



# Top Technologies Shaping Innovation Strategies in 2026



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# Agenda

**01** | Themes underpinning innovation in 2026

**02** | Using Lux's Tech Signal to predict innovation trends

**03** | Translating trends into innovation action

## Oil & Gas: Resiliency

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## Utilities: Affordability

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## Chemicals: Performance

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## Industrials: Momentum

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## Agrifood: Refinement

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## Medical Devices: Diagnosis

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**How are the underlying technologies  
shifting within these innovation  
themes?**

# Agenda

**01** | Themes underpinning innovation in 2026

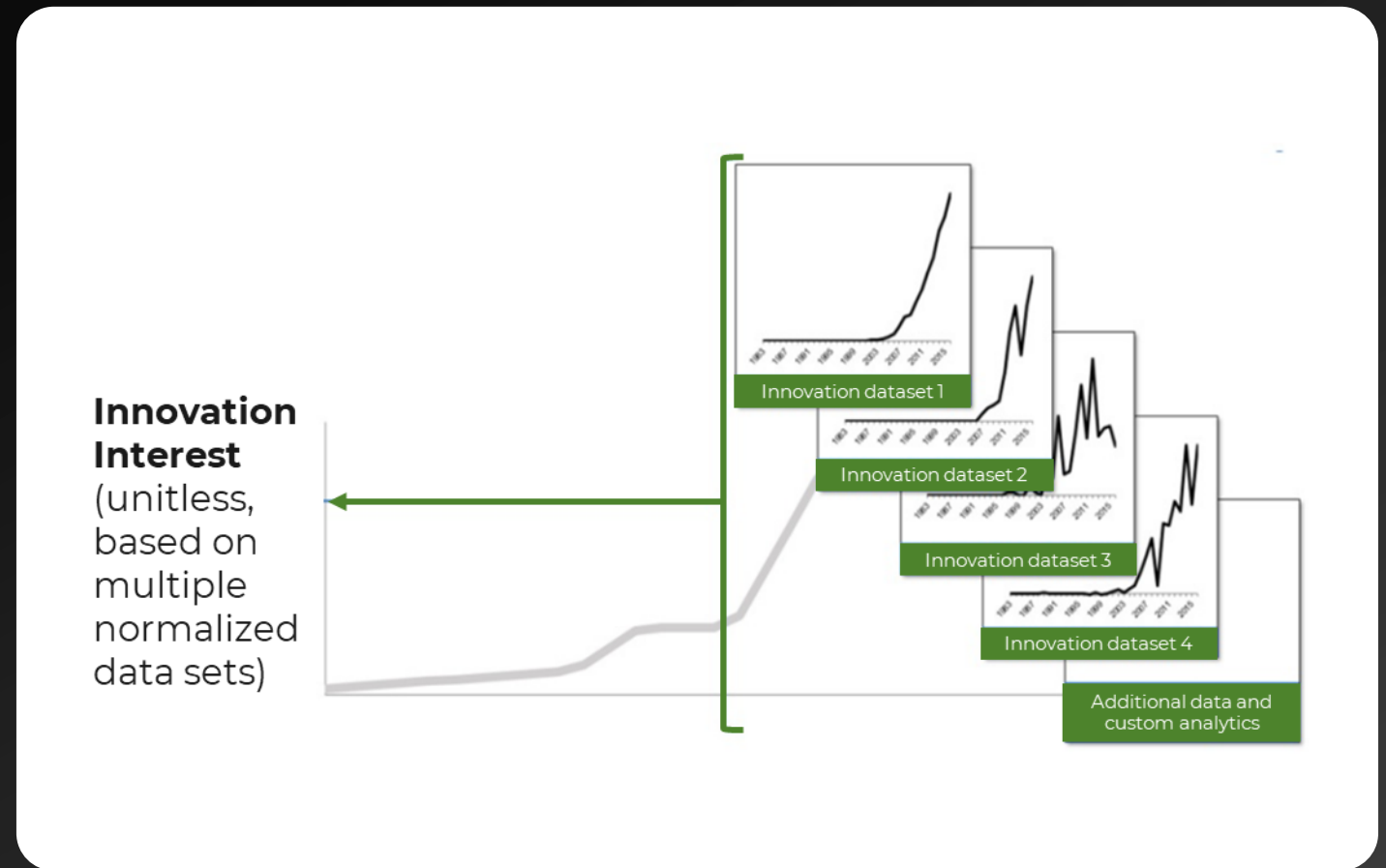
**02** | **Using Lux's Tech Signal to predict innovation trends**

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# The Lux Tech Signal is the foundation of innovation foresight and tech scouting

The Lux Tech Signal, which provides foresight into the future of innovation, is:

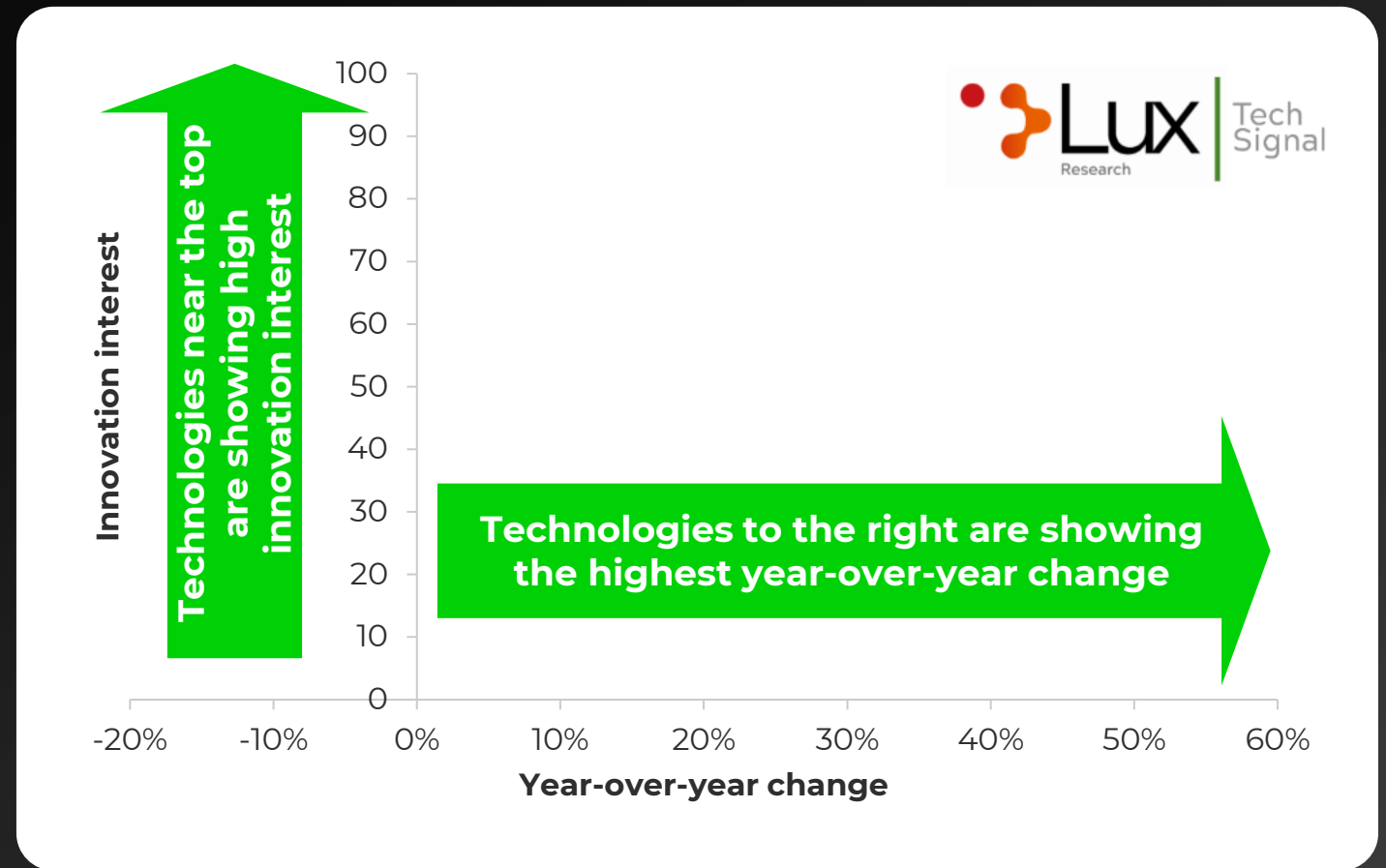
- **Data driven.** A unitless innovation signal normalizes unique data sets.
- **Data backed.** It combines patents, academic publications, venture funding, early stage government funding, and Lux's proprietary data.
- **Foresight.** It pinpoints early indicators of technology breakthroughs and bursting hype bubbles.



# Uncovering the interest and changes in innovation trends

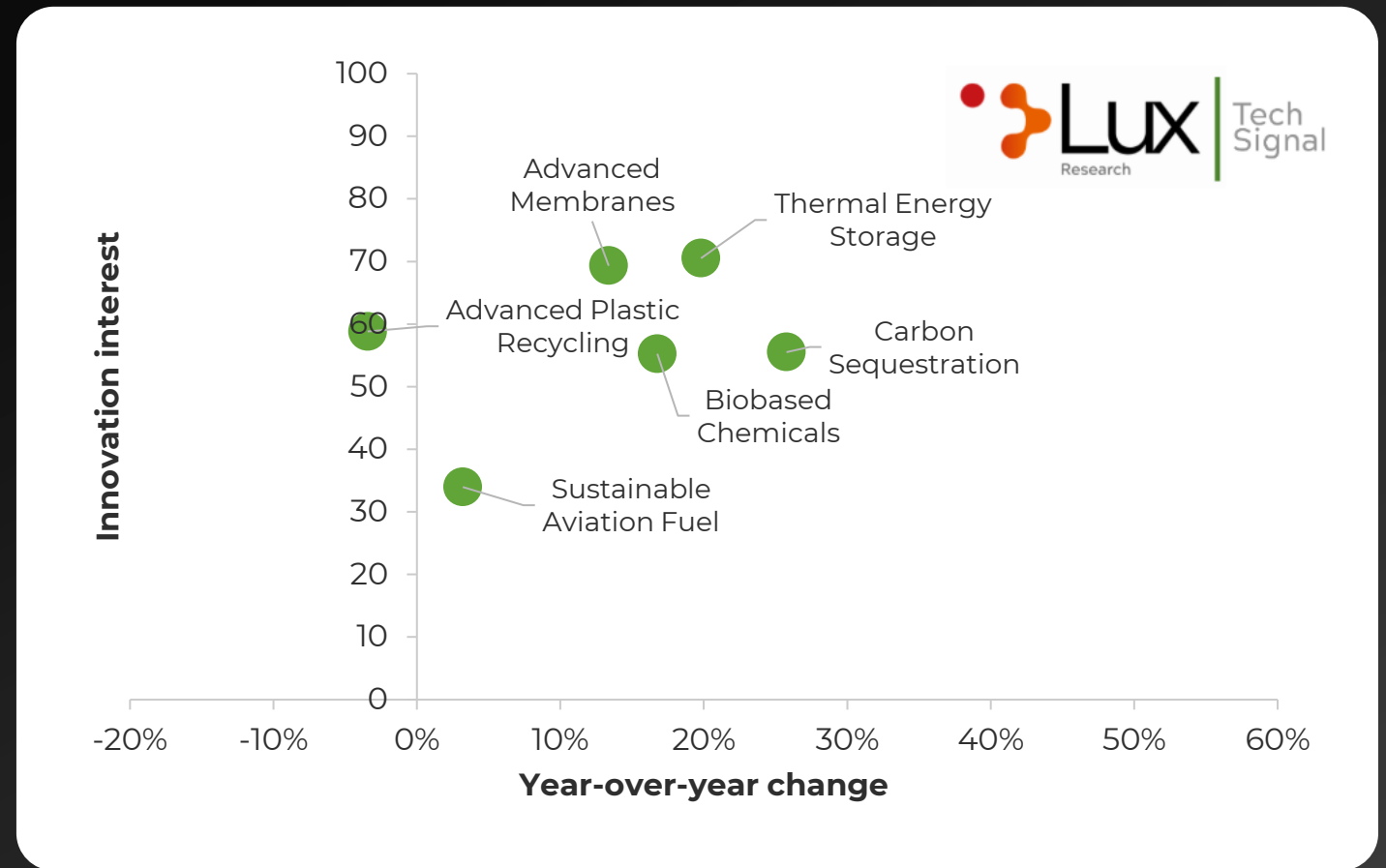
With the pace of innovation moving faster, the Lux Tech Signal plays a key role in:

- **Going beyond the headlines.** As hype cycles wax and wane, ground innovation interest with data-backed evidence.
- **Identify early signals.** Pick up on momentum as new technologies emerge into the landscape.



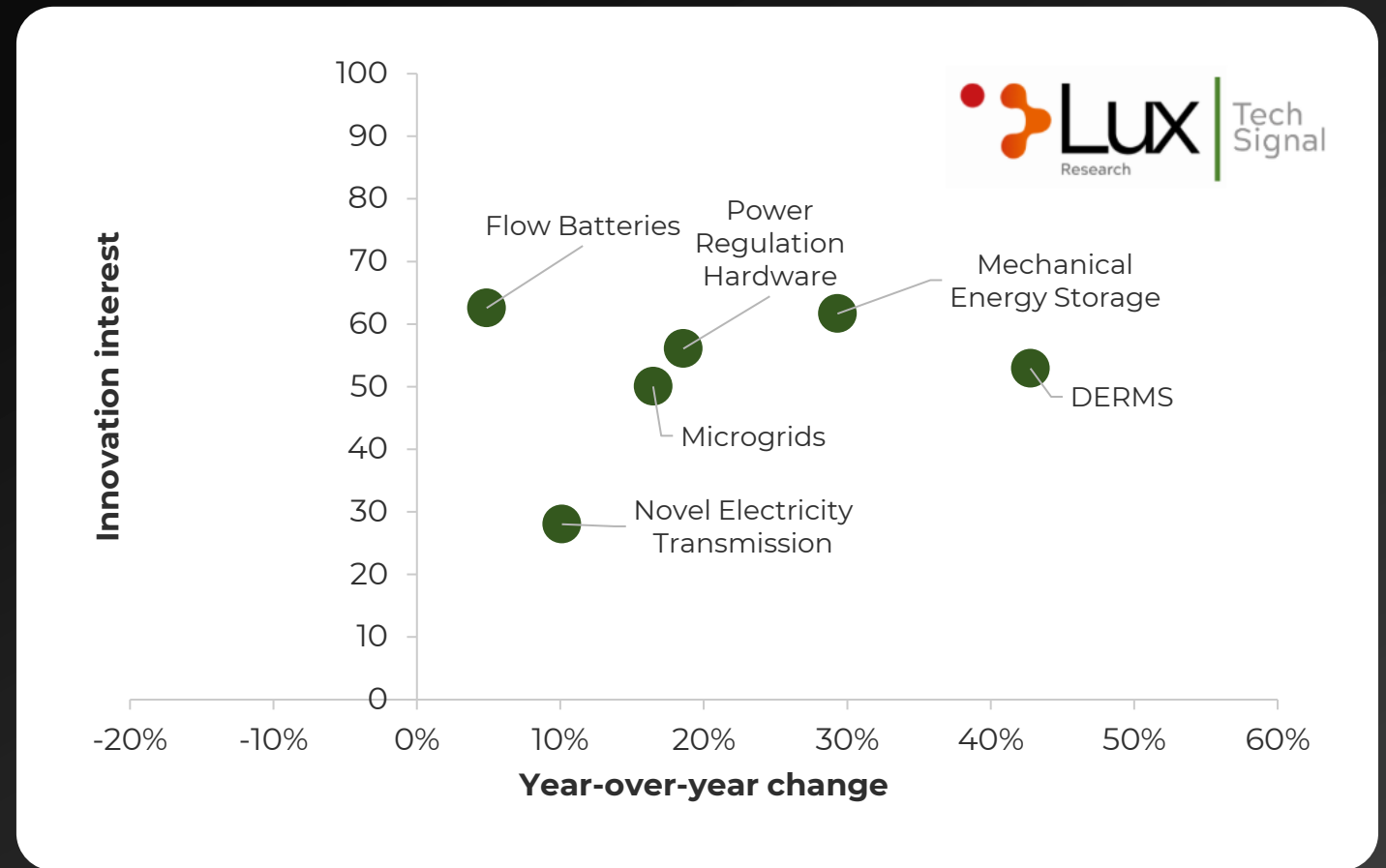
# Oil and Gas: Resilience innovation shifting to near-term operational optionality

- Strong momentum in advanced membranes, carbon sequestration, and thermal energy storage persists despite uncertain near-term returns.
- Energy security and process efficiency — driven by EU regulations and China scale-up — continue to drive activity.
- Prioritize infrastructure enablers as near-term deployment plays and track scale-up milestones as tipping points through 2026.



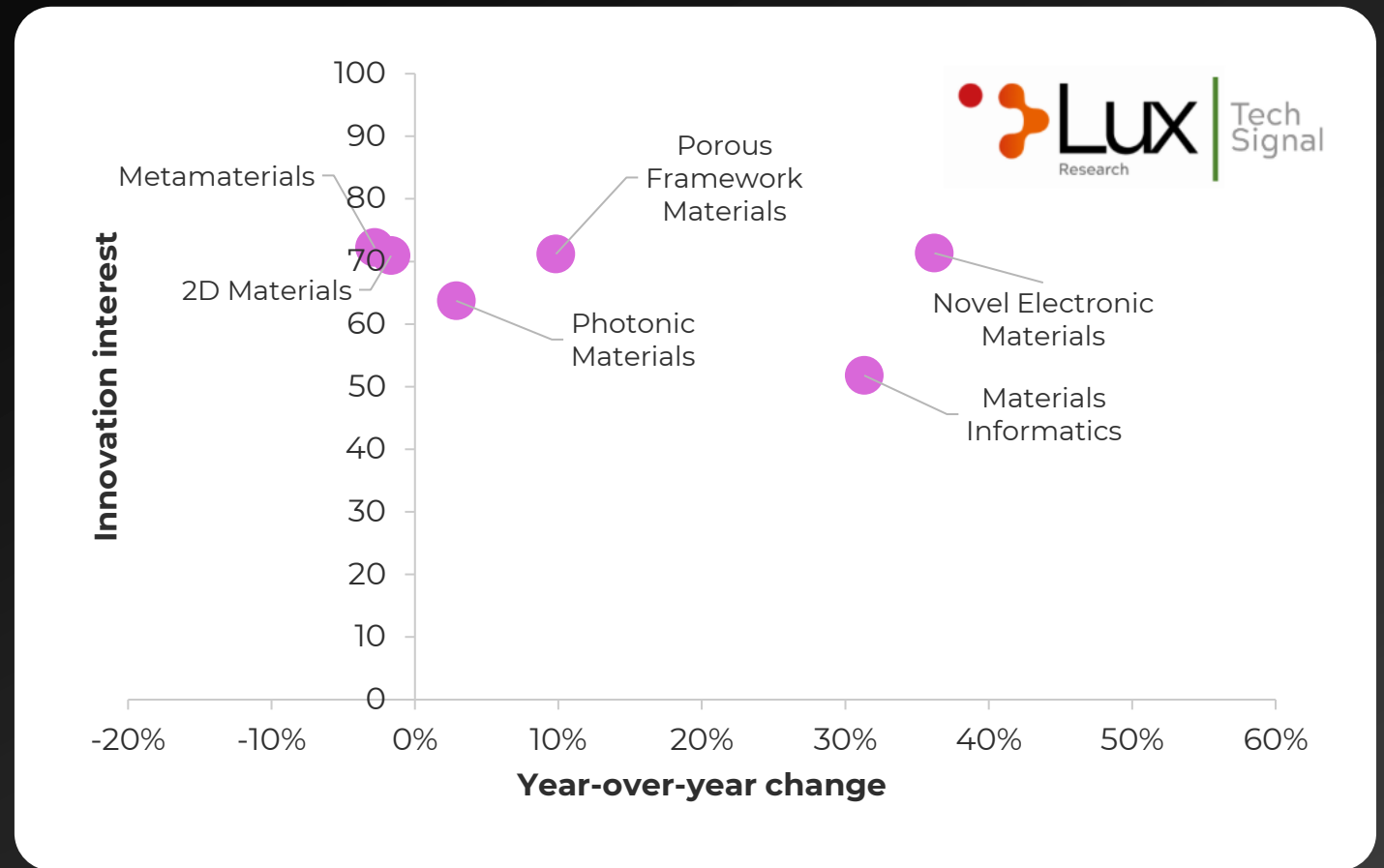
# Utilities: Flexibility-led innovation surges as affordability pressures outpace grid buildout

- Momentum in flexibility and storage aligns with affordability pressures, while solutions requiring infrastructure buildout lag.
- A vibrant startup ecosystem is driving distributed flexibility, with corporates focusing on near-term deployable hardware over long-cycle infrastructure.
- Scale investments in flexibility assets where economics are proven, while continued storage cost reductions may unlock DER orchestration opportunities by 2026.



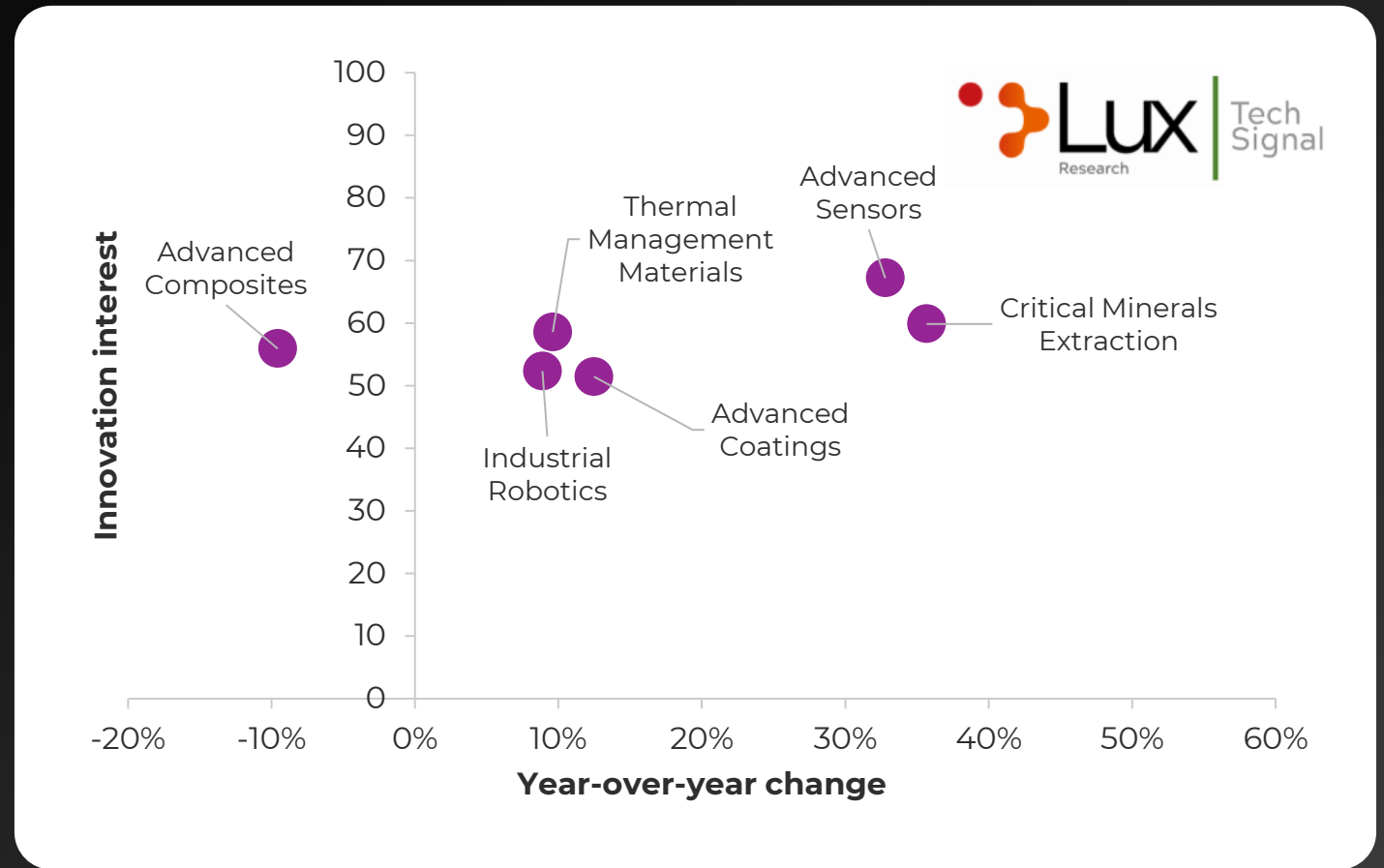
# Chemicals: Performance innovation drives platform acceleration

- Strong momentum in materials informatics and fragmented advanced materials suggests technical innovation may be outpacing commercialization readiness.
- VC funding in materials informatics and academic-led breakthroughs are key drivers of activity.
- Accelerate AI-enabled R&D platforms and selectively back materials as clearer application-fit signals emerge in 2026.



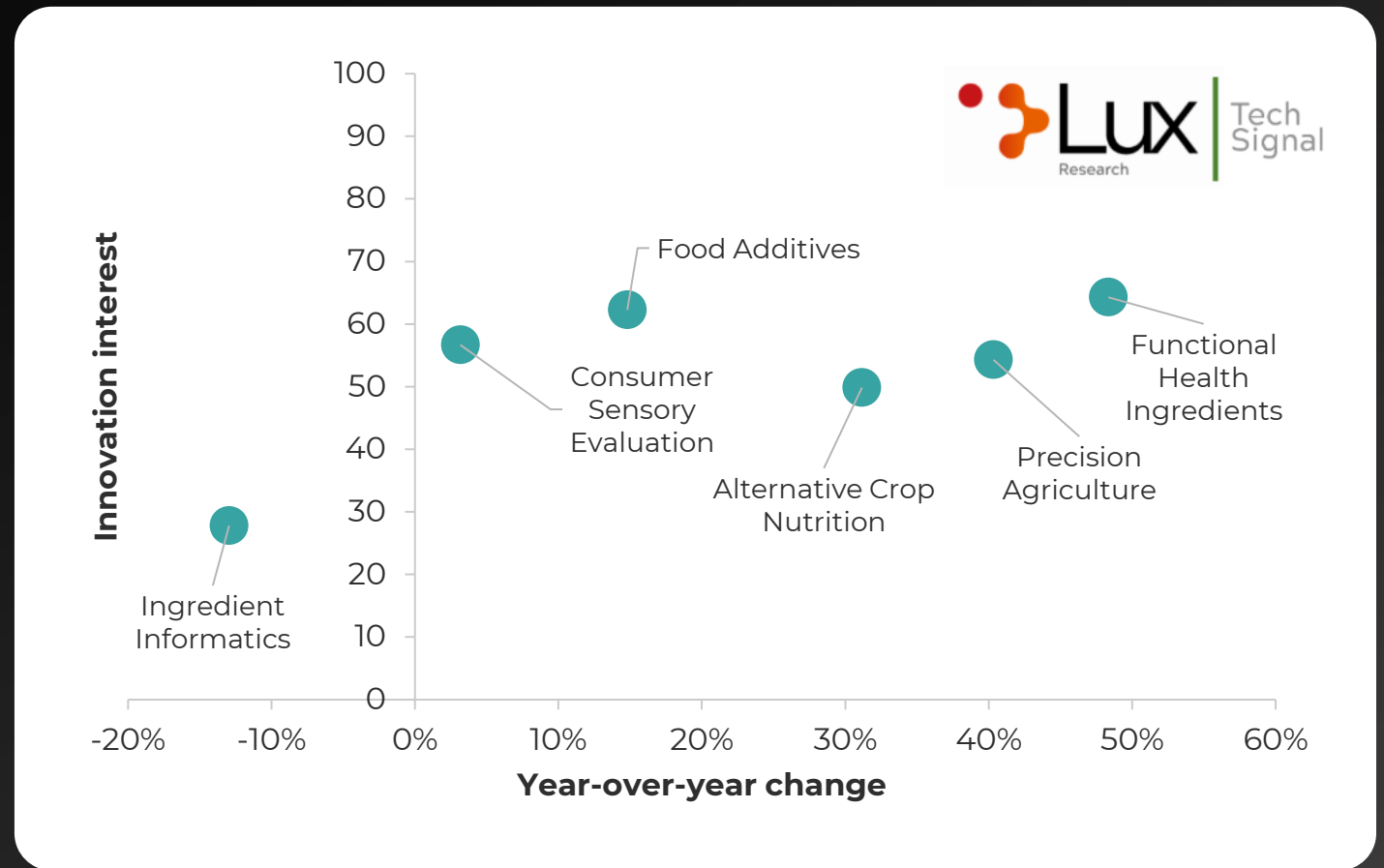
# Industrials: Innovation momentum shifts from hype to deployable technologies

- Innovation is concentrated in sensing, aligning with resilience and efficiency goals, while materials show signs of cooling following a likely overinvestment cycle.
- Growth is driven by policy-backed supply chains, defense-linked use-cases, and sustained corporate and startup activity.
- Engage in advanced sensors and critical minerals and monitor cost-performance validation for advanced materials through 2026.



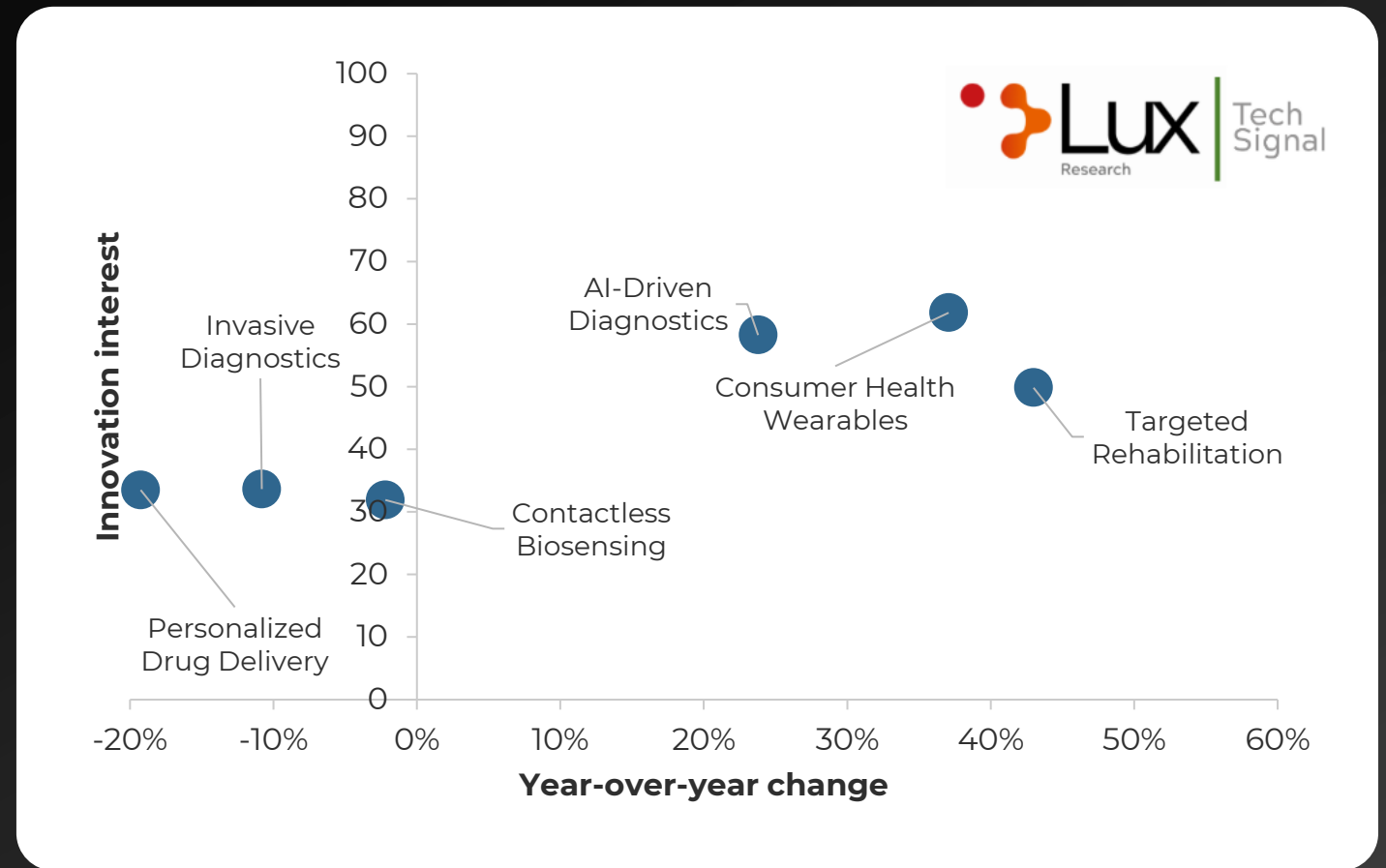
# Agrifood: Refinement outperforms discovery towards compliance-ready execution

- Momentum is strong in formulation and health, while digital enablers lag in delivering scalable, defensible IP.
- Geopolitics, EU regulatory scrutiny, and the U.S.'s health positioning underscore growing innovation interest.
- Strengthen ingredients and formulation resilience capabilities today; evaluate regulatory shifts and validation signals through 2026.



# Medical Devices: AI-led diagnostic innovation surges while clinical fragments

- AI concentrates innovation momentum diverging from slower clinical segments.
- Equipment and AI integration is underway, leading toward new business models for product testing and outcome-driven consumer health devices.
- Engage for workflow-embedded AI and wearables but beware of overcomplication and the future of AI device regulation before scaling.



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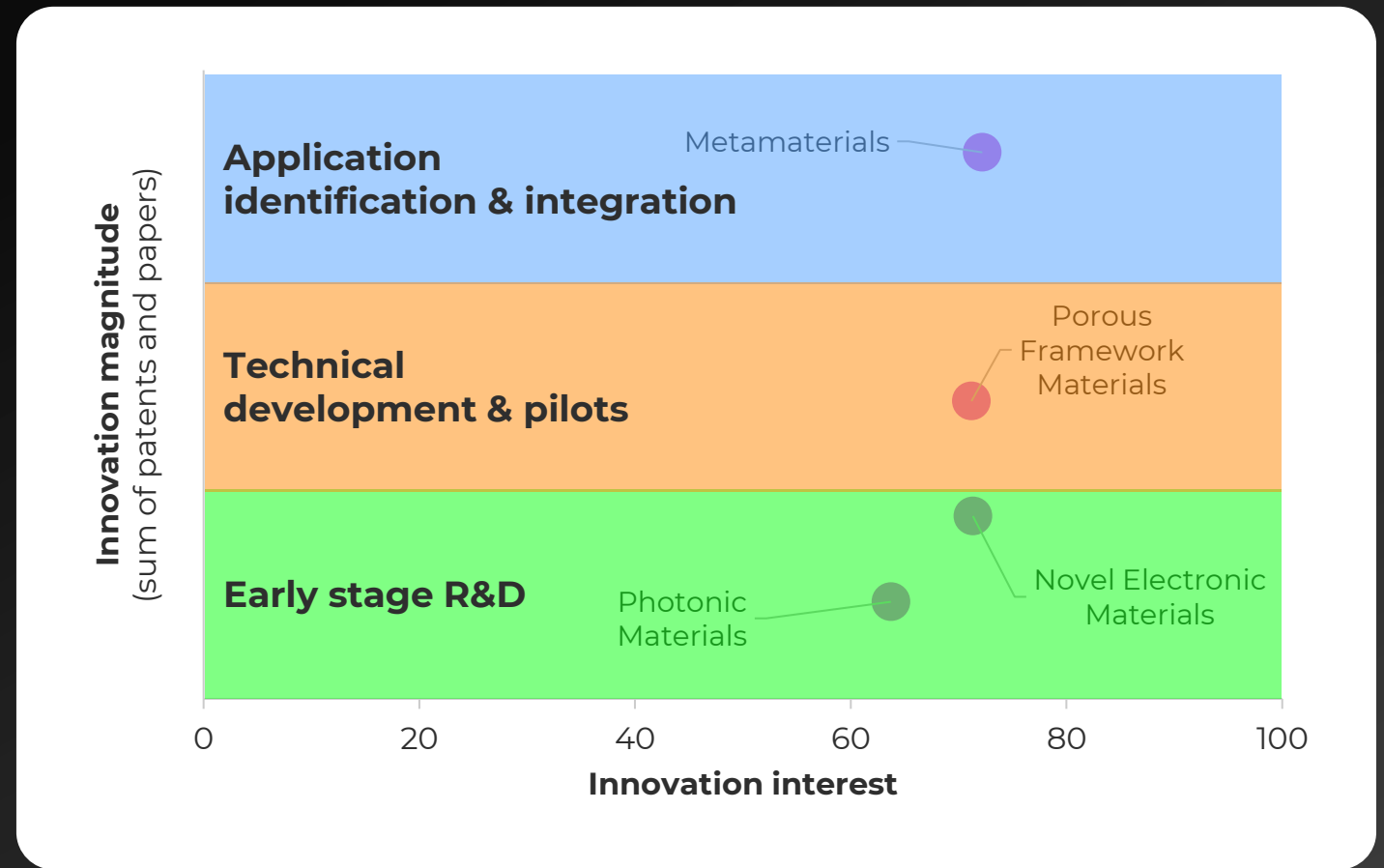
**03** | **Translating trends into innovation action**

# Segmenting innovation interest to find the sweet spot for your innovation activities

The Lux Tech Signal provides an integrated signal of science, investment, and commercialization.

Examining the Signal with respect to its components helps uncover innovation sweet spots.

Innovation magnitude reveals well-investigated areas and those that remain more exploratory.



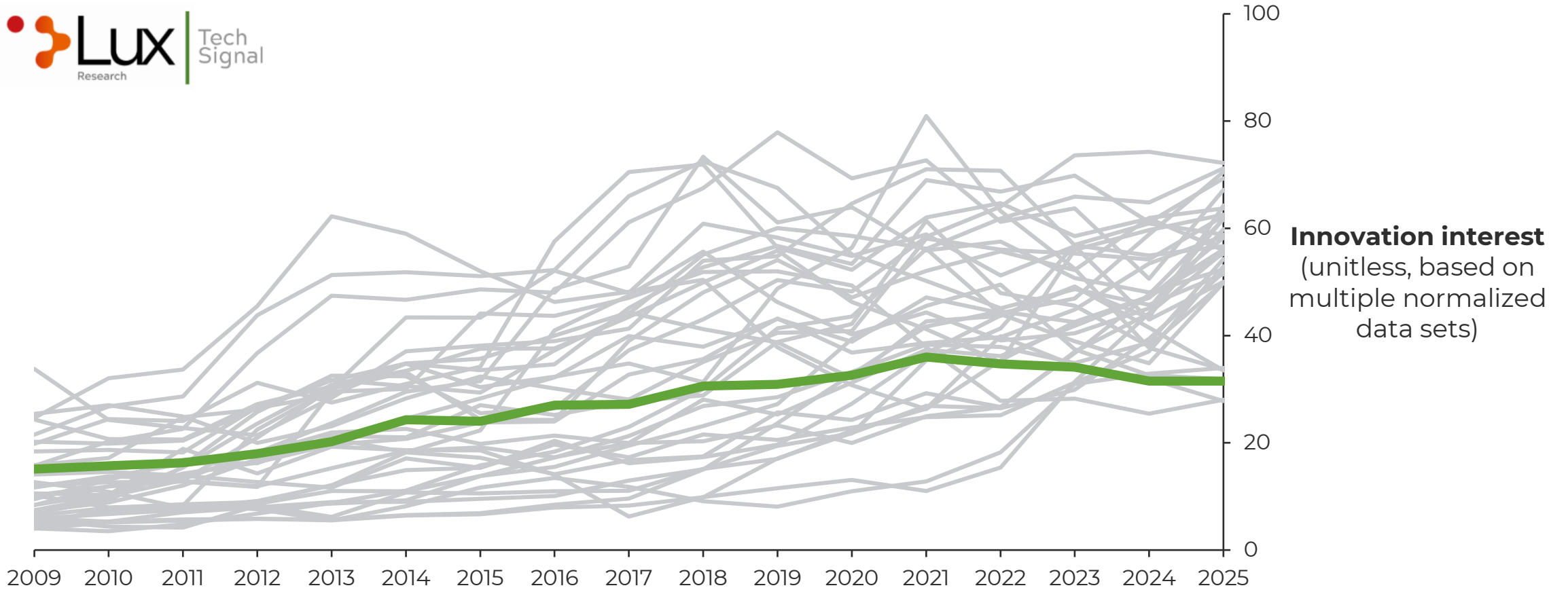
# Use a structured innovation process to complement technology-specific signals

Monitor market movements and listen to weak signals that change the maturity of factors beyond technology.

Detecting, interpreting, and acting systematically enable companies to position themselves better for tech-driven innovation opportunities.



# Technologies on the Lux Innovation Radar are rising in interest faster than average



# Key Takeaways

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## Pinpoint how to engage the technology options.

Various sources drive rising innovation interest — isolate where momentum is coming from to shape your strategy.

2

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## Monitor tech and market signals in parallel.

Noise and distractions are at an all-time high — a structured approach to innovation scouting is key for clarity.

3

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## Get back to innovation.

While many companies, even industries, have dialed back innovation efforts, the data say otherwise — someone else is winning the innovation race.



# Thank you

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