

Gartner®

# 2025 R&D Digital Technology Investment Benchmarking Report

Benchmark your digital technology investment strategies to lead digital transformation.

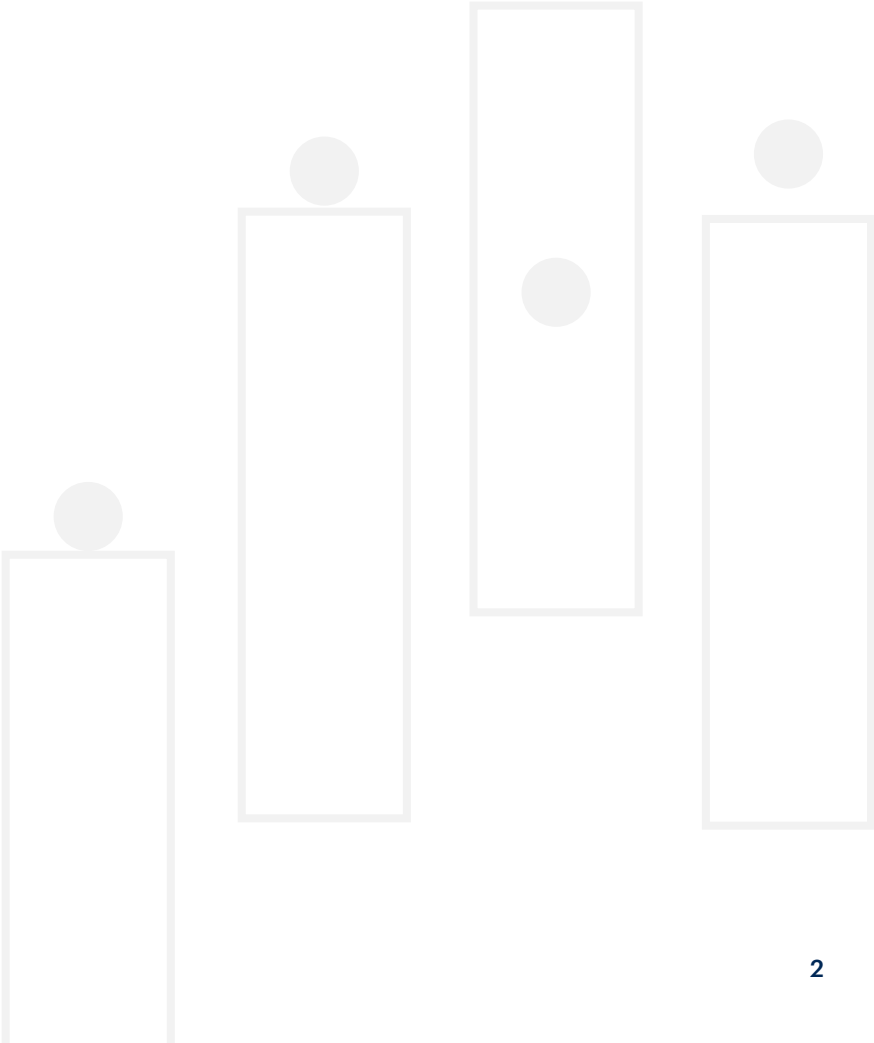


## Introduction

Gartner recently conducted a survey of over 200 R&D leaders across various industries and geographies on their planned technology spending and strategies in the coming years.

As the landscape of technologies and service providers catering to the R&D function expands, R&D leaders are choosing technologies based on considerations beyond features and price. They are also evaluating how easily the technology can be integrated with existing systems and how their planned use will impact data management. R&D leaders are also playing an active role in digital systems governance.

**Use these R&D technology benchmarks to calibrate your 2025 technology strategy.**

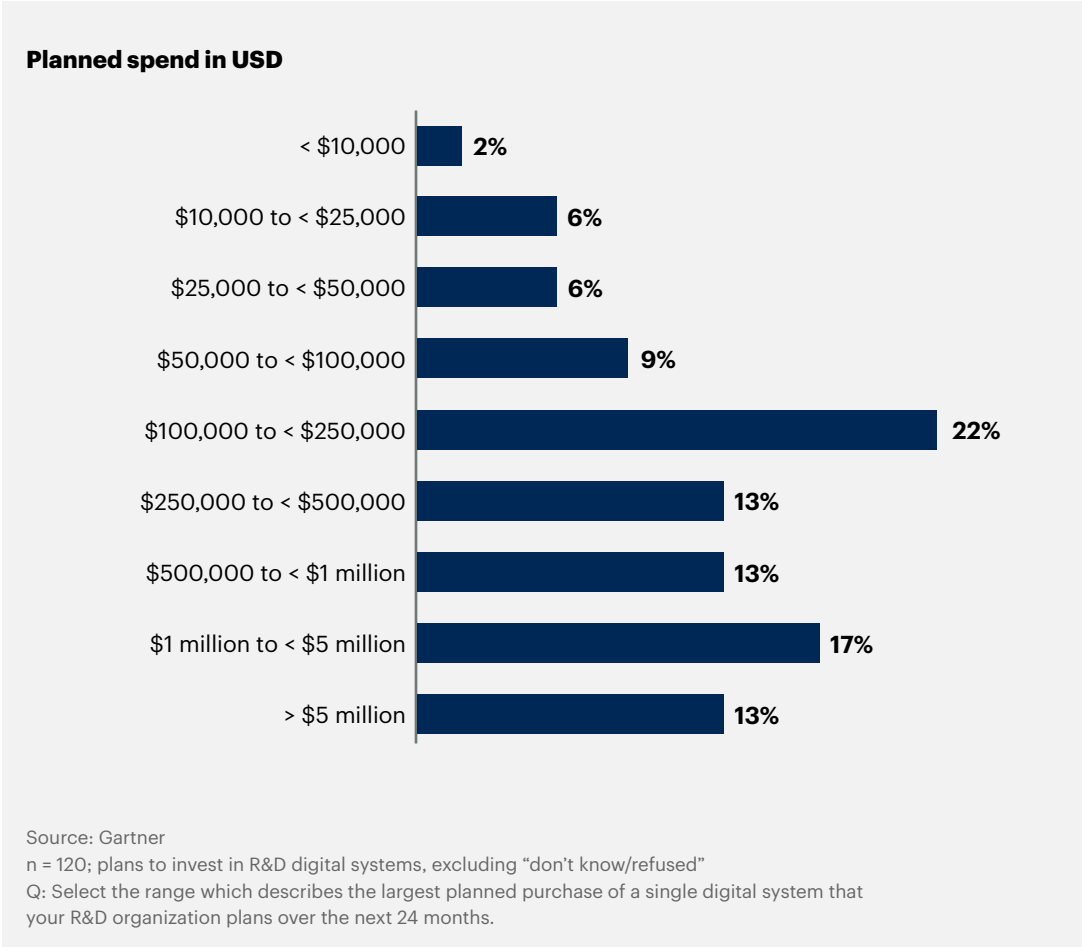


### Digital investment magnitude

Seventy-two percent of the surveyed R&D leaders have plans to invest in R&D digital systems over the next 24 months.

On average, R&D leaders plan to spend \$1.5 million on their single largest planned digital purchase. This is down from 2022 when the mean value of the single largest planned digital investment was \$1.9 million. The change was mainly driven by a drop in planned investments greater than \$5 million.

Figure 1: Largest planned purchase of a single digital system  
R&D leaders' planned investment



## Digital investment rationale

Survey participants were asked to identify the three leading criteria they use for evaluating potential technology providers. The leading criterion cited by R&D leaders is the products' capabilities to meet future needs (59%). Following this are the products' compatibility with existing technology systems (54%) and the supplier's specific expertise within their given industry (51%).

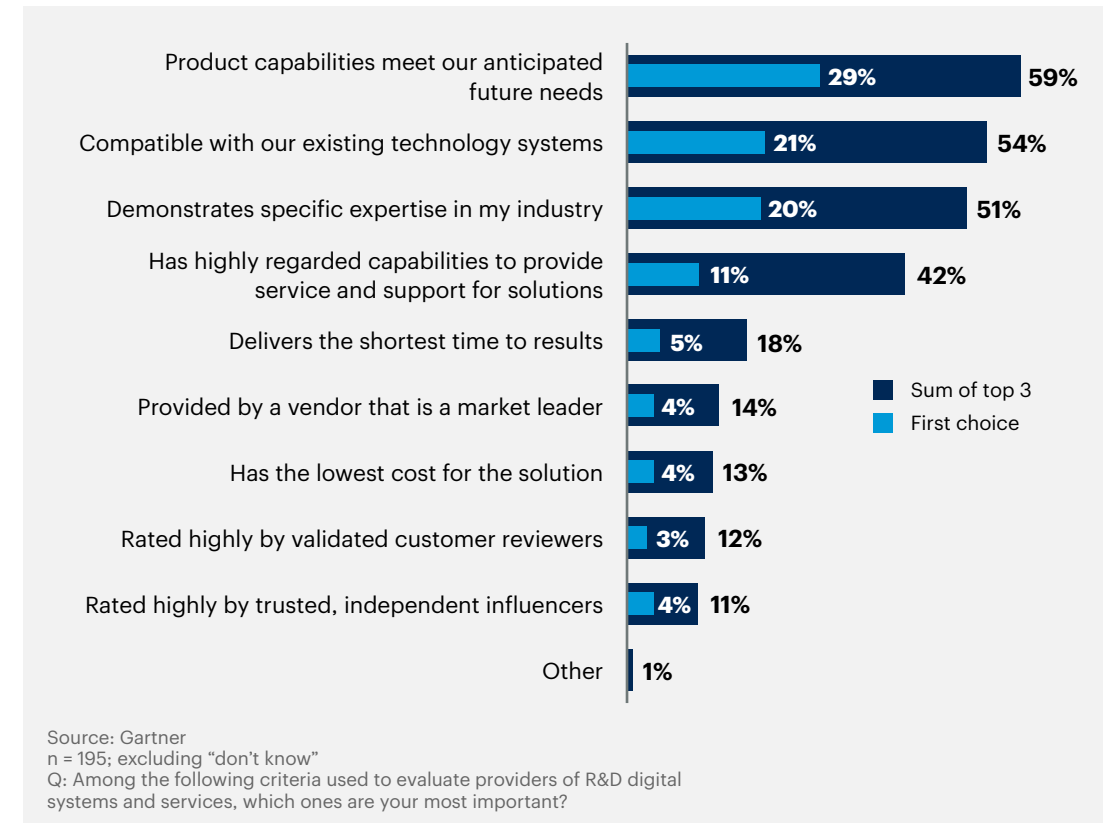
The ability of a digital tool or system to meet R&D organizational needs depends on several factors, including options for data hosting, data storage and compatibility with AI platforms. As R&D leaders expand their use of digital systems, a critical consideration is ensuring data can be integrated (and migrated as needed) across enterprise systems.

---

**30% of R&D leaders cite a product's capability to meet future needs as their single top consideration.**

---

Figure 2: Criteria used to evaluate the providers of R&D digital systems and services  
Sum of top 3 ranks vs. first choice

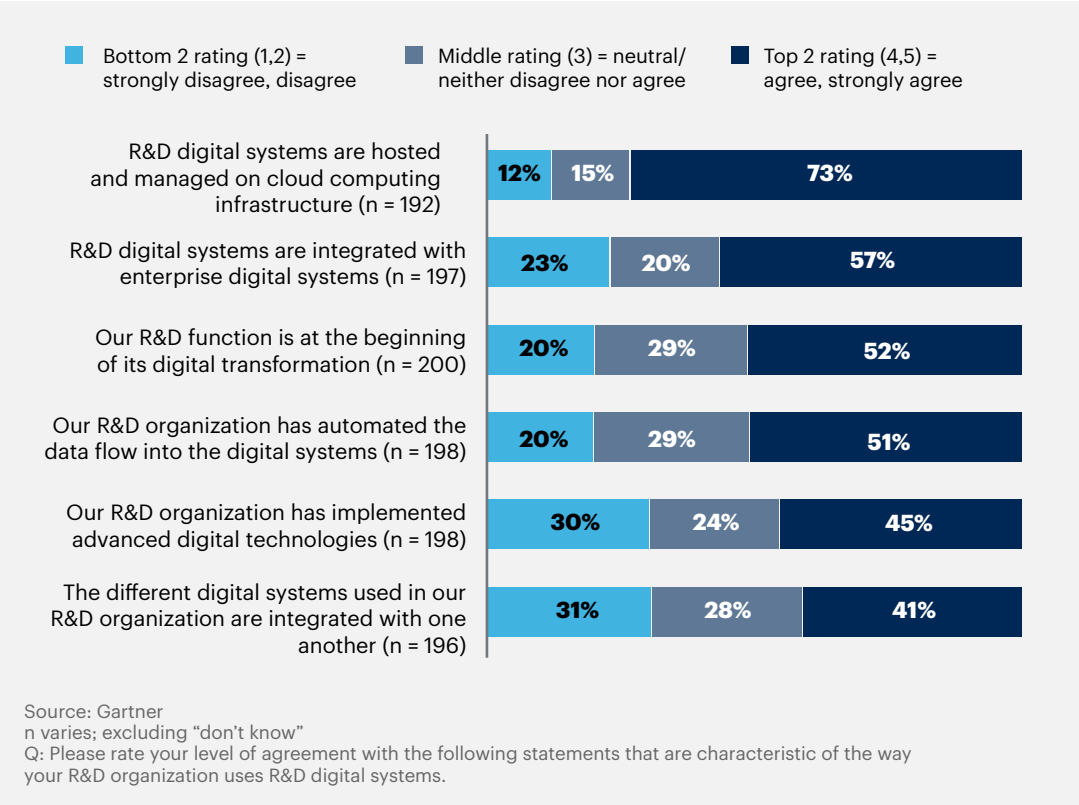


### Digital systems integration

Systems integration is an important aspect of digital maturity, especially as data that was previously managed manually is digitized and new platforms are introduced to accommodate that digitization. R&D leaders reported differing levels of progress in digital systems integration. More than half of the respondents (57%) stated their R&D systems are already integrated with enterprise digital systems, and 51% reported that their R&D organization has automated data flow into digital systems.

Opportunities remain to advance digitization within R&D organizations. Only 41% of leaders report that the digital systems used within their R&D organizations are integrated, and 52% say their organizations are at the beginning of their digital transformation.

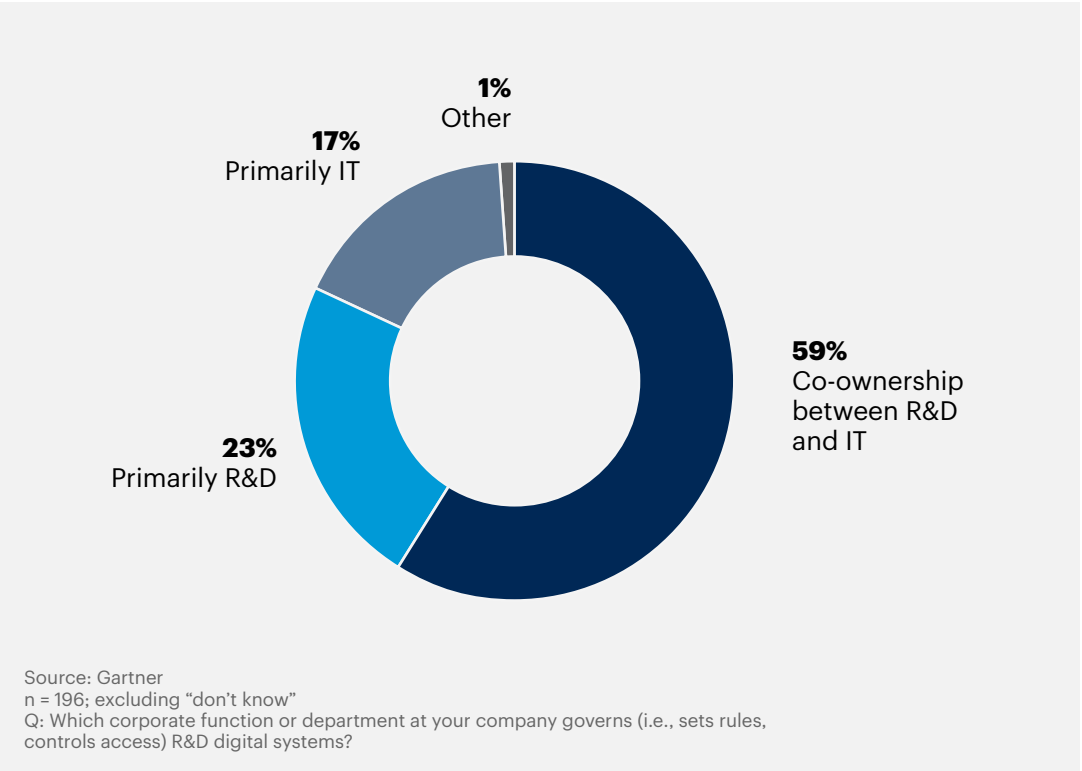
Figure 3: Level of agreement regarding how organizations use R&D digital systems



### Digital systems governance

Digital systems governance includes setting rules for and controlling access to R&D digital systems. Over half of survey respondents (59%) reported that systems governance is co-owned by R&D and IT. Twenty-three percent of respondents reported that R&D primarily governs digital systems, while 17% reported that IT is primarily responsible.

Figure 4: Corporate function or department that governs R&D digital systems  
Percentage of respondents



## Data storage

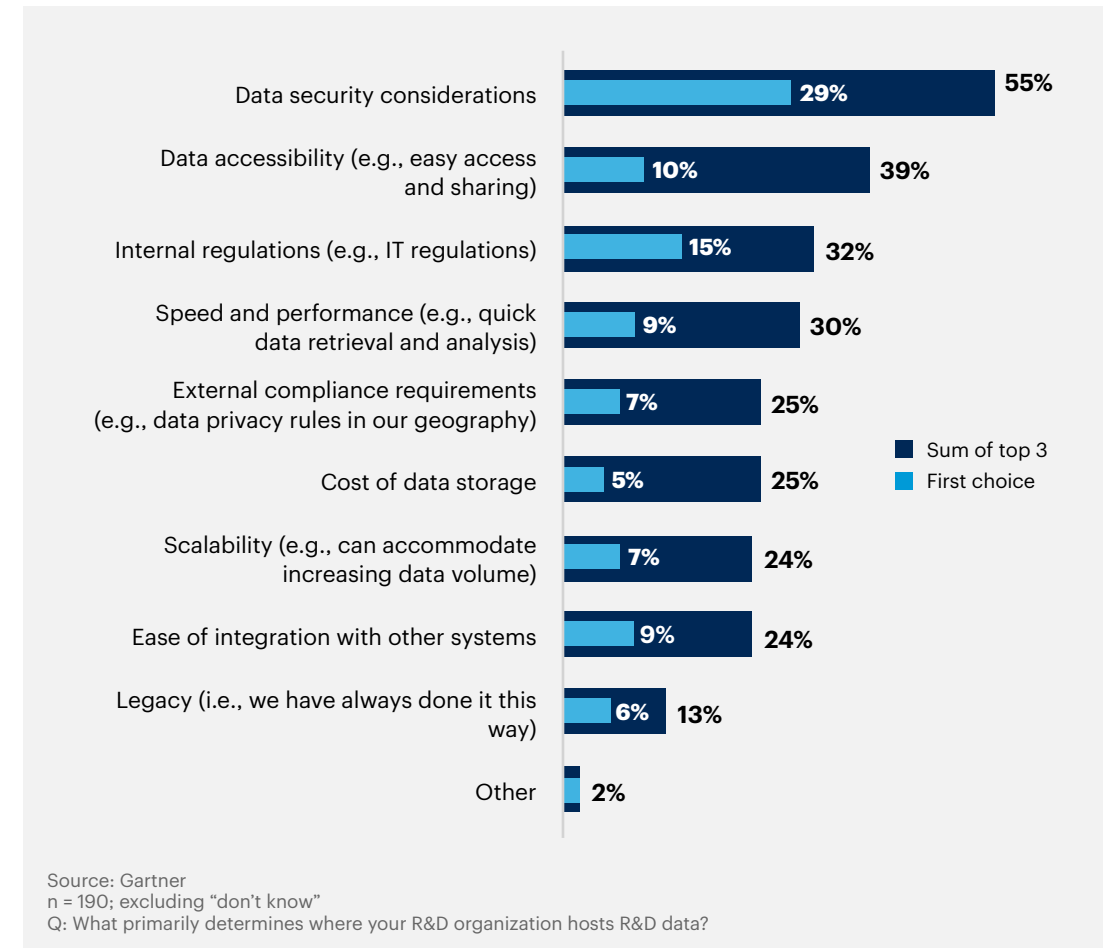
As technology advances and datasets grow, deciding where and how data is stored becomes increasingly important for R&D leaders. Data storage choices will impact the use of AI applications, which require significant computing power and are best supported in cloud storage. Storage choices will also have implications for data transfer between applications — for example, APIs may have different features and capabilities.

R&D leaders have cited cloud as the main choice for storing their R&D data assets (54%). Moreover, 73% of R&D leaders reported that their organizations use cloud hosting, while 23% of organizations indicated their data assets are primarily stored on local servers.

The leading factor R&D leaders use when determining where to host data is security (55%). When primarily hosting data on internal servers, leaders more frequently rank data security as their main consideration. In contrast, leaders of organizations primarily using cloud hosting more frequently rank data accessibility as their top consideration.

Cloud computing remains an important option for R&D organizations, both for backup and data recovery, and it can accommodate the considerable computing power required for running AI applications.

Figure 5: Factors determining where organizations host R&A data  
Sum of top 3 ranks vs. first choice



# Actionable, objective insight

Position your organization for success.  
Explore these additional complimentary  
resources and tools for R&D leaders:

Already a client?  
Get access to even more resources  
in your client portal. [Log In](#)

## Guide

Building a Business Case for R&D Technology Investment

Tell a compelling story of business value creation from your R&D technology investments.

[Download Now](#)



## Insight

4 Distinct R&D Technology Development Profiles

Understand your R&D organization's technology development profile to realign your portfolio allocations for better outcomes.

[Learn More](#)



## Webinar

Build an R&D Technology Roadmap That Drives New Product Development

Learn how to use technology roadmaps as powerful tools to drive successful new product development.

[Watch Now](#)



## How We Help

Gartner for Research & Development

Explore insights, guidance and tools to enable faster, smarter decisions and stronger R&D performance.

[Learn More](#)



# Connect With Us

Get actionable, objective insight that drives smarter decisions and stronger performance on your mission-critical priorities. Contact us to become a client:

**U.S.:** 1 855 811 7593

**International:** +44 (0) 3330 607 044

[Become a Client](#)

**Learn more about Gartner for R&D Leaders**

[gartner.com/en/rd](https://gartner.com/en/rd)

**Stay connected to the latest insight**

