



# Rising Technologies Shaping Innovation in 2026





# A note about this e-book



**Joshua Haslun, Ph.D.**  
Senior Director



**Runeel Daliah**  
Principal Analyst



**Yuan-Sheng Yu**  
Senior Director

---

This e-book is an abridged version of our popular webinar “Top Technologies Shaping Innovation Strategies in 2026.” For the full webinar, which provides more research and context, please visit our website [here](#).

# Rising Technologies Shaping Innovation in 2026

---

Resilience, operational flexibility, and AI-driven efficiency are redefining innovation priorities as companies navigate uncertainty and accelerating market change.



## PRODUCT DESIGN & INNOVATION

Design adaptable, high-performance products that accelerate commercialization while reducing operational and market risk.



## SUPPLY CHAIN AND OPERATIONS

Regionalize supply chains and deploy automation to improve resilience, flexibility, and operational performance.



## CONSUMER SENTIMENT

Respond to growing demand for healthier, more transparent, and higher-value products that improve everyday consumer experiences.



## GROWTH POTENTIAL

Invest in AI, advanced materials, healthcare, and energy technologies to capture emerging long-term growth opportunities.

# Key takeaways

## 01

---

### **Pinpoint how to engage the technology options.**

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

## 02

---

### **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.

## 03

---

### **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.

# Innovation is entering a more practical era

*Key Takeaway: The organizations best positioned for long-term success will focus on technologies that balance innovation ambition with near-term operational value.*

Geopolitical instability, AI acceleration, supply chain disruption, and changing regulatory priorities are reshaping the innovation landscape in 2026. Companies are no longer pursuing innovation purely for long-term transformation. Instead, organizations are prioritizing technologies that can deliver measurable operational value while strengthening resilience against uncertainty.

At the same time, Lux's Tech Signal data show innovation activity remains strong despite headlines suggesting a slowdown in technology investment. The difference is that innovation is becoming more selective, pragmatic, and commercially disciplined.



# A focus on resilience, efficiency, and adaptability

**Key Takeaway:** *Despite serving different markets, nearly every industry is converging around the same strategic goal: building resilient, efficient, and adaptable innovation ecosystems.*

Innovation strategies across industries are becoming more focused and outcome driven. Rather than pursuing broad transformation agendas, organizations are concentrating investments around a small number of strategic themes that directly address operational pressure, economic uncertainty, and changing customer expectations.

Lux Research identified six themes shaping innovation priorities in 2026, each reflecting the specific challenges and opportunities facing major industries.



**Oil & gas:** Resiliency



**Utilities:** Affordability



**Chemicals:** Performance



**Industrials:** Momentum



**Agrifood:** Refinement



**Medical devices:** Diagnosis

# The Lux Tech Signal

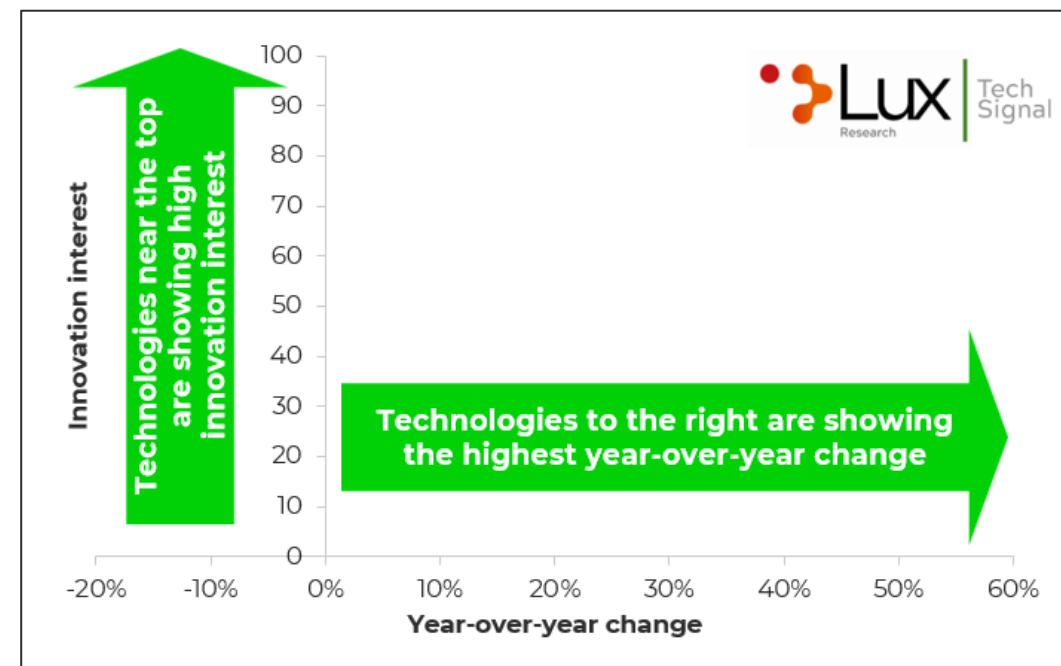
**Key Takeaway:** *Data-driven innovation scouting gives organizations a clearer view of where technology momentum is real and where future opportunities are emerging.*

As innovation accelerates, companies face a growing challenge: identifying which technologies have real momentum and which are driven by short-term hype.

The Lux Tech Signal provides a data-driven framework for innovation foresight by combining multiple indicators into a single measure of innovation interest. These inputs include:

- Patent activity
- Academic research
- Venture funding
- Government support
- Lux proprietary data

Rather than relying on headlines alone, leaders can identify early indicators of technological breakthroughs, commercialization momentum, and emerging market shifts.



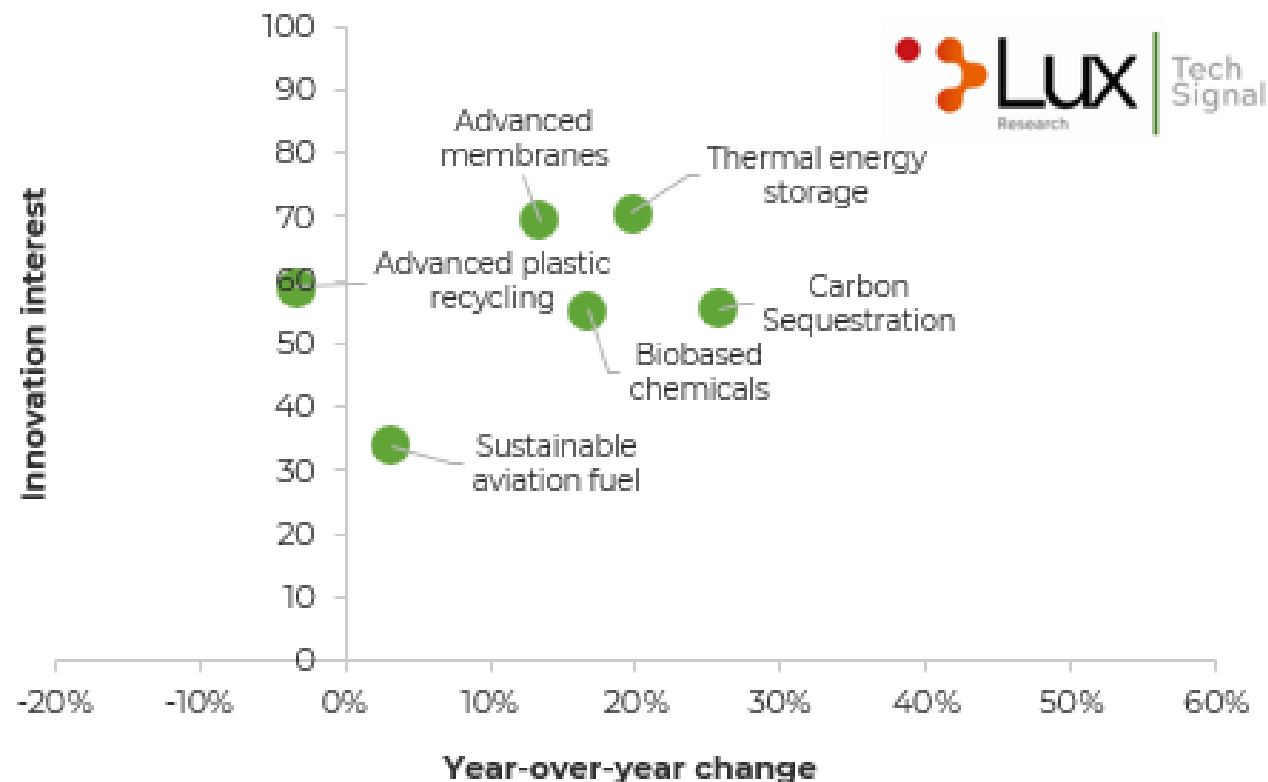
# Lux Tech Signal in practice: Oil & gas

## Oil & gas analysis:

- 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's scale-up — continue to drive activity.

## Innovators should:

Prioritize infrastructure enablers as near-term deployment plays and track scale-up milestones as tipping points through 2026.



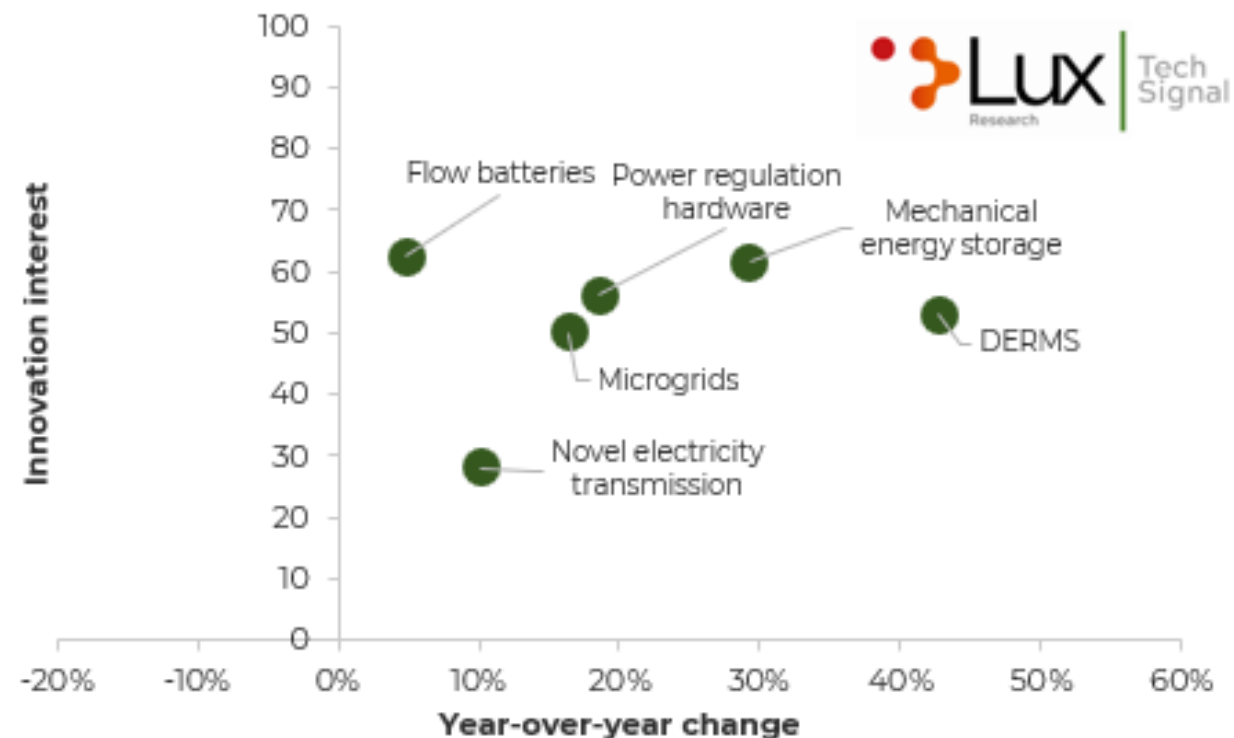
# Lux Tech Signal in practice: Utilities

## Utilities analysis:

- 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.

## Innovators should:

Scale investments in flexibility assets where economics are proven, while continued storage cost reductions may unlock DER\* orchestration opportunities by 2026.



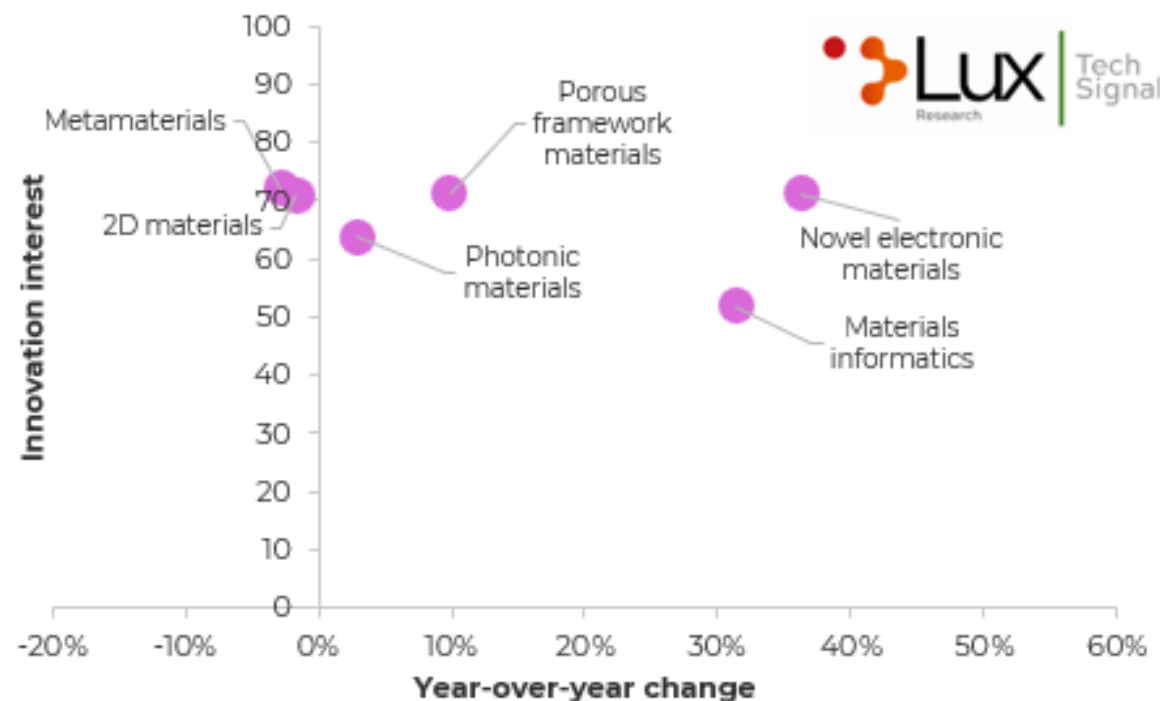
# Lux Tech Signal in practice: Chemicals

## Chemicals analysis:

- Strong momentum in materials informatics and fragmented advanced materials landscape suggest technical innovation may be outpacing commercialization readiness.
- VC funding in materials informatics and academic-led breakthroughs are key drivers of activity.

## Innovators should:

Accelerate AI-enabled R&D platforms and selectively back materials as clearer application-fit signals emerge in 2026.



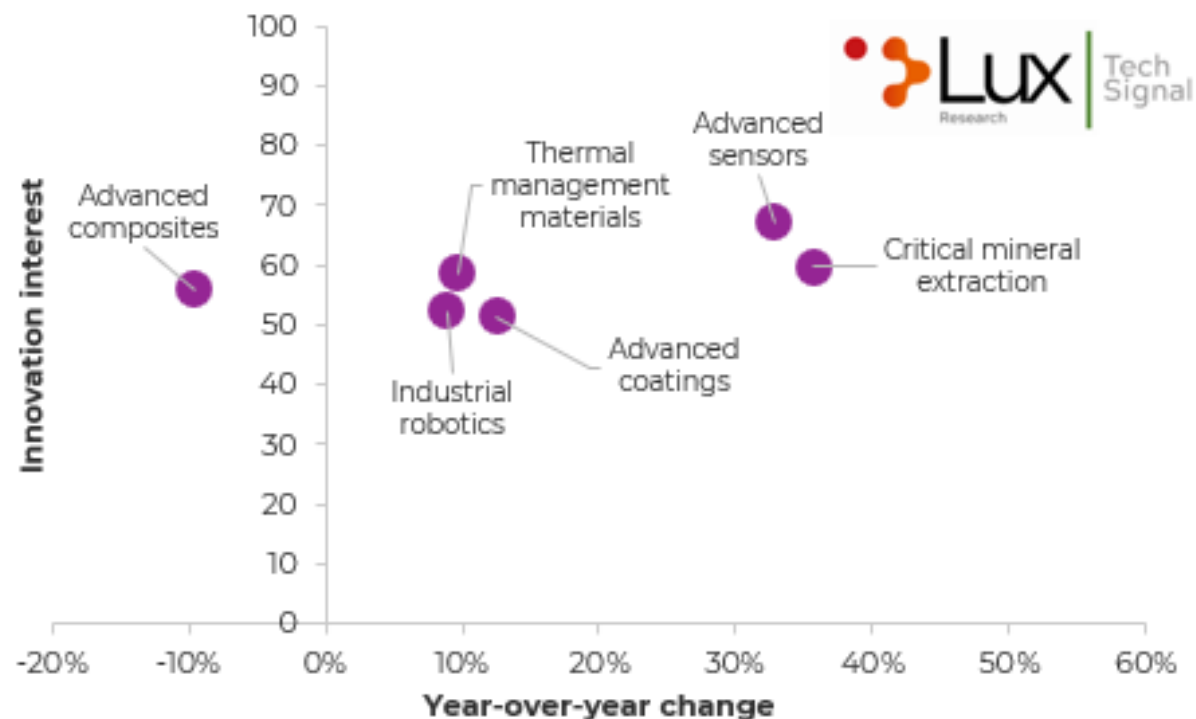
# Lux Tech Signal in practice: Industrials

## Industrials analysis:

- Innovation is concentrated in sensing, aligning with resilience and efficiency goals, while materials show signs of cooling following a likely overinvestment cycle.
- Policy-backed supply chains, defense-linked use-cases, and sustained corporate and startup activity drive growth.

## Innovators should:

Engage in advanced sensors and critical minerals and monitor cost-performance validation for advanced materials through 2026.



## REFINEMENT OUTPERFORMS DISCOVERY

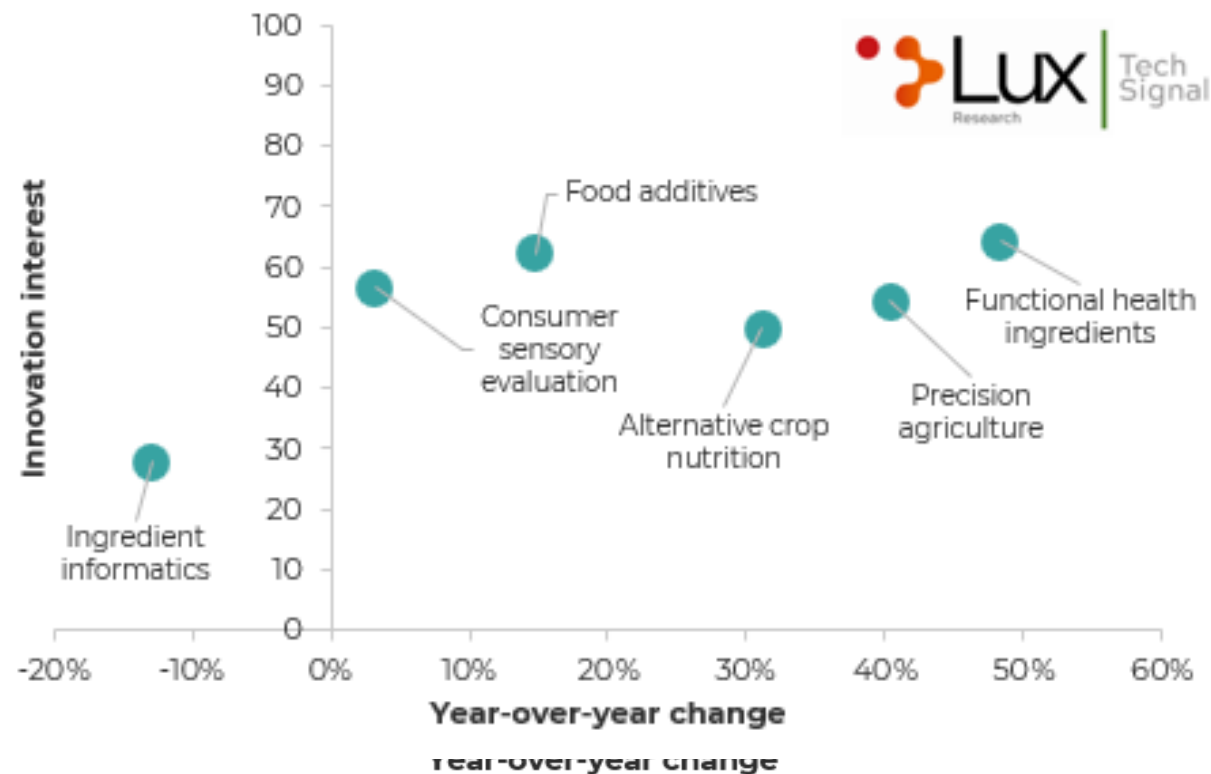
# Lux Tech Signal in practice: Agrifood

### Agrifood analysis:

- Momentum is strong in formulation and health, while digital enablers lag in delivering scalable, defensible IP.
- Geopolitics, EU regulatory scrutiny, and the U.S.' health positioning underscore growing innovation interest.

### Innovators should:

Strengthen ingredients and formulation resilience capabilities today, evaluate regulatory shifts and validation signals through 2026.



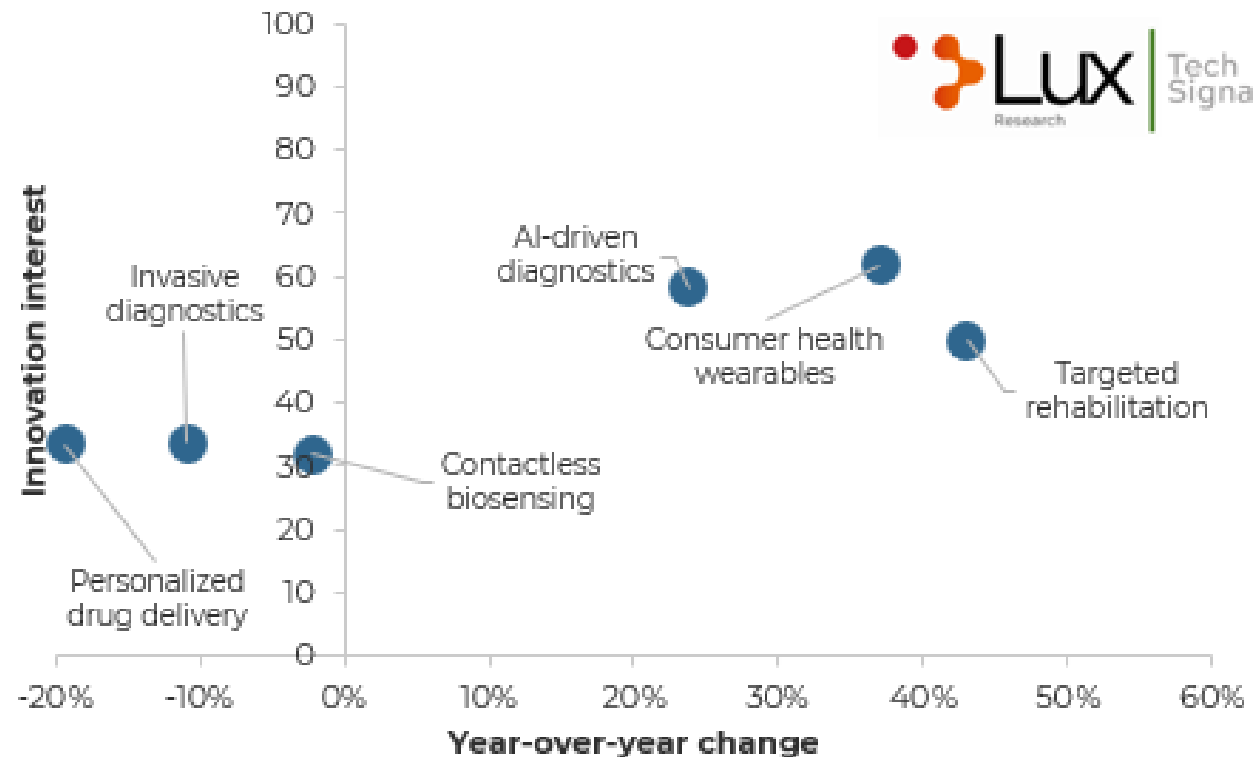
# Lux Tech Signal in practice: Medical devices

## Medical devices analysis:

- 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.

## Innovators should:

Engage for workflow-embedded AI and wearables but beware of overcomplication and the future of AI device regulation before scaling.



# Separate hype from opportunity

*Key Takeaway: The strongest innovation strategies combine momentum analysis with commercialization readiness, technical maturity, and market fit.*

One of the most important insights from Lux Research's analysis is that innovation momentum alone doesn't determine long-term success. A technology may grow rapidly in funding and patent activity yet remain commercially immature.

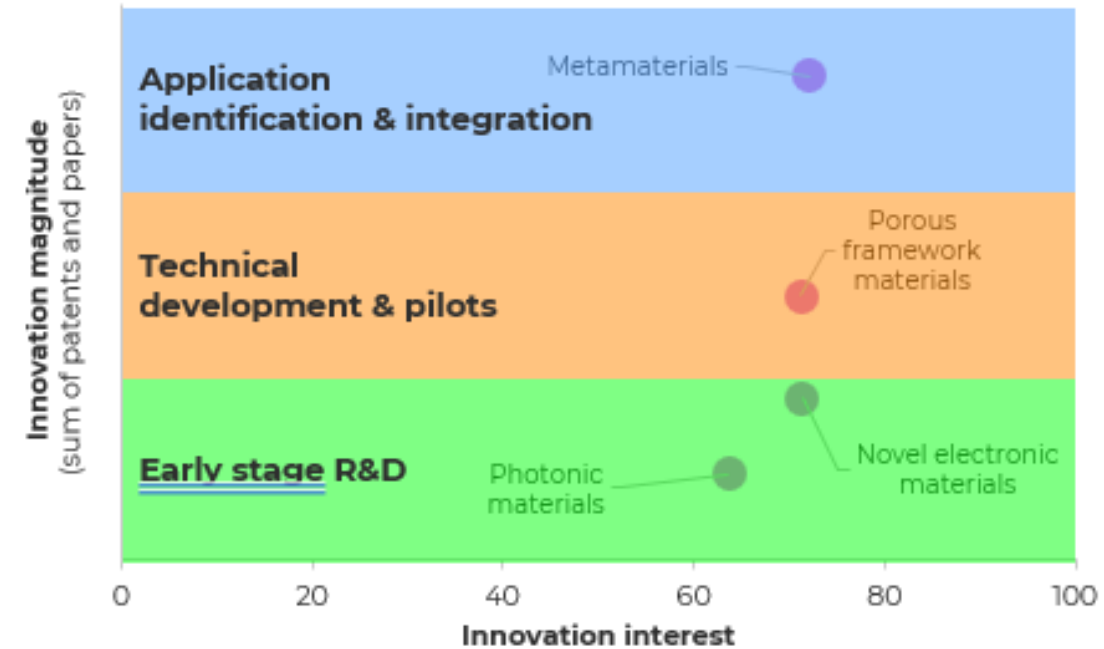
Lux distinguishes between:

- **Innovation Interest** → momentum and acceleration
- **Innovation Magnitude** → depth and maturity of activity

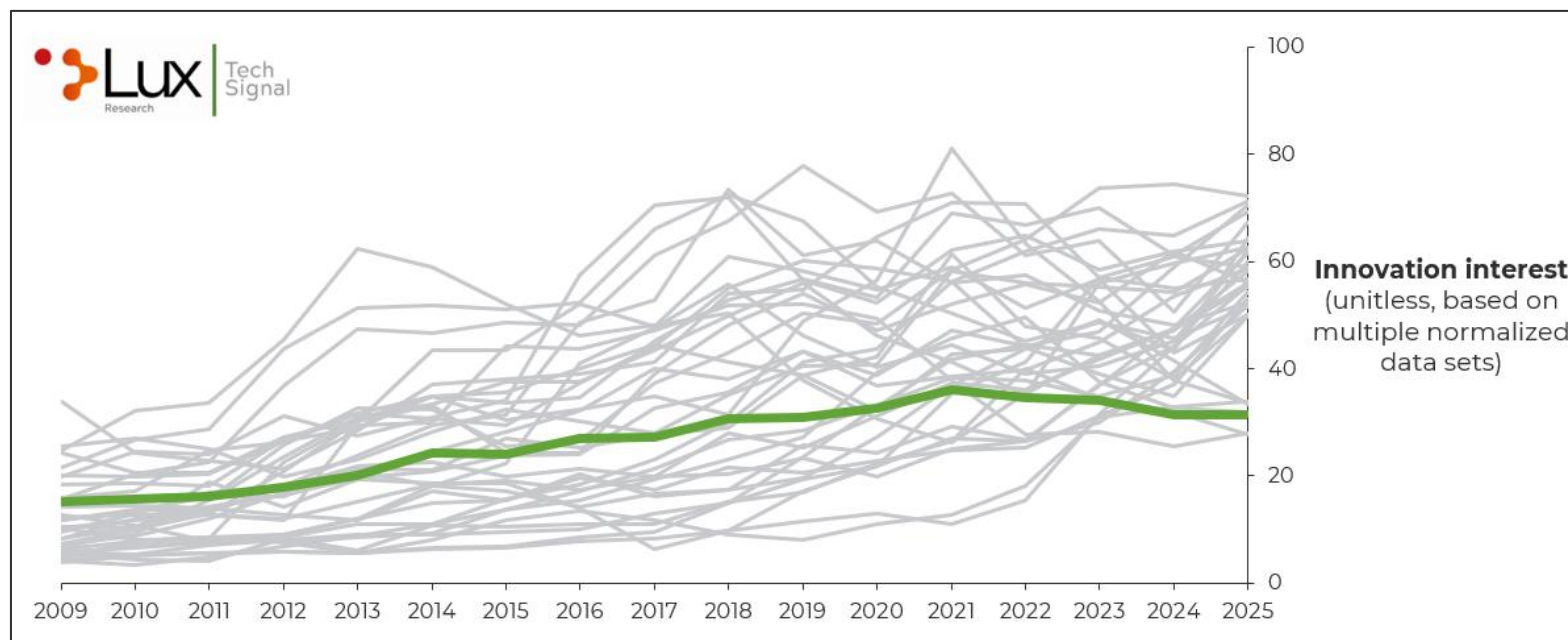
Early-stage technologies require exploratory R&D, research partnerships, technical validation, and pilot experimentation.

Mature technologies require integration planning, commercial scaling, manufacturing alignment, and market deployment strategies.

Organizations that rely only on headlines risk overinvesting in technologies without viable commercialization pathways.



# Innovation activity remains strong despite uncertainty



The Lux Tech Signal shows that many technologies on Lux Research's Innovation Radar are rising in innovation interest faster than the average. This indicates that companies, startups, research centers, and investors continue to actively develop next-generation technologies despite market uncertainty.

For innovation leaders, the message is clear: While some companies may hesitate during uncertain periods, others continue to invest, scale expertise, and build long-term strategic positioning.

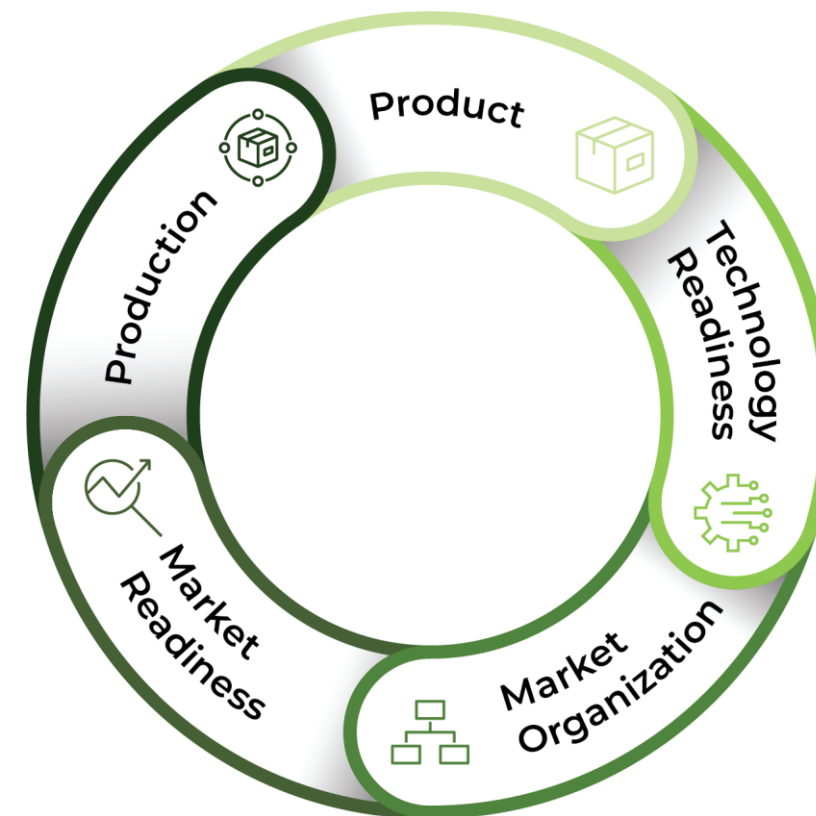
# Technology signals alone are not enough

**Key Takeaway:** *The most successful innovation strategies combine technology scouting with broader market, production, and commercialization intelligence.*

Lux Research emphasizes the importance of using a structured innovation process that evaluates the full innovation ecosystem, not just the technology.

Companies that monitor these signals together are better positioned to identify technologies with real commercial potential.

This approach also helps organizations detect weak signals early, including shifts in regulation, customer demand, manufacturing capability, and supply chain readiness that may accelerate or delay adoption.



# About Lux

Lux Research fuels innovators to not only imagine what's possible in the future but also operationalize innovation success in the near term. We deliver research and advisory services to inspire, illuminate, and ignite innovative thinking that reshapes and grows businesses. Using quality data derived from primary research, fact-based analysis, and opinions that challenge traditional thinking, our experts focus on finding truly disruptive innovations that are also realistic and make good business sense.

The “Lux Take” is trusted by innovation leaders around the world, many of whom seek our advice directly before placing a bet on a startup or partner — our clients rely on Lux insights to make decisions that generate fantastic business outcomes. We pride ourselves on taking a rigorous, scientific approach to avoid the hype and generate unique perspectives and insights that innovation leaders can't live without.



## READ

<http://www.luxresearchinc.com/blog/>



## VISIT

[www.luxresearchinc.com](http://www.luxresearchinc.com)



## EMAIL

[questions@luxresearchinc.com](mailto:questions@luxresearchinc.com)



## CONNECT

[LuxResearch](#)