The Harvey Nash/KPMG CIO Survey is the largest IT leadership study in the world, with almost 4,000 respondents across 84 countries, representing over US$300bn of IT budget spend.

This Pharmaceuticals industry snapshot provides survey responses from 59 IT leaders on some of the key topics, and highlights several areas where this industry’s responses differed significantly from those across all industries.

**Digital Strategy**

**Does your organization have a clear digital business vision and strategy?**

- Yes, enterprise-wide: Pharmaceuticals 23%, All Industries 49%
- Yes, within business units: Pharmaceuticals 28%, All Industries 27%
- No: Pharmaceuticals 41%, All Industries 22%

Pharmaceutical companies are less likely to maintain an enterprise-wide digital business strategy than others (23% vs. 32% for all industries), and are roughly equally likely to have one within business units (28% vs. 27%). Overall, 51% have a clear strategy, less than other industries.

**Which are the most important goals when prioritizing digital technology initiatives in your organization?**

- Improving business process efficiency: Pharmaceuticals 70%, All Industries 54%
- Enhancing the customer experience: Pharmaceuticals 52%, All Industries 60%
- Developing new products and services: Pharmaceuticals 48%, All Industries 49%
- Developing new delivery/distribution methods: Pharmaceuticals 41%, All Industries 27%
- Growing revenue from existing customers: Pharmaceuticals 41%, All Industries 52%
- Attracting new customers: Pharmaceuticals 26%, All Industries 55%

When prioritizing digital investments, Pharmaceutical companies most heavily focus on improving business process efficiency (70% vs. 54% for all industries) and enhancing the customer experience (52% vs. 60%).

**Does your organization have a Chief Digital Officer or someone serving in that capacity?**

- Yes, we have a dedicated CDO: Pharmaceuticals 4%, All Industries 11%
- Yes, CIO or someone else in that role: Pharmaceuticals 37%, All Industries 39%

Only 41% of Pharmaceutical companies have a CDO or equivalent, with 4% having a dedicated CDO, and an additional 37% having the CIO or someone else act in that role. Overall, they are less likely than others to have a single executive lead their digital strategy.

**How effective is your organization at each of the following capabilities? (Very/Extremely Effective)**

- Understanding the impact of digitization on your industry: Pharmaceuticals 39%, All Industries 48%
- Integrating core business systems with newer digital solutions: Pharmaceuticals 30%, All Industries 32%
- Relying upon an overall digital vision to guide decisions: Pharmaceuticals 28%, All Industries 32%
- Hiring and developing people with digital skills: Pharmaceuticals 21%, All Industries 24%
- Redesigning business processes to take advantage of digital technologies: Pharmaceuticals 19%, All Industries 24%

Pharmaceuticals effectiveness in key digital capabilities tends to lag peers in other industries. Pharmaceutical companies are most effective at understanding the impact of digitization (39%), but struggle with redesigning business processes to take advantage of digital technologies (19%).

**How effective has your organization been in using digital technologies to advance the following goals? (Very/Extremely Effective)**

- Improve business process efficiency: Pharmaceuticals 31%, All Industries 28%
- Enhance the customer experience: Pharmaceuticals 15%, All Industries 27%
- Develop new products and services: Pharmaceuticals 19%, All Industries 26%
- Develop new delivery/distribution methods: Pharmaceuticals 15%, All Industries 19%
- Grow revenue from existing customers: Pharmaceuticals 19%, All Industries 20%
- Attract new customers: Pharmaceuticals 13%, All Industries 20%

Despite its high importance, just 15% of Pharmaceutical companies rate themselves as very effective or better at using digital to enhance the customer experience. They are more much effective at digital to improve business process efficiency (31%).

**Overall, how effective has your organization been in using digital technologies to advance its business strategy?**

- Not/slightly effective: Pharmaceuticals 46%, All Industries 42%
- Moderately effective: Pharmaceuticals 22%, All Industries 37%
- Very/extremely effective: Pharmaceuticals 17%, All Industries 23%

Like other industries, Pharmaceutical companies report low overall effectiveness levels in their digital strategies, with just 17% describing their digital strategies as very effective or better.
Pharmaceutical companies are slightly less optimistic about their IT budgets for next year than companies in other industries, with 46% expecting an increase in their budgets, compared to an all-industries average of 48%.

### Technology & Innovation

**How would you characterize your investment in the following technologies?**
(Moderate/Significant Investment)

- Artificial intelligence / machine learning: 25% (All Industries), 28% (Pharmaceuticals)
- Robotic process automation: 18% (All Industries), 17% (Pharmaceuticals)
- On-demand marketplace platforms: 21% (All Industries), 19% (Pharmaceuticals)
- Internet of things: 22% (All Industries), 14% (Pharmaceuticals)
- Augmented/virtual reality: 11% (All Industries), 6% (Pharmaceuticals)

**In which functions have you implemented digital labor / automation?**

- Within IT: 10% (All Industries), 16% (Pharmaceuticals)
- Supply Chain: 14% (All Industries), 9% (Pharmaceuticals)
- Finance: 14% (All Industries), 10% (Pharmaceuticals)
- Customer Support: 18% (All Industries), 14% (Pharmaceuticals)
- HR: 16% (All Industries), 14% (Pharmaceuticals)
- Marketing: 16% (All Industries), 14% (Pharmaceuticals)
- Sales: 14% (All Industries), 10% (Pharmaceuticals)
- Legal: 10% (All Industries), 5% (Pharmaceuticals)

### Conclusion

The digital divide continues to impact in pharmaceuticals. Leveraging the emerging digital ecosystem to drive overall enterprise value continues to challenge CIOs in this sector. Pharmaceuticals continue to have no clear digital vision and strategy, and this is evident by the slow adoption in using intelligent automation within IT to drive insights inside core functions such as supply chain. Furthermore, CIOs continue to struggle with leveraging data to drive insights into customer profitability, having a single view of customer channels and enhancing the customer experience, showing a lack of integration between the digital strategy and an executable data architecture roadmap. Because of this, we are starting to see a new role emerge in pharmaceuticals, the Chief Digital Officer, who will drive the innovation required to move the enterprise beyond the pill, while the CIOs who are slow to disrupt themselves continue to be pushed to traditional IT operations roles, which are quickly being automated and moved to the cloud.

Further information

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