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Driving Scale-Up for UK Semiconductor Companies in AI Hardware

London Tech Week Roundtable Report

8 June 2026

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Session detail	Description
Session	Driving Scale-Up for UK Semiconductor Companies in AI Hardware
Date and time	8 June 2026, 15:00 to 16:00
Host	Compound Semiconductor Applications (CSA) Catapult
Context	UK Global R&D and Science Investment Summit, aligned to London Tech Week
Format	Invitation-only roundtable
Facilitator	Pete Broadbent, Connected Places Catapult
Opening speakers	Richard Duffy, DSIT; Caroline O’Brien, CSA Catapult; Andy McLean, UK Semiconductor Centre

1. Executive summary

On 8 June 2026, Compound Semiconductor Applications (CSA) Catapult hosted an invitation-only roundtable focused on how the UK semiconductor sector can work together to drive scale-up in AI hardware. The session brought together representatives from government, industry, CSA Catapult, the UK Semiconductor Centre and the wider semiconductor ecosystem.

The session was deliberately designed as a rapid, action-focused discussion rather than a conventional roundtable. Short opening contributions set the strategic context, and Slido was then used to prioritise scale-up needs, identify capability gaps and surface practical joint actions.

The core message from the session was clear:

The UK has significant semiconductor and AI hardware strengths, but these need to be converted more deliberately into scale-up outcomes, integrated system capability, resilient supply chains and visible delivery.

The discussion did not suggest that the UK lacks technical ambition or research capability. Instead, it highlighted a practical challenge of how to connect existing strengths to customers, facilities, investment, procurement pathways and system-level integration capability.

Three findings stand out:

- **Scale-up barriers are practical and structural**. Participants prioritised access to specialist facilities, testbeds and pilot lines; access to customers, first adopters and defence routes; and clearer demand signals from government and major buyers.
- **System-level integration is the strongest capability signal.** Advanced packaging and heterogeneous integration was the clearest priority in the polling, selected by 67% of respondents.
- **Participants want visible delivery.** Open-text responses repeatedly called for prioritisation, role clarity, movement from grants to procurement, implementation milestones and short-term action.

This report focuses on what was heard, why it matters and what should happen next.

2. Strategic context

The opening presentations established a shared view of why AI hardware now matters to UK growth, security and industrial capability.

> **"How do we create an innovation ecosystem and a pipeline that supports AI hardware innovation in the UK from discovery through to scale?"**

— Richard Duffy, DSIT

Richard Duffy positioned AI hardware and semiconductors within the UK's modern industrial strategy and the Government's focus on frontier technologies. He framed AI hardware broadly, covering not only accelerators and processors, but also photonics, interconnects, power supplies, sensors, edge systems and the wider infrastructure needed to support AI deployment. He also linked the session to the UK AI Hardware Plan, published on the day of the roundtable.

> **"We see our role as helping companies speed, scale and stay."**

— Caroline O'Brien, CEO CSA Catapult

Caroline O'Brien set out the case for CSA Catapult evolving towards a broader semiconductor role. She emphasised that AI hardware is a system-wide challenge, from grid to edge AI, and that the UK needs stronger capability to bring together technologies, supply chains and industrial demonstrators. She framed the future Catapult role as helping companies move faster, scale more effectively and remain anchored in the UK.

> **"We have the innovation, we have the research, we have a lot of the capabilities in place. What is missing?"**

— Andy McLean, CEO UK Semiconductor Centre

Andy McLean positioned the UK Semiconductor Centre as a strategic coordination body working alongside CSA Catapult. He identified investment, skills and workforce, partnerships, and ecosystem visibility as central to turning UK semiconductor capability into outcomes. His remarks reinforced that the UK does not need to own every part of the global semiconductor value chain, but does need clearer choices, stronger partnerships and better coordination.

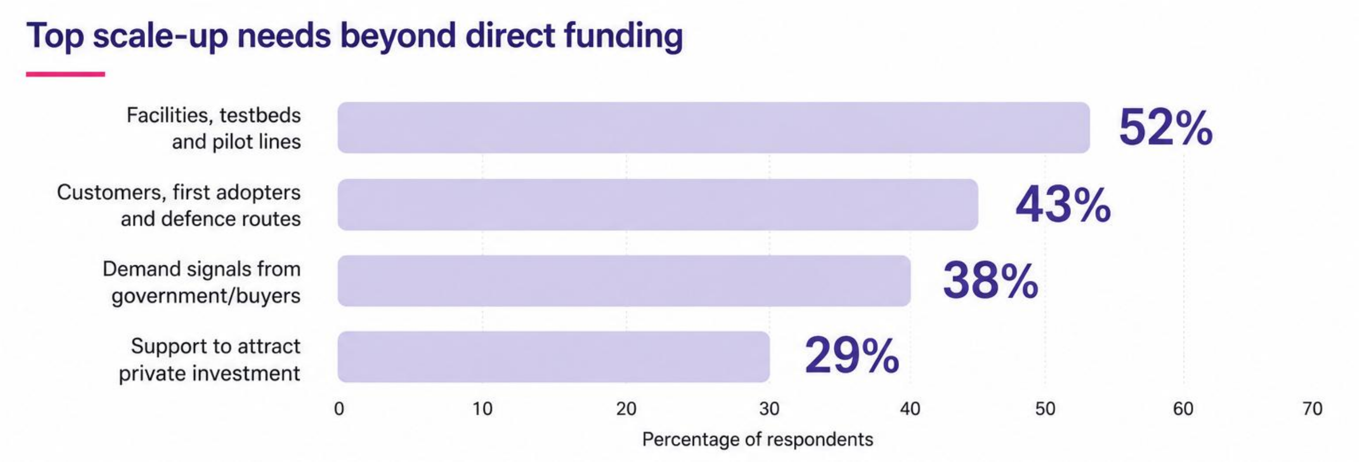
Together, the three introductions framed the roundtable around one practical question:

What needs to be done now to help UK semiconductor companies turn AI hardware opportunities into UK scale-up outcomes?

3. What the room prioritised

3.1 Scale-up needs are practical and structural

Participants were asked what would make the biggest difference to helping UK semiconductor companies turn AI hardware opportunities into UK scale-up outcomes, beyond direct funding.

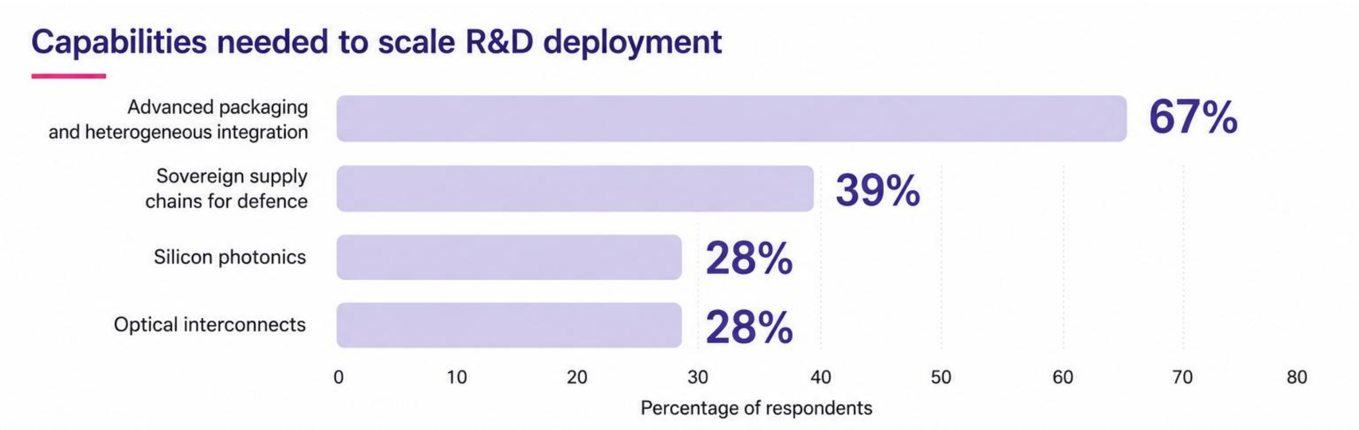


These results suggest that companies need more than grant funding. They need access to infrastructure, credible routes to customers, clearer demand signals and stronger conditions for private investment.

The low score for “better skills pipelines and talent retention” at 5% should not be read as meaning skills are unimportant. The discussion suggested that many participants interpreted this primarily as technical skills. A related gap is the business acumen and commercial capability needed to help SMEs cross the scale-up chasm. Existing business support can often be biased towards early-stage start-ups, whereas high-potential semiconductor businesses need more targeted support around commercial capability, investment readiness, procurement pathways, leadership experience and access to people who have taken similar businesses through that journey before.

3.2 System-level integration is the strongest capability signal

Participants were asked what new capabilities would be needed to scale R&D deployment for AI hardware and defence.

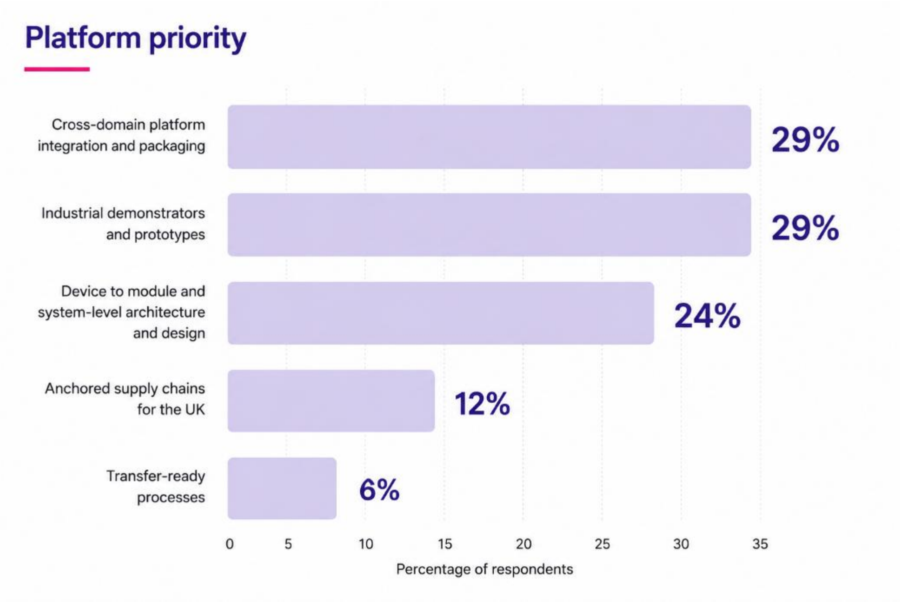


The standout result was advanced packaging and heterogeneous integration, selected by 67% of respondents. This strongly supports the view that UK opportunity sits not only in individual technologies, but in the ability to bring together silicon, compound semiconductors, photonics, power, sensors, packaging and system-level design into deployable solutions.

The discussion also showed that "sovereign supply chains" needs careful framing. Participants recognised the importance of defence and secure supply chains, but also noted that full domestic ownership of the entire semiconductor value chain is not realistic. A more practical framing is likely to be around secure, resilient and trusted supply chains, with clear choices about which capabilities need to be built in the UK and which can be secured through strategic international partnerships.

3.3 The future Catapult role should focus on integration and demonstrators

Participants were asked which capabilities should be prioritised as CSA Catapult evolves towards a converged technology integration R&D platform for UK industry.



The results point towards a role for the future Semiconductor Catapult that is closer to system-level integration, demonstrators and applied industrial capability. The discussion suggested that industry values practical stepping stones between research and commercial deployment, particularly where those steps help companies integrate technologies, test propositions and build confidence with customers or investors.

4. What participants asked for next

The open-text responses were consistent and action-oriented. Participants did not ask for another broad strategy exercise. They asked for prioritisation, delivery and clearer mechanisms for turning strategy into outcomes.

Theme	What participants asked for
Prioritisation	"Pick key interventions, not everything for everyone."
Roles and clarity	"Coherence and clarity across the wider ecosystem and outline of roles and responsibilities."
Demand and procurement	"Clarity on moving companies from grants to procurement and delivering capability."
Delivery pace	"Short-term deliverable action with results in 12 to 24 months."
Use cases	"Align and agree on 3 AI system-level scale-up national semiconductor use cases."
Sprint model	"Create a 90-day AI Hardware ScaleUp Sprint with 6 to 10 named UK companies."
Implementation	"Industrial strategy with concrete milestones."
Industry offer	"A clear joined-up offering for industry."

The closing question reinforced the same message. Participants said they would stay engaged if they saw follow-up, impact, clear messaging, prioritisation and signs of action, even if small.

5. Proposed action plan

The following action plan is distilled from the Slido results, open-text responses and discussion themes. It should be read as a proposed follow-up plan for consideration by CSA Catapult, the UK Semiconductor Centre, DSIT and industry, rather than as a set of actions formally agreed by participants.

Action/Owner	Rationale	Proposed output
1. Agree a small number of priority AI hardware use cases (CSA Catapult)	Participants called for focus and prioritisation, including a specific suggestion to agree three AI system-level scale-up national semiconductor use cases.	A short list of priority use cases that can guide follow-up activity and investment conversations.
2. Build a joined-up scale-up offer for industry (ALL: DSIT/CSA Catapult/UKSC)	Participants asked for coherence, clarity and a joined-up offer across the ecosystem.	A simple industry-facing scale-up pathway or one-page operating model showing who does what.
2a.Strengthen commercial scale-up capability	The discussion highlighted that business acumen is as important as technical skills in helping SMEs cross the scale-up chasm. Existing business support can be biased towards early-stage start-ups, while high-potential semiconductor companies need more targeted support around commercialisation, investment readiness, procurement pathways and leadership experience.	A targeted scale-up support offer for high-potential semiconductor businesses, linked to CSA Catapult, UKSC and DSIT and industry partners.
3. Prioritise advanced packaging and heterogeneous integration (CSA Catapult)	This was the strongest capability signal from the session, selected by 67% of respondents.	A focused capability proposition around system-level integration for AI hardware and defence.
4. Create stronger demand and procurement pathways (ALL DSIT/CSA Catapult/UKSC)	Customer access, first adopters, defence routes and government demand signals were among the highest-ranked scale-up needs.	A practical demand-side pathway for selected AI hardware use cases.
5. Define a secure and resilient supply chain approach (CSA Catapult)	Building sovereign supply chains for defence was selected by 39% of respondents, but discussion highlighted the need for a realistic model based on resilience and trusted partnerships.	A prioritised supply chain resilience map for selected AI hardware and defence-relevant use cases.
6. Test a 90-day AI hardware scale-up sprint (ALL: DSIT/CSA Catapult/UKSC)	One open-text response proposed a 90-day sprint with 6 to 10 named UK companies and one concrete customer or problem per company.	A short, visible delivery activity that demonstrates follow-up from the roundtable and creates learning for a wider programme.

Appendix A: Method and limitations

This report has been prepared from the available transcript, Slido poll results and structured discussion outputs. The report is intended to capture the main points raised during the session and to identify practical themes for follow-up.

The Slido results provide a useful indication of the priorities expressed by participants in the room. They should not be treated as statistically representative of the whole UK semiconductor sector. The results are best understood as a structured input from a focused group of stakeholders participating in the London Tech Week roundtable.

The report avoids attributing precise wording or detailed claims. The findings therefore focus on points that were clearly reflected in the poll results, repeated in the discussion, or supported by the open-text responses.

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