Head of
R&D Leadership
Vision 2022
4 Strategic Actions for Success
From Chris Howard, Chief of Research, Gartner

As we head into 2022, we continue to feel the human toll of the global pandemic, but we already know it has been a watershed period in which attitudes and norms have permanently shifted — in our everyday lives and at work.

Living through COVID-19 has increased social awareness — as have growing demands for equity for those who are underrepresented.

Businesses have also changed. For many organizations, the pandemic has catalyzed digital business initiatives as we adapt to the demands of employees, customers and other stakeholders, who were forced into new digital options that they have now come to favor.

B2B purchasers are happy to buy digitally, without a sales representative; B2C consumers are buying off social media platforms; employees are physically distributed and communicating asynchronously — and IT infrastructures must secure the organization despite this “anytime, anywhere, anywhere” way in which we’re operating.

You and your team may be burning out, and it’s never been more important to prioritize your time and energy.

In your role as a leader, you’ve now spent months adapting to change and delivering new solutions at speed. You and your team may be burning out, and it’s never been more important to prioritize your time and energy. To help with that, Gartner Leadership Vision provides top-level guidance to leaders and their teams on where to focus — based on our data-driven research.

We’re providing detailed insights to our clients across dozens of roles, and we’re now excited to share excerpts with the business community beyond our clients. We hope this will help you to focus discussions with your teams, peers and other leaders, so you can more quickly and effectively diagnose priorities and actions, especially as you solidify your strategic plans for 2022.

Chris Howard
Chief of Research, Gartner
A Changing Research and Development Landscape

Evolution of R&D function responsibilities

Past
- Discover New Technology Opportunities
- Demonstrate the Value of R&D
- Rapidly Mature Technologies

Present
- Interpret Customer Insights
- Cultivate Technology Partnerships
- Collaborate in an Ecosystem
- Manage and Build Software
- Design Thinking

Source: Gartner
Shifting Landscape Creates Two Major Changes Impacting R&D Leaders

Highly dispersed teams with a mix of remote and in-person staff raise key challenges for R&D leaders to manage, including:

- When teams need to work together
- Which activities are best done in person and which are best done remotely
- How to preserve the flexibility that technology enables in terms of engagement and productivity

R&D leaders

Sustainability will move from being a corporate ambition to a critical necessity.

- R&D must navigate innovation and regulation to prioritize, monitor and leverage technology investments required to develop new products.

Artificial intelligence (AI) will become a core part of all business activities.

- R&D leaders will need to rapidly mature emerging technologies to integrate into new and existing products and services.
Challenges and Actions for R&D Leaders

**R&D leader challenges**

**Staying ahead of technologies and trends**
- 96% of R&D leaders indicate that the rate of change for technologies and trends is increasing.

**Evolving R&D culture to address new working preferences and needs**
- 25% of R&D and engineering employees worked remotely two or more days per week. During the pandemic, that number has more than doubled.

**Using co-development models to innovate**
- 48% of R&D leaders conduct engineering in conjunction with an external partner, but co-development to innovate is less common.

**Defining the digital opportunity for R&D**
- 67% of R&D leaders report that digital funding comes from R&D itself — as R&D digitalizes workflows and increases the digital quotient of products.

**R&D leader actions**

**Track and monitor key technologies and trends.**

**Stress-test portfolios to ensure resiliency and flexibility in delivering technology to market.**

**Consider partnership or acquisition early in technology impact discussions.**

**Empower teams to integrate digital technology into workflows.**
Use Monitoring Tools Like the Megatrend Radar

Visuals like this tool provide an easy way to plot the technology landscape and share those insights with business partners.

The bubbles represent megatrends.

The segments represent different lines of business or geographies.

Source: Gartner
A Portfolio-Level, Scenario-Based Scorecard Provides Visibility

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Stress-testing across varied scenarios (to ensure investments offer appropriate value) and against varied resourcing scenarios (to ensure speedy and cost-efficient delivery of technology solutions) ensures resiliency and flexibility in delivering technology to market.

1. Identify Areas of Learning
2. Expand the Consideration Pool
3. Test for Diversity

Source: Adapted From Citrus Inc.*
* Pseudonym
Use Robust Criteria to Decide Whether to Build, Buy or Ally on Technology

Be rigorous in deciding whether to build organically or incubate a technology, partner with others to develop a technology or acquire the technology outright. Build the capability within your teams to manage co-development partnerships, which require both technology expertise and strong influencing and project management skills.

**Starting Point**
Should we pursue a new idea?

**Idea Evaluation**

**Stage 1**
Can we overcome the barriers to winning?

- **Yes**
  - 2 – 4 Weeks
  - Build

- **No**
  - Stop

**Path Evaluation**

**Stage 2**
Can we easily build the needed capabilities?

- **Yes**
  - 1 – 2 Weeks
  - Acquire

- **No**
  - Stop

**Stage 3**
Is an optimal partner available?

- **Yes**
  - 1 – 2 Months
  - Minority Stake

- **No**
  - Joint Venture/Strategic Alliance

**Stage 4**
What is the optimal structure?

- **Yes**
  - 1 – 2 Weeks
  - Consider Options

- **No**
  - Buy/Ally

Source: Adapted From DuPont
Digital Dexterity Is a Critical Element of Digital Transformation

R&D leaders must reimagine their workflows to accommodate new technologies that enable teams to work differently — and accommodate new realities around how people want to work. Promoting mindset shifts that encourage agility, openness and experimentation will enable R&D functions to operate more dynamically and take advantage of emerging work models that have the potential to differentiate their organization from its competitors.

Source: Gartner

IoT = Internet of Things
Actionable, objective insight

Explore these additional complimentary resources and tools for R&D leaders:

**Research**
- Measure and Influence Innovation Climate at Your Organization
  Uncover three steps R&D leaders should take to establish a strong culture of innovation at their organization.

**Research**
- Build a Better Strategic Plan for Your Function
  Turn your strategy into action with our tools and templates.

**Resource Hub**
- Future of Work Reinvented
  Reinvent where, when and how we work to maximize employees’ engagement and productivity.

**Journal**
- Gartner Business Quarterly
  Stay up to date with the most compelling research on organizational issues that cut across the C-suite.

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