April 2024

IRI Quarterly Trends Analyzer

INNOVATION RESEARCH INTERCHANGE

Accelerating Value Creation

The IRI Quarterly Trends Analyzer 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, potential 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 an 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.

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01 — The Dangers of Unregulated AI

02 — What are the ramifications of food inflation?

03 — How will Gen Z impact the workplace?

The Dangers of Unregulated AI

01. Description

AI is being exploited in ethically questionable ways, such as employing deepfake technology to create convincingly manipulated videos for malicious purposes, including spreading misinformation and in online scams. In the realm of cybersecurity, hackers are increasingly leveraging AI to conduct more sophisticated and targeted attacks. Some businesses are using AI-driven automated systems to generate fake reviews or ratings, deceiving consumers and influencing their purchasing decisions. How troubling is unregulated AI for companies and what are the largest threats? How can companies put internal controls in place in the absence of cohesive regulations?

02. Learn more

- Five Ways AI Could be Regulated (*The New York Times*)
- In the Face of Nefarious Deep Fakes Congress Must Curb The Abuses of AI (*US News & World Report*)
- Meta Unveils Team to Combat Disinformation and AI Harms in EU Elections (Al Jazeera)
- Fake Reviews Are Rampant Online. Can a Crackdown End Them? (*The New York Times*)

03. Ask yourself these questions:

- How are we vulnerable to the unethical use of AI technologies, such as deepfake videos and AI-driven cyber-attacks, especially considering the potential impact on corporate reputation and consumer trust?
- What internal controls can we implement to prevent the exploitation of AI for malicious purposes, particularly in areas like generating fake reviews or influencing consumer decisions?
- Should we consider appointing a Chief AI Officer responsible for implementing policies and safeguards related to AI technology, considering the complex legal and security issues involved?
- Do our cybersecurity protocols take into account malicious AI?
- What steps are we taking to educate and empower employees to recognize and respond effectively to AI-driven threats, such as phishing scams or manipulated content?
- What role can AI play in augmenting traditional cybersecurity measures, and how can we leverage AI-powered tools and techniques to enhance threat detection and response capabilities?
- How can we foster a culture of transparency and accountability in AI development and deployment processes to build trust with stakeholders?
- How can we balance the potential benefits of AI-driven automation with the ethical considerations and risks associated with its misuse, and what frameworks or guidelines should be established to guide responsible AI adoption?
- Considering the rapid evolution of AI technologies, how can we ensure that internal controls and security measures remain effective and adaptive to emerging threats and vulnerabilities?
- What collaborative efforts can businesses undertake with industry peers, policymakers, and regulatory bodies to promote responsible AI usage and establish common standards or best practices?

What are the ramifications of food inflation?

01. Description

Inflation in food prices has emerged as a pressing global concern, impacting consumers, businesses, and economies at large. The rise in food prices can be attributed to a myriad of factors, including supply chain disruptions, extreme weather events, increased demand, and geopolitical tensions. This inflationary pressure also has significant implications for the manufacturing sector. This can lead to reduced profit margins, potentially resulting in companies passing on the additional costs to consumers through higher product prices. What will the long-term impact be on businesses and their workers (who all need to pay for food…)? Will this force the US Federal Reserve to maintain high interest rates? How should the manufacturing sector prepare for turmoil in specific economic sectors?

02. Learn more

- Grocery Price Inflation: Why Are Americans Paying So Much for Food? (*The Washington Post*)
- Food Is Taking A Bite Out of Your Income: These Consumers are Getting Creative (*The Wall Street Journal*)
- It's Been 30 Years Since Food Ate Up This Much of Your Income (*The Wall Street Journal*)
- Inflation is Cooling. So Why Are Food Prices Rising from Steak to Fast Food? (CBS News)
- US Economy Today: Will the Fed Change Course? (*Investopedia*)

03. Ask yourself these questions:

For all organizations:

- How will the long-term impact of rising food prices affect us and our workers, particularly considering the potential strain on employees' budgets? Will this lead to increased pressure to raise wages?
- Will the current food inflationary pressure necessitate the US Federal Reserve to maintain high interest rates, and what implications might this have for the economy and our company?
- What will be the societal impacts of food inflation (e.g. food deserts, increased interest in gardening) and how can we prepare for them?

For those in or serving the food industry:

- How are changes in consumer eating habits influencing the market?
- Are customer preferences changing in response to food inflation, and how can we adjust our value proposition to meet evolving consumer demands?
    - How can we balance the challenge of retaining existing staff while also preparing for increased cost pressures and turmoil?
- Will these pressures lead to innovation in food processing and waste reduction? How can we lead on this?
    - How can we leverage technology to help with this?
- Given the comparison between food prices and gas prices, how can we navigate the concept of "shrinkflation" mentioned in this year's State of the Union address, and what implications does this have for product pricing and consumer behavior?
- Considering the interconnected nature of global supply chains and economic factors contributing to food inflation, is there a need for broader systemic changes or government intervention to address the root causes of rising food prices? How can we influence that?

How will Gen Z impact the workplace?

01. Description

When Millennials entered the workforce over a decade ago, much was made about the changes that that generation would bring. With increased ‘job-hopping’ and remote work (brought on by the pandemic), many of the changes have come to fruition. Generation Z, digitally savvy and having come of age during a pandemic and in an era of economic uncertainty and soaring higher education costs, is now coming into the workplace. As highlighted in recent news articles, one major concern is the need for a shift in management and communication styles to accommodate Gen Z's preference for digital communication and collaboration tools. The generation's strong emphasis on work-life balance and desire for purpose-driven work and continuous learning opportunities also pose challenges for companies aiming to attract and retain young talent. There are discussions about the potential clash between Gen Z's expectations for rapid career advancement and the traditional organizational hierarchy. How will companies adapt to the stronger presence of this new generation? Do new HR policies have to be put in place that are more aligned with Gen Z values? What do you think the impact of Gen Z will be on innovation and R&D?

02. Learn more

- 8 Ways Gen Z will Change the Workforce (*Stanford Report*)
- Gen-Z in the Workforce: Challenging or Change Makers (*Forbes*)
- What Gen-Zers want Their Managers to Know (*Forbes*)
- What Its Like to Work For A Gen-Z boss (*The Wall Street Journal*)
- Different Generations When They're the Manager (Instagram)
- Feel the burn(out): Millennials are aging from bright-eyed 'hustle culture' workers into exhausted middle managers (*Fortune*)

03. Ask yourself these questions:

- Do HR policies need to be revised to better align with the values and expectations of Gen Z?
- Are the desires we see from Gen Z also things other generations in the workforce would like to have (e.g. flexibility, work-life balance)? How can we accommodate that?
- Should we reconsider how we measure employee engagement, moving beyond traditional metrics like satisfaction and commitment to encompass factors such as inclusion, flexibility, and continuous learning?
- Considering the economic anxieties and shifting attitudes towards traditional education, how might the value of a college degree evolve, and what implications does this have for our recruitment and talent development strategies?

03. Ask yourself these questions, continued:

- What adjustments will we need to make in our management and communication styles to effectively accommodate the preferences of Gen Z, particularly regarding digital communication tools and work-life balance?
- How can we leverage digital tools and platforms to engage and retain Gen Z employees effectively, considering their preferences for visual communication and desire for constant learning opportunities?
- With Gen Z's tendency to seek rapid career advancement and learning opportunities, how can we create pathways for growth and development that align with their expectations?
- What factors contribute to Gen Z's inclination to leave a job quickly, and how can we address these factors to improve retention rates?
- How can organizations foster a supportive and inclusive work environment that resonates with Gen Z's values and encourages long-term commitment to the company?
- What role can mentorship and coaching programs play in retaining Gen Z employees, particularly in providing guidance and support to navigate career challenges and aspirations?
- How can we foster a culture of continuous learning and adaptability to accommodate Gen Z's propensity for experimenting and learning on the fly?
- How will Gen Z’s approach to problem-solving and collaboration impact how we have typically done innovation and R&D?

Additional trends to watch

We'll keep an eye on these trends as they develop and let you know how they may impact innovation.

- **How Chinese firms are using Mexico as a backdoor to the US (BBC News)**
- **Not Everyone Needs a College Degree (*The Wall Street Journal*)**
- **Daniel Dennett: 'Why civilisation is more fragile than we realised' (BBC News)**
- **One company's 4-day workweek experiment increased productivity by 24% and cut burnout in half (*Fortune*)**
- **How Immigrant Workers In US Have Helped Boost Job Growth And Stave Off A Recession (*Grants Pass Daily Courier*)**

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