ACCEDIAN

Report

The Hidden Cost
of Network Brownouts

Accedian and Sapio Research Poll IT Leaders to
Expose the Business Impact of Network Brownouts

What are Network Brownouts?

Network brownouts are unexpected and unintentional drops in network quality

40%

of organizations experience network brownouts **several times a week**

Introduction

According to a recent survey of over 1,000 IT decision makers in U.S. organizations, sponsored by Accedian, more than 40% of organizations report that they experience network brownouts several times a week. Beyond that,

- One in five organizations experience network brownouts daily
- More than 25% of network brownouts are not even discovered by IT or NetOps, they are found and reported by users or customers!
- When they do know about network issues, IT teams spend an average of 2.5 hours trying to fix each one
- One-in-five organizations spend up to 12.5 hours a week from IT resources on troubleshooting network brownouts

For any IT team, that's significant time taken away from projects focused on transformation or revenue-generating opportunities. For already understaffed IT teams, this can be disastrous.

Not only are brownouts time-consuming and costly, they also affect severely affect end user experience and satisfaction.

In addition, since the COVID-19 work-from-home mandates came into effect, end user complaints about application performance have skyrocketed by 60%. These reported complaints have largely been due to:

- Performance degradations
- Excessive slowdowns
- Network congestion

In this report, we share our survey findings and proactive ways to tackle this critical, costly issue of network brownouts.

Why are network brownouts so relevant?

Increased reliance on high-speed networks

Since COVID-19, businesses are living significantly more of their daily lives online and across new time zones.

As a result, this put a major strain on networks and applications, as well as on organizations' ability to provide a seamless and positive digital experience from any location.

Communicating with colleagues and customers, and working productively from home, all rely on having good network connectivity, reliable audio and video conferencing, and fast, uninterrupted access to business applications.

Sudden shift in traffic patterns for enterprise cloud applications

Employees have been driven to work from home, causing a sudden shift in traffic patterns for enterprise applications. Monitoring the end-user experience of teleworkers has never been so important to business productivity.

Frustration with slow networks and applications is growing fast and companies realize that not only is securing the network edge critical, so too is assuring application performance and productivity from any location.

Cloud SaaS applications are impacted most by network brownouts

30% **of organizations report performance issues** with Office 365 and SaaS applications.

But, network drops impact performance of applications across the board:

30% Office 365 and SaaS

28% Databases

26% Audio/video conferencing

22% Collaboration tools

21% Streaming events/webinars

20% Infrastructure as a Service (IaaS)

20% Big data analytics systems

20% Content/media file transfers

20% Voice over IP (VoIP)

19% Customer communication channels

16% Financial systems

14% ERP supply chain

To put it simply:

 # Hours/day impacted by network brownouts (known and hidden from IT)

✕

Employees' wasted time

=

Productivity loss $$

The hidden cost of network brownouts

Organizations are spending significant time and budget to optimize networks.

- 70% of respondents reported spending between 6% and 20% of their IT budgets on optimizing network and application performance.
- Yet, more than 25% of end user performance issues are hidden and unreported to IT.

C-levels understand that network brownouts are a serious issue limiting productivity and seriously frustrating employees.
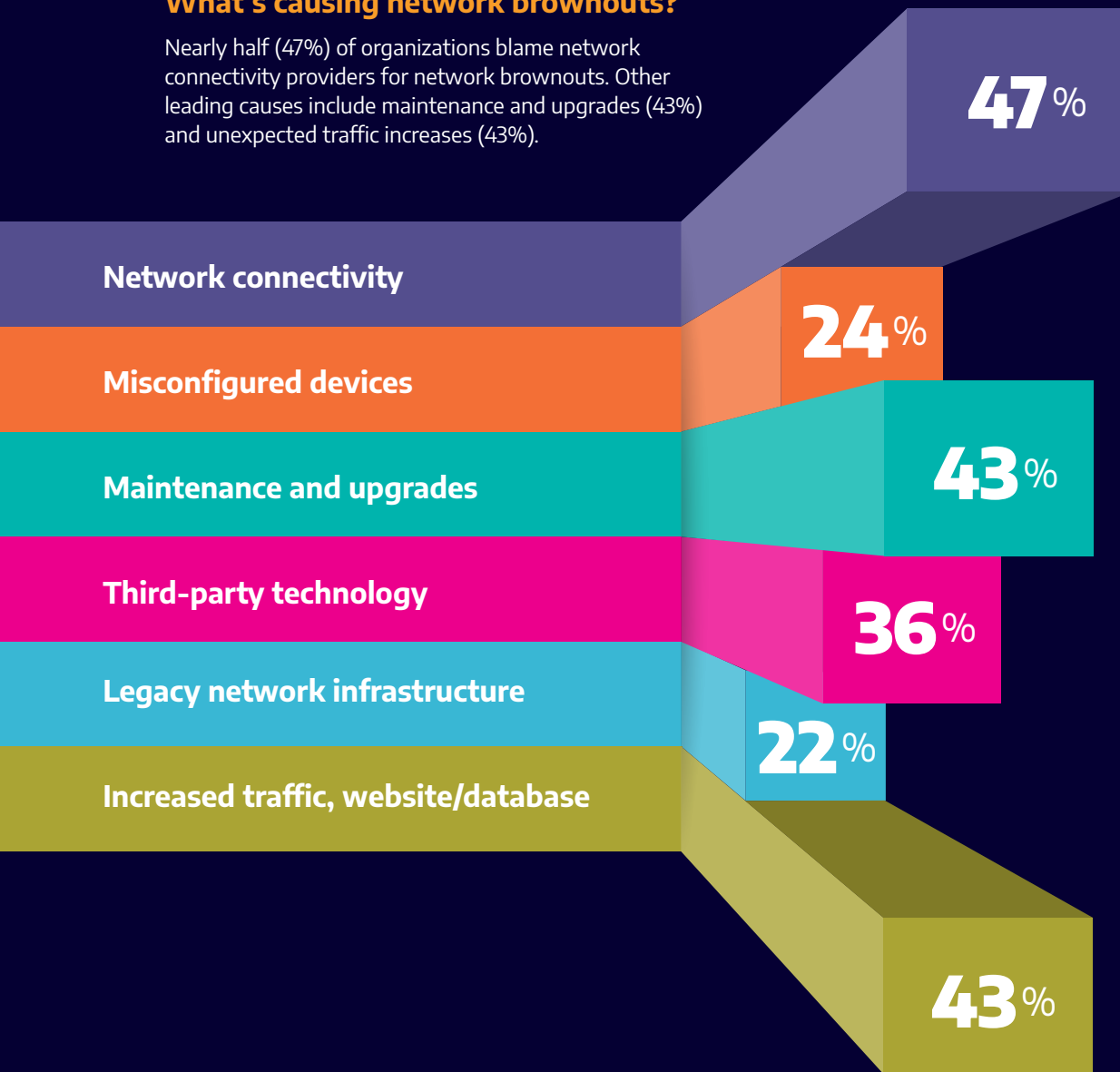
How much productivity is lost?

- More than 40% of organizations experience network brownouts several times a week.
- One in five organizations experience network brownouts daily.
- More than half (53%) of organizations spend an average of 2.5 hours resolving a single network brownout.
- For daily brownouts (which one in five experience), that adds up to 12.5 hours a week is wasted on troubleshooting.

What's causing network brownouts?

Nearly half (47%) of organizations blame network connectivity providers for network brownouts. Other leading causes include maintenance and upgrades (43%) and unexpected traffic increases (43%).

Network connectivity — 47%

Misconfigured devices — 24%

Maintenance and upgrades — 43%

Third-party technology — 36%

Legacy network infrastructure — 22%

Increased traffic, website/database — 43%

Active monitoring can be used to prevent the top three causes that can lead to brownouts

IT teams need independent performance data to enforce performance SLAs with network (broadband) service providers and ensure they are getting the bandwidth they are paying for.

Preventing network brownouts will also entail coordinating with third party technology vendors to ensure they're equipped with the appropriate tools to mitigate network brownouts on their end, as well as ensuring regular maintenance practices and the ability to scale during busy periods.

?

Are you getting the bandwidth you're paying for?

How can I be sure:

- Run service activation tests and utilize high-definition network testing after upgrades or changes
- Proactively monitor service quality with active monitoring solutions

F&M Farmers & Merchants Bank®
California's Strongest, since 1907.

In the age of remote working, video conferencing is a critical tool for the everyday productivity of the organization. The ability to ensure no issues would arise for key communications was paramount for Farmers & Merchants Bank.

F&M Bank deployed Skylight to understand where problems causing their degraded application performance were occurring. They could then work with their broadband service provider directly to fix the issues and enforce their service level agreements (SLAs).

In the end, they were able to recover their total multi-year Skylight investment in record time, while at the same time improving quality of service for their clients and gaining microsecond-level visibility into their network performance.

" It is very comforting to know we have eyes everywhere instead of hoping. I don't believe in hope, I believe in taking preventative measures. "

The insight Accedian provides into network health is extraordinary. For a recent high-profile meeting in which video was paramount, Accedian Skylight allowed us to know in advance and in real-time that there would be no issues. If an issue comes up, we have full history and metrics including network jitter, bandwidth usage, and KPIs with minimum overhead. "

Greg Sachs, SVP, Chief Technology Officer, Farmers & Merchants Bank

How can IT organizations prevent the damage caused by network brownouts and improve end user experience?

Moving forward, as the world continues to move to digital, it'll be even more critical for organizations to move from reactive to proactive performance monitoring.

This will require technology that provides full integrated visibility into network connectivity and application performance in order to get ahead of network brownouts.

In fact, the top three causes of network brownouts, network connectivity, maintenance and upgrade/change planning and unexpected traffic increases could all be essentially eradicated with active monitoring.

About this survey
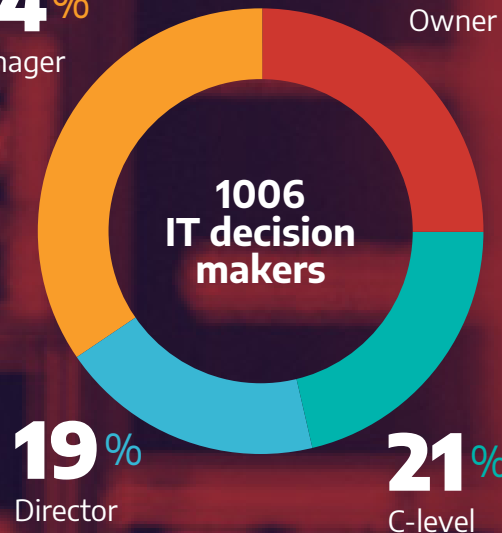**Conducted in July 2020 by Sapio Research**

1006
IT decision makers from enterprises across the United States

Sector	
Technology/IT	45%
Professional services	11%
Manufacturing	8%
Financial services	7%
Retail	7%
Healthcare	5%
Education	4%
Transport	2%
Government	2%
Energy	2%
Other	4%

34% Manager
25% Owner
19% Director
21% C-level

1006 IT decision makers

27% < 100
27% 100-499
19% 500-999
27% 1000+

Company size (# employees)
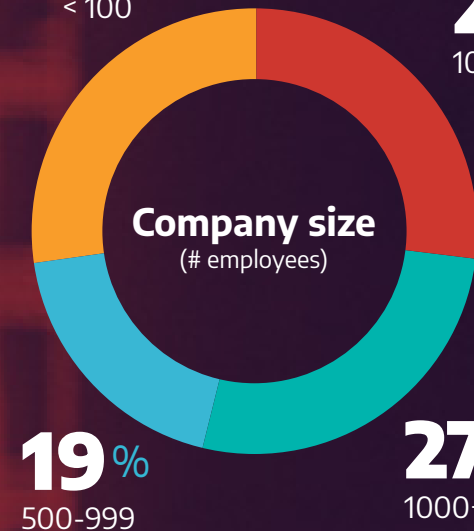
About Accedian

Accedian is the leader in performance analytics, cybersecurity threat detection and end user experience solutions, dedicated to providing our customers with the ability to assure their digital infrastructure, while helping them to unlock the full productivity of their users.

Learn more at accedian.com