

Skills for innovation

A framework to enable system-wide impact



The UK's innovation agency

Welcome



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We are the UK's innovation agency

As part of UK Research and Innovation (UKRI), Innovate UK is publicly funded to drive innovation and productivity across the UK.

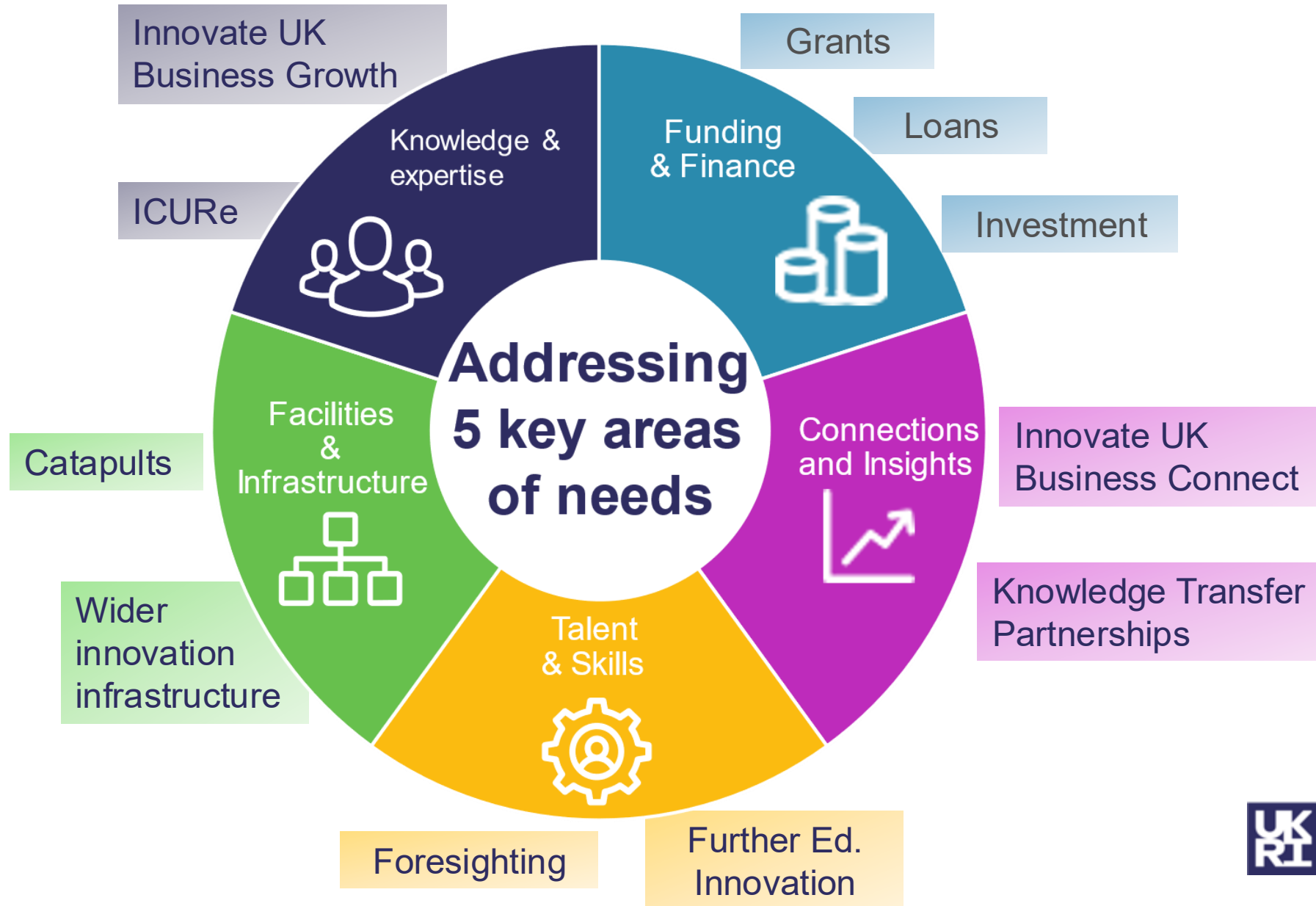
We work for the UK to create a better future by inspiring, involving and investing in businesses developing life-changing innovations.



Are innovators born or made?

- a) Many people have **innovation potential**, but this is not always realised
- b) There are **barriers that prevent people from becoming innovators** – Limited access to opportunities, cultural factors, personal circumstance, absence/awareness of the necessary skills...

How we support business innovation



Background to the Innovation Skills Framework (ISF)

- Businesses are struggling to access the skills they need
 - **33% businesses** said that a **'lack of skills' is a major barrier to innovation activity**
(Innovation State of the Nation Survey, 2024)
- But what are the key skills that enable innovation?
 - The answer gets messy!
- IUK commissioned researchers from the Innovation & Research Caucus (IRC) to develop an **evidence-based framework** to clarify what we mean by **'innovation skills'**.



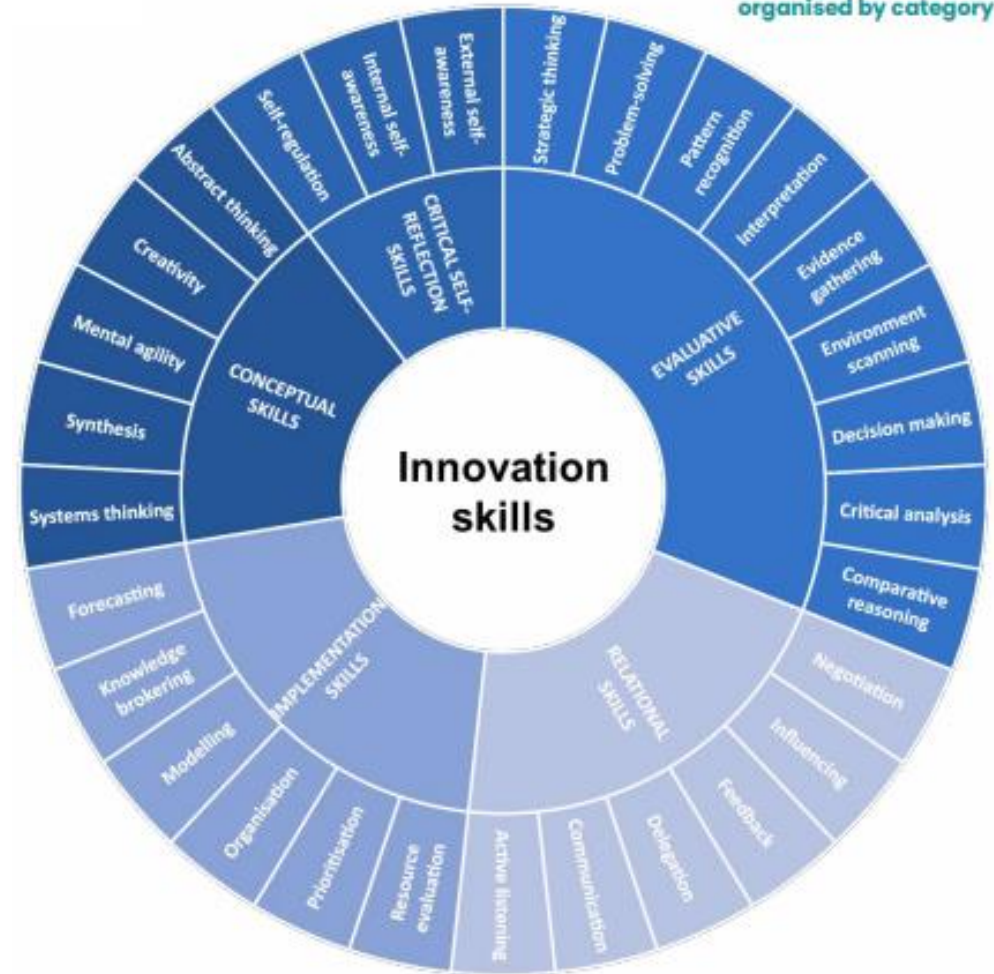
Innovation Skills Framework (ISF)

- Researchers conducted a **review of academic and grey literature** to identify activities, processes, tasks etc. associated with innovation.
- These were thematically grouped to derive **relevant tasks and related skills**. Output = skills wheel.
- Stakeholder engagement enabled further iterative refinement.

What is a 'skill'?

'Personal capacities that can add value [...] and can be acquired or enhanced through learning and development and contribute to the completion of [...] tasks.'

Figure 2: Innovation skills organised by category



ISF shows that the skills needed for innovation are learnable and teachable

- The framework was well received and has been adopted in several ways, including:

IfATE (Institute for Apprenticeships and Technical Education) Innovation Strategy – commitment to using the ISF to inform national approach to developing innovation skills among apprentices.

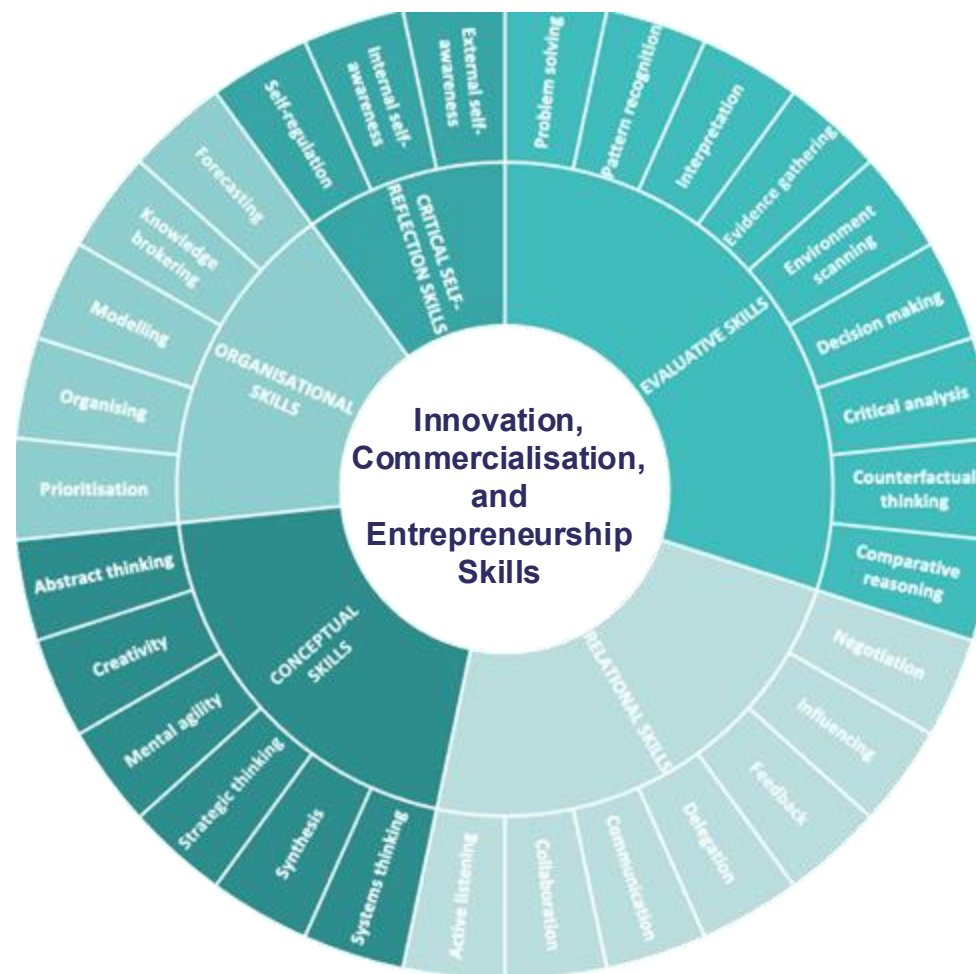
Innovation Literacy Training, Greater Manchester Colleges
- inspired by the ISF and co-authored by innovation expert Ben Edmonds, this interactive course equips apprentices with the tools to become Innovation Ambassadors. Delivered across all nine Greater Manchester Colleges, it sends a clear message: innovation isn't just for the few, it's for everyone.

Scan to download
the report

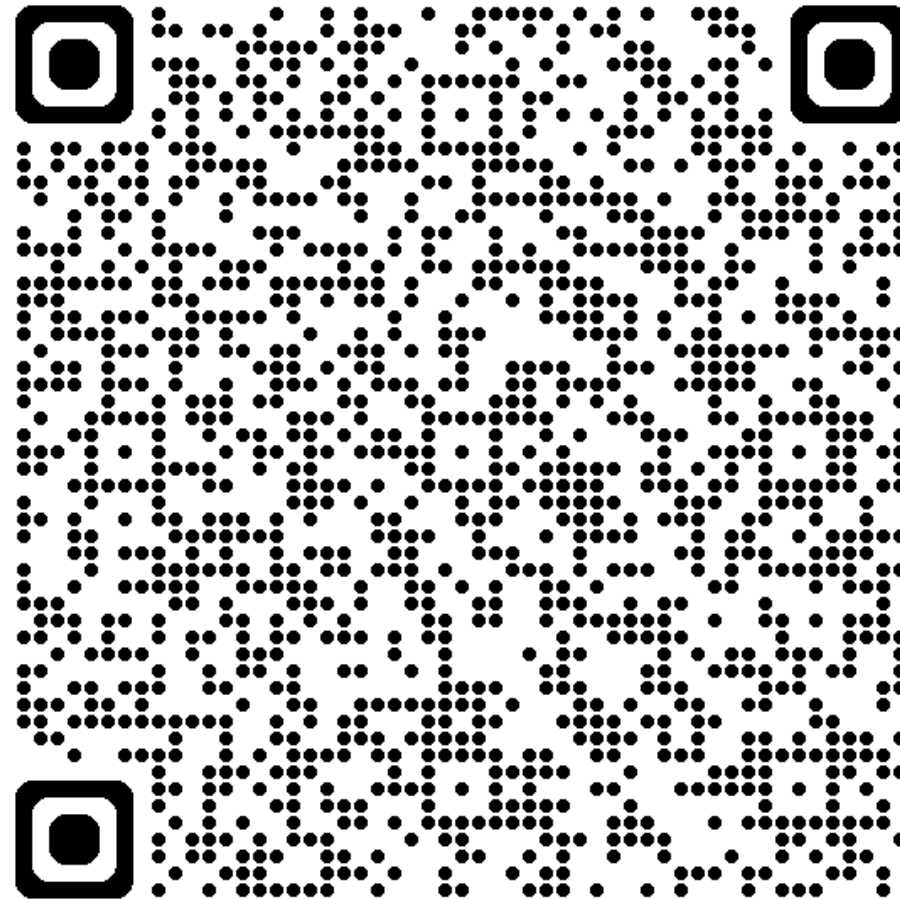


Version 2.0: ICE skills framework

- Ongoing engagement revealed **commercialisation & entrepreneurship** skills are equally vague.
- Associated tasks closely related to innovation.
- IRC researchers **expanded the framework** using the same approach.
- An **evolution**, rather than a departure, from ISF (version 1.0).
- Unique approach which helps to view skills in context and avoid artificial silos.
- Disclaimer! ICE skills are not the only ingredient - need to be accompanied by **context-specific skills**, knowledge and enabling attitudes and resources.



Download the full report:



How might the framework be used?

Deploying skills

- Assess how well employees' existing **skills align with the tasks and roles** involved in the ICE process, supporting better decisions about how to organise and utilise staff.
- Identifying gaps or **mismatches** enables organisations to develop or source the necessary ICE skills to strengthen performance.

Developing skills

- Use the Framework to **map curricula** and ensure ICE skills are effectively introduced, reinforced, and assessed across programmes.
- Supports alignment of professional and curriculum **standards** with ICE skills, helping organisations like IfATE and training providers update and enhance their development programmes.

Sourcing skills

- Inform **role descriptors** and **person specifications** to prioritise ICE skills in recruitment and selection processes.
- Design **selection methods**, such as assessment centre activities, to evaluate candidates' existing ICE skills or their potential to develop them.

Thank you

- Read the reports and let us know what you think. Your feedback is invaluable.



Get in touch:

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