of new technologies

UWE -Case Study Development

Antiform – Fashion Label, Garment Manufacturer and Textile Recycling

Bespoke Creations – Sole Trader Woodworker, Resident at Old Market Manor

Bristol Upholstery Collective – Community Upholstery Workshop, Retail Store

CentreSpace Studios– Community Arts Workshop, Studios and Gallery

Old Market Manor– Community Woodwork Workshop

Prior Made– Jewellery Maker, Resident at InBristol Studios

Rusty Squid – Inter-disciplinary Design Studio, Resident at Puppet Place Studios

Tangent Field – Architectural Firm

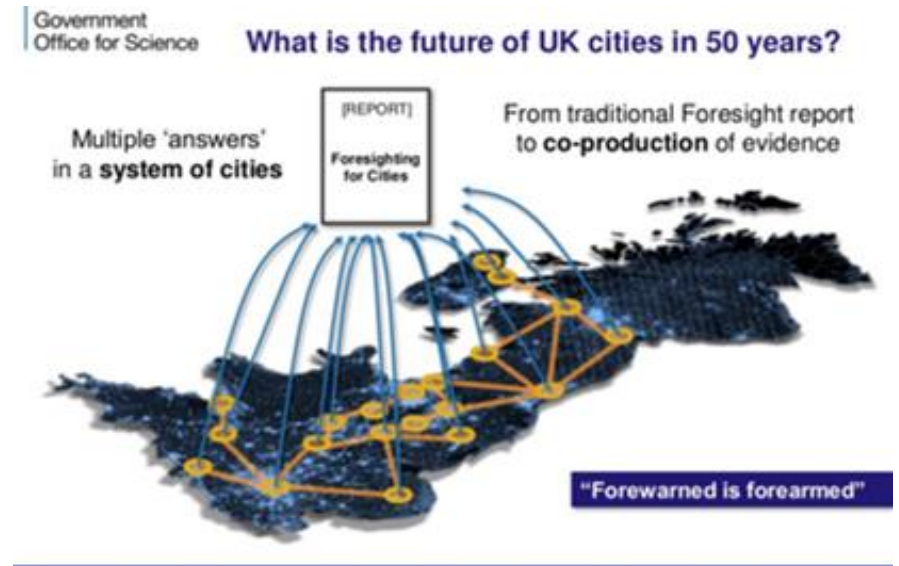


🔥 What drives localised local manufacturing?

- Cultural factors: perception of Bristol as a place that makes things, a place to innovate with a willingness to adapt
- Ownership of companies, especially UK vs overseas ownership (Bailey Caravans/Cameron Balloons vs 2011 Cadbury's Somerdale Factory).
- Access to right skills & labour, including extended enterprise
- Access to resources (materials, and financial)
- Access to market (digital platform, brand and logistics)
- Access to space from start up to global supplier

🔥 What factors might affect distribution of manufacturing in the future?

- Political:
 - Isolationist versus Globally Interconnected
 - Defining critical national capabilities and infrastructure
 - Devolution agenda and tax raising powers



What factors might affect distribution of manufacturing in the future?

- Economic:
 - New business models:
 - Sharing applied to capital investments in plant and facilities (Fab Lab and Extended Enterprise models)
 - Circularity balancing making and unmaking where virgin resource extraction, logistical transport or safe waste disposal costs are high
 - Costs of investment and production (energy, resources and labour)

What factors might affect distribution of manufacturing in the future?

- Social:
 - Business start-up and ownership
 - Social capital (skills, resilience, institutions)
 - Ability to attract and retain skills
 - Leadership and governance
 - Perceived value in local provenance
- Legal:
 - Regulatory frameworks – global to local
 - Design codes - localised

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Technology Readiness and Organisational Readiness Levels

Avon Plywood

Pixash Works, Pixash Lane, Keynsham, Bristol BS31 1TR - 0117 986 1383 : Fax 0117 986 1725



Welcome to Avon Plywood

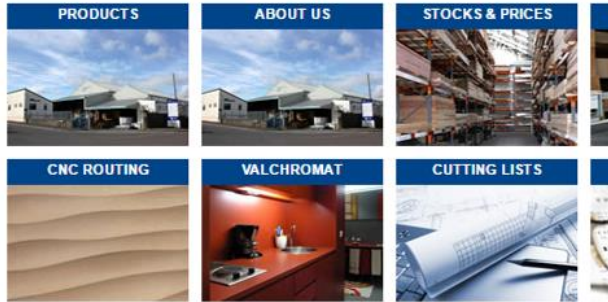
Avon Plywood Ltd first began importing wood-based materials (panel products) and timber into Bristol in 1983 and has since developed into the well-established timber merchant it is today.

The company offers an extensive choice of species, sizes and non-standard thickness within its sheet material range. Stock is updated regularly to meet contemporary trends, we are stockists and distributors of Valchromat Coloured Fibreboard and Tricoya Extreme M

Our acknowledgement of current trade requirements has led us to focus strongly on the further processing of panel products, including CNC routing, banding and CNC machining service. From our base in Keynsham we offer a reliable delivery service to Bristol, B and deliver nationwide using courier or haulage contractor services.



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Engineering and Physical Sciences
Research Council



Arts & Humanities
Research Council

RDM | RSC

Re-Distributed Manufacturing for
Resilient Sustainable Cities

Sustainability and environment

- Carbon neutral city & clean energy
 - Can new manufacturing technologies reduce energy demand sufficiently to meet clean energy supply?
 - Air quality impacts of commuting and freight transport
- Waste management:
 - Balancing making and unmaking

Concluding Remarks

- We now have a better idea of what we don't know
 - Data are sparse and incomplete: case study data is informative but not readily generalised
 - Little consideration is given by manufacturers either to resilience or sustainability
- For SME/MEs location is driven as much by start-up and ownership – multinationals are not bound by 'loyalty' or anchored by ownership
- Technology readiness must be matched by organisational/workforce readiness levels for take-up
 - Education outside of Universities appears to be failing to keep pace with advanced computer-based manufacturing

Concluding Remarks

- Many local areas/manufacturers outside of aerospace and defence are currently oblivious to advanced manufacturing
- There is take-up of digital market platforms, but many makers/manufacturers find sufficient clients through word-of-mouth
- There is a case for investigating new business models to establish:
 - What are constraints/ preconditions to stimulating local growth in manufacturing/making?