Empower your teams.

At a glance
Cisco public

IT infrastructures are growing in complexity—accommodating more, and more diverse, end-user devices and Internet of Things (IoT) connections. Today’s applications are more interactive and bandwidth hungry, generating massive amounts of data that supports real-time analytics and problem solving. This digital transformation requires more distributed and intelligent edge network capabilities with constantly evolving security. To achieve business agility (a top priority for businesses of all sizes), empowering global workforces with the right tools is a must. Automation, collaboration, and mobility are essential for managing IT complexity and new customer expectations and demands.

Increasing demands on IT infrastructures

- Increase overall business agility
- Maintain/improve security and compliance
- Create more standardized IT environments
- Increase use of automation
- Increase digital engagement with customers/partners
- Drive broad digital transformation
- Leverage data and analytics to create new markets/business
- Engage more directly with customers and partners
- Accelerate use of public cloud services
- Execute hybrid/multicloud cloud strategy
- Take greater advantage of open source innovation
- Implement unified management across network, storage, and computing

[Percentage of respondents: N = 200 IT and DevOps decision makers]
What are your main objectives for implementing a network automation strategy?

The primary objective of network teams is to continuously deliver application and service performance and protection for the business. Network automation is the process of automating the configuration, management, testing, deployment, and operation of physical and virtual networks. According to a Capgemini survey (where the top two objectives driving automation initiatives were ranked), nearly 40 percent of the organizations implementing automation initiatives are doing so to improve workforce productivity.

According to Gartner, approximately 70 percent of data center networking tasks are performed manually, which increases time, cost, and the likelihood of errors and reduces flexibility. Automation can improve network availability and relieve teams from time-consuming, repetitive tasks, freeing them up for higher-value-add activities.

Global IT leaders’ top objectives for implementing network automation

- **To improve quality**: 43%
- **To improve workforce productivity**: 37%
- **To improve customer satisfaction**: 36%
- **To gain operational efficiencies**: 33%
- **To gain incremental revenue**: 23%

Source: Automation Use Case Survey, Capgemini Research Institute, July 2018. [N = 705 organizations that are experimenting with or implementing automation initiatives]
Do you use a unified communications and collaboration (UCC) solution to improve your workflow?

UCC has become a mainstream productivity tool for many organizations based on how widely it has been adopted and used for business communications and collaboration. According to a survey conducted by IDC, nearly 50 percent of businesses are currently using UCC, while the “no plans for UCC” percentage has declined. Nearly 75 percent of businesses are either using UCC or plan to do so within one year.

### UCC adoption

<table>
<thead>
<tr>
<th>Currently use</th>
<th>Intenders–plan to use within 1 year</th>
<th>Intenders–plan to use within 1-2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>49%</td>
<td>25%</td>
<td>15%</td>
</tr>
<tr>
<td>45%</td>
<td>24%</td>
<td>13%</td>
</tr>
<tr>
<td>37%</td>
<td>21%</td>
<td>15%</td>
</tr>
<tr>
<td>31.1%</td>
<td>21.8%</td>
<td>19.3%</td>
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</table>

<table>
<thead>
<tr>
<th>Plan to use in more than 2 years</th>
<th>Don’t use/no plans to use</th>
</tr>
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<tbody>
<tr>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>7%</td>
<td>21%</td>
</tr>
<tr>
<td>7.1%</td>
<td>20.8%</td>
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### Source:
What role does wireless networking play in empowering your workforce?

Mobility is another important tool for empowering your workforce. Business users expect high-performance connectivity anywhere, anytime, on any device (via Wi-Fi or cellular networks). Additionally, wireless IoT devices are becoming more ubiquitous in many business sectors (manufacturing, healthcare, logistics, etc.). This wave of IoT applications dramatically changes wireless networking requirements in terms of scale, traffic patterns and volumes, and security.

- By 2023, IoT devices will account for 50 percent of all networked devices (nearly a third will be wireless).
- By 2023, 5G speeds will be 13 times higher than the average mobile connection.
- By 2023, there will be nearly 628 million public Wi-Fi hotspots, 4x more than 2018 (169 million).

Cellular advances (4G/LTE or 5G) and Wi-Fi upgrades (Wi-Fi 6) are driven by our insatiable demand for wireless connectivity. Ongoing mobile innovations will be required to support massive IoT connection density as well as highly interactive and tactile applications.

### Global mobile networking metrics

<table>
<thead>
<tr>
<th>Year</th>
<th>Mobile users</th>
<th>Mobile connections</th>
<th>Mobile speeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>5.1 billion</td>
<td>8.8 billion</td>
<td>13.2 Mbps</td>
</tr>
<tr>
<td>2023</td>
<td>5.7 billion</td>
<td>13.1 billion</td>
<td>43.9 Mbps</td>
</tr>
</tbody>
</table>

Source: Cisco Annual Internet Report, (2018-2023)

Cisco can help you build and enhance a strategy and tactical plan to empower your teams.

Learn more from the Cisco Annual Internet Report >

- Explore Cisco’s data center automation solutions.
- Find out more about Cisco’s network automation solutions.
- See more about Cisco’s unified communications and collaboration solutions.
- Become informed about Cisco’s wireless and mobility solutions.