

# The 2023 R&D and Innovation Agenda

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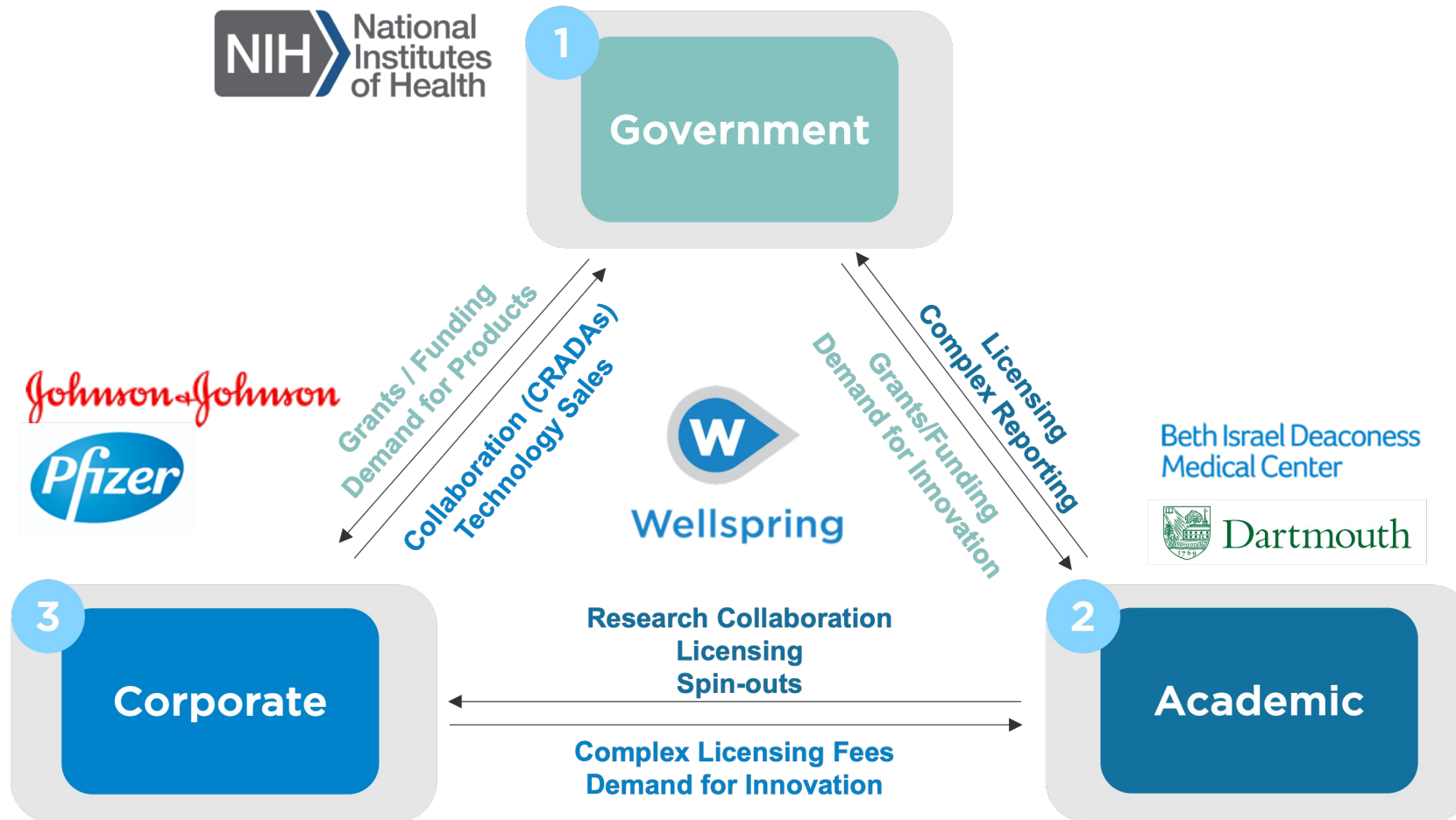
**Wellspring**  
Knowledge In Sight™

# About Wellspring

## INNOVATION OPS for the modern enterprise

We power world-class innovation management and technology commercialization programs for leading corporations and universities.

# COVID vaccines – a successful innovation ecosystem



# Hundreds of organizations use our solutions



U.S. Department  
of Veterans Affairs



U.S. DEPARTMENT OF  
**ENERGY**

BILL & MELINDA  
GATES foundation



## We Help the World Innovate



# Research Study: *The 2023 R&D and Innovation Agenda*

# Wellspring's annual study: five years and counting

2019



2020



2023



2021



2022



# Research methods for the 2023 study



## Study design

- 330 respondents (US and UK)
- \$1B+ companies in a broad range of industries
- Primary job function in R&D, Innovation, Strategy, Product, or General Management
- 14% C-Suite, 18% VP, 30% Director, 38% Manager

## Survey details

- Phone survey conducted in July 2023
- 44 survey questions on innovation management practices
- Topics included: Strategy, Governance, Budgets, KPIs, Processes, Systems, etc.
- Dozens of qualitative phone interviews (summer 2023)

# Research themes: what we asked about

## Innovation practices (annual)

Strategy &  
leadership

Process &  
governance

Budgets &  
spending

Metrics &  
KPIs

Teams &  
structure

Emerging  
trends

## Complicating factors (2023 only)

Economic  
Headwinds

Generative  
AI



# Today's topics

1. Economic Headwinds
2. Generative AI
3. Future vs. Present

# Economic Headwinds

# Two conflicting impulses from 2022 – sound familiar?

**“Startups and emerging technologies are progressing very quickly. We see opportunities everywhere we look.”**

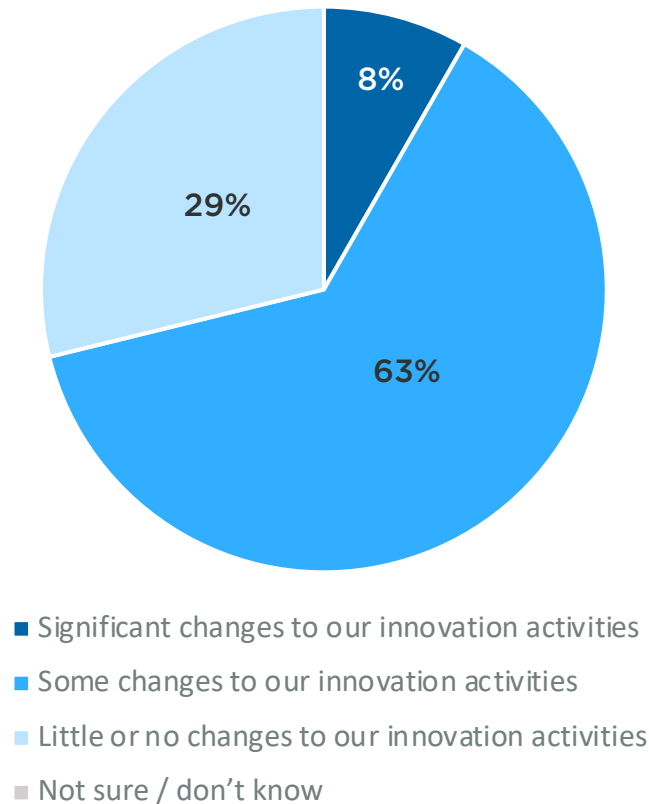
*- Innovation executive, F500 pharma company*

**“Right now, we’ve been putting bolder bets on the backburner. It’s not a ‘no,’ just a question of when.”**

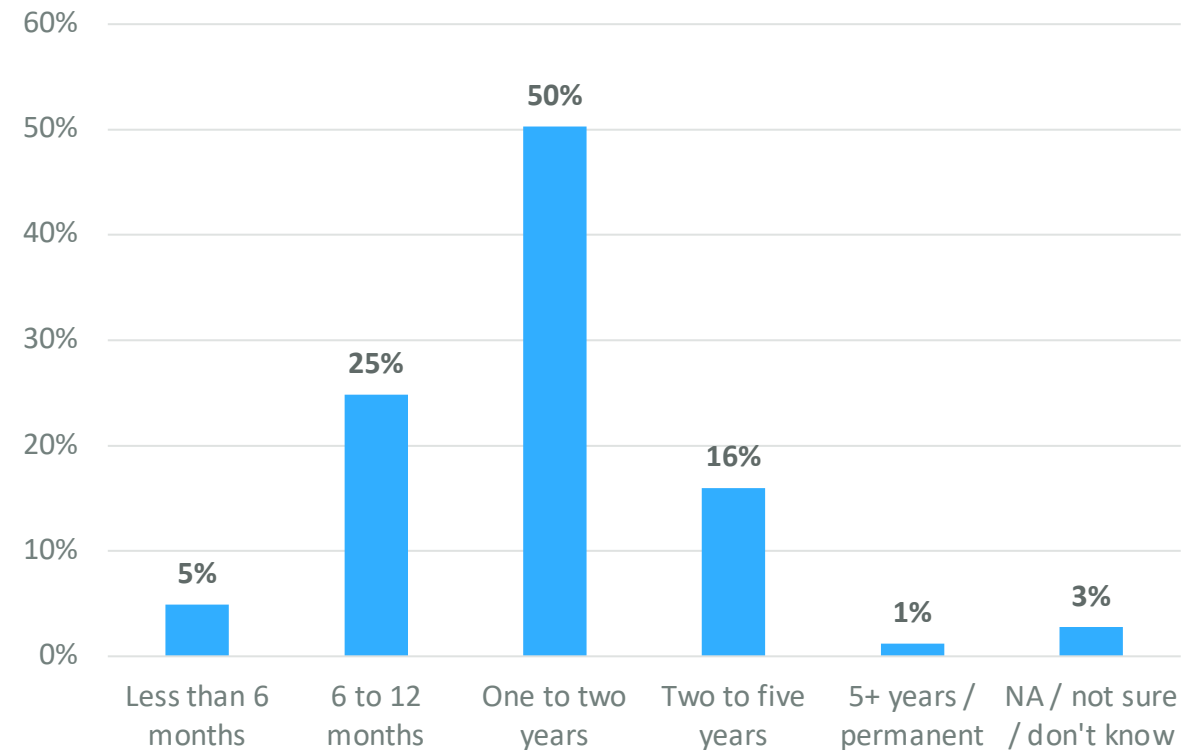
*- Innovation executive, F500 consumer products company*

# 2022: inflation was a top concern

*Which of the following best describes the effect that current and expected **inflation issues** are having (or are likely to have) on your company's **innovation activities**?*



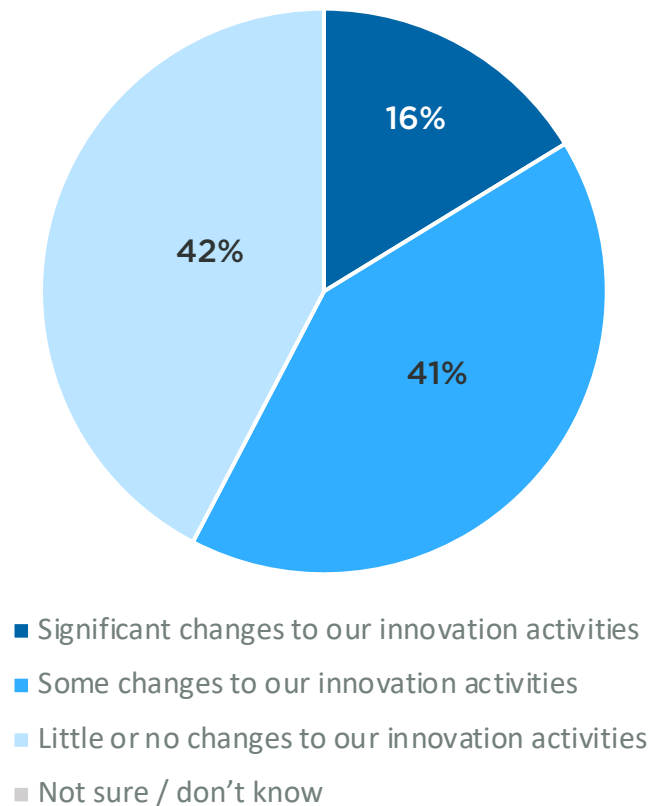
*To the extent your innovation programs have been affected by current and expected **inflation issues**, how long do you expect the changes to last?*



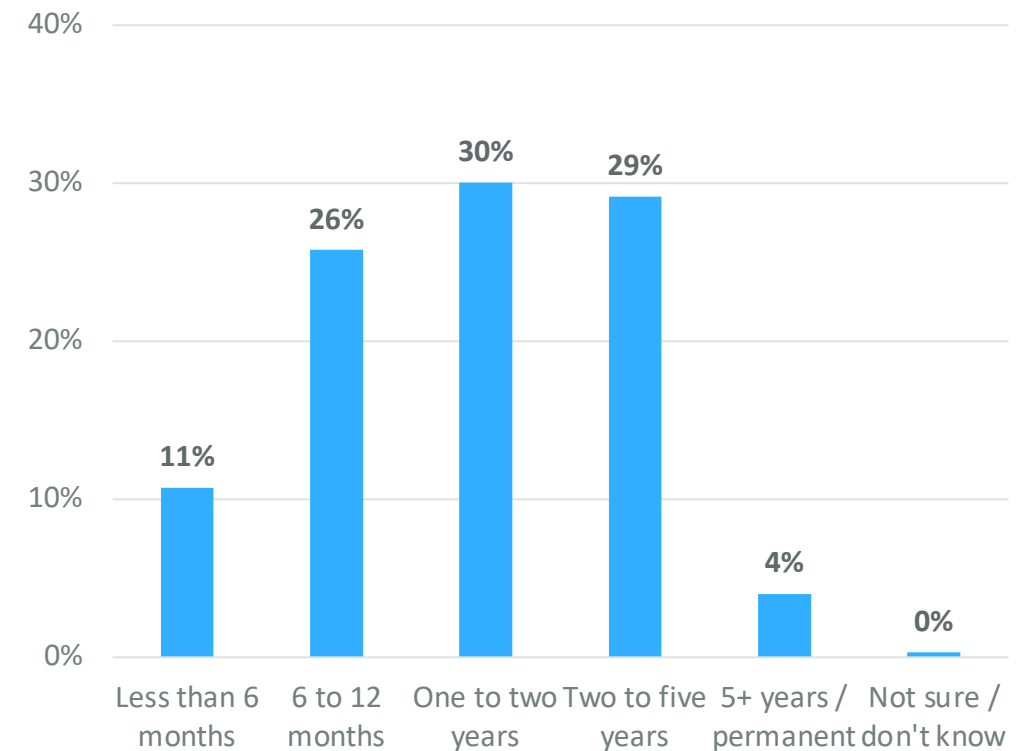


# 2023: generalized economic headwinds

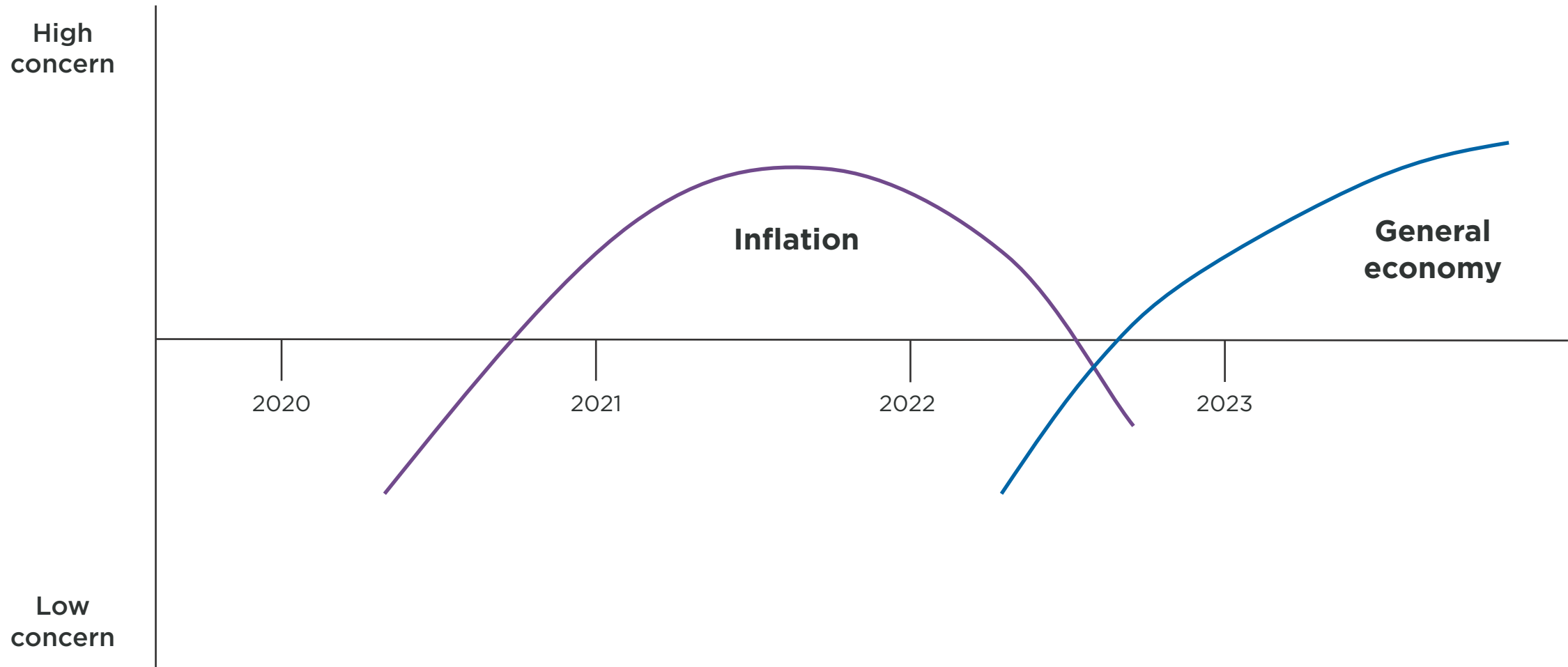
*Which of the following best describes the effect that current and expected **economic headwinds** are having (or are likely to have) on your company's **innovation activities**?*



*To the extent your innovation programs have been affected by current and expected **economic headwinds**, how long do you expect the changes to last?*



# Two waves of economic uncertainty



# What's going on? No one is quite sure.

## Hypotheses include:

- Sluggish capital markets
- Changing consumer demand
- Persistent supply chain issues
- Lingering inflation concerns
- CEO uncertainty about the future

**“Until a year ago, everyone wanted growth. Then the market changed. And capital is more expensive.”**

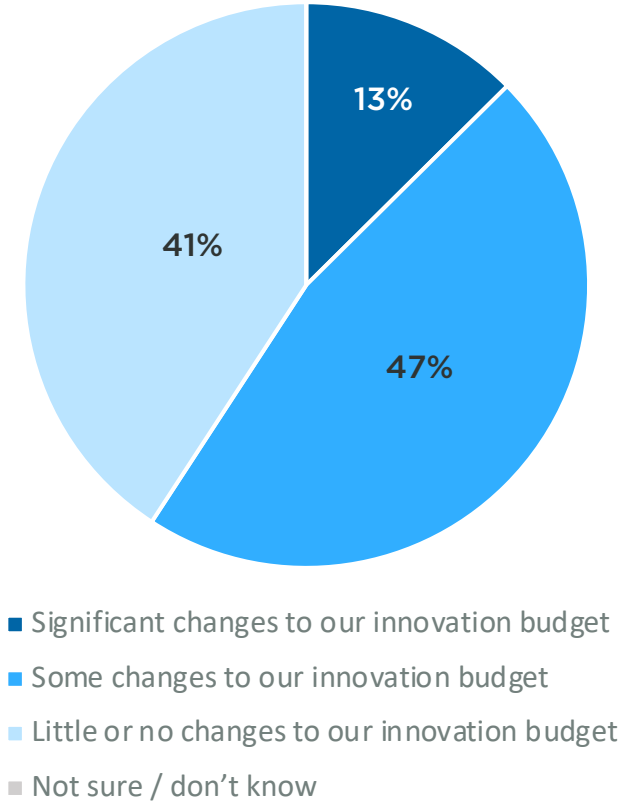
*- R&D executive, global food products company*

**“We see the signs of economic recovery all around us. But the orders just aren’t coming in yet.”**

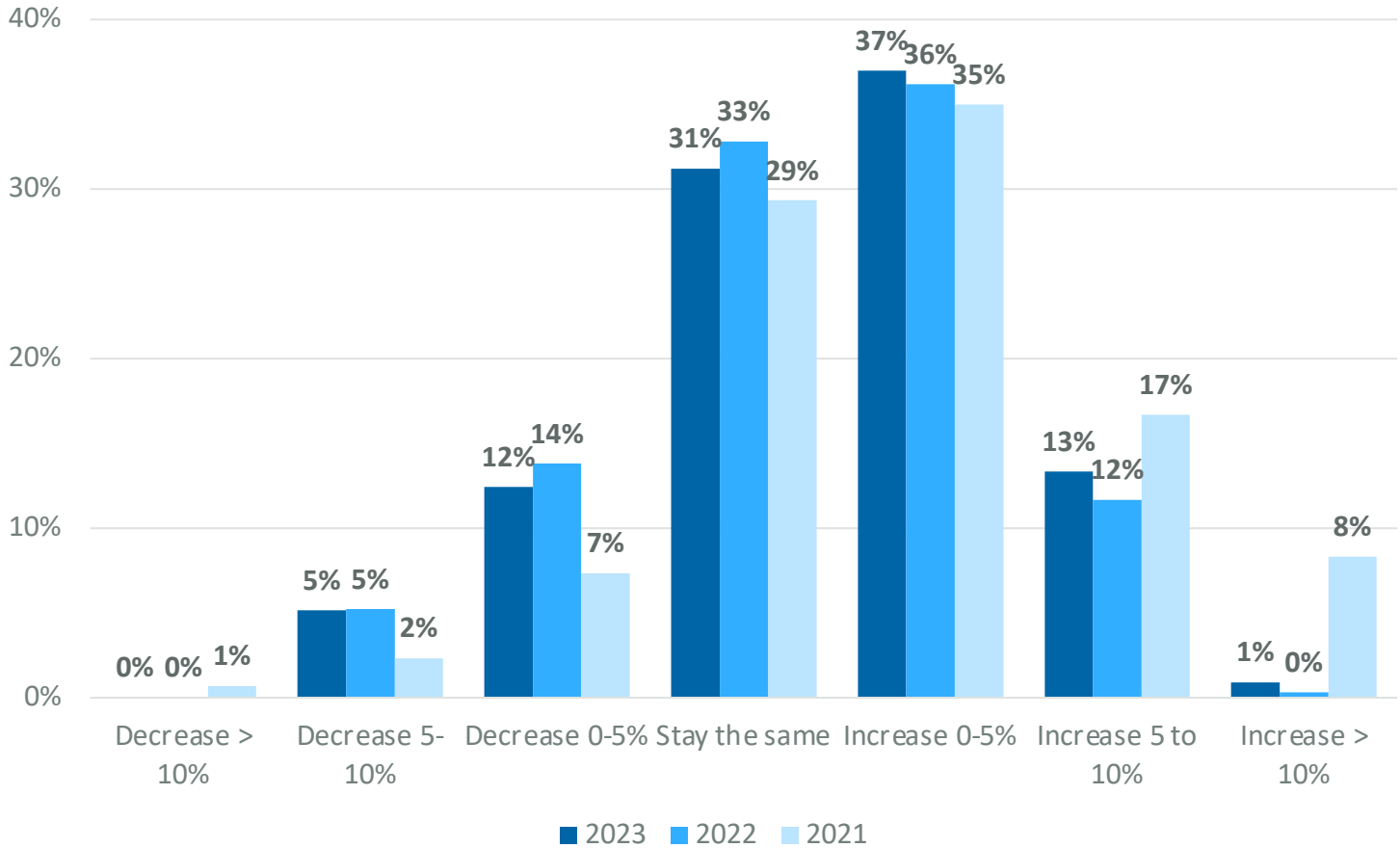
*- Innovation executive, F500 chemicals & materials company*

# Innovation budgets are stuck in neutral

Which of the following best describes the effect that current and expected **economic headwinds** are having (or are likely to have) on your company's **innovation budget**?



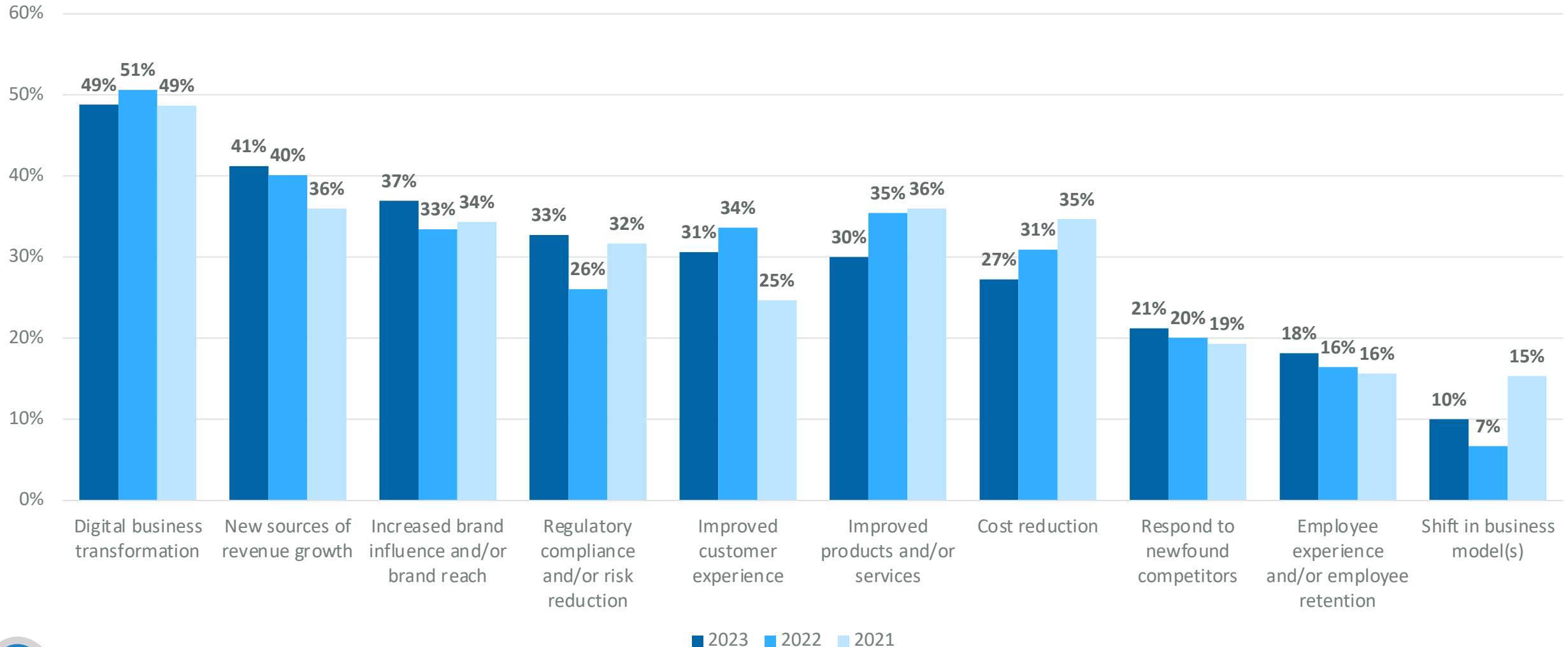
How much do you expect your company's **overall innovation spending** (including R&D spend) to increase or decrease over the next 12 months?





# High-level business priorities are unchanged

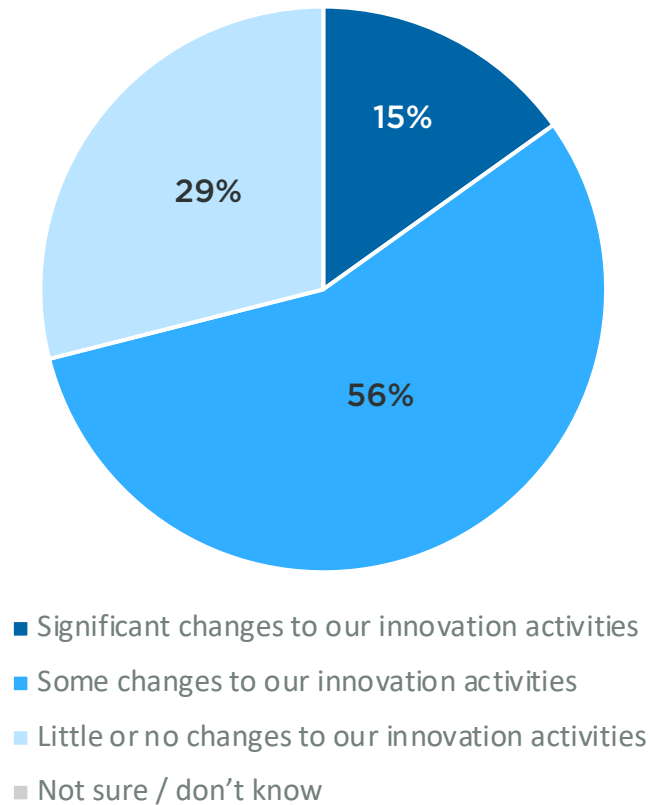
*Which of the following initiatives are likely to be among your organization's top business priorities over the next two years? (select up to three)*



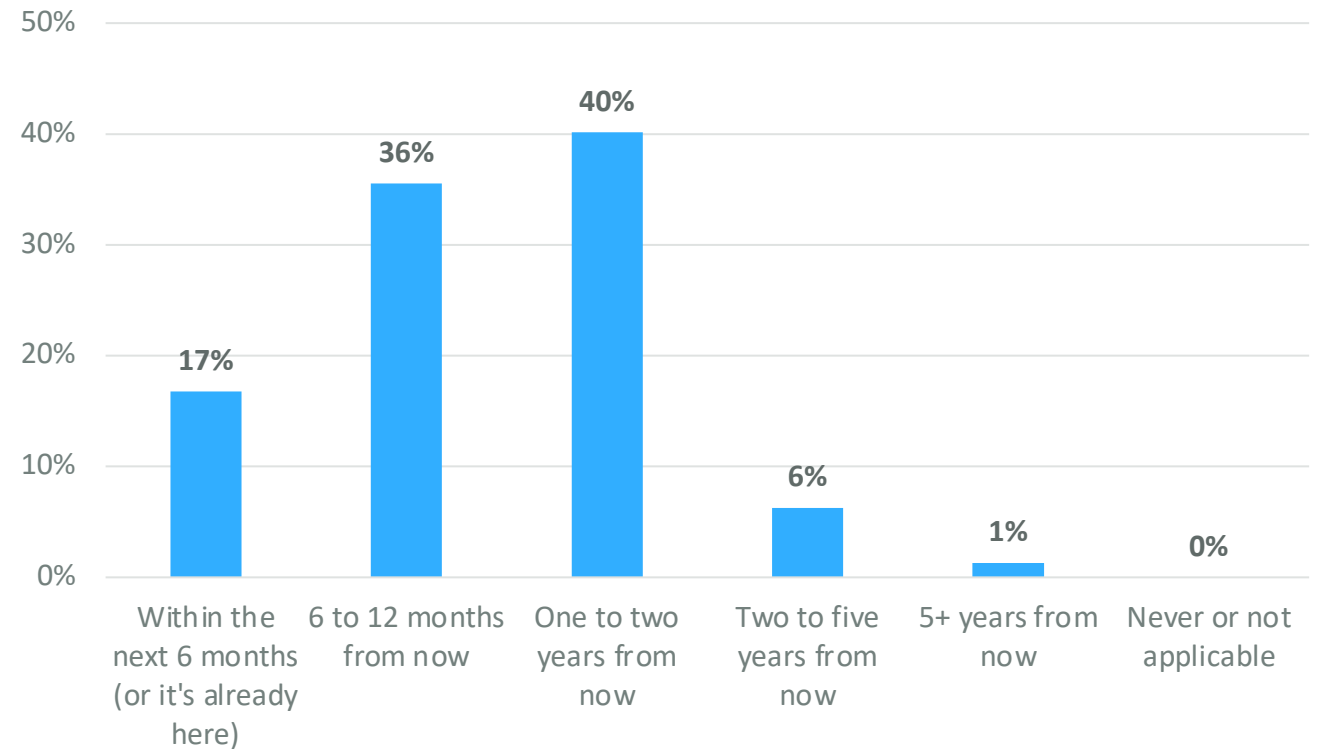
# Generative AI

# AI's rapid rise

Which of the following best describes the impact that **generative AI technologies** are having (or are likely to have) on your company's **innovation activities**?



To the extent your innovation activities will be impacted by generative AI technologies, how soon do you expect it to **materialize substantively**?



# AI adoption: it's a broad range

## Company A

- Unicorn startup with 20+ AI patents and counting.
- R&D uses AI technologies to design, develop, and deploy new products.

## Company B

- Large established corporation, same industry as Company A.
- Lots of ideas for using AI in R&D, none in production.

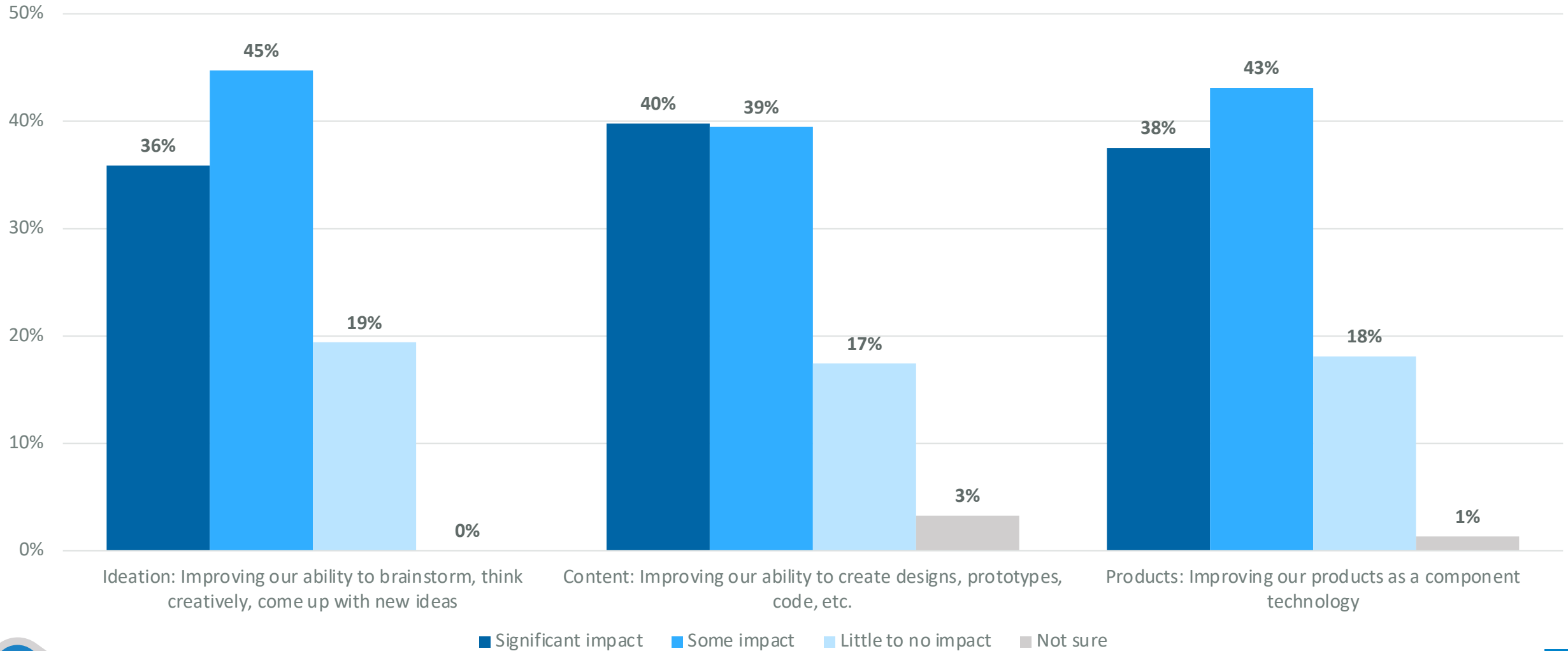
AI  
adopters

AI  
laggards

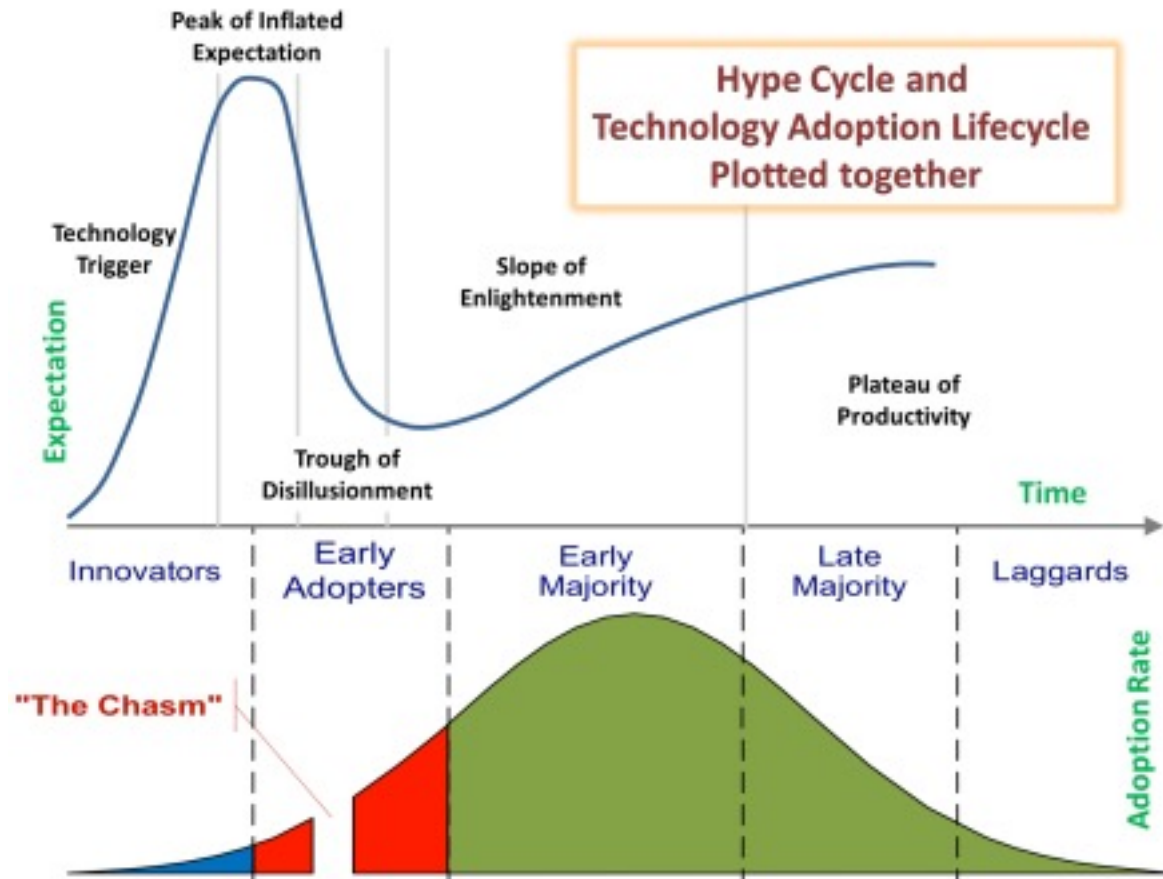


# AI priorities are unfocused

*For each of the following possible **uses of generative AI**, please rate its expected impact on your company's innovation activities.*



# Leaders are guessing right now – and that's normal



“Generative AI has taken everyone by surprise. At a recent Board meeting, they kept asking, what are you doing about this?”

- Innovation executive, financial services company

“For the next 5 to 10 years, these AI tools will be just that – tools. They will support human engineers to be more efficient.”

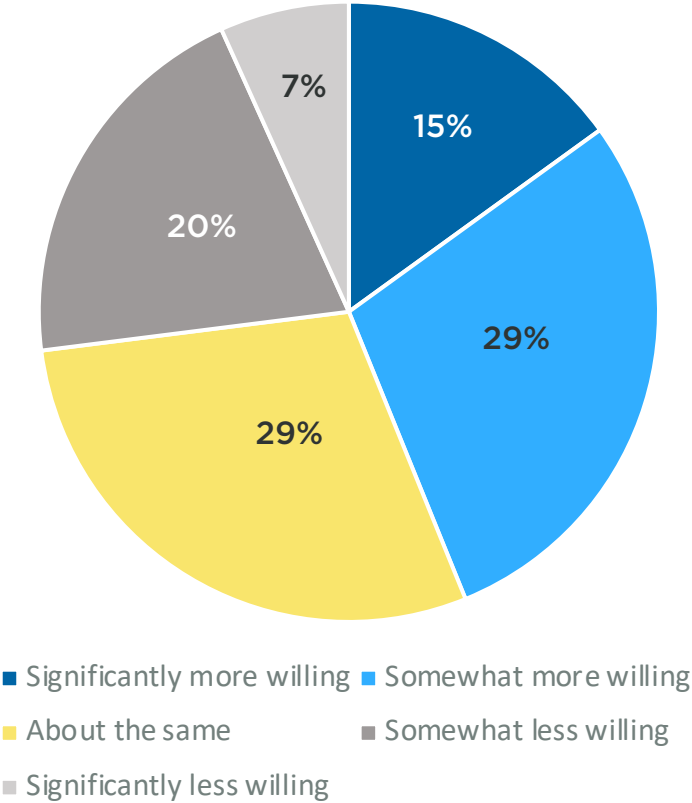
- Product Devpt. leader, industrial equipment company

Source: Technology Trend Analysis, [How experts explain technology adoption cycle](#)

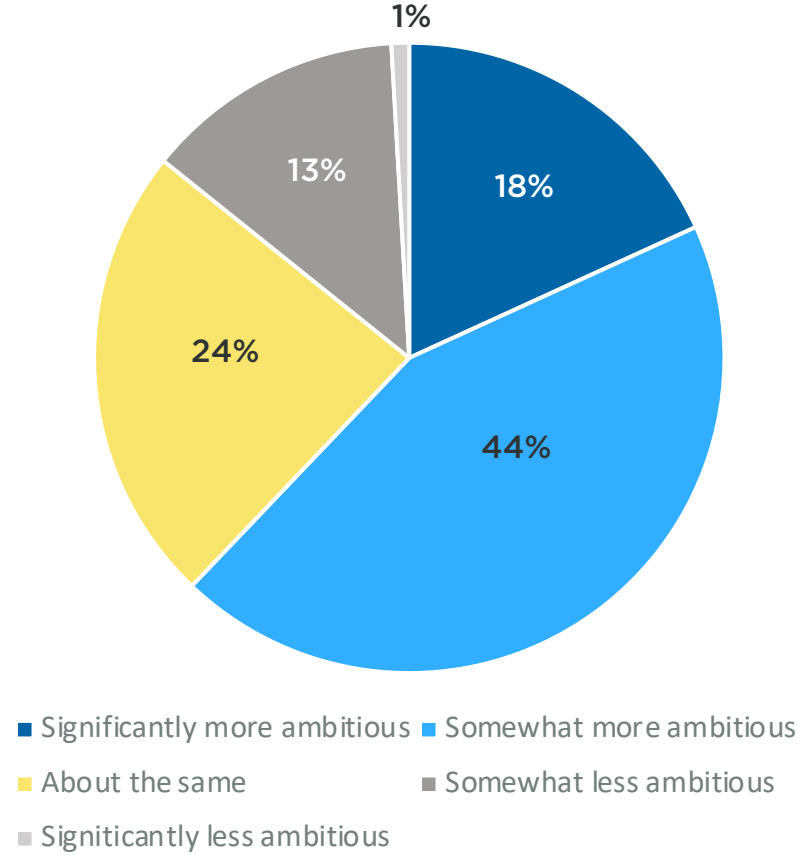
# Future vs. Present

# Despite headwinds, ambitions remain high

Which of the following best describes the effect that current and expected economic headwinds are having (or are likely to have) on your company's willingness to pursue **non-incremental innovations** ("horizon 2" and "horizon 3")?

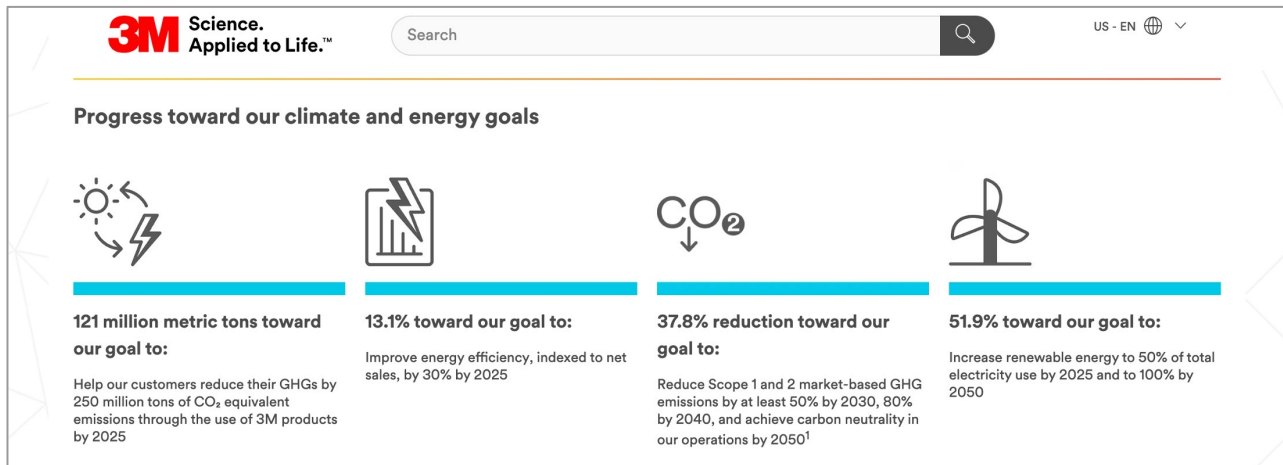


To what degree have your organization's **innovation ambitions** changed within the past 12 months?





# Ambition for the future: carbon neutrality



**Scope 1**

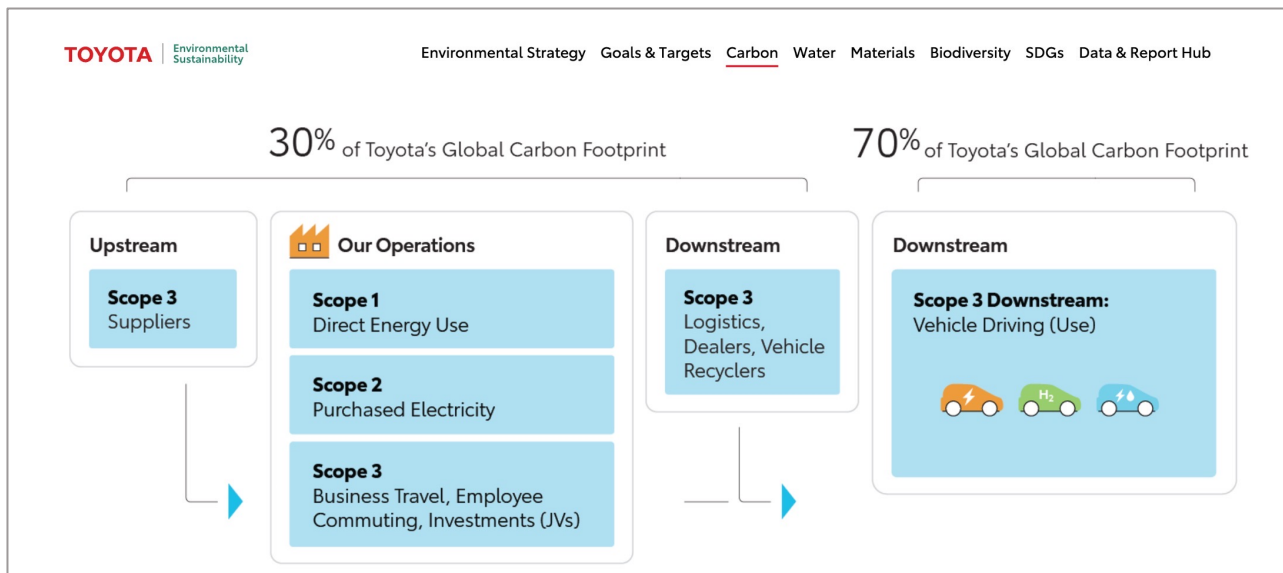
Direct emissions from company-owned and controlled resources.

**Scope 2**

Indirect emissions from the generation of purchased energy.

**Scope 3**

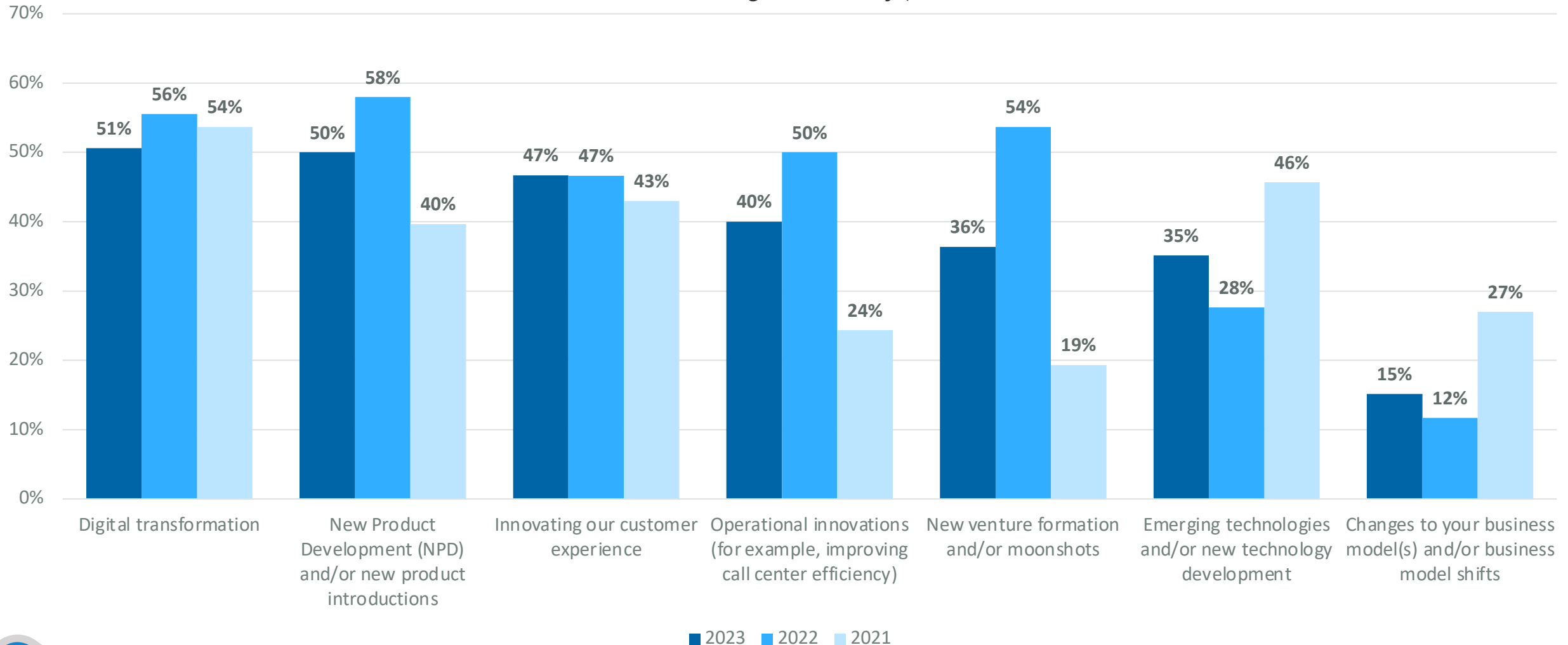
Indirect emissions that occur in the company's value chain.



Source: Plan A, [What are Scopes 1, 2, and 3 of Carbon Emissions?](#)

# Innovation pipelines are steady

*To what extent has your company pursued a **pipeline of innovations** along each of the following dimensions over the past two years? (percent answering “consistently”)*



■ 2023 ■ 2022 ■ 2021

# The path to net-zero has its challenges

- Fundamental mismatch between consumer expectations and cost-curve realities.
- Long-term replacement cycles for capital equipment are on a different time scale than net-zero commitments.
- Executives want action on carbon neutrality, but without a commensurate increase in the R&D or innovation budget.
- Organization-wide coordination of emissions reduction programs remains fragmented.
- Lack of direct control over Scope 3 improvements.

**“We see growing regulatory pressure to decarbonize. But our customers will not compromise on product performance.”**

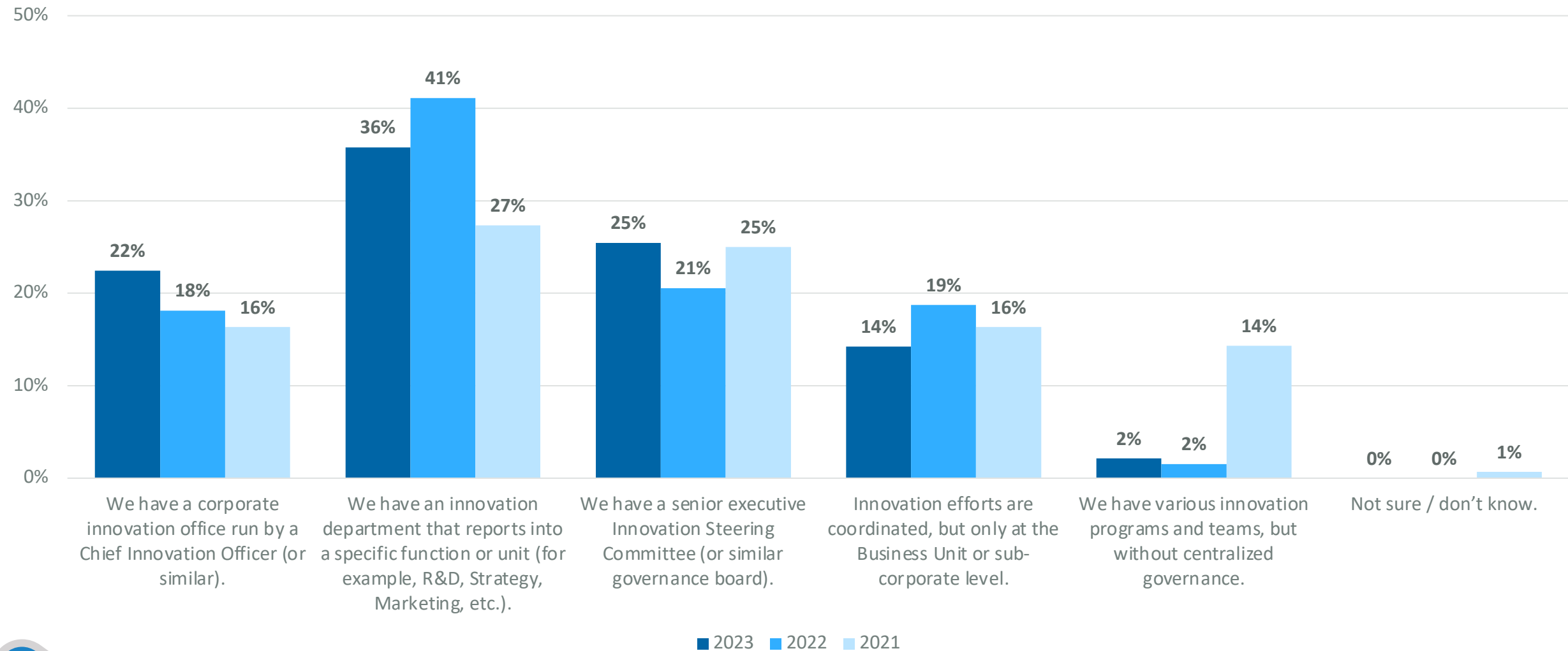
*- Innovation leader, consumer products company*

**“At our company, someone else decided on the public commitments. Then they left it to the technical folks to solve.”**

*- R&D leader, global building products company*

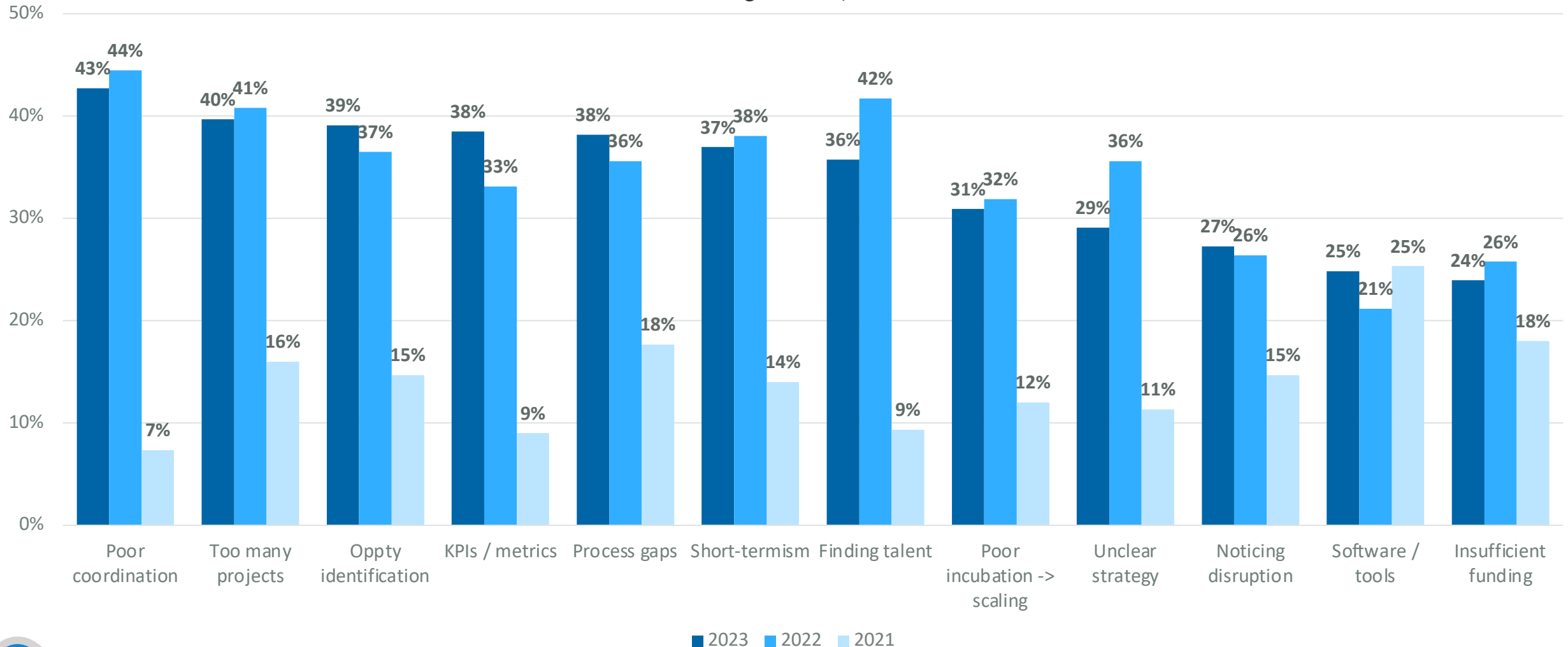
# Innovation is inching toward centralized governance

*Which of the following best describes how innovation is managed across your company?*



# Execution barriers remain

*How significant are each of the following factors as **impediments** to the R&D and/or innovation group's success? (percent answering "very significant")*



■ 2023 ■ 2022 ■ 2021

# Parting thoughts



# The road ahead: where are we going?



## Optimist

*We are in the early stages of a new renaissance of R&D and Innovation globally. This year's challenges are natural hiccups as we enter a new paradigm.*

## Pessimist

*These economic headwinds will persist as the new normal. Corporate Innovation will continue to stumble along with the same execution challenges as always.*

# Thank you / Q&A

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