THE EDGE OF WHAT'S NEXT: IRI'S QUARTERLY TRENDS ANALYZER

2026

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About The Trends Analyzer

The Edge of What's Next examines the strategic environment in which innovation and R&D take place and flags up potential trends that you should factor into your strategic planning. At the end of each quarter, trends are examined by the IRI Foresights Advisory Board and assessed for their potential impact on innovation. In this report, key trends are described and vital questions you should ask yourself as you conduct your strategic planning are listed. In addition, we include some interesting possibilities (weak signals') at the end of the report that we will keep an eye on to see if they will rise to the level of a bigger, more impactful trend.

Innovation Research Interchange (formerly the Industrial Research Institute) is an inclusive membership organization with hundreds of global members in private-sector companies and federally funded laboratories. Founded in 1938, we lead and advance the field of innovation management by creating contemporary practices. Some of the world's most widely adopted models – such as "open innovation", "front end of innovation", and "stage-gate" – were born from the work of our members. We value strength in cooperation and partner with other organizations at the forefront of developments in innovation management, creating a hub for all to convene and contribute in an experimental, noncompetitive, and noncommercial environment. The IRI is a division of the National Association of Manufacturers.

April 2026 Trends

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RAMIFICATIONS OF THE K-SHAPED ECONOMY ON R&D

The K-shaped economy is one of the defining macroeconomic patterns of 2026, with high-growth, technology-driven sectors (especially AI, automation, and digital services) surging while traditional and lower-margin industries are lagging, creating uneven outcomes. In this environment, corporations with strong balance sheets and exposure to next-generation technologies are sustaining or increasing their R&D expenditures to deepen competitive advantage and capture future markets, while companies in struggling segments face margin pressure that forces them to cut discretionary research and long-cycle innovation projects.

This dynamic is reinforced by selective capital flows as venture and private equity are disproportionately backing AI, cloud, and biotech while small businesses and legacy manufacturers struggle to secure funding for exploratory work. As a result, the innovation ecosystem itself is dividing, with widening gaps in talent allocation, technology adoption, and focus on R&D. For R&D leaders, this structural divergence means reassessing strategy to protect core research capabilities under financial stress while pinpointing where innovation investment, talent, and high-growth opportunities are concentrating. It requires reprioritizing projects, exploring partnerships or acquisitions, and ensuring key skills and long-term capabilities are preserved even as some areas contract.

LEARN MORE

- Wealth Inequality and the K-Shaped Economy are More Striking Than Ever (CNBC)
- What Executives Are Saying About the K-Shaped Economy (*The New York Times*)
- Navigate the K-Shaped Economy: 5 Cultural Insights for Execs (*Forbes*)
- *K Shaped Economy Hits Walmart* (NBC News)

ASK YOURSELF THESE QUESTIONS:

1. What scenario planning approaches should we use to prepare for continued economic divergence and how might those scenarios influence our R&D strategy?

2. How can we leverage opportunities that this type of environment creates?

3. Which R&D programs are most exposed if margins tighten, and how should we balance long-term vs. short-term projects?

4. What steps can we take to safeguard critical knowledge, talent, and infrastructure if parts of the organization have to scale back? Are there acquisitions, partnerships, or talent opportunities that could help strengthen and extend innovation capabilities in this environment?

5. How can we retain and attract top R&D talent amid increasing competition for specialized skills?

IS HUMAN INTERACTION MAKING A COMEBACK?

There are growing signals that after a period of rapid digital acceleration, people are reassessing the role of technology in their daily lives and seeking more direct, in-person, and authentic human interaction. Younger generations are expressing fatigue with algorithm-mediated communication and transactional digital experiences and showing renewed interest in environments that foster spontaneity, community, and meaningful connection. This shift is not simply social; it has potential implications for how work is structured and experienced. As organizations optimize for digital efficiency, some elements of relational depth such as mentorship, informal knowledge transfer, and idea exchange may be diminished.

For R&D and innovation teams, where creativity often depends on trust, debate, and unplanned interaction, a broader cultural move toward human-centered engagement could reshape expectations around hybrid work, workspace design, team structure, and leadership presence. If sustained, this “human rebalancing” may require companies to think beyond productivity metrics and reconsider how physical proximity, shared experience, and community contribute to long-term innovation performance and talent retention.

LEARN MORE

- Why Human Connection Is Your Ultimate AI-Era Advantage (*Forbes*)
- More Than A Job:Why Human Connection Matters for the Workplace (Society for Industrial and Organizational Psychology)
- Is The Swipe Era Over? (*The New York Times*)
- *Disconnect to Reconnect* (*Positive Psychology*)

ASK YOURSELF THESE QUESTIONS:

1. Are we optimizing digital efficiency at the expense of human connection in our innovation processes?

2. How might increased in-person collaboration affect creativity, trust, and speed of execution within R&D teams?

3. Do our hybrid policies enable mentorship, apprenticeship, and informal learning for early-career talent?

4. Could a more human-centered culture become a competitive advantage in attracting and retaining technical employees?

5. What aspects of our current operating model will need to change if employees increasingly prioritize connection and community?

PRIVATE EQUITY TAKES OVER

The continued expansion of private equity ownership across industries is reshaping corporate investment priorities and raising new questions about the future of innovation. Private equity firms are increasingly acquiring companies in sectors ranging from healthcare and technology to industrials and consumer goods, with a focus on operational efficiency, cost optimization, and near- to mid-term value creation. While this can drive discipline and performance improvements, it may also introduce tension with long-term, exploratory R&D that requires sustained investment and longer time horizons. In some cases, R&D portfolios are streamlined, deprioritized, or reoriented toward clearer commercial payoffs. At the same time, certain private equity-backed firms are using targeted investment strategies to accelerate innovation in high-growth areas, especially digitalization, automation, and AI.

For R&D leaders, this raises a critical question about the appropriate relationship between private equity and innovation. Should R&D be constrained by financial discipline or positioned as a core driver of value creation? Navigating this dynamic requires aligning innovation strategy with investment horizons, clearly articulating the business impact of R&D, and identifying where focused, well-governed innovation can accelerate both growth and returns.

LEARN MORE

- Dishoom Secures Major Investment and Confirms First US Opening (*The Caterer*)
- Private Equity: Clearer View, Tougher Terrain (McKinsey & Company)
- Q4'25 Pulse of Private Equity: United States (KPMG)
- Private Equity's Growing Influence in Healthcare- 6 recent Deals (*Becker's Hospital Review*)
- David Blitzer and Blackstone-backed group snaps up Indian Cricket Franchise for 1.8 billion (CNBC)
- Private Equity News (VC Circle)

ASK YOURSELF THESE QUESTIONS:

1. What is the right role of R&D in a private equity-backed company: an engine of long-term value creation or a lever for near-term performance improvement?

2. Where does long-cycle, exploratory research fit within shorter investment horizons, and how do we justify it?

3. Are there parts of our innovation portfolio that should be accelerated under private equity ownership rather than reduced?

4. What would a “best-in-class” model look like for integrating private equity discipline with sustained innovation investment?

5. How can R&D communicate our value in a private equity environment? What metrics make the most impact?

WILL AI MAKE PHYSICAL LABOR OBSOLETE?

Accelerating advances in robotics and “physical AI” are beginning to reshape R&D priorities across industries, as companies explore how automation can take on an increasing share of physical tasks in manufacturing, logistics, and field operations. As capabilities improve, R&D teams will be asked to design products, processes, and systems that are inherently automation-ready, reducing reliance on manual intervention and enabling greater scalability and consistency. This shift will also drive greater convergence across software, engineering, and operations, requiring tighter integration of digital and physical systems throughout the innovation lifecycle. At the same time, it will influence how R&D work itself is conducted, with increased use of simulation, digital testing, and automation within development environments. As the boundary between human and machine capabilities evolves, R&D strategy will increasingly be defined by where automation can create the most value and where human-driven innovation remains essential, particularly in complex, adaptive, and creative work.

LEARN MORE

- Musk Has a Plan to Make Human Labor Obsolete: Billionaires are Joining In (*The Washington Post*)
- Physical AI in Healthcare (*Forbes*)
- Musk and Other Billionaires Push Robots to Replace Humans (MSN)
- 15 Ways Robotics Will Transform the World (*Science News Today*)
- *Robots are Learning to Do Housework from Videos of Humans Doing Chores* (*The Washington Post*)

ASK YOURSELF THESE QUESTIONS:

1. How should R&D priorities shift to ensure products and processes are designed for automation from the outset?

2. Which areas of our innovation pipeline are best suited for robotics and physical AI integration?

3. Are there parts of our innovation portfolio that should be accelerated under private equity ownership rather than reduced?

4. What new capabilities are required as software, AI, and physical systems increasingly converge?

5. Where can automation create the greatest impact on productivity, speed, and cost within our R&D processes?

ADDITIONAL TRENDS TO WATCH:

- DHS Finalizes Controversial Immigration Rule on H1-B Lottery (*Forbes*)
- *Manufacturers Feed America* (National Association of Manufacturers)
- *Why Surging Oil Prices Are a Shock for the Global Economy* (*The Conversation*)
- We Don't Really Know How AI Works (*The New York Times*)

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