The Dell Technologies Digital Transformation Index (DT Index) is a global benchmark indicating businesses’ status of digital transformation across the globe and how they are performing in this digital age. This is the third installment of the DT Index, and a powerful, point-in-time snapshot of how businesses are adapting to unprecedented uncertainty during a global pandemic.

According to the last wave of the DT Index (2018), many businesses’ digital transformation programs were out of step with leaps in computing power and the influx of emerging technologies - making the imperative to adapt to today’s unprecedented business disruption even more urgent and challenging. So, have they succeeded?

Dell Technologies surveyed 4,300 business leaders from around the globe to analyze their organizations’ transformation efforts.

<table>
<thead>
<tr>
<th>Global perspective:</th>
<th>Cross-functional:</th>
<th>Industry view:</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 countries</td>
<td>Director to C-Suite from Mid-Size to Enterprise organizations</td>
<td>12 industries</td>
</tr>
</tbody>
</table>

Survey conducted by Vanson Bourne on behalf of Dell Technologies, July & August 2020.
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UNPRECEDENTED UPHEAVAL
WE LIVE IN UNCERTAIN, TURBULENT TIMES.

Prior to recent disruption, the pace of transformation was lagging - making the imperative to transform in recent months even more challenging.

Companies are bracing themselves for a challenging chapter ahead.

Almost 1 in 3 are worried their organization may not survive the next couple of years.

60% believe they will survive but will shed many more jobs and take years to return to profitability.
ACCELERATION PHENOMENON
Accelerating digital transformation programs in 2020

80% businesses fast-tracked at least some digital transformation programs this year. But just 41% accelerated all or most of their programs.

Top 5 acceleration programs

1. Strengthening our cybersecurity defenses
2. Rolling out broader working from home/remote working capabilities
3. Reinventing how we deliver digital experiences to customers & employees
4. Using data in completely new ways
5. Transforming our services and consumption models

But just 41% accelerated all or most of their programs.
79% are reinventing their business model as a result of the disruption caused by the pandemic.

50% worry they didn’t transition fast enough.

89% are proud of their team/organization in the way that they’ve adapted their IT and business/operational strategy.

48% fear they are at risk of employee burn-out from trying to adapt their IT strategy in these abnormal times.
A NEW DIGITAL TRANSFORMATION CURVE
<table>
<thead>
<tr>
<th>BENCHMARK GROUPS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIGITAL LEADERS</td>
<td>Digital ingrained in DNA</td>
</tr>
<tr>
<td>DIGITAL ADOPTORS</td>
<td>Mature digital plans, investments and innovations in place</td>
</tr>
<tr>
<td>DIGITAL EVALUATORS</td>
<td>Gradual digital transformation and planning</td>
</tr>
<tr>
<td>DIGITAL FOLLOWERS</td>
<td>Very few investments; tentative plans</td>
</tr>
<tr>
<td>DIGITAL LAGGARDS</td>
<td>No digital plans; limited initiatives and investments</td>
</tr>
</tbody>
</table>
Digital Transformation Index 2020

Digital Laggards
No digital plans; limited initiatives and investments
3%

Digital Followers
Very few investments: tentative plans
13%

Digital Evaluators
Gradual digital transformation and planning
39%

Digital Adopters
Mature digital plans, investments and innovations in place
39%

Digital Leaders
Digital ingrained in DNA
6%
Digital Transformation Index YoY

- **Digital Laggards**: No digital plans; limited initiatives and investments
- **Digital Followers**: Very few investments: tentative plans
- **Digital Evaluators**: Gradual digital transformation and planning
- **Digital Adopters**: Mature digital plans, investments and innovations in place
- **Digital Leaders**: Digital ingrained in DNA

<table>
<thead>
<tr>
<th>Year</th>
<th>Digital Laggards</th>
<th>Digital Followers</th>
<th>Digital Evaluators</th>
<th>Digital Adopters</th>
<th>Digital Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>3%</td>
<td>13%</td>
<td>39%</td>
<td>39%</td>
<td>6%</td>
</tr>
<tr>
<td>2018</td>
<td>9%</td>
<td>30%</td>
<td>33%</td>
<td>23%</td>
<td>5%</td>
</tr>
<tr>
<td>2016</td>
<td>15%</td>
<td>32%</td>
<td>34%</td>
<td>14%</td>
<td>5%</td>
</tr>
</tbody>
</table>

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4 BARRIERS TO TRANSFORMATION
### Business are facing entrenched barriers to transformation

<table>
<thead>
<tr>
<th>No.</th>
<th>Barrier Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Data privacy and security concerns</td>
</tr>
<tr>
<td>02</td>
<td>Lack of budget and resources</td>
</tr>
<tr>
<td>03</td>
<td>Unable to extract valuable insights from data and/or information overload</td>
</tr>
<tr>
<td>04</td>
<td>Lack of economic growth (NEW)</td>
</tr>
<tr>
<td>05</td>
<td>Lack of the right in-house skill sets and expertise (analytics, technology, and business skills)</td>
</tr>
<tr>
<td>06</td>
<td>Regulation or legislative changes</td>
</tr>
<tr>
<td>07</td>
<td>Immature digital culture: lack of alignment and collaboration across the company</td>
</tr>
<tr>
<td>08</td>
<td>Lack of the right technologies to work at the speed of business</td>
</tr>
<tr>
<td>09</td>
<td>Lack of coherent digital strategy and vision</td>
</tr>
<tr>
<td>10</td>
<td>Weak digital governance and structure</td>
</tr>
<tr>
<td>11</td>
<td>Lack of the right senior support/leadership</td>
</tr>
<tr>
<td>12</td>
<td>A fragmented or siloed computing environment</td>
</tr>
</tbody>
</table>

**Transformation isn’t easy.**

94% of businesses are facing entrenched barriers spanning across technology, people and policy.

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### Top 3 barriers to transformation

<table>
<thead>
<tr>
<th>Rank</th>
<th>Barrier</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data privacy and security concerns</td>
<td>Digital Leaders and Adopters are more likely to cite data privacy and security concerns as a major barrier to transformation – suggesting a level of awareness that others lack.</td>
</tr>
<tr>
<td>2</td>
<td>Lack of budget and resources</td>
<td>This barrier ranked lower for Digital Leaders and Adopters (hence they’re continuing to invest in IT &amp; workforce transformation).</td>
</tr>
<tr>
<td>3</td>
<td>Unable to extract valuable insights from data and/or information overload</td>
<td>This barrier climbed from 11th place in 2016 to joint second in 2018 and remains a significant barrier. In fact, 91% of businesses agree that extracting valuable insights from data will be more important for their business than ever before.</td>
</tr>
</tbody>
</table>
89% say recent disruption has shown they need a more agile/ scalable IT environment.

Only 41% say having the right technologies to work at the speed of business enabled them to successfully accelerate this year.

Current IT Investments

<table>
<thead>
<tr>
<th>Service</th>
<th>Investing (varying degrees)</th>
<th>Fully completed latest investment/ mature stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cybersecurity and privacy</td>
<td>60%</td>
<td>82%</td>
</tr>
<tr>
<td>Data management and analytics</td>
<td>56%</td>
<td>82%</td>
</tr>
<tr>
<td>Digital workplace</td>
<td>53%</td>
<td>80%</td>
</tr>
<tr>
<td>Multi-cloud environment</td>
<td>47%</td>
<td>74%</td>
</tr>
<tr>
<td>On-demand digital services</td>
<td>45%</td>
<td>73%</td>
</tr>
<tr>
<td>Edge</td>
<td>41%</td>
<td>69%</td>
</tr>
<tr>
<td>Artificial Intelligence</td>
<td>32%</td>
<td>62%</td>
</tr>
<tr>
<td>5G infrastructure</td>
<td>28%</td>
<td>56%</td>
</tr>
</tbody>
</table>
Overall planned investments over the next 1-3 years

- Cybersecurity solutions: 43%
- Data management tools: 39%
- 5G infrastructure: 37%
- Multi-cloud environment: 35%
- Privacy software: 35%
- 5G ready hardware: 33%
- Software: containers and serverless: 32%
- Artificial intelligence algorithms: 32%
- Commercial/industrial robotics: 29%
- Real-time applications at the Edge: 28%
- Natural user interfaces: 24%
- Quantum computing: 16%
- Mixed Augmented or Virtual Reality: 16%
- Distributed ledgers such as Blockchain: 15%
- Evolutionary nanotechnology: 14%

Foundational technology

Emerging technology
Technology planned investments (1-3 years) have stalled

Continual investment, amid the uncertainty, is necessary to shape the future that businesses want.
High hopes for next 3-5 years

- **82%** envision that people will use AR to learn how to do or fix things in an instant.
- **85%** foresee businesses using AI and data models to predict potential disruptions.
- **78%** predict distributed ledgers will make the gig economy fairer (by cutting out the intermediary).

Yet, despite the high hopes, businesses are not investing accordingly:

- **Only 16%** are planning to invest in VR/AR.
- **Just 32%** intend to invest in AI.
- **Just 15%** plan to invest distributed ledgers.
THE WORKFORCE TRANSFORMATION IMPERATIVE
Remote working is the new normal

Before the pandemic

About 1 in 4 employees worked remotely

Proportion of staff working remotely
- 0-30%
- 30-60%
- 60-90%
- 90-100%
- Don't know

Today

More than 1 in 2 employees works remotely

Proportion of staff working remotely
- 0-30%
- 30-60%
- 60-90%
- 90-100%
- Don't know
Businesses are continuing to invest in their workforce but some of these efforts are stalling.
Room for improvement: agile culture

- Just **17%** are hosting hackathons / scrums to encourage innovation.
- Only **29%** are actively encouraging a fail-fast-then-succeed mindset.
Room for improvement: engaged leadership

just 46% could say that having an engaged leadership team (championing digital transformation) enabled them to accelerate.

only 30% are in communication with/from the C-Suite to identify discrete projects in the business that can be digitized.

only 20% have appointed a Chief Data Officer.
LEARNING FROM LEADERS
Digital Leaders have ingrained digital in all they do

96% of Digital Leaders say their ability to collect, analyze and act on data has made it easier to adapt and survive.

74% of Digital Leaders have already set-up new digital channels to support customers during the pandemic.

Digital Leaders believe that within 12 months they’ll be:

- 92% Extracting insights at the Edge
- 94% Overcoming bandwidth and latency issues at the Edge
- 93% Making their data secure, at the Edge
More Digital Leaders successfully accelerated key transformation programs

- Strengthening our cybersecurity defenses
- Rolling out broader working from home/remote working capabilities
- Reinventing how we deliver digital experiences to customers & employees
- Using data in completely new ways
- Transforming our services and consumption models
- Extending our business domain (operating in new, digital adjacencies)
- Transforming our Edge deployments (and its connection with the core and the cloud)
- Transforming our processes with AI initiatives

Digital Laggards  Digital Followers  Digital Evaluators  Digital Adopters  Digital Leaders
8 BE READY FOR WHAT'S NEXT
In response to these turbulent times, we’ve seen a major acceleration in digital transformation.

Today, nothing is certain. Business continuity for long-term resilience is paramount and we all need to be ready for what’s next, because the world can change in an instant.

With a strong ally by their side, businesses can absolutely adapt to new routines and push the frontiers of what’s possible, with timely, on-demand IT that flexes to meet the needs of the business.
Explore the Full Research on
www.delltechnologies.com/dtindex