

# The **Future** of Network Management

Presented by

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# EXECUTIVE SUMMARY



**This study delves into the perspectives of state and local government leaders concerning the hurdles and prospects they and their counterparts encounter in modernizing their networks.**

**The research assessed the viewpoints of state and local government officials regarding:**

- The condition of their network, broadband and wireless infrastructure to meet their present and future IT requirements in providing public services.
- The primary challenges and incentives guiding their network, broadband and wireless investment strategies.
- The capability of managed network service providers to provide technical and managerial assistance amidst persistent IT staffing shortages.



# EXECUTIVE SUMMARY

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Based on our survey of state and local government IT, business and program executives, we learned:

## **Performance of WAN infrastructure**

A majority of state agency respondents describe the performance of their agency's wide area network infrastructure as "above average" (43%) or "advanced" (15%) compared to similar-sized agencies. Only 29% of county/municipal agency respondents described their WAN infrastructure as "above average," while 32% said it was just "on par" with similar-sized agencies.

## **Motivators for using managed services**

Among the biggest motivators to increase reliance on MSPs, "cost efficiency," was cited most often by 48% of state respondents and 54% of county/municipal respondents. "Scalability and flexibility" were cited as the second biggest motivator, followed by a desire to "focus on core business functions," "improve service levels," and "access specialized expertise."

## **Cyber resiliency of WAN infrastructure**

About 6 in 10 state respondents said their WAN infrastructure could "manage disruptions seamlessly" (23%) or "recover quickly" (39%). Fewer county/municipal recipients (11% and 29% respectively) could say the same, with half (52%) saying incidents might require "noticeable recovery time."

## **Relying on managed services**

Agency leaders view managed services providers (MSPs) as a viable option to address their network needs. Half of state respondents (51%) and 33% of county/municipal respondents said they are "definitely or highly likely" to increase their reliance on MSPs to manage their network ecosystems. IT leaders were even more likely than their business counterparts to lean toward MSPs.

## **Skills needed to modernize WAN**

Looking more closely at the internal skills gaps agencies face, nearly half of all respondents (46%) said that "expertise in designing and implementing modern network architecture to optimize performance and scalability" is their greatest need for modernizing WAN infrastructure.

However, perceptions diverged among business and IT executives. While business executives also ranked "expertise in designing and implementing modern network architecture" as their top, their second most needed skill was "skills in effective project management to ensure the successful execution of modernization initiatives." IT executives ranked the need for "skills to assess and enhance cybersecurity measures for network safeguarding" as their most needed skill set.

# EXECUTIVE SUMMARY

Based on our survey of state and local government IT, business and program executives, we learned:

## Challenges for modernization

More than half of all respondents (54%) said the top challenge holding their agency back from modernizing its WAN infrastructure is “lack of necessary budget resources.” A lack of staff/skills was a close second, cited by 45% of respondents.

## CAPEX model for agencies

When asked if the CAPEX model for financing network technology is “sustainable for government agencies” (versus an OPEX or operating expense model), only 33% of state executives and 24% of county/municipal executives said “yes.” Surprisingly, nearly 8 in 10 business executives said they didn’t know or weren’t sure, suggesting that agency officials need to be better educated about the financing options available to upgrade their networks.

## De-motivators for using MSPs

When there is hesitancy to rely on MSPs to support network ecosystems, agency leaders most often cited concerns about the “loss of control over IT ops,” “security risks,” or “integration challenges.”

## Factors for considering an OPEX model

Among the reasons in favor of adopting an OPEX IT investment model, half of IT leaders — significantly more than their business counterparts — saw advantages in “reducing the need for in-house IT resource management” and “faster deployment of technologies.”

## Greatest networking needs

The areas where MSPs could meet the greatest network needs, according to state respondents, are to support the remote workforce (45%), and the need for business continuity (35%) and scalability (18%). For county/municipal respondents, scalability was slightly more important (29%) than supporting remote workers (28%), while business continuity was the greatest need (35%).

## Future outlook on managed services

When asked about the future role of managed services with government operations, 32% of IT executives and 21% of business executives said, “managed services will become their primary IT model.” Fully half (51%) of both cohorts, however, believe “managed services will coexist with traditional IT.”



## SURVEY DEMOGRAPHICS

SNG conducted an online survey of **184 prequalified** state and local government agency decision-makers. The survey was conducted online in January 2024.

Respondent by  
**agency type:**

**59%**  
State

**41%**  
County, city  
or municipal

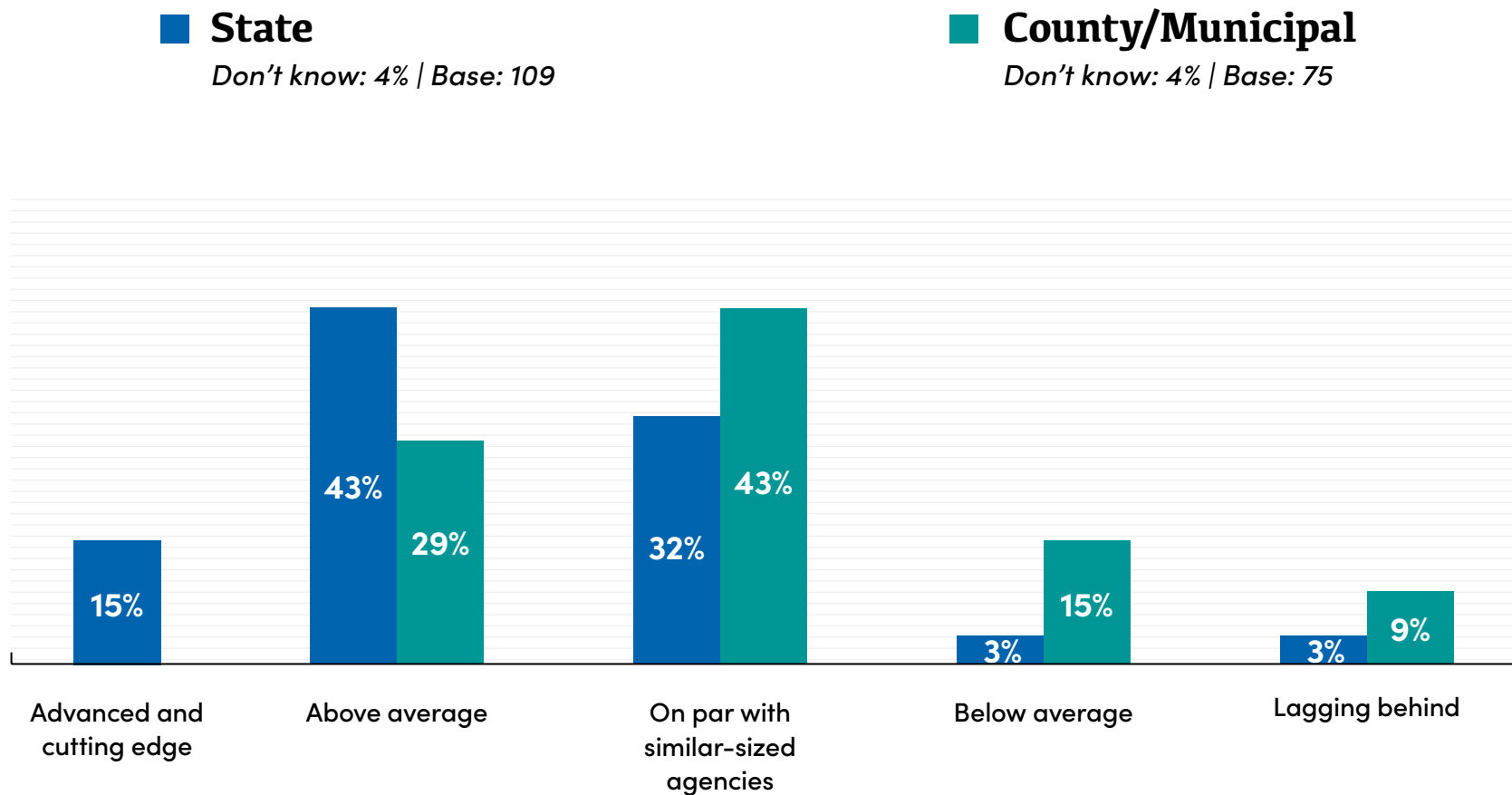
Respondent by  
**job function:**

**56%**  
Mission/Program/  
Ops/CX/Admin/  
Budget roles

**44%**  
IT/Security roles

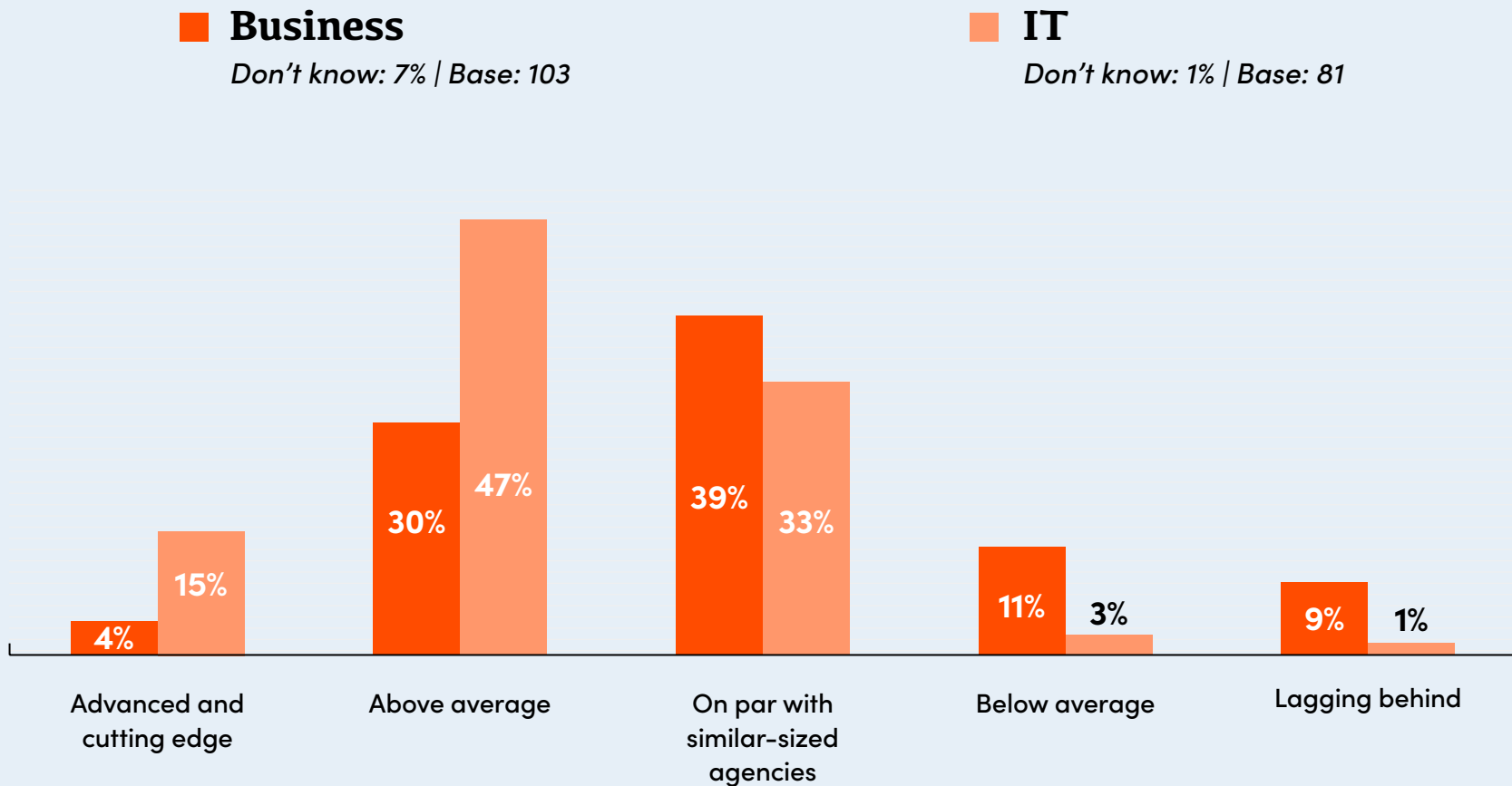
## WAN INFRASTRUCTURE PERFORMANCE - STATE VS. COUNTY/MUNICIPAL

How would you describe the **performance** of your agency's wide area network infrastructure compared to similar-sized agencies?



## WAN INFRASTRUCTURE PERFORMANCE - BUSINESS VS. IT EXECUTIVES

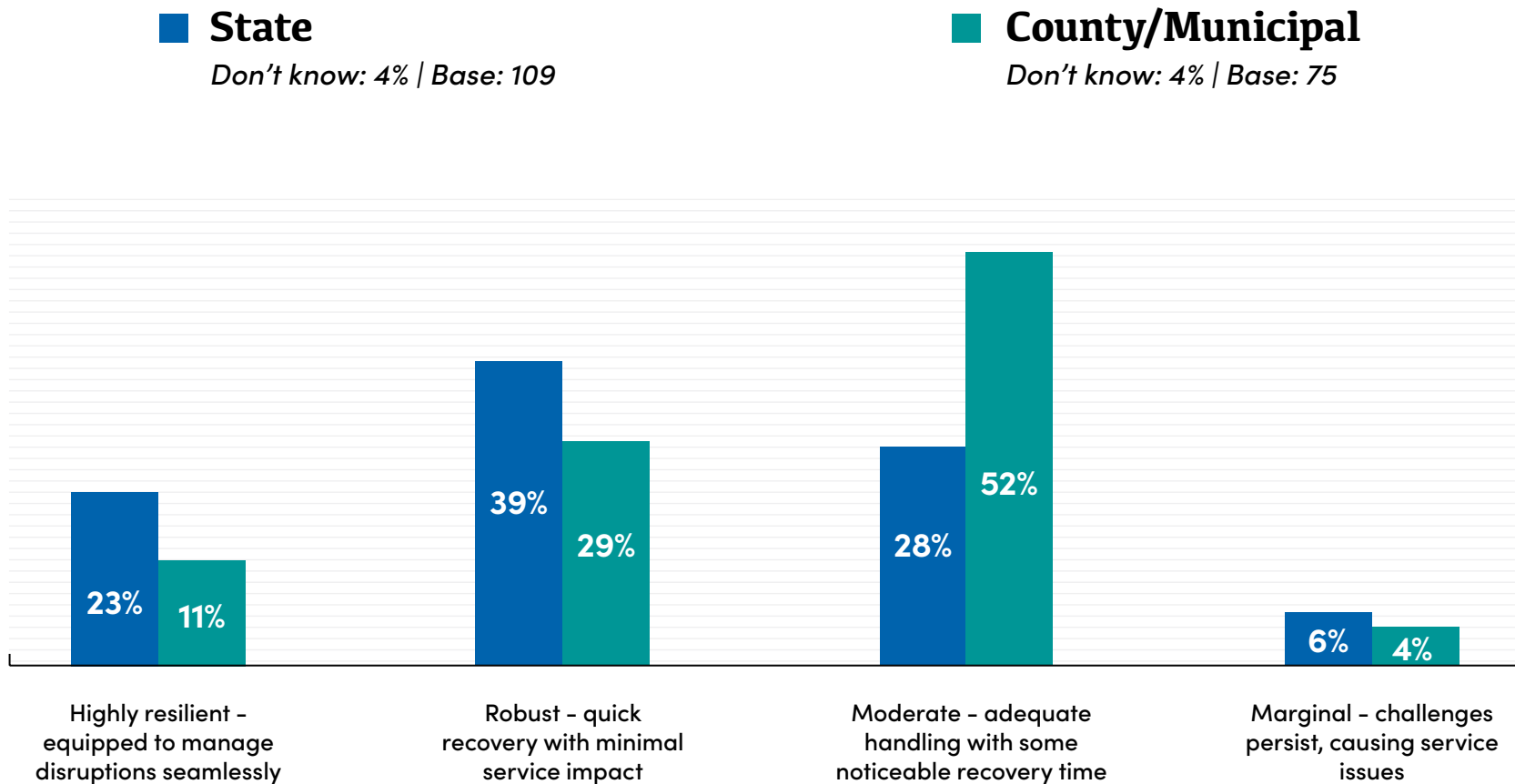
How would you describe the **performance** of your agency's wide area network infrastructure compared to similar-sized agencies?





## CYBER RESILIENCY OF WAN INFRASTRUCTURE - STATE VS. COUNTY/MUNICIPAL

How would you describe the **cybersecurity resiliency** of your agency's wide area network infrastructure?



*Zero percent of respondents said, "Non-resilient—disruptions lead to immediate and extended service time."*

## CYBER RESILIENCY OF WAN INFRASTRUCTURE - BUSINESS VS. IT EXECUTIVES

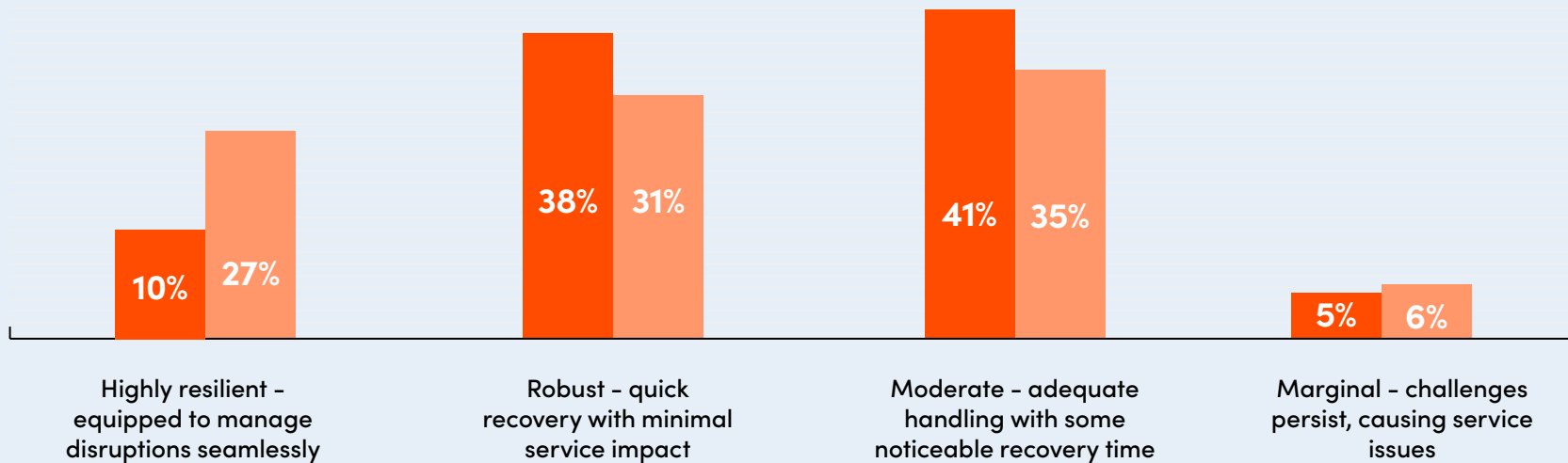
How would you describe the **cybersecurity resiliency** of your agency's wide area network infrastructure?

### ■ Business

*Don't know: 6% | Base: 103*

### ■ IT

*Don't know: 1% | Base: 81*



*Zero percent of respondents said, "Non-resilient—disruptions lead to immediate and extended service time."*

## CHALLENGES FOR MODERNIZATION - ALL RESPONDENTS AND BUSINESS VS IT EXECUTIVES

What are the top challenges **holding your agency back** from modernizing its wide area network infrastructure?

*Respondents could select up to three answer options.*

	All	Business execs	IT execs
Lack of necessary budget resources	54%	54%	53%
Lack of staff/skills	45%	41%	51%
Lack of consistent leadership	30%	29%	31%
Conflicting investment priorities	24%	20%	30%
Shortcomings in wireless access/backup connectivity	16%	12%	21%
	Base: 184	Base: 103	Base: 81

*9% of all respondents said other. Responses included network connectivity, limit of time, keeping up with advanced technology.*



## NEEDED SKILLS TO MODERNIZE WAN - ALL RESPONDENTS AND BUSINESS VS. IT EXECUTIVES

What **internal skills** does your agency need most to modernize its wide area network infrastructure successfully?

*Respondents could select up to three answer options.*

	All	Business Execs	IT Execs
Expertise in designing and implementing modern network architectures to optimize performance and scalability	46%	45%	48%
Skills to assess and enhance cybersecurity measures for network safeguarding	42%	35%	52%
Skills in effective project management to ensure the successful execution of modernization initiatives	36%	39%	33%
Expertise in managing vendor relationships/contracts for procuring and maintaining network infrastructure components	32%	30%	35%
Competence in leveraging data analytics for network resource management	27%	22%	32%
Understanding/complying with wireless technical/regulatory requirements	21%	19%	23%
	Base: 184	Base: 103	Base: 81

# LIKELINESS TO RELY ON MANAGED SERVICES - ALL RESPONDENTS

How likely is your agency to **increase its reliance on managed service providers** to manage network ecosystems, including switches, WiFi, sensors, secure edges and SD-WAN?



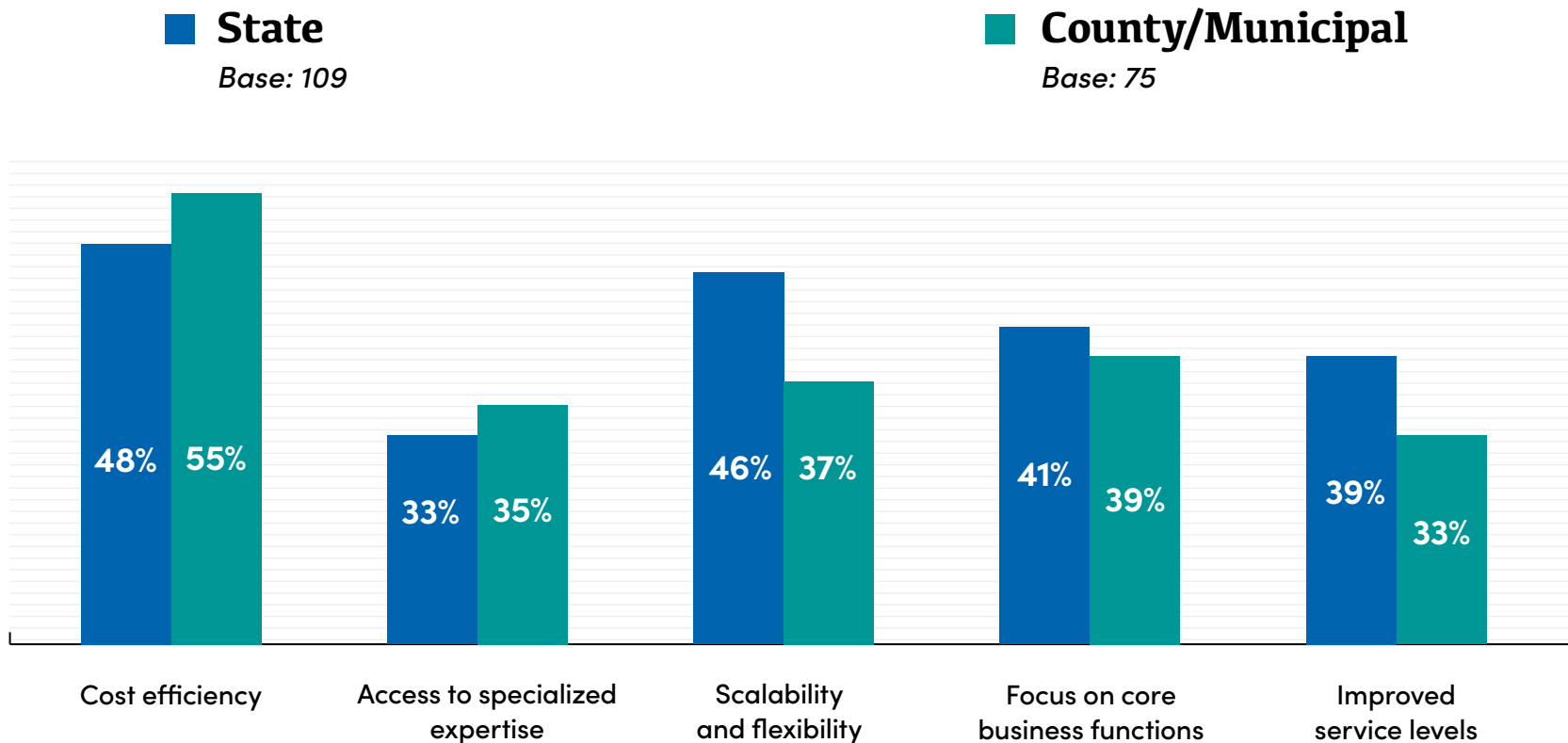
State executives and IT leaders expressed a higher likelihood of increasing their reliance on MSPs than their county/municipal and business counterparts.



## MOTIVATORS FOR USING MSP - STATE VS. COUNTY/MUNICIPAL

What are the **biggest motivators** for using a managed services provider to manage your network ecosystem, including switches, WiFi, sensors, secure edges and SD-WAN?

*Respondents could select up to three answer options.*



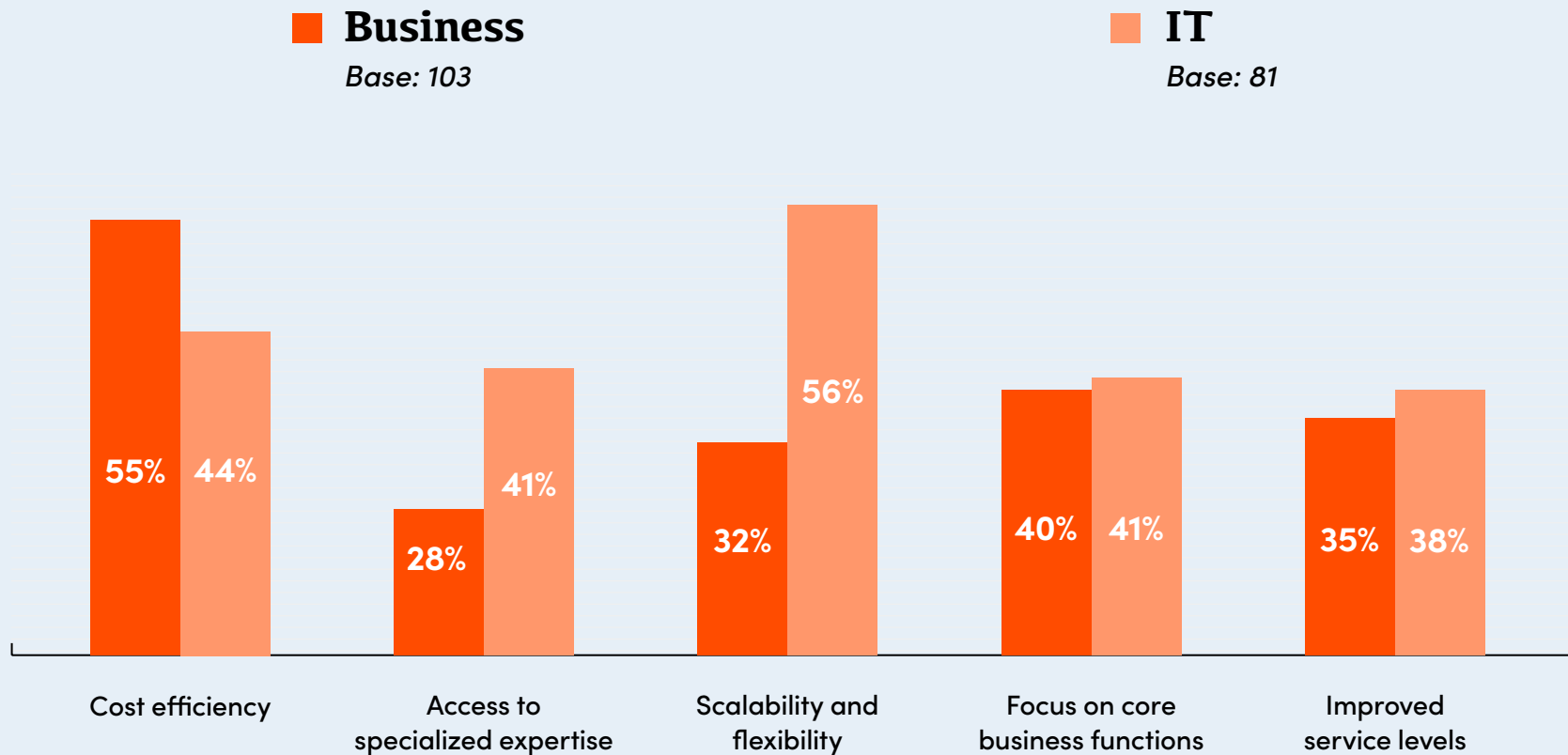
*3% of all respondents said other. Responses included not involved or informed, don't know or because of state laws/requirements.*



## MOTIVATORS FOR USING MSP - BUSINESS VS IT EXECUTIVES

What are the **biggest motivators** for using a managed services provider to manage your network ecosystem, including switches, WiFi, sensors, secure edges and SD-WAN?

*Respondents could select up to three answer options.*

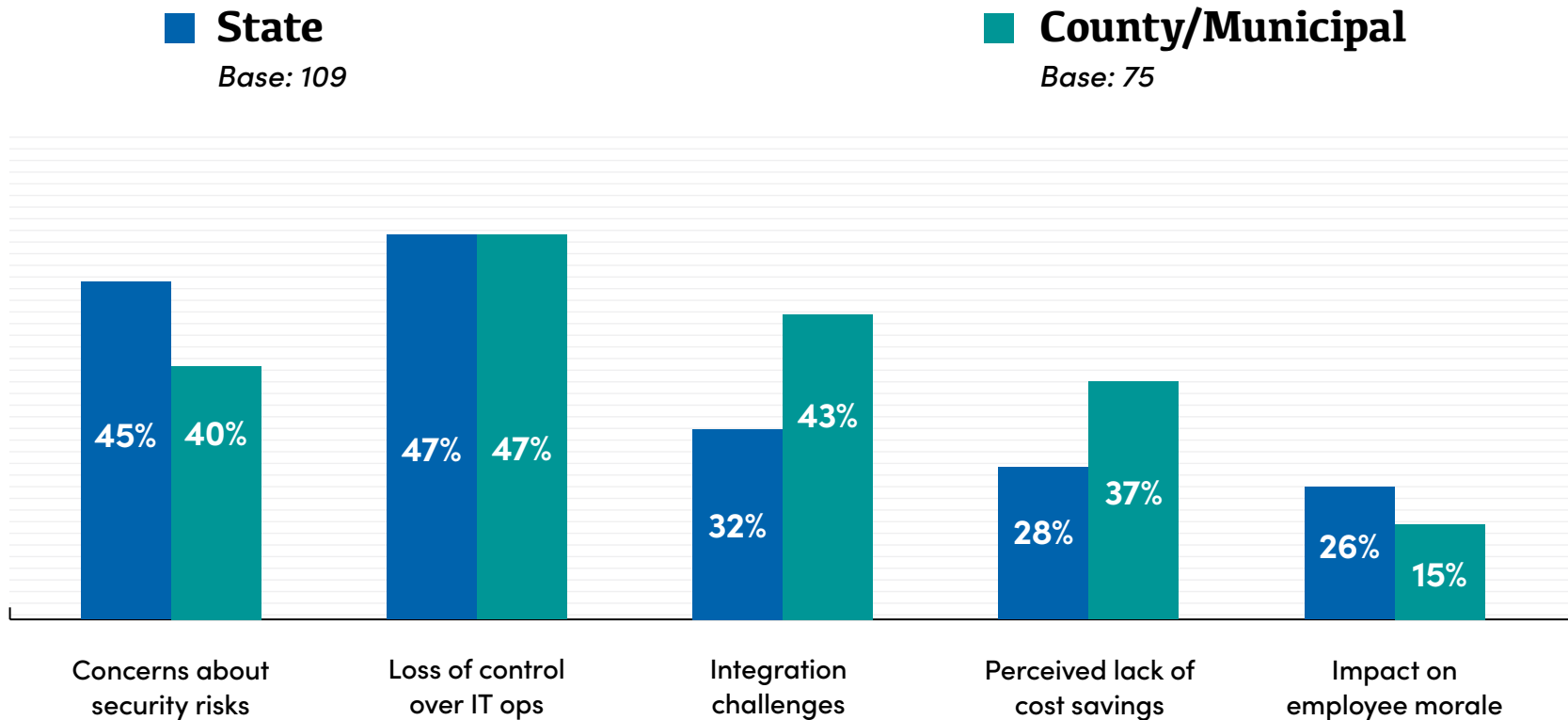


*3% of all respondents said other. Responses included not involved or informed, don't know or because of state laws/requirements.*

## DE-MOTIVATORS FOR USING MSP - STATE VS. COUNTY/MUNICIPAL

What are the **biggest de-motivators** for using a managed services provider to manage your network ecosystem?

*Respondents could select up to three answer options.*

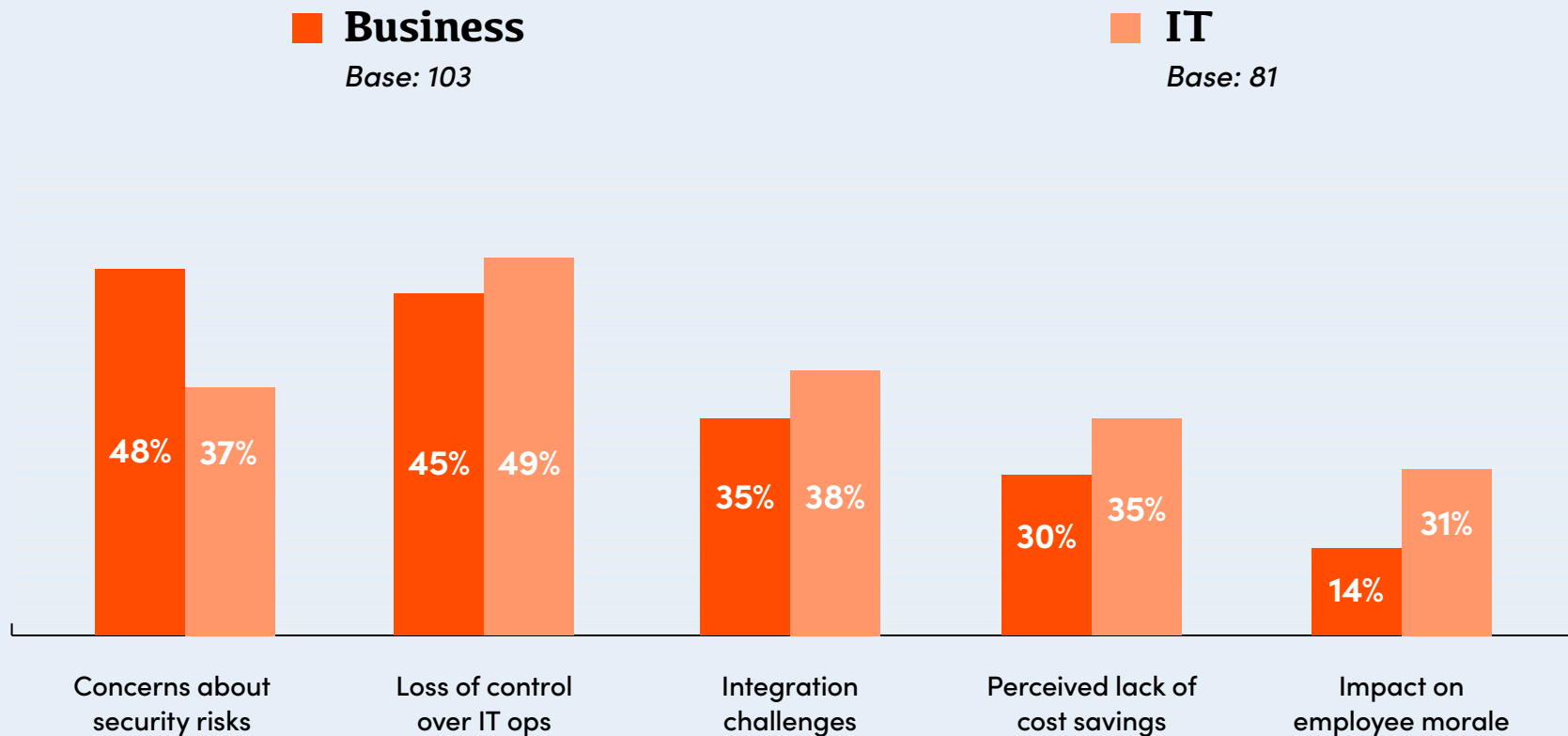


*4% of all respondents said other. Responses included don't know, FedRamp certification or type of secured company network.*

## DE-MOTIVATORS FOR USING MSP - BUSINESS VS IT EXECUTIVES

What are the **biggest de-motivators** for using a managed services provider to manage your network ecosystem?

*Respondents could select up to three answer options.*

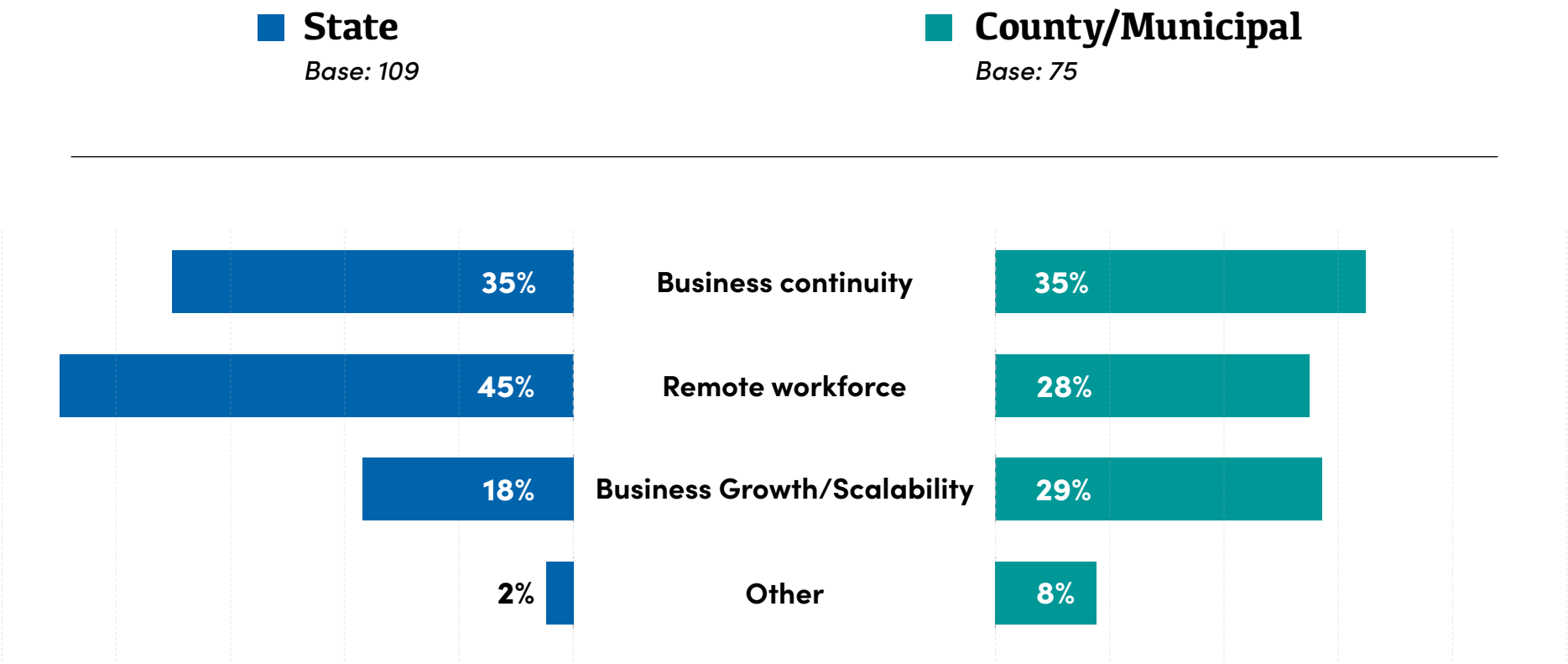


*4% of all respondents said other. Responses included don't know, FedRamp certification or type of secured company network.*



NETWORKING CHALLENGE DRIVING NEED FOR MSP - STATE VS COUNTY/MUNICIPAL

Which **networking challenge** represents the greatest need for managed services support?



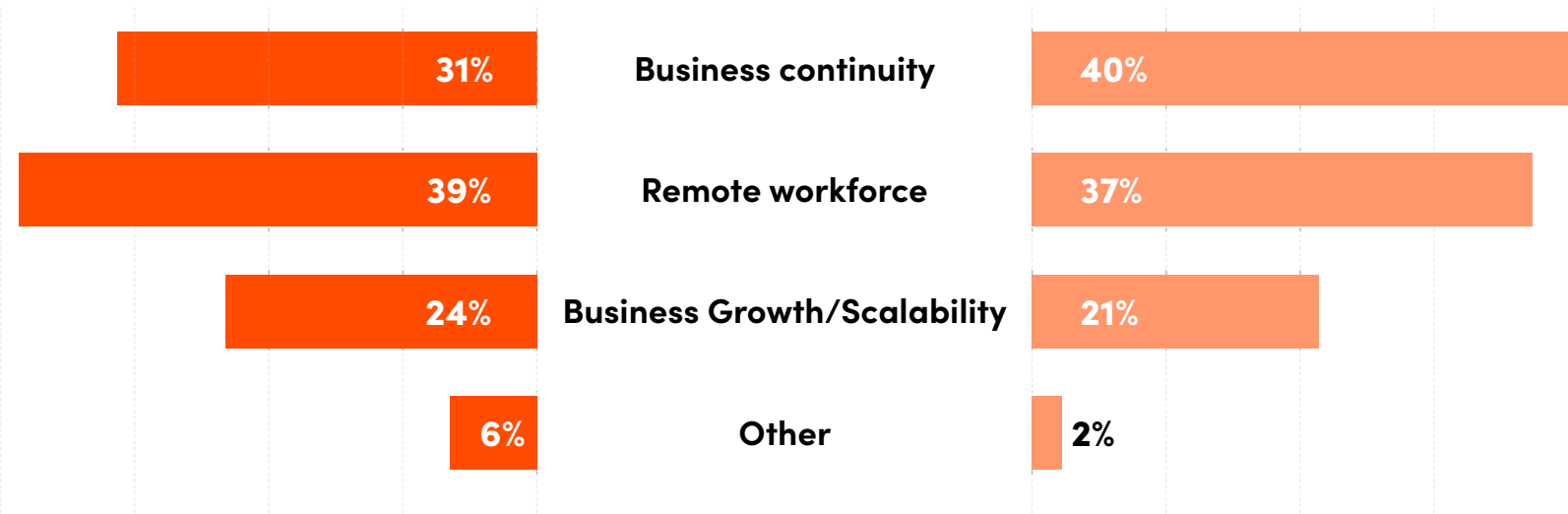
Other responses included unknown, none of the above or regulations.

NETWORKING CHALLENGE DRIVING NEED FOR MSP - BUSINESS VS IT

Which **networking challenge** represents the greatest need for managed services support?

**Business**  
Base: 103

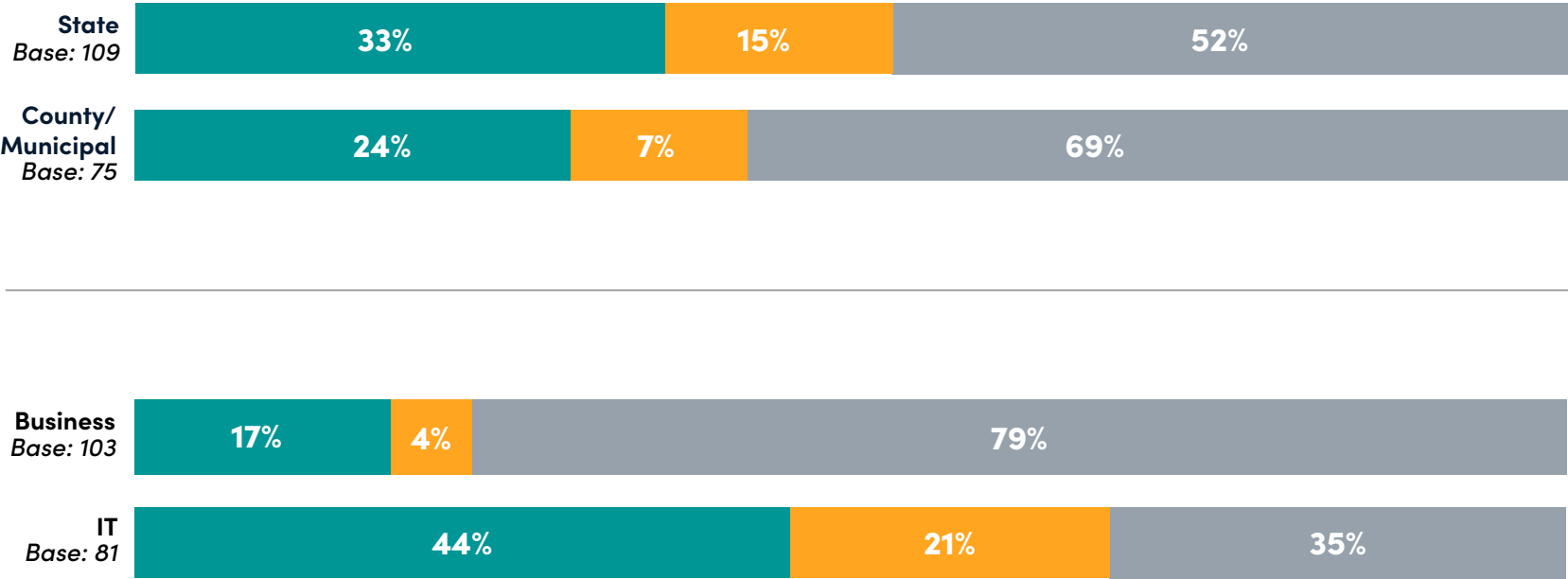
**IT**  
Base: 81



Other responses included unknown, none of the above or regulations.

CAPEX MODEL FOR AGENCIES - ALL RESPONDENTS

Do you believe the CAPEX model for financing network technology is sustainable for government agencies?



## FACTORS FOR MOVING TO AN OPEX MODEL - ALL RESPONDENTS AND STATE VS COUNTY/MUNICIPAL

What are the **key factors influencing** your agency's decision to consider shifting from a CAPEX to an OPEX model for IT investments?

*Respondents could select up to three answer options.*

	All	State	County/Municipal
Financial management and budgeting advantages	50%	44%	59%
Reduced need for in-house IT resource management	40%	44%	33%
Faster deployment of technologies	40%	43%	35%
Lack of predictability of annual budget continuity	33%	28%	40%
	Base: 184	Base: 109	Base: 75

*7% of all respondents said they were unsure or not involved.*

## FACTORS FOR MOVING TO AN OPEX MODEL - ALL RESPONDENTS AND BUSINESS VS IT EXECUTIVES

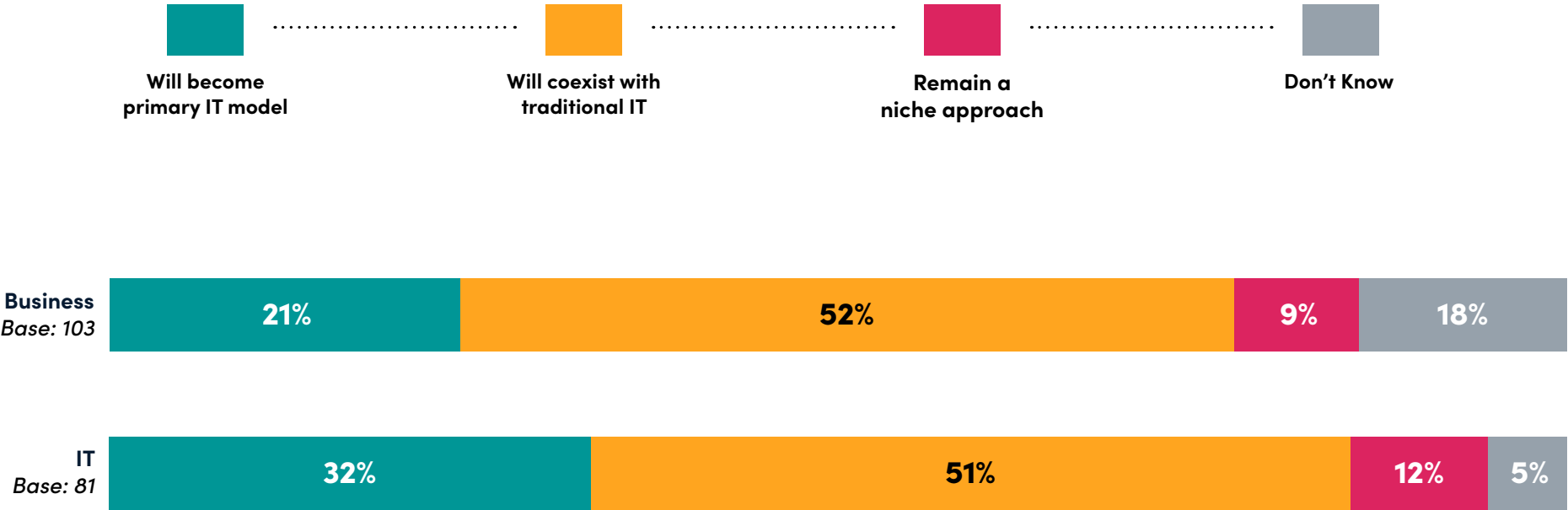
What are the **key factors influencing** your agency's decision to consider shifting from a CAPEX to an OPEX model for IT investments?

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	All	Business execs	IT execs
Financial management and budgeting advantages	50%	55%	43%
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Faster deployment of technologies	40%	32%	49%
Lack of predictability of annual budget continuity	33%	36%	30%
	Base: 184	Base: 103	Base: 81

*7% of all respondents said they were unsure or not involved.*

What is your agency’s perspective on the future of managed services with government operations?





# RECOMMENDATIONS

## The Future of Network Management

### **Address** modernization proactively

Agencies face a shared challenge: limited budget and staffing resources. To overcome these constraints, it's crucial to consider innovative solutions like OPEX financing and managed services. It's also essential to foster consistent leadership support to guide the direction of modernization efforts.

### **Evaluate** financial models

Rapid technological changes are breeding increasing uncertainty about the sustainability of the CAPEX model for financing IT infrastructure. The increased flexibility and predictability of OPEX financing models are prompting agencies to explore its benefits, especially as IT departments continue to wrestle with how to better manage resource management overhead.

### **Embrace** managed services strategically

Managed services offer a strategic solution for agencies looking to modernize without making costly upfront investments. Agencies can convert these investments into predictable operating expenses by leveraging robust service-level agreements. Moreover, the expertise of managed services can liberate internal resources, enabling agencies to concentrate on their core competencies and strategic initiatives.

### **Mitigate** concerns over managed services

To address inherent concerns about shifting IT operations to managed services, agencies should focus on enacting service-level agreements that protect their interests, emphasize transparency, set clear expectations and define the terms of control and security. The proper service-level agreements ensure that agencies can maintain command over their IT operations while reaping the benefits of managed services specialized expertise.

### **Align** skill development with modernization needs

Training and skill development must be aligned with the evolving technical capabilities of today's modern WAN infrastructure. That includes expertise in network architecture and cybersecurity. Targeted training programs can help bridge the skill gap and empower agencies to handle network modernization internally and when outsourcing network operations.

# RECOMMENDATIONS



The findings suggest the **future of network management for state and local government agencies will likely involve balancing internal and outsourced network resources**, using a flexible financing approach that allows for adaptability in the face of rapid technological changes.



# STATESCOOP

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## Contact

**Wyatt Kash**

SVP, Content Strategy

Scoop News Group

Washington, D.C.

202.887.8001

[wyatt.kash@scoopnewsgroup.com](mailto:wyatt.kash@scoopnewsgroup.com)

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