What the Data Tells Us About Digital Transformation, by Industry
The key findings for software and services companies

Software’s digital transformation success rate of 60% is the highest across all sectors because these companies are inherently digital and because leaders are naturally primed to be early adopters of digital advances.

Top-quartile companies nail the six key success factors, while median companies struggle most with talent.

Software companies pursue digital initiatives more broadly than companies in other industries, emphasizing customer experience, marketing and pricing, and innovation.

Successful digital players are prioritizing areas that have not yet emerged as universal priorities, such as automated lead generation, personalization, and automated churn reduction.

Software companies have sophisticated forward-looking digital agendas in customer experience and services, security, and support functions.

ESG is becoming more important in the digital agenda, especially supply chain, customer and employee data risk, and cyber resilience.

Source: BCG analysis.
The data in more depth

- Rates of success in digital transformation
- Topics of focus for software companies
- Top priorities for the future
- The critical human and tech enablers
- The role of ESG in digital transformation

Source: BCG analysis.
Nearly 60% of software companies fall in the win zone—a figure 70% higher than the cross-industry average.


Note: Survey question: “Across the following dimensions, please rate your organization’s digital transformation experience to date on a scale of 1 to 10, using the guidelines in the table below.”

‘Success score is calculated from respondents’ answers on six dimensions of transformation: strategy; leadership; talent; agility; monitoring; and tech and data.”
Software companies struggle most with deploying high-caliber talent


Note: Survey question: “Across the following dimensions, please rate your organization’s digital transformation experience to date on a scale of 1 to 10 using the guidelines in the table below.”

RATES OF SUCCESS


Note: Survey question: “Across the following dimensions, please rate your organization’s digital transformation experience to date on a scale of 1 to 10 using the guidelines in the table below.”

Integrated strategy with clear transformation goals | 7.8
Leadership commitment from CEO through middle management | 8.5
Deployment of high-caliber talent | 7.1
An agile governance mindset that drives broader adoption | 7.4
Effective monitoring of progress toward defined outcomes | 7.7
Business-led modular technology and data platform | 7.9

Woe zone (success score <6) | Worry zone (success score ≥6–<8) | Win zone (success score ≥8)


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‘Success score is calculated from respondents’ answers on six dimensions of transformation: strategy; leadership; talent; agility; monitoring; and tech and data.'
Transformation priorities for software companies have been customer oriented and innovation focused

<table>
<thead>
<tr>
<th>Strategic objectives</th>
<th>SHARE OF RESPONDENTS (%)</th>
<th>Scope of digital transformation</th>
<th>SHARE OF RESPONDENTS (%)</th>
<th>CROSS-INDUSTRY AVERAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement in customer experience and go-to-market</td>
<td>35</td>
<td>Customer experience and journeys</td>
<td>92</td>
<td>81</td>
</tr>
<tr>
<td>Innovation and growth in the core and beyond</td>
<td>28</td>
<td>Sales and market acceleration</td>
<td>85</td>
<td>71</td>
</tr>
<tr>
<td>Performance improvement through the operational value chain</td>
<td>18</td>
<td>Growth and business model innovation</td>
<td>85</td>
<td>72</td>
</tr>
<tr>
<td>Performance improvement in support functions</td>
<td>19</td>
<td>Digital ecosystem and partnership</td>
<td>74</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marketing and dynamic pricing</td>
<td>72</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digitizing support functions</td>
<td>69</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Building resilience via cybersecurity and compliance</td>
<td>62</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supply chain</td>
<td>49</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital procurement</td>
<td>49</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New business venture</td>
<td>41</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital manufacturing and operations</td>
<td>28</td>
<td>50</td>
</tr>
</tbody>
</table>


1Respondents were asked to select all priorities that applied.
Software companies that are farther along in the transformation journey shift their focus toward digitizing support functions and customer-centricity.

**Scope of digital transformation**

**SHARE OF RESPONDENTS (%)**

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>Win-zone software companies</th>
<th>Change of +5 pp or less</th>
<th>Change of more than +5 pp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth and business model innovation</td>
<td>86</td>
<td>79</td>
<td>57</td>
</tr>
<tr>
<td>Digital ecosystem and partnerships</td>
<td>96</td>
<td>72</td>
<td>76</td>
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<td>72</td>
<td>57</td>
</tr>
<tr>
<td>Digitizing support functions</td>
<td>57</td>
<td>79</td>
<td>72</td>
</tr>
</tbody>
</table>


Note: Survey question: “From the list of most common digital outcome areas and enablers in digital transformation, please help us identify the scope of your digital transformation (select all that apply).”
### TOP PRIORITIES FOR THE FUTURE

**Nearly all software companies intend to direct 50% of their investments toward customer experience and delivery of services**

<table>
<thead>
<tr>
<th>Digital Support Function</th>
<th>Share of Respondents Allocating Any Investment (%)</th>
<th>Average Share of Total Investment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer experience</td>
<td>97</td>
<td>29</td>
</tr>
<tr>
<td>Delivery of services</td>
<td>100</td>
<td>22</td>
</tr>
<tr>
<td>Next-generation security</td>
<td>90</td>
<td>17</td>
</tr>
<tr>
<td>Next-generation sales and marketing</td>
<td>82</td>
<td>17</td>
</tr>
<tr>
<td>Digital support functions</td>
<td>90</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: 2021 BCG Global Digital Transformation Survey

*For example, the uppermost pair of bars can be read as “97% of software respondents plan to invest in customer experience, allocating an average 29% of total digital investment.”*
Software companies’ digital priorities: Customer experience

Digital initiatives (bars indicate relative prioritization of initiatives)

- Multichannel customer access: 1.00
- Identification of service improvement areas based on customer feedback: 0.68
- Digital immersion experience creation for customer engagement: 0.53
- Customer services (chatbot, interactive voice response): 0.43
- Integrated payments: 0.39
- Loyalty programs: 0.10

TOP PRIORITIES FOR THE FUTURE

Software companies’ digital priorities: Delivery of services

Digital initiatives (bars indicate relative prioritization of initiatives)

- Multichannel sales and customer engagement: 1.00
- Cloud data warehouse solutions to support data engineering with integrated pipelines: 0.63
- Automation of product/delivery life cycles (continuous testing, integration): 0.55
- Optimized resource planning and allocation: 0.29
- Digital control tower for transparency and people optimization: 0.21
- Efficient teaming by using collaboration tools and efficient communication channels: 0.17
- Digital tools to support agile delivery (e.g., Jenkins for release, Kibana for testing): 0.10

Software companies’ digital priorities: Next-generation security

Digital initiatives (bars indicate relative prioritization of initiatives)

- AI-powered network threat identification: 1.00
- AI-driven anomaly identification: 0.81
- Cloud application monitoring: 0.63
- Automated threat hunting: 0.58
- Data exfiltration detection: 0.35
- Text/pattern recognition for phishing: 0.31
- Automated incident investigation: 0.20

Software companies’ digital priorities: Next-generation sales and marketing

Digital initiatives (bars indicate relative prioritization of initiatives)

- Smart customer segmentation: 1.00
- Personalized and targeted marketing: 0.97
- Automated lead generation and handling: 0.69
- Social-media-based customer engagement: 0.66
- Smart ROI optimization and A&P allocation\(^1\): 0.47
- Personalized offer generation: 0.36
- Data-driven churn management: 0.36

\(^1\)A&P = advertising and promotion.
### Software companies’ digital priorities: Digital support functions

#### Digital initiatives (bars indicate relative prioritization of initiatives)

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Relative prioritization for all software companies</th>
<th>Top priorities for win-zone companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>End-to-end hire-to-retire digitization (including integrated training) for HR</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>End-to-end procure-to-pay digitization for procurement</td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>End-to-end record-to-report digitization of finance activities</td>
<td>0.62</td>
<td></td>
</tr>
<tr>
<td>End-to-end order-to-cash digitization for management of accounts receivable</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>End-to-end source-to-contract digitization for contracting</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>End-to-end contact-to-resolve digitization for contact center</td>
<td>0.47</td>
<td></td>
</tr>
</tbody>
</table>

Software companies intend to invest across broad range of tech and human enablers

Nine out of ten software companies plan to invest in infrastructure and cloud enablement, AI and big data, and modernization of tech architecture, allocating on average about 45% of their total digital enabler spending to these areas.


For example, the leftmost pair of bars can be read as "92% of software respondents plan to invest in infrastructure and cloud enablement, allocating an average 17% of their total digital enabler spending."
About 82% of software companies plan to increase investments in ESG (in line with cross-industry averages)… with greater emphasis on S and G dimensions

Leading digital initiatives being prioritized to support E, S, and G goals

<table>
<thead>
<tr>
<th>SHARE OF RESPONDENTS PRIORITIZING (%)</th>
<th>SOFTWARE AVERAGE (%)</th>
<th>CROSS-INDUSTRY AVERAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· Digital supply chain optimization</td>
<td>~49</td>
<td>~25</td>
</tr>
<tr>
<td>· IoT for data collection, monitoring production processes, and environmental impact assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>~62</td>
<td>~17</td>
</tr>
<tr>
<td>· Reducing employee risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· Ensuring protection of clients’, employees’, and/or customers’ data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td>~62</td>
<td>1</td>
</tr>
<tr>
<td>· Critical risk incident management, building cyber resilience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· Predictive risk analytics to ensure improved preparedness and mitigation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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