Harvey Nash/KPMG CIO Survey 2017

Pharmaceuticals Sector Findings

The Harvey Nash/KPMG CIO Survey is the largest IT leadership study in the world, with almost 4,500 respondents across 86 countries, representing over US$300bn of IT budget spend.

This pharmaceuticals sector snapshot provides survey responses from 76 pharmaceutical companies on some of the key topics, and highlights several areas where this sector’s responses differed significantly from those from across all industries.

Key Topics

Looking forward, over the next 12 months, do you expect your IT budget to?

- Stay the Same: 40% (All Industries), 35% (Pharmaceuticals)
- Increase: 42% (All Industries), 46% (Pharmaceuticals)
- Decrease: 18% (All Industries), 18% (Pharmaceuticals)

Pharmaceuticals companies are slightly more pessimistic about their IT budgets for next year than in other industries, with fewer expecting a budget increase (42% vs 46% for all industries), and the same a decrease (18% vs. 18%).

Digital Strategy

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

- Yes, enterprise-wide: 32% (All Industries), 35% (Pharmaceuticals)
- Yes, within business units: 21% (All Industries), 27% (Pharmaceuticals)
- No: 45% (All Industries), 48% (Pharmaceuticals)
- No, but we are currently working on one: 10% (All Industries), 8% (Pharmaceuticals)

Pharmaceuticals companies are less likely to maintain an enterprise-wide digital business strategy than in other industries (32% vs. 41%).

What are the key business issues that your management Board is looking for IT to address? (top 5)

- Increasing operational efficiencies: 67% (All Industries), 62% (Pharmaceuticals)
- Improving business processes: 61% (All Industries), 59% (Pharmaceuticals)
- Delivering consistent and stable IT performance: 58% (All Industries), 63% (Pharmaceuticals)
- Saving costs: 55% (All Industries), 54% (Pharmaceuticals)
- Delivering business intelligence / analytics: 49% (All Industries), 46% (Pharmaceuticals)

Pharmaceuticals company Boards most notably place a greater emphasis on increasing operational efficiencies (67% vs. 62% for all industries) and less of an emphasis on delivering consistent and stable IT performance (58% vs. 63%).

How have you adapted your technology plans to deal with uncertainty? (top 5)

- Creating a more nimble technology platform: 63% (All Industries), 52% (Pharmaceuticals)
- Investing more in cyber security: 50% (All Industries), 45% (Pharmaceuticals)
- Working more with trusted suppliers and partners: 46% (All Industries), 39% (Pharmaceuticals)
- Finding a way to work with restricted budgets: 44% (All Industries), 49% (Pharmaceuticals)
- Reducing the amount of longer-term planning: 13% (All Industries), 26% (Pharmaceuticals)

Pharmaceuticals companies much more often deal with uncertainty by creating a more nimble technology platform (63% vs. 52% for all industries), and less often by reducing the amount of longer-term planning (13% vs. 26%).

How effective has your organization been in using digital technologies to advance its business strategy?

- Very effective: 11% (All Industries), 15% (Pharmaceuticals)
- Moderately effective: 56% (All Industries), 63% (Pharmaceuticals)
- Not effective: 28% (All Industries), 22% (Pharmaceuticals)
- No, but we are currently working on one: 10% (All Industries), 13% (Pharmaceuticals)

Pharmaceuticals companies report low overall effectiveness levels in their digital strategies, with many more describing their strategies as not effective (33% vs. 19% for all industries) than very effective (11% vs. 18%).

Which of the following represent the greatest challenges to your organization’s successful implementation of digital capabilities? (top 5)

- Dealing with legal and regulatory compliance issues: 44% (All Industries), 35% (Pharmaceuticals)
- Overcoming resistance to change: 40% (All Industries), 36% (Pharmaceuticals)
- Achieving adequate return on investment (ROI): 38% (All Industries), 33% (Pharmaceuticals)
- Satisfying privacy and security requirements: 36% (All Industries), 31% (Pharmaceuticals)
- Gaining executive-level sponsorship: 20% (All Industries), 31% (Pharmaceuticals)

When implementing digital capabilities, pharmaceuticals companies face greater challenges with compliance issues (44% vs. 23% for all industries), privacy/security (36% vs. 25%), and executive sponsorship (31% vs. 20%).
Technology & Innovation

How would you characterize your current investment in the following cloud services and how do you expect that to change over time? (Significant Investment)

<table>
<thead>
<tr>
<th>Service</th>
<th>Pharmaceuticals</th>
<th>All Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>IaaS</td>
<td>21% 14%</td>
<td>23% 16%</td>
</tr>
<tr>
<td>PaaS</td>
<td>19% 16%</td>
<td>16% 18%</td>
</tr>
<tr>
<td>SaaS</td>
<td>43% 26%</td>
<td>27% 22%</td>
</tr>
</tbody>
</table>

Compared to other industries, pharmaceutical companies are roughly equally likely to invest significantly in IaaS and PaaS, but are much more likely to invest in SaaS.

Which of the following do you think best describes the role your organization’s CIO is currently playing in promoting innovation?

- Leading innovation across the business: 15% Pharmaceuticals, 26% All Industries
- Leading innovation in technical/IT matters: 19% Pharmaceuticals, 17% All Industries
- Not leading, but actively supporting: 12% Pharmaceuticals, 20% All Industries
- Supporting innovation only when asked: 9% Pharmaceuticals, 7% All Industries

Compared to non-industry peers, pharmaceuticals CIOs are less likely to lead innovation across the business (15% vs. 26% for all industries), and are more likely to take secondary, supporting roles such as supporting innovation only when asked (20% vs. 12%).

How would you characterize your current investment in digital labor? (Significant Investment)

- Significant: 14% Pharmaceuticals, 14% All Industries
- Moderate: 46% Pharmaceuticals, 44% All Industries
- Low: 26% Pharmaceuticals, 28% All Industries
- None: 15% Pharmaceuticals, 16% All Industries

Pharmaceuticals companies have invested somewhat more heavily in digital labor than in other industries, with more making significant investments (14% vs. 9% for all industries).

In which of the following ways is your organization fostering innovation?

- Partnering with other organizations, e.g., academic institutions: 54% Pharmaceuticals, 52% All Industries
- Dedicating time for innovation opportunities: 49% Pharmaceuticals, 54% All Industries
- Holding innovation contests: 29% Pharmaceuticals, 24% All Industries
- Creating an incubation lab: 29% Pharmaceuticals, 27% All Industries
- Creating an incubation lab: 29% Pharmaceuticals, 27% All Industries

Pharmaceuticals companies undertake similar innovation-related activities as in other industries, with partnering with other organizations and dedicating time for innovation activities the most popular.

Significant Differences

How effective is your IT organization in each of the following capabilities? (Very Effective)

- Executing projects: 42% Pharmaceuticals, 34% All Industries
- Facilitating the use of data and analytics: 16% Pharmaceuticals, 19% All Industries
- Fostering innovation: 16% Pharmaceuticals, 13% All Industries
- Integrating core business systems with newer digital solutions: 19% Pharmaceuticals, 9% All Industries

Pharmaceuticals companies exceed cross-industry effectiveness benchmarks in executing projects (42% vs. 34% for all industries). However, they lag in certain next-generation capabilities such as fostering innovation (13% vs 16%) and integrating core business systems with digital solutions (9% vs. 19%).

Conclusions

CIOs in pharmaceuticals face three competing barriers in this emerging digital ecosystem: requirements to decrease costs as margins are squeezed; regulatory and legal challenges; and competition from non-traditional healthcare industries who are using strictly digitally-focused business models. Pharmaceutical companies have been slow to adapt effective digital strategies to support the overall business vision, opening the door for the ones “who get it right” to leapfrog their competition. While CIOs still view themselves as leading innovation from a technical / IT standpoint, many have not moved into supporting enterprise-wide innovation. Pharmaceutical CIOs need to move the needle from a traditional IT operations focus, to enabling innovation by continuing to invest in cloud-based solutions, while leveraging the emergence of disruptive technologies such as Internet of Things, Artificial Intelligence and digital labor.

Further information

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