Opportunities for Leadership and Disruption in Consumer Packaged Goods

Industry Report from the TCS CIO Study

TCS Business 4.0™ Institute
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Opportunities for Leadership and Disruption in Consumer Packaged Goods

The TCS 2020 Chief Information Officer (CIO) Study seeks answers to central questions facing information and technology executives across industries in North America and Europe: How are these leaders helping their enterprises navigate a complex and fast-evolving digital landscape? Where are their companies focusing their digital initiatives? What traction have they gained this decade from those efforts?

In this report, data from the surveys of CIOs in the consumer packaged goods (CPG) industry (141 companies) is compared against the overall survey data (1,010 companies) on such issues as success in transforming business models and offerings to meet digital opportunities and challenges; how digitally adept senior CPG management and boards of directors are; and what kind of data CPG CIOs think will help drive future revenue growth, compared to the views of CIOs in other industries.

Other reports in this series examine these and other issues across industries and within other industries.

- Key Findings: How CIOs Are Helping Their Companies Navigate the Digital Ecosystem
- Roles & Responsibilities in Digital Business
- Data: What Kinds? How Is It Used?
- Threats & Opportunities: Industry vs. Ecosystem
- Master Report: Study Results, Trends & Best Practices

Additional reports will look specifically at the banking, financial services, insurance, retail, media, entertainment and information services industries, as well as the viewpoints of CIOs at North American and European firms.

All reports currently available from the TCS 2020 CIO Study can be found at: sites.tcs.com/bts/tcs-cio-study
Key Highlights

CPG Companies Must Play Digital Catch-Up

The consumer packaged goods industry is **behind most other sectors in digitization.**

CIOs who said they’re still in proof-of-concept phase or their digitization is limited to only a few business units

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Packaged Goods</td>
<td>44%</td>
</tr>
<tr>
<td>Other industries</td>
<td>34%</td>
</tr>
</tbody>
</table>

- Across 11 industries, similar numbers of companies could be defined as “digital leaders” and “digital followers.” However, the CPG industry had twice as many followers as leaders.

- CPG management sees fewer opportunities to digitally transform their businesses than other industries’ managers do.

- Many CPG companies may be overlooking competitive advantages they can gain by analyzing data on how consumers are using their products.

- CIOs at the “digital leader” CPG companies foresee a greater competitive impact from **cloud computing**, **Internet of Things technology**, and **machine learning** than do CIOs at CPG firms overall.
How Digital Leaders Are Different: Context in the CIO Study

Across 11 industries in North America and Europe, we analyzed the survey answers of 1,010 CIOs and other IT executives to understand the differences between firms that are leading and trailing in the digital transformation of their businesses.

**Digital Leaders vs. Digital Followers**

### All Companies

- **Digital Leaders**: 22%
- **Other**: 57%
- **Digital Followers**: 22%

### Digital Leader Companies (220 out of 1,010 surveys):

- Enterprise-wide digitization initiatives with strong leadership in place, or new digitally enabled business models, products and services, and operating models
- Huge or high success in increasing revenue from those digital businesses and offerings over the decade

### Digital Follower Companies (219 out of 1,010 surveys):

- Digital initiatives in the pilot phase or limited to a few business units
- No or low success in increasing revenue from their digital efforts this decade

### Among CPG firms (141 out of 1,010)

Using these criteria, there were nearly twice as many “follower” as “leader” companies in the consumer packaged goods industry.
A Lower Innovation Profile

Just as with all the companies we surveyed across 11 industries, CIOs in the consumer packaged goods business are most likely to lead their firms’ digital transformations. And this is the case at 72% of the CPG Digital Leader companies. But despite receiving a plurality of responses, at CPG firms overall the role for the CIO has a lower profile when it comes to leading digital transformations: fewer than half of all CPG CIOs said their role is in front on the effort.

At CPG Digital Follower companies, the head of distribution is just as likely to be leading the digital charge as the CIO.

Even among CPG leaders, more than a fifth of these companies have seen division heads or a chief strategy officer lead digital transformations, rather than the CIO—slightly more than for CPG companies overall.

Which one person or function has been driving digital transformation this decade?

<table>
<thead>
<tr>
<th>Role</th>
<th>All Companies</th>
<th>CPG Companies</th>
<th>CPG Leaders</th>
<th>CPG Followers</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIO</td>
<td>58%</td>
<td>46%</td>
<td>26%</td>
<td>72%</td>
</tr>
<tr>
<td>CEO</td>
<td>7%</td>
<td>6%</td>
<td>0%</td>
<td>14%</td>
</tr>
<tr>
<td>Line-of-business/division heads</td>
<td>14%</td>
<td>13%</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>Chief strategy officer</td>
<td>9%</td>
<td>11%</td>
<td>17%</td>
<td>2%</td>
</tr>
<tr>
<td>Board of directors</td>
<td>3%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Production/manufacturing head</td>
<td>10%</td>
<td>0%</td>
<td>14%</td>
<td>4%</td>
</tr>
<tr>
<td>Distribution head</td>
<td>12%</td>
<td>26%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Answers garnering less than 5% of responses for each segment not included.
Opportunities for Leadership and Disruption in Consumer Packaged Goods

CPG Leadership Lacks Digital Experience

A company’s digital leadership begins with its corporate leadership. For CPG Digital Leader companies, their board of directors’ and top management’s digital experience seems roughly to match the results from all 1,010 companies in our survey: about half have deep digital experience on their board and top management team.

But among CPG firms overall, the amount of digital experience on their board is closer to that of the 219 Digital Follower companies found in our study—an indicator of how the consumer packaged goods industry may be ripe for disruptive innovators to take charge.

How digitally experienced is your board and management?

<table>
<thead>
<tr>
<th>Category</th>
<th>Deep Digital Experience</th>
<th>Deep Digital Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Companies</td>
<td>49%</td>
<td>49%</td>
</tr>
<tr>
<td>CPG Digital Leader Companies</td>
<td>51%</td>
<td>51%</td>
</tr>
<tr>
<td>All CPG Companies</td>
<td>39%</td>
<td>44%</td>
</tr>
<tr>
<td>All Digital Follower Companies</td>
<td>38%</td>
<td>39%</td>
</tr>
</tbody>
</table>

Company’s board members have deep digital experience
Company’s top management members have deep digital experience

CPG Execs Don’t See the Digital Upside

In general, CPG management teams are less optimistic about their opportunities to further digitize their business over the next decade and play in the emerging digital ecosystem than are executives in other industries.

CPG management is less likely to be seeking digital opportunities

<table>
<thead>
<tr>
<th>Category</th>
<th>Seeking Digital Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPG Companies</td>
<td>43%</td>
</tr>
<tr>
<td>Other Companies</td>
<td>35%</td>
</tr>
<tr>
<td>CPG Leaders</td>
<td>28%</td>
</tr>
<tr>
<td>Leaders Overall</td>
<td>6%</td>
</tr>
</tbody>
</table>

Top management believes “there are limited opportunities to further digitize our business”
What Gets CIOs’ Time and Attention

CIOs across all respondents in the study say they spend about half their time on digital business model innovation and the other half on managing the current IT environment. CIOs at Digital Leader companies spend significantly more time on innovation efforts, devoting nearly two-thirds of their time on their firms’ digital futures.

As a whole, **CPG companies look more like Digital Follower companies** in terms of where their CIOs spend their time, spending more than half of it on managing legacy IT systems.

- **Digital business model innovation**
- **Managing present IT infrastructure**
We asked CIOs which of seven aspects of managing information technology they’re responsible for. At Digital Leader CPG companies, CIOs’ portfolios are mostly evenly distributed. Excluding “end-user tech support” (only 17% said this was a responsibility), the percentages claiming oversight of each of the seven areas appeared within a 23-point range. At the high end, two-thirds of CIOs at Digital Leader firms manage IoT technologies.

For CIOs at CPG Digital Follower companies, the variations are much wider. About three-quarters say they’re in charge of legacy IT systems; about a third say they’re in charge of data security and analytics.

CIOs at CPG Digital Follower companies are nearly as likely to be responsible for identifying emerging technologies and their potential value for the company as CIOs at CPG Digital Leader companies—yet with less responsibility for some of the applications of that technology (such as analytics and IoT).
Data Leveraged—or Left on the Table?

Which data will drive future growth? According to CPG CIOs, reputation data (i.e., what customers are saying online about the firm), product quality data, and production data top the list.

**What kind of data is most important to future business growth?** (top CPG answers)

| Data on what customers are saying about our firm in online channels | 77% | 70% | 75% |
| Product/service performance data | 52% | 61% | 71% |
| Production data | 43% | 52% | 71% |

“High” or “extreme” importance

Understandably, the CPG industry differs from other industries in its reliance on product quality and production data. But in looking at the data from CIOs in other industries—several of which are more advanced in their digital transformations than is consumer packaged goods—and at what CIOs at Digital Leader companies from all industries are using to fuel their growth, we believe many CPG CIOs are leaving valuable insights on the table that could provide a competitive advantage.

**What kind of data is most important to future business growth?** (other answers)

- Data on what products and services our customers buy from our company
- Data on how customers find out about our company and our products/services
- Data from business partners that help us identify and target potential new customers
- Distribution data
- Data on how customers use the products/services they buy from our company after the purchase

“High” or “extreme” importance
Artificial Intelligence, Machine Learning on the Rise

Most CPG CIOs see artificial intelligence and machine learning rising in importance in the coming decade. Two-thirds of CPG CIOs also expect 3D printing, which had little impact on the industry in the past 10 years, to have “extreme” or “high” importance in the next 10. Most CPG CIOs expect current trends in cloud computing and mobile devices to continue. And CPG CIOs expect Internet of Things technology to fade somewhat, with 58% seeing it as extremely or highly important in the coming decade.

For CPG companies, what impact did these technologies have the last decade and what impact will they have the next?

<table>
<thead>
<tr>
<th>Technology</th>
<th>Past decade</th>
<th>Next decade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud computing</td>
<td>74%</td>
<td>72%</td>
</tr>
<tr>
<td>Mobile devices</td>
<td>66%</td>
<td>72%</td>
</tr>
<tr>
<td>Internet of Things (IoT)</td>
<td>58%</td>
<td>71%</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>68%</td>
<td>80%</td>
</tr>
<tr>
<td>Machine learning</td>
<td>66%</td>
<td>76%</td>
</tr>
<tr>
<td>Virtual/augmented reality</td>
<td>57%</td>
<td>55%</td>
</tr>
<tr>
<td>3D printing</td>
<td>23%</td>
<td>67%</td>
</tr>
</tbody>
</table>

CIOs at CPG Digital Leader firms have different views on these technologies. Three technologies—cloud computing, Internet of Things, and machine learning—are expected to get a lot more interesting for the CPG Digital Leader CIOs than for CPG CIOs in general.

In addition, CIOs at Digital Leader CPG companies aren’t quite as impressed with the potential further impact from such things as mobile devices and 3D printing as their counterparts at less digitally advanced CPG companies.

What impact did these technologies have the last decade and what impact will they have the next? (% point change)

<table>
<thead>
<tr>
<th>Technology</th>
<th>Past decade</th>
<th>Next decade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud computing</td>
<td>-2</td>
<td>22</td>
</tr>
<tr>
<td>Mobile devices</td>
<td>-5</td>
<td>6</td>
</tr>
<tr>
<td>Internet of Things (IoT)</td>
<td>-13</td>
<td>11</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>-6</td>
<td>12</td>
</tr>
<tr>
<td>Machine learning</td>
<td>-2</td>
<td>10</td>
</tr>
<tr>
<td>Virtual/augmented reality</td>
<td>-6</td>
<td>22</td>
</tr>
<tr>
<td>3D printing</td>
<td>39</td>
<td>44</td>
</tr>
</tbody>
</table>

“Extreme” or “high” impact
How We Conducted This Study

The TCS 2020 CIO Study asked senior IT executives in 11 industries about their work, their company’s digital success, and where they’re focused strategically for the future. Among the 1,010 companies represented in our study, 14% (141) were in the consumer packaged goods industry.

**Consumer packaged good companies surveyed**

- Food & beverage (non-alcoholic)
- Health & beauty (excluding pharmaceuticals)
- Household products (cleaning, detergents, etc.)
- Alcoholic beverages
- Other

70%

The IT budgets under these CIOs in the consumer packaged goods industry ranged from less than $25 million to more than $1 billion, with most falling in the $25 million to $100 million range.

- < $25 million 12%
- $25 million to < $50 million 28%
- $50 million to < $100 million 32%
- $100 million to < $250 million 13%
- $250 million to < $500 million 7%
- $500 million to < $750 million 1%
- $750 million to < $1 billion 4%
- $1 billion or more 3%
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