

## Country Overview Profile United Kingdom

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### Präambel:

Wir schreiben im Folgenden in der maskulinen Form, und zwar ausschließlich wegen der einfacheren Lesbarkeit: Wenn beispielsweise von Mitarbeitern die Rede ist, meinen wir selbstredend auch Mitarbeiterinnen.

### Empfohlene Zitierweise:

GAUSEMEIER, J.; KLOCKE, F.: Industrie 4.0 – Internationaler Benchmark, Zukunftsoption und Handlungsempfehlungen für die Produktionsforschung. Paderborn, Aachen, 2016

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### Summary

**Reindustrialization and focus on radical innovation.** The United Kingdom has enacted a **comprehensive reindustrialization strategy** after decades of prioritizing the finance sector. The **strong start-up scene** in London is starting to be complemented with technology- and **production-heavy start-ups in the production hubs**. Catapult centres to boost innovation in manufacturing have been launched. **Sensors, data analytics and logistics/SCM are strengths** of the economy, and will play a key part in the country's offering of Industrie 4.0 solutions. **Implementation** of Industrie 4.0 is **encouraged**, but **hurdles including missing competences** are seen. **Sustainable manufacturing** is seen as a **key reason to implement** Industrie 4.0, so is the **flexibilization of manufacturing**. **Cooperation** on standardization and development of Industrie 4.0 **in the European framework is seen as an enabler, but may be jeopardized** by the political situation.

### Highlights



Collection and  
Analysis of  
Field Data

With a strong start-up scene in London, a strong sensor industry and companies already both offering smart products and solutions for smart manufacturing using real-time data, a strong ecosystem for data-driven activities exists.

### Map



## Industrie 4.0 in the United Kingdom

Drivers/ Challenges	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p style="text-align: center; color: #0070C0;"><b>Drivers</b></p> <ul style="list-style-type: none"> <li>▪ <b>Reindustrialization strategies</b> drive the return of advanced manufacturing on the technology radar</li> <li>▪ <b>Data analysis and real-time sensor data</b> feedback loops are used to increase efficiency in manufacturing</li> <li>▪ Existing <b>risk capital infrastructure</b> paired with <b>strategic research centers</b> to develop key technologies leads to <b>good start-up ecosystem for Industrie 4.0 applications</b></li> </ul> </div> <div style="width: 48%;"> <p style="text-align: center; color: #0070C0;"><b>Challenges</b></p> <ul style="list-style-type: none"> <li>▪ Need to <b>catch up with technology progress</b> missed in decades of under-priorization of the manufacturing sector</li> <li>▪ <b>Small importance of the production sector</b> for the national economy at the moment</li> </ul> </div> </div>
Key Stakeholder	<ul style="list-style-type: none"> <li>▪ <b>Innovate UK</b></li> <li>▪ <b>Catapult Centre High Value Manufacturing</b> – Research cluster of excellence funded by                         <ul style="list-style-type: none"> <li>▶ <i>Innovate UK</i>. Industrie 4.0-related activities are focused in the Manufacturing Technology Centre</li> </ul> </li> <li>▪ <b>GAMBICA</b> – Industry association for automation and control</li> <li>▪ <b>Ubisense</b> – Developer of sensors and software systems for the Smart Factory</li> <li>▪ <b>Rolls-Royce</b> – Pioneer in both in-factory smart production and data-driven B2B business models for jet engines</li> </ul>
Key Approaches	<p><b>High Value Manufacturing</b>              Approach focusing on general excellence in advanced manufacturing through basic technologies as well as automation, flexible manufacturing and digital manufacturing. Championed through the              ▶ <i>Catapult Centre High Value Manufacturing</i>.</p> <p><b>Strengthening UK manufacturing supply chains</b>              Action plan by the UK government to strengthen manufacturing particularly in SMEs, to be partially implemented through the ▶ <i>Catapult centres</i>. Includes ▶ <i>horizontal integration</i> demonstrators and exploration of areas for standardization.</p>