

Building Winners: Strengthening the UK Innovation Ecosystem

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OVERVIEW

UK innovators face a two-tier intellectual property system: start-ups and small firms can rarely afford to obtain, maintain or defend patents against better-resourced competitors. Access to finance is the most cited barrier to commercialisation. Funding and infrastructure remain concentrated in London, Oxford and Cambridge.

PURPOSE

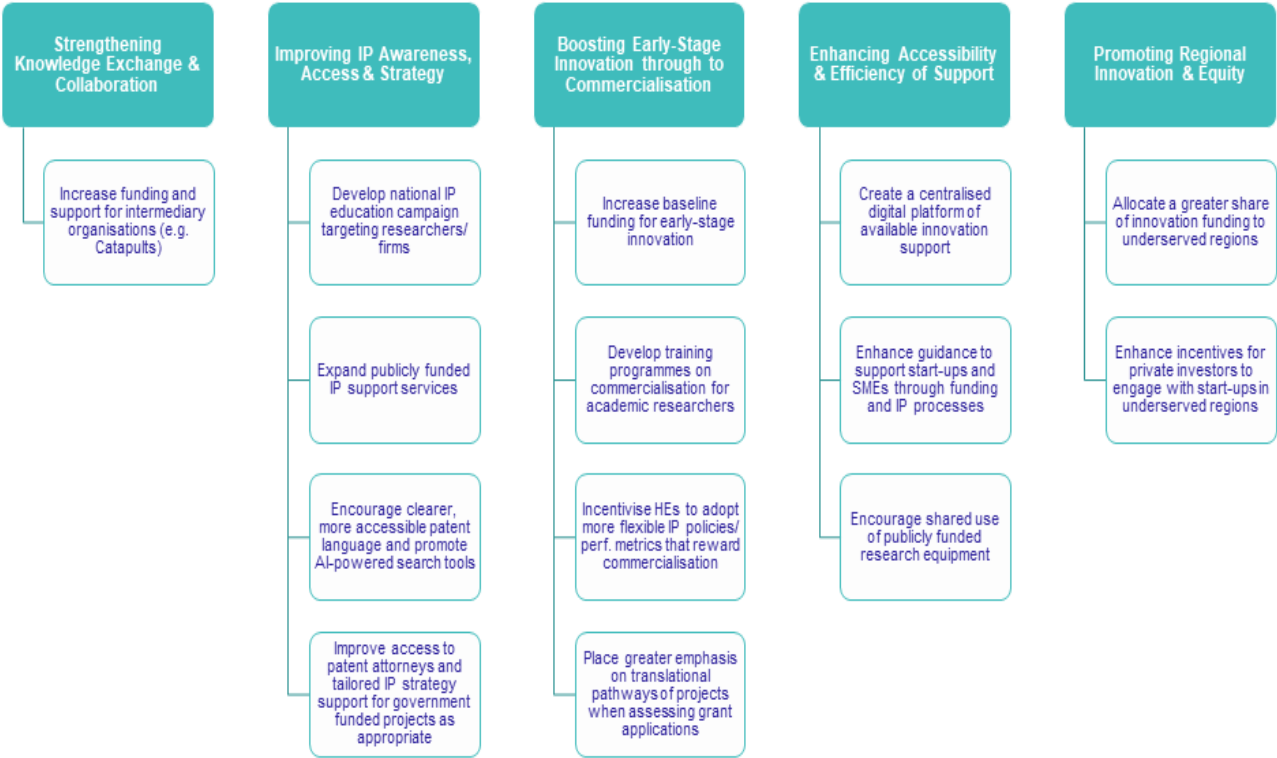
Knowledge gap/problem

The UK leads in basic research but converts it into commercial and societal impact less effectively than comparable economies. Evidence on spending, patent counts and investment levels is plentiful; first-hand accounts of how innovators protect and commercialise ideas are scarce, particularly outside established hubs.

Approach

We interviewed 20 innovators from industry and academia, sampled from the most highly cited UK patents filed between 2010 and 2017 in biotechnology, automotive and electric vehicles, green technologies, pharmaceuticals and chemistry, plus two innovation support bodies. The findings describe patent-active innovation rather than innovation in general.

Policy Proposals to Strengthen the UK Innovation Ecosystem



FINDINGS

- » Industry innovates mainly through in-house research and practical problem-solving, while academic innovators draw more on published literature and scholarly networks.
- » Collaboration is valued but slowed by mismatched incentives, timescales and ownership disputes.
- » Intermediaries such as Catapults bridge these divides, although interviewees described mistrust and guarded silence within shared innovation spaces.
- » Protecting intellectual property is regarded as necessary but costly and opaque. Taking an idea to international filing and maintaining it over twenty years was reported to cost in excess of £150,000. Patent language is hard to read, prior art searches unwieldy and rules inconsistent across jurisdictions. Enforcement is the deeper problem: smaller firms cannot fund litigation against larger competitors.
- » Access to finance is the most cited barrier to commercialisation, and the gap between research and market readiness is steepest in pharmaceuticals and biotechnology. Academic reward systems favour novelty and publication, and some university ownership policies are perceived as deterring founders and investors.
- » Tax credits and Innovate UK grants are valued and help attract private capital, but the support landscape was described as disjointed, applications burdensome and decisions slow. Grants were considered small against international competitors, and venture capital scarcer than in the United States.

DISCUSSION/IMPLICATIONS

Innovate UK and the Catapult Network could pair increased investment in intermediaries with measures that make collaboration inside them safer, including partner involvement in programme design, joint pilots and embedded intellectual property support. The UK Intellectual Property Office could expand subsidised advice and prior art assistance, promote clearer drafting and artificial intelligence search tools, and make patent attorney support available within publicly funded projects.

The Department for Business, Innovation, Science and Trade and UKRI could ring-fence proof-of-concept and seed-stage funding, consolidate scheme information in one platform, shorten decision times, mandate shared use of publicly funded equipment, and direct more investment towards underserved regions. Universities could adopt more flexible ownership terms and reward commercialisation in performance metrics.

Two questions remain open:

What equity stake sustains both investor confidence and founder motivation?

Whether regional imbalance reflects the distribution of applications or of awards.