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.
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.
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.

Recommended action

Increasing video usage, virtual reality, and augmented reality business applications can all improve your team’s collaboration, training, and productivity. UCC solutions can also lead to quicker and more innovative problem solving for business processes and customer interactions.

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.

### Recommended action

Your business needs to develop a mobile strategy with policies to empower your teams and protect their assets and data. Emerging capabilities such as OpenRoaming will provide seamless, always-on, and secure global roaming between different Wi-Fi 6 networks and public 5G networks.

### Global mobile networking metrics

<table>
<thead>
<tr>
<th>Mobile momentum metrics</th>
<th>More mobile users</th>
<th>More mobile connections</th>
<th>Faster mobile speeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>By 2023</td>
<td>5.7 billion</td>
<td>13.1 billion</td>
<td>43.9 Mbps</td>
</tr>
<tr>
<td>By 2023</td>
<td>5.1 billion</td>
<td>8.8 billion</td>
<td>13.2 Mbps</td>
</tr>
</tbody>
</table>

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