Federal Network Visibility Report

September 2020

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Methodology

Riverbed commissioned Market Connections to design and conduct a blind online survey of 200 government IT decision makers and influencers, fielded in August/September 2020.

Due to rounding, graphs may not add up to 100%.

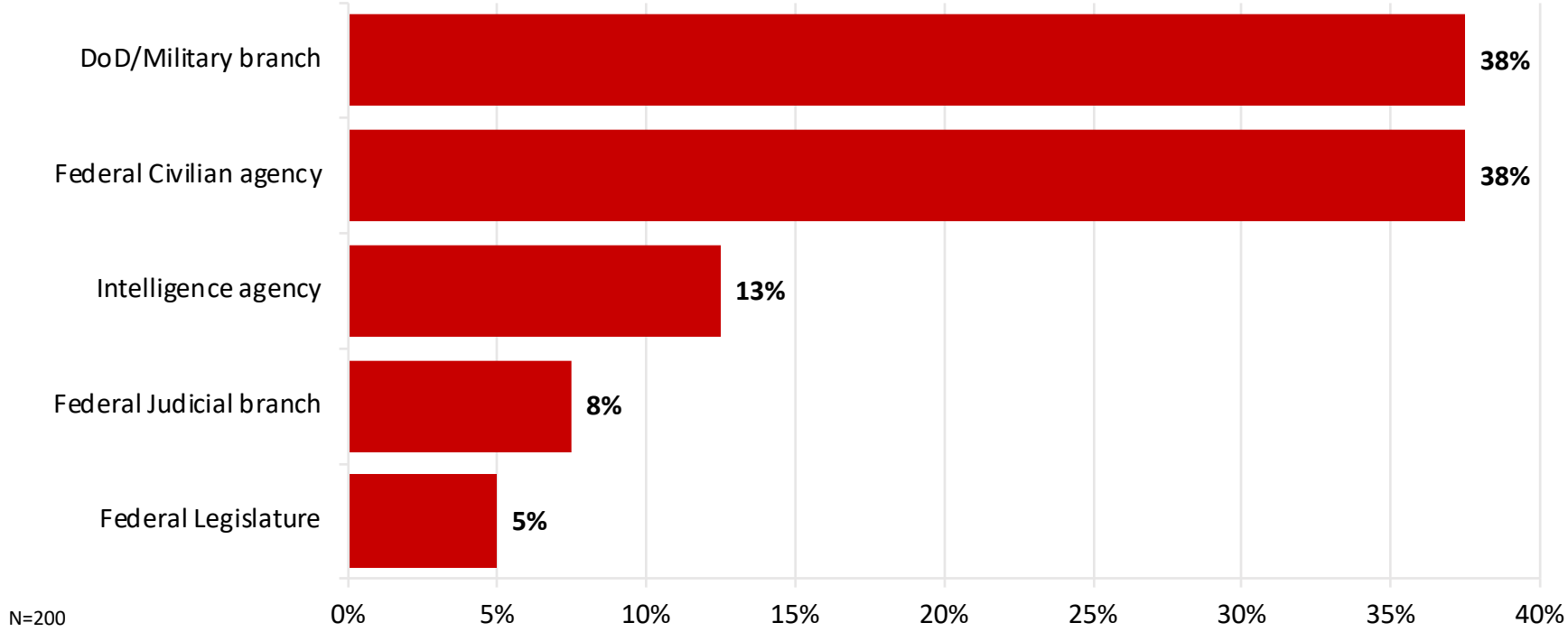
PRIMARY OBJECTIVES:

- Determine agencies' self-described network visibility, both now and over time
- Understand the impact of visibility on network security and infrastructure
- Gauge ability to monitor and troubleshoot network performance
- Determine network complexity
- Challenges of a lack of visibility on network management
- Confidence in network reliability
- Determine the need for a network visibility solution, and key features

Respondent Classifications

Current Employer

- Per quota instructions, half of respondents are federal civilian employees, including some in the federal judicial branch and federal legislature. The other half comprise defense and intelligence agency personnel.
- If the respondent was not currently employed by the federal government, the survey was terminated.

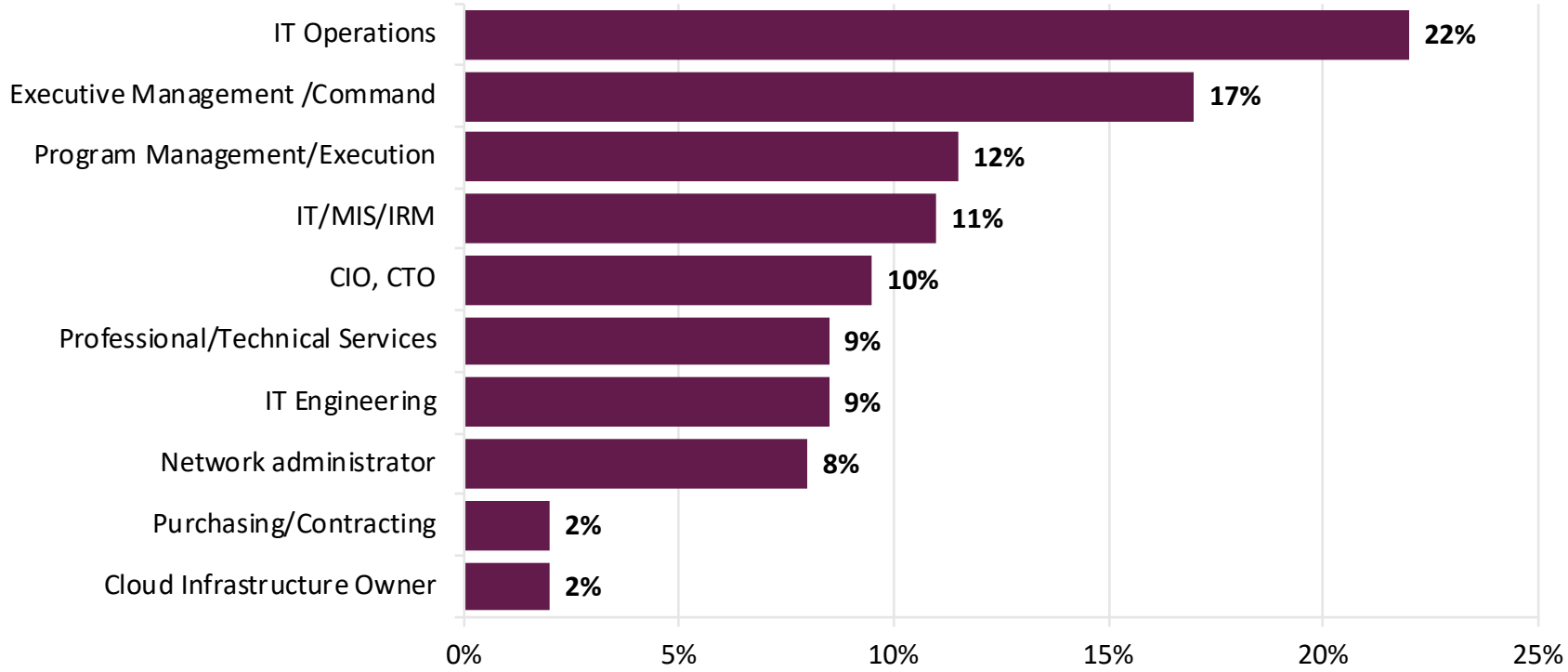


N=200

Which of the following best describes your current employer?

Job Function

- A wide variety of different job functions are represented in the sample. Most indicate their role as IT operations, and executive management/command.
- An array of other roles is also represented.

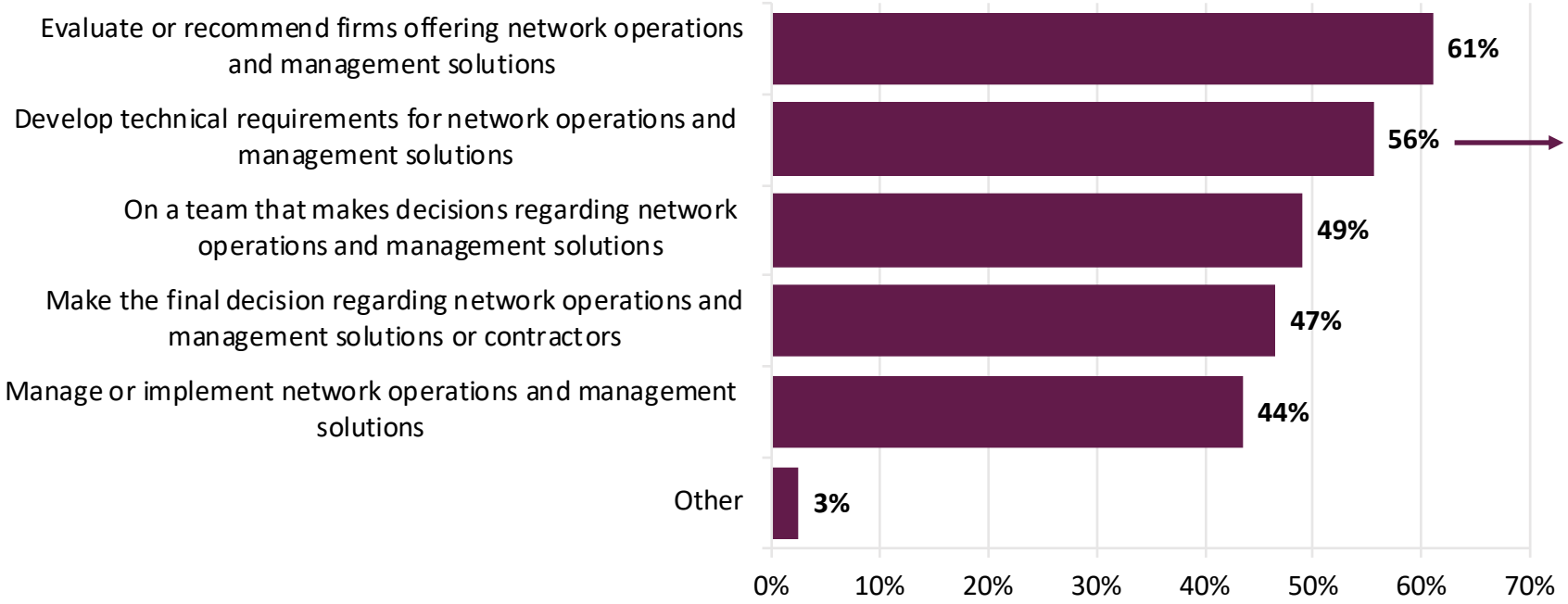


N=200

Which of the following best describes your role in your organization?

Decision-Making Involvement

- To qualify for the survey, all respondents were required to be involved in their organization's decisions or recommendations regarding network management tools and solutions.



Defense	Civilian
64%	47%

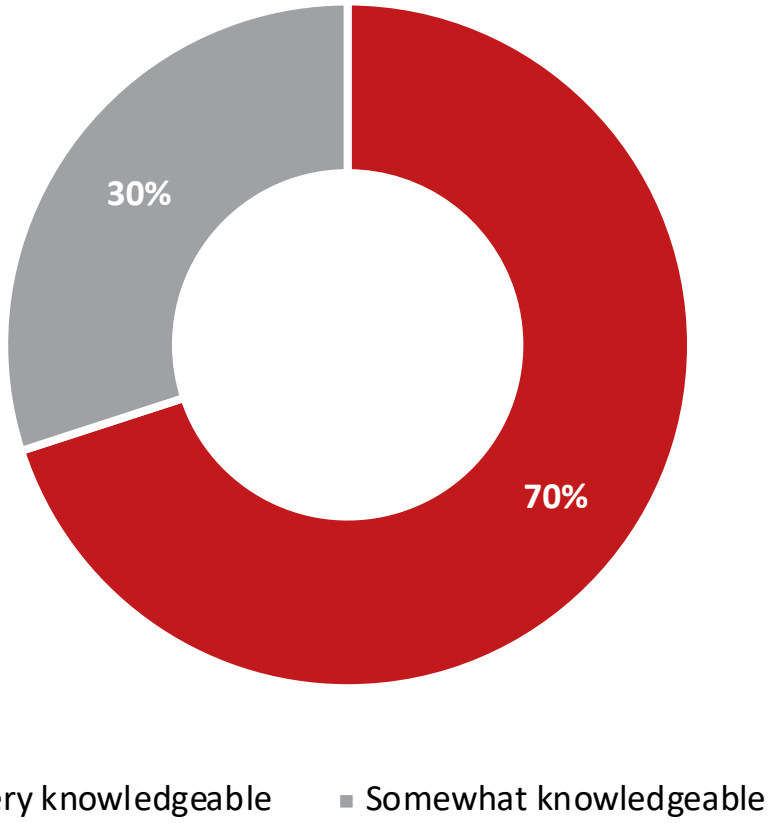
N=200

Note: Multiple responses allowed

How are you involved in your organization's decisions or recommendations regarding network management tools and solutions?) = *statistically significant difference between defense and civilian*

Network Management Knowledge

- A large majority describe themselves as very knowledgeable about their organization's network management.
- If not at all knowledgeable, the respondent was terminated.



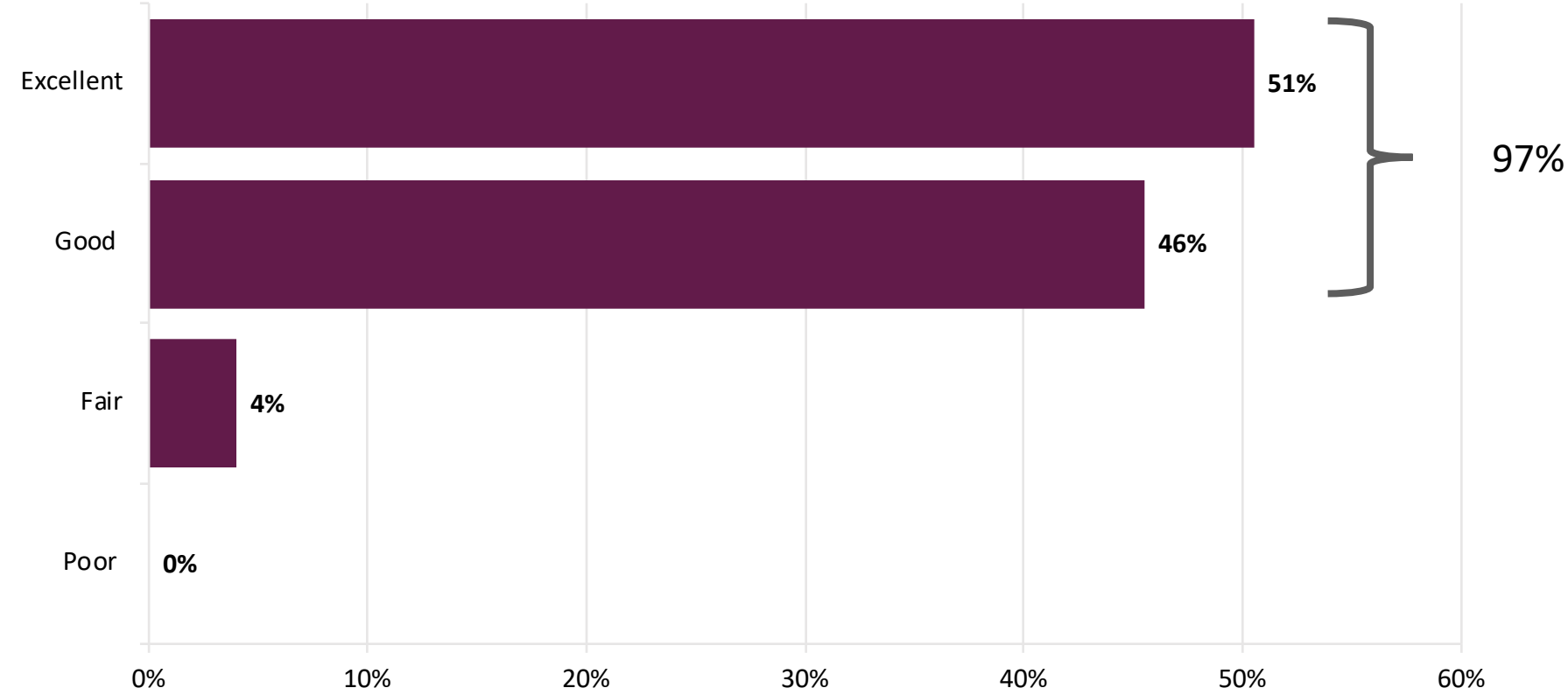
N=200

How would you describe your level of knowledge with your organization's network management? [Those indicating not at all knowledgeable were terminated from the survey.]

Findings

Agencies' Current Network Visibility

- Virtually all describe their agency's current network visibility as good or excellent.

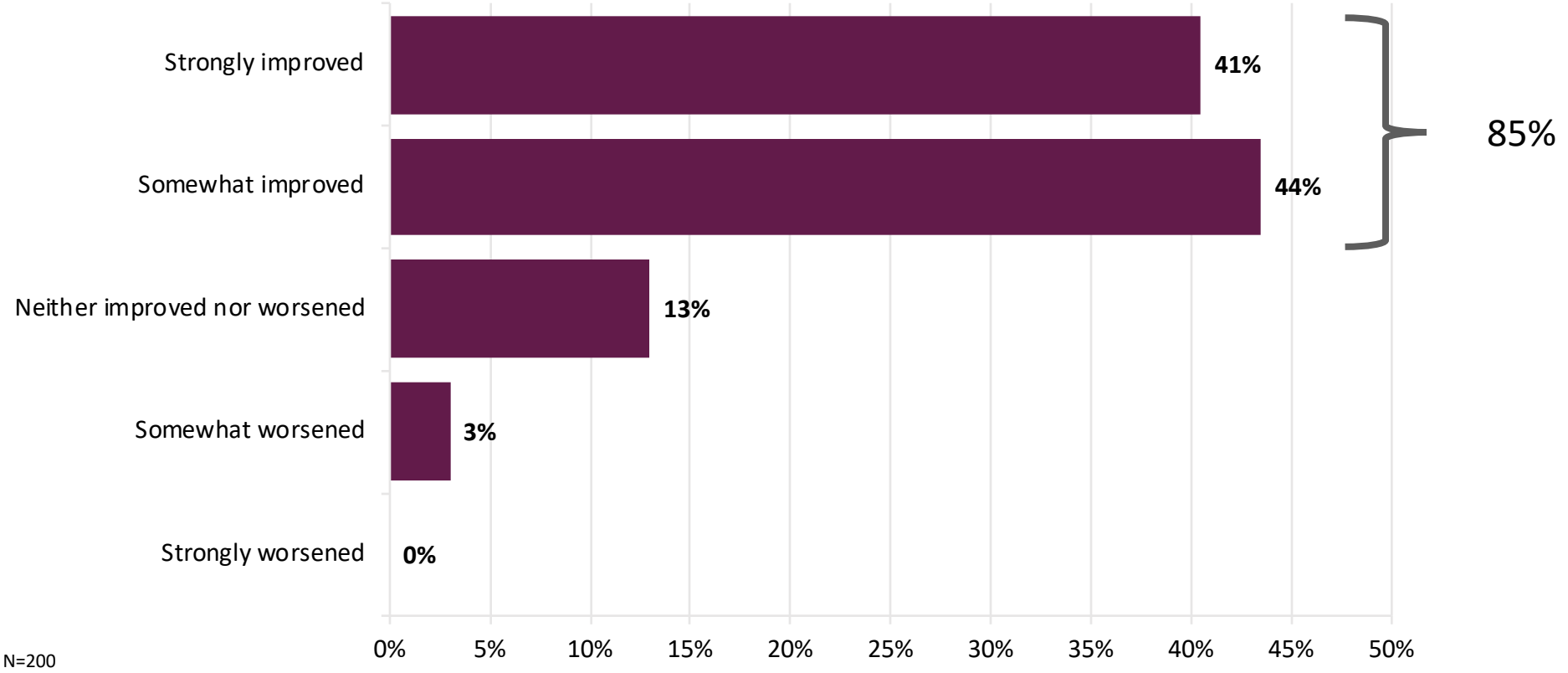


N=200

How would you rate your agency's current network visibility?

Network Visibility Over the Past Five Years

- With positive momentum, four in five state that in the past five years their network visibility has improved. Only 3% indicate the situation has worsened.

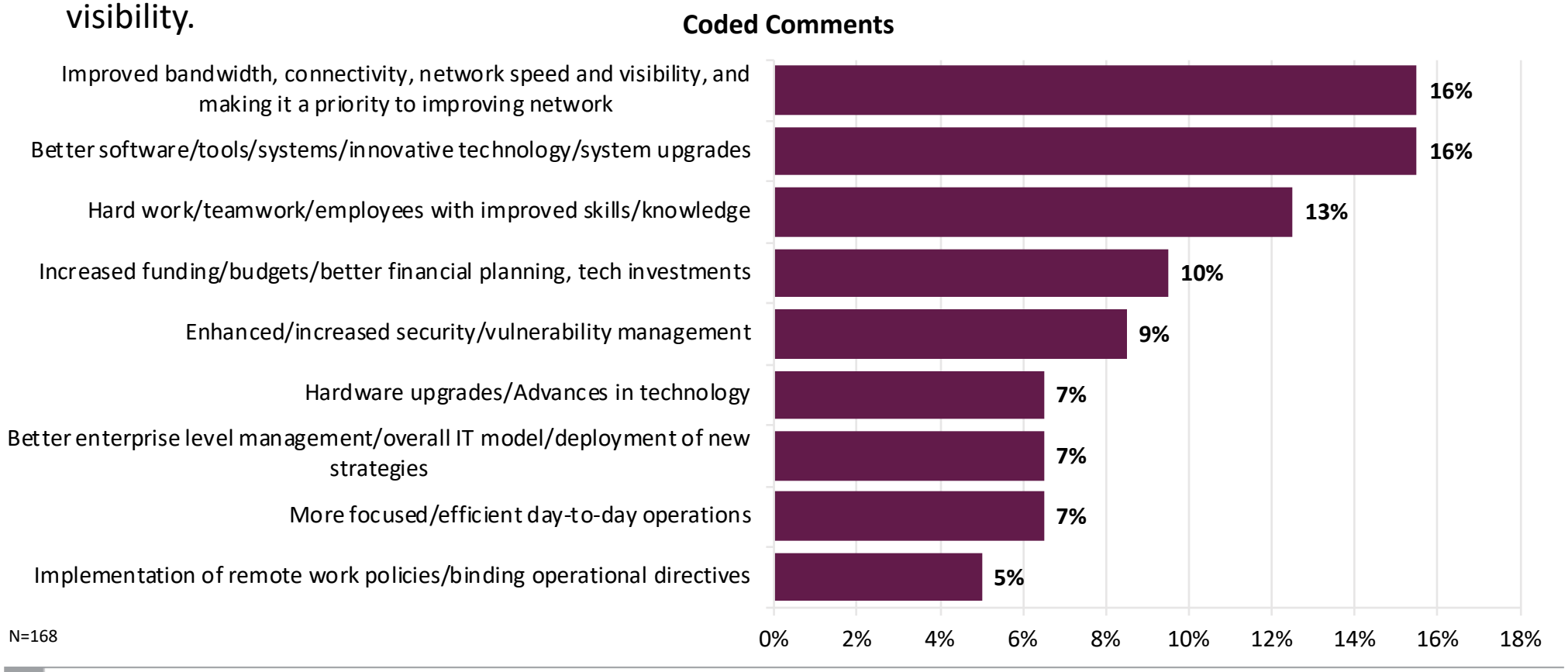


N=200

To what extent has your network visibility improved or worsened over the past five years?

Contributors to Improved Network Visibility

- Improved bandwidth, connectivity, network speed and visibility; and better software/tools and other systems and upgrades, are the most commonly mentioned contributors to improved network visibility.



You mentioned that your network visibility has [Somewhat/ Strongly improved] over the past five years. What do you think contributed to or caused this outcome?

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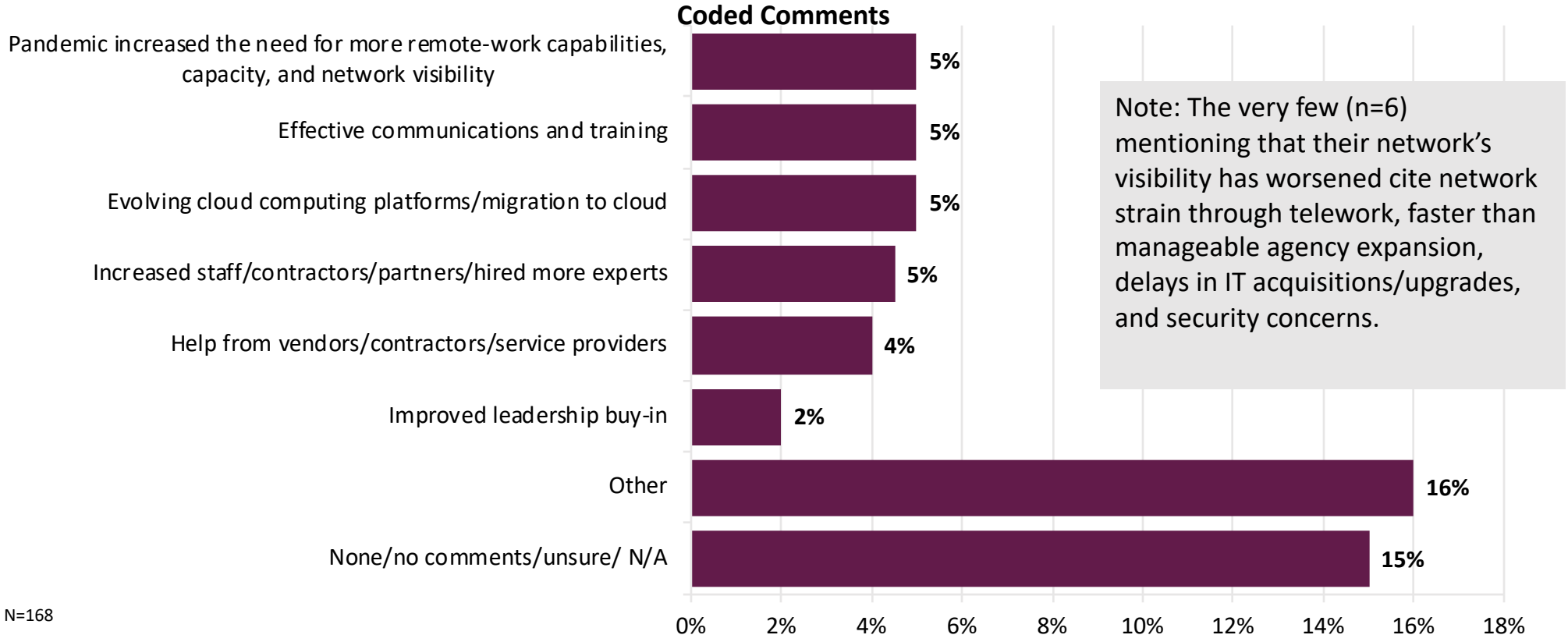
Contributors to Improved Network Visibility (cont'd)

- A wide array of additional contributors to improved network visibility range from addressing the challenges of Covid-19, to more reliance on outside help.



Note: The very few (n=6) mentioning that their network's visibility has worsened cite network strain through telework, faster than manageable agency expansion, delays in IT acquisitions/upgrades, and security concerns.

You mentioned that your network visibility has [Somewhat/ Strongly improved] over the past five years. What do you think contributed to or caused this outcome?

Note: *Given that only 3% (6 individuals) indicate their network visibility has somewhat/strongly worsened, it is inadvisable to attempt to quantify their responses due to the very small base size.*

Improved Network Visibility – in Their Own Words

"An enterprise mandate to increase visibility for certain types of users working from unclassified and open-source nodes.

CONTRIBUTES TO A STRONGLY IMPROVED OUTCOME; DEFENSE

"Going to cloud and getting new tools.

CONTRIBUTES TO A SOMEWHAT IMPROVED OUTCOME; FEDERAL CIVILIAN

"Our program's network visibility has improved overall due to the fact that we have invested in solid tools and training.

CONTRIBUTES TO A SOMEWHAT IMPROVED OUTCOME; FEDERAL CIVILIAN

"We improved network performance and security issues and topology mapping, using a trusted vendor.

CONTRIBUTES TO A STRONGLY IMPROVED OUTCOME; DEFENSE

"All the hard work and sweat we put in our work finally paid off and we got some love from it.

CONTRIBUTES TO A SOMEWHAT IMPROVED OUTCOME; DEFENSE

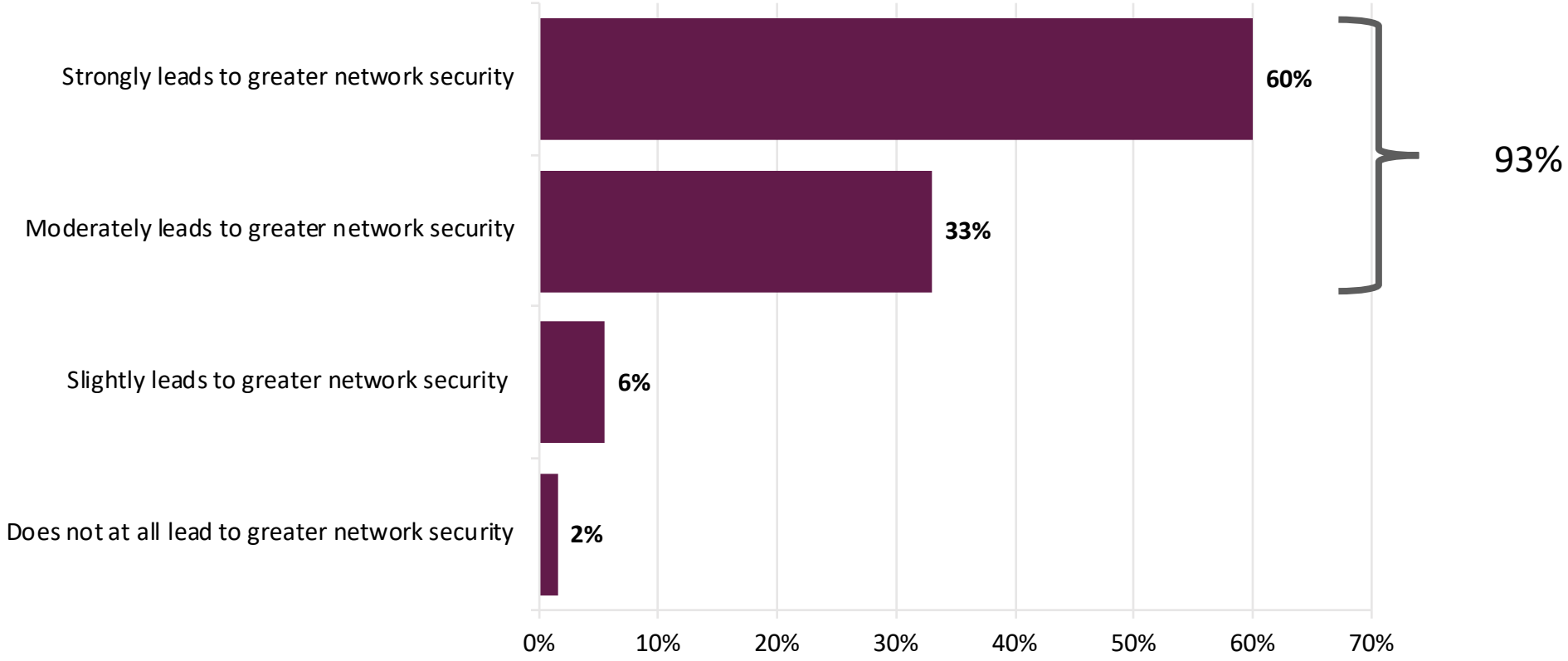
"We have successfully invested more in the network visibility system of our organization so that more reliable data can be collected, aggregated and distributed effectively.

CONTRIBUTES TO A STRONGLY IMPROVED OUTCOME; DEFENSE

Q *You mentioned that your network visibility has [improved /worsened] over the past five years. What do you think contributed to or caused this outcome? [OPEN END]*

Network Visibility's Impact on Network Security

- Nine in ten indicate that greater visibility facilitates greater network security.

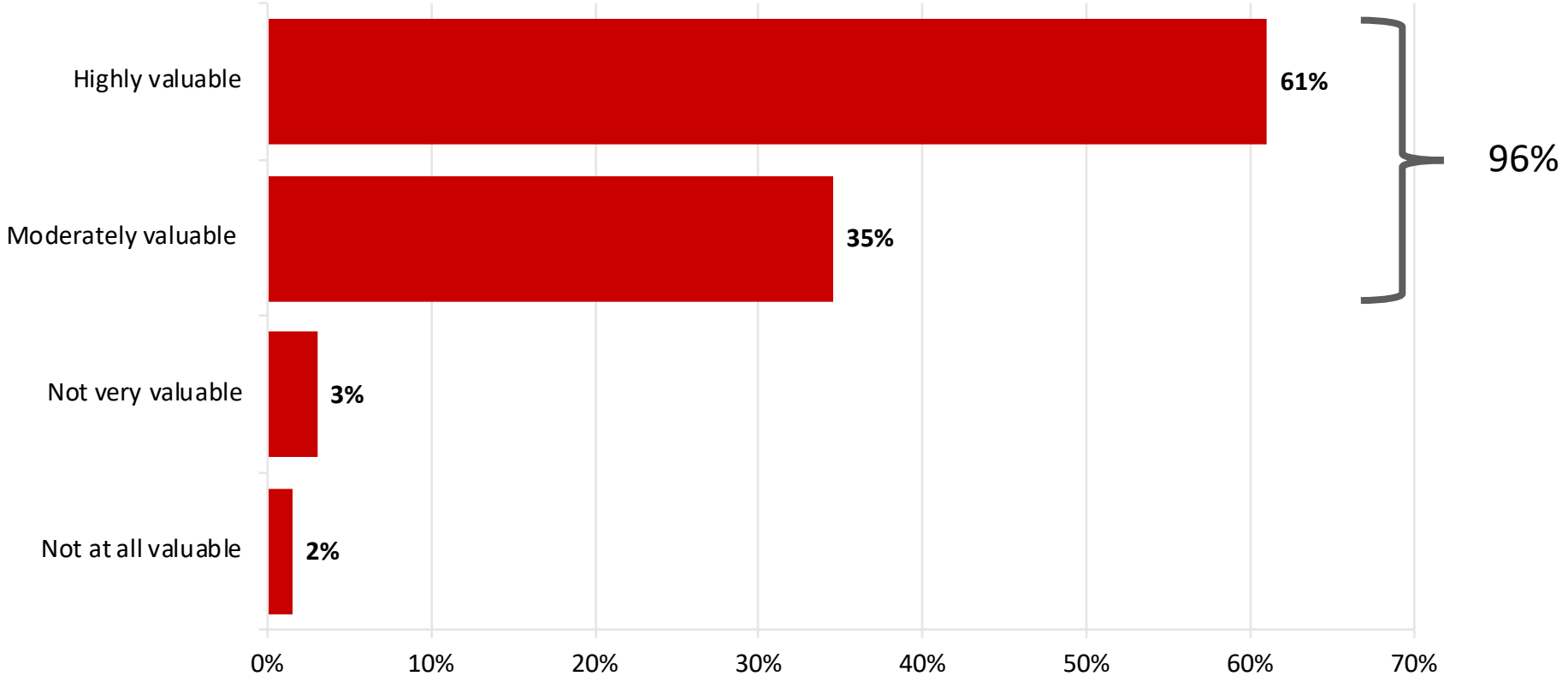


N=200

To what extent does greater visibility impact network security?

Network Visibility's Value to Secure Infrastructure

- Nearly all consider network visibility as highly or moderately valuable in assuring secure infrastructure.

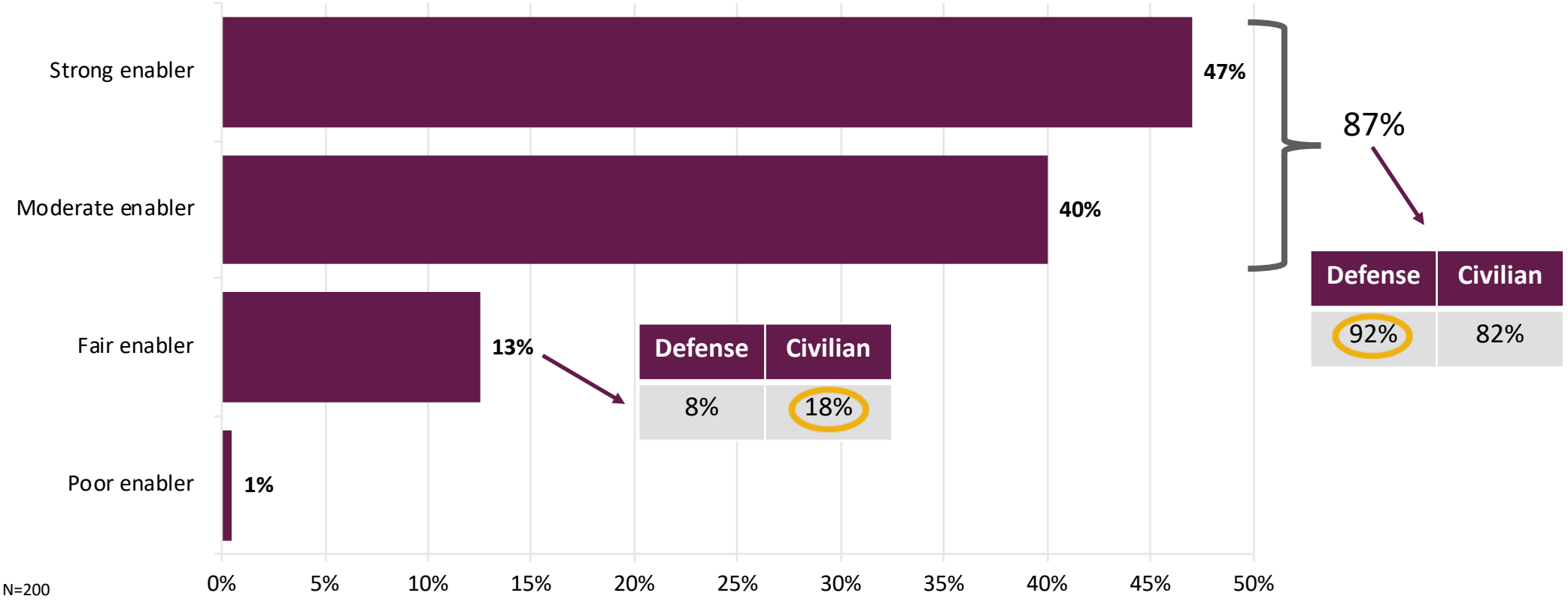


N=200

How valuable is network visibility in assuring secure infrastructure?

Network Visibility as Enabler of Cloud Infrastructure

- Nearly nine in ten (rising significantly higher among defense respondents) believe network visibility is a strong or moderate enabler of cloud infrastructure. Conversely, civilian respondents are more apt to consider visibility a fair enabler only.



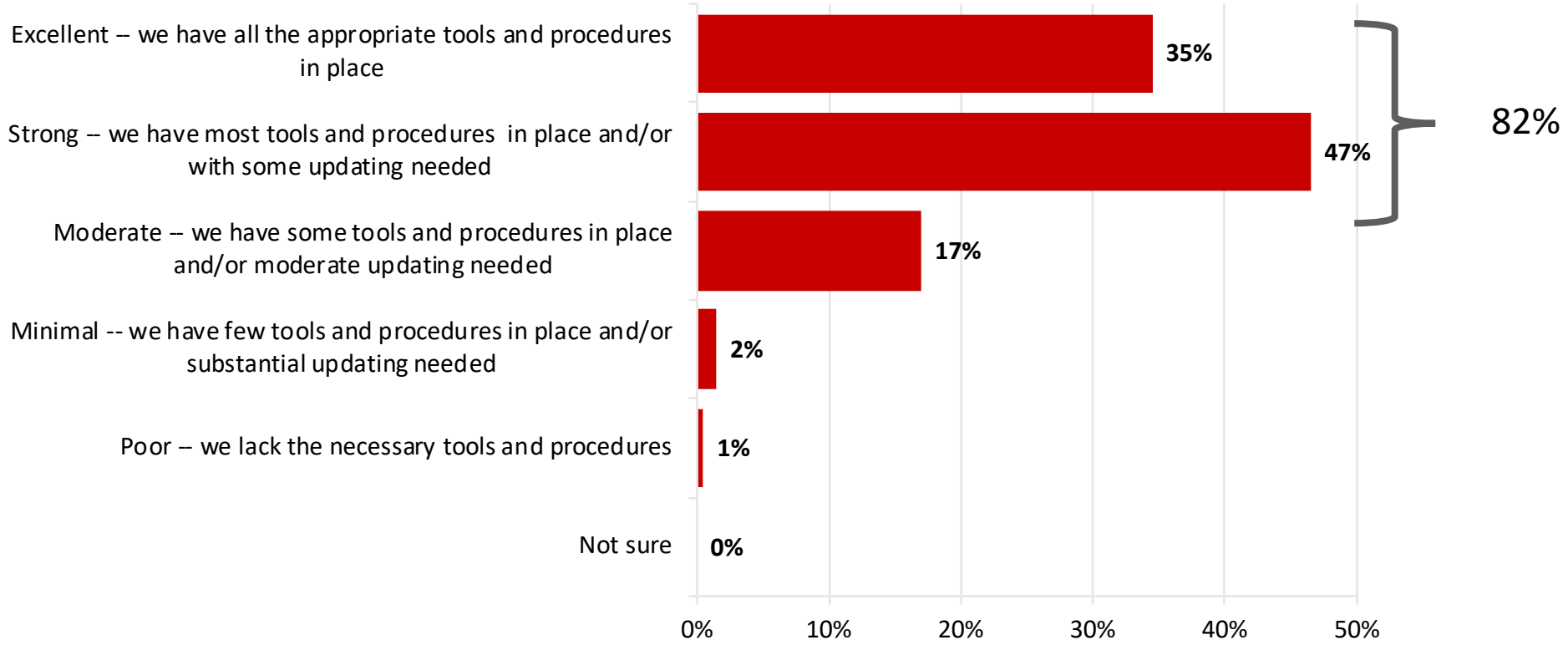
N=200

To what extent is network visibility an enabler of cloud infrastructure?

= statistically significant difference between defense and civilian

Ability to Monitor Network Performance

- Four in five respondents consider their agency's ability to monitor and troubleshoot its network performance as strong or excellent.

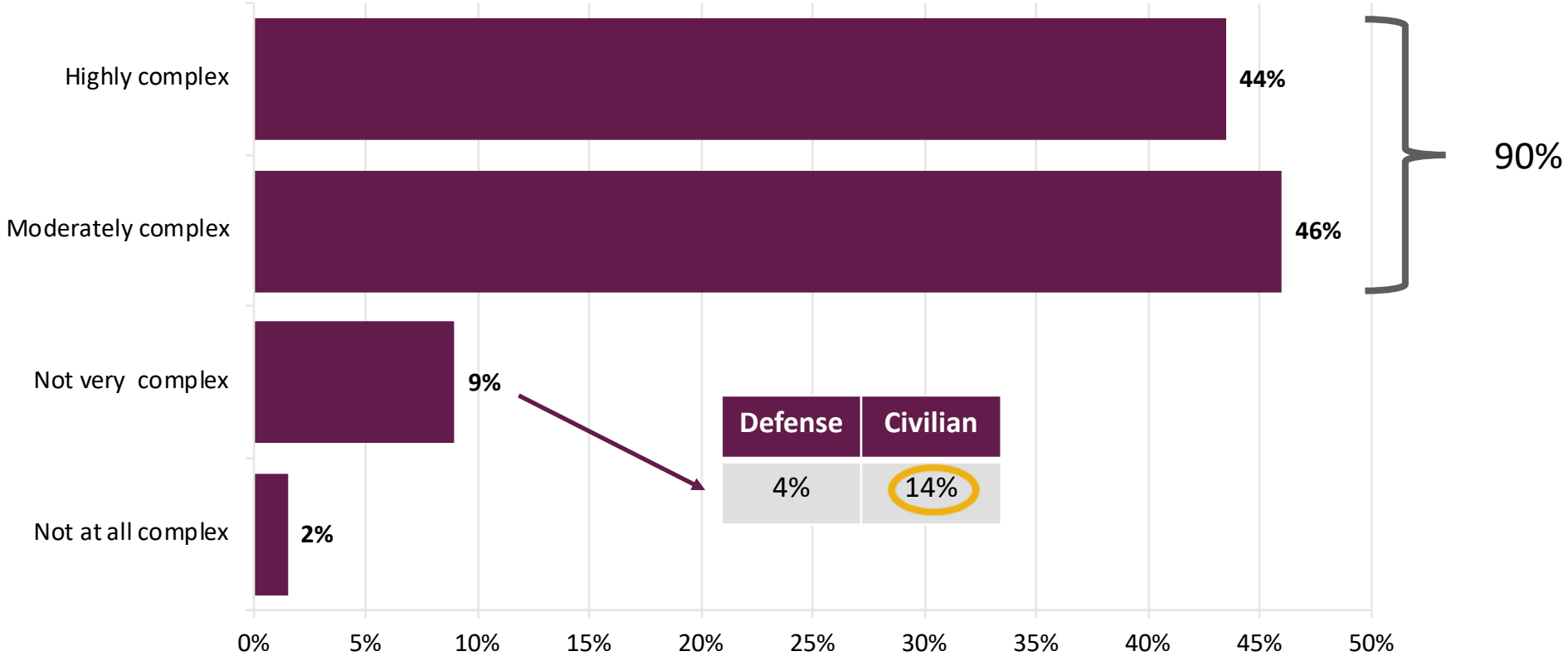


N=200

How would you describe your agency's ability to monitor and troubleshoot its network performance?

Network Complexity

- Nine in ten rate their agency's network as moderately or highly complex.



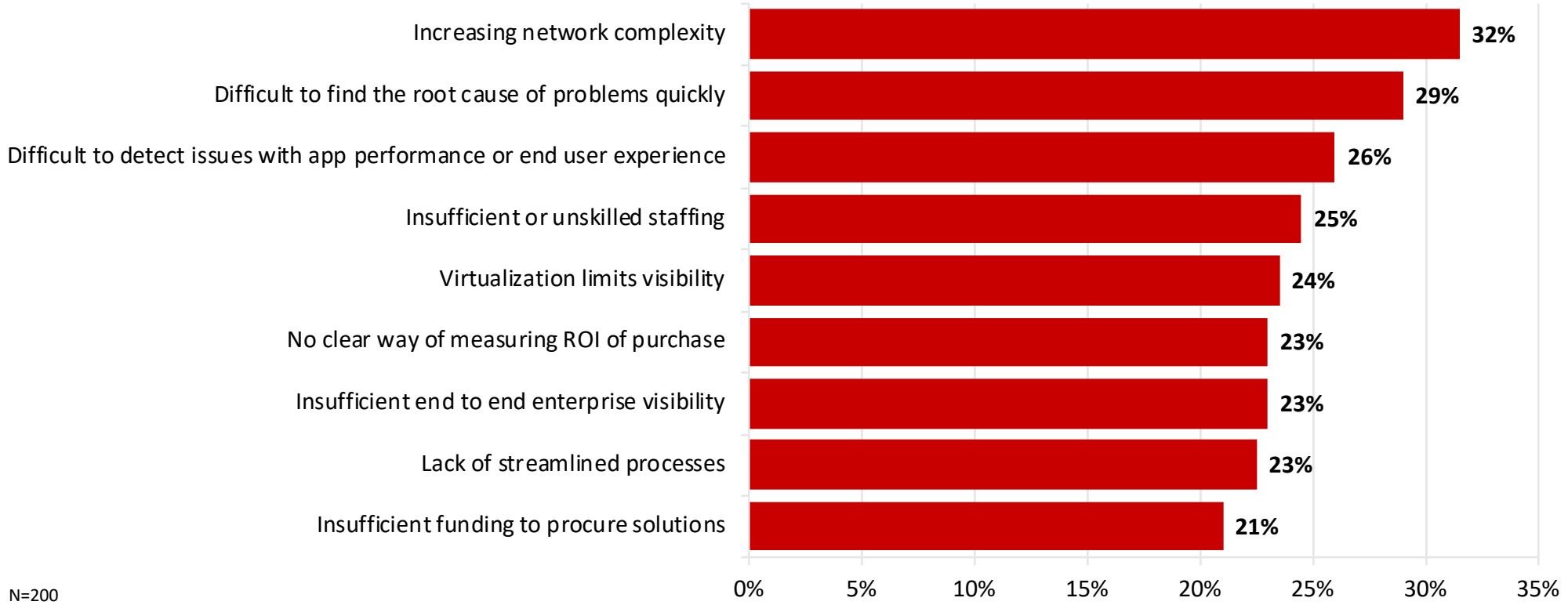
N=200

How would you rate the complexity of your networks?

= statistically significant difference between defense and civilian

Challenges Managing the Network

- The top challenges an IT professional without visibility faces in their agency when managing the network include increasing network complexity, and difficulty finding the root causes of problems quickly.

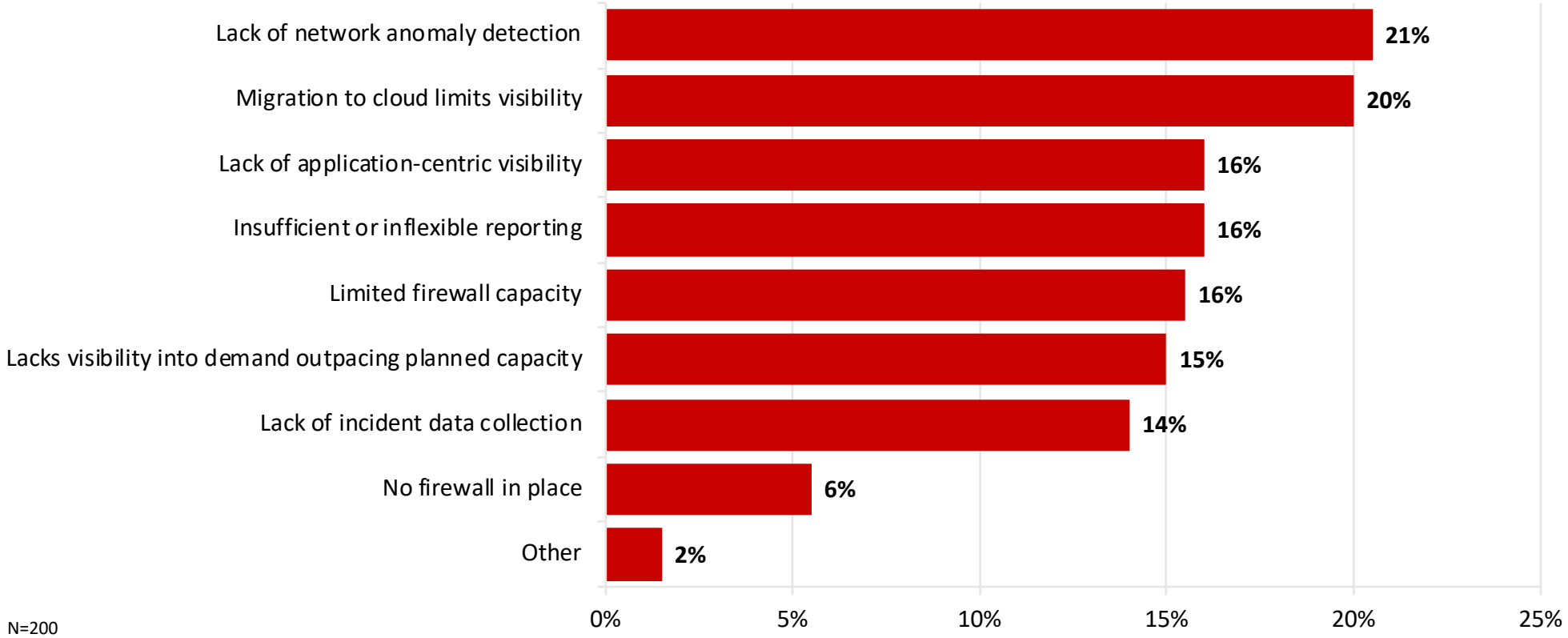


N=200

What are the greatest challenges an IT professional without visibility faces in your agency when managing the network?

Challenges Managing the Network (continued)

- Additional challenges are identified in the graph below.

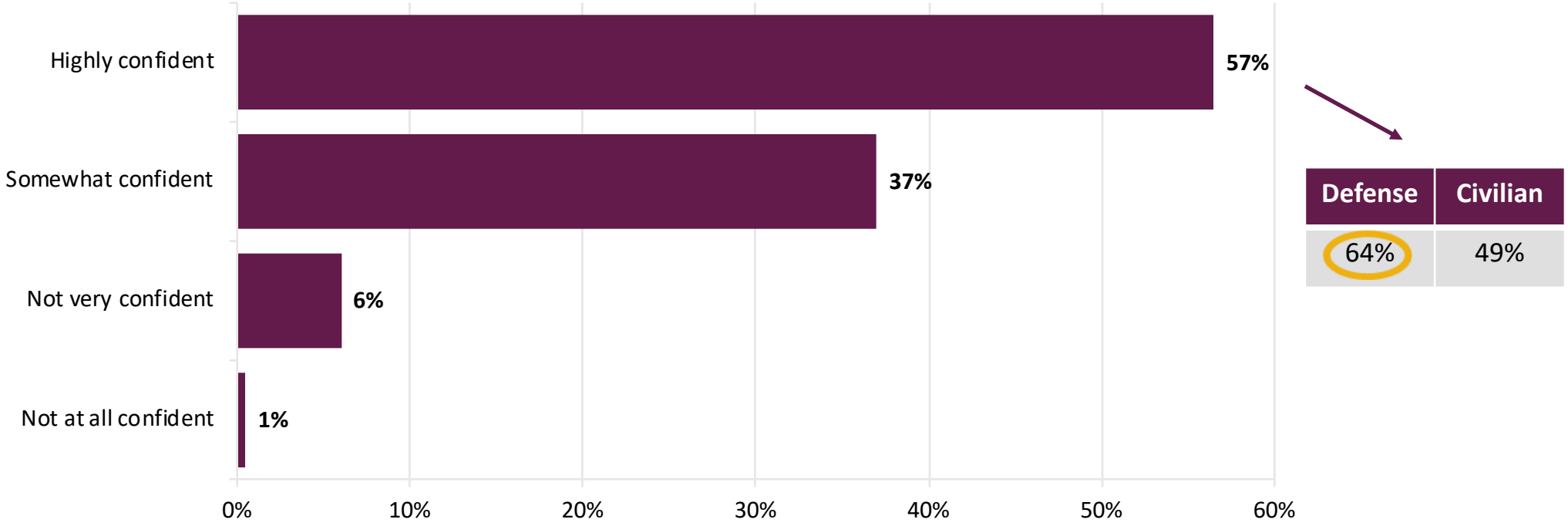


N=200

What are the greatest challenges an IT professional without visibility faces in your agency when managing the network?

Confidence in Agencies' Network Reliability

- A strong majority are confident in the reliability of their network; more than half are highly confident, rising significantly among defense respondents.



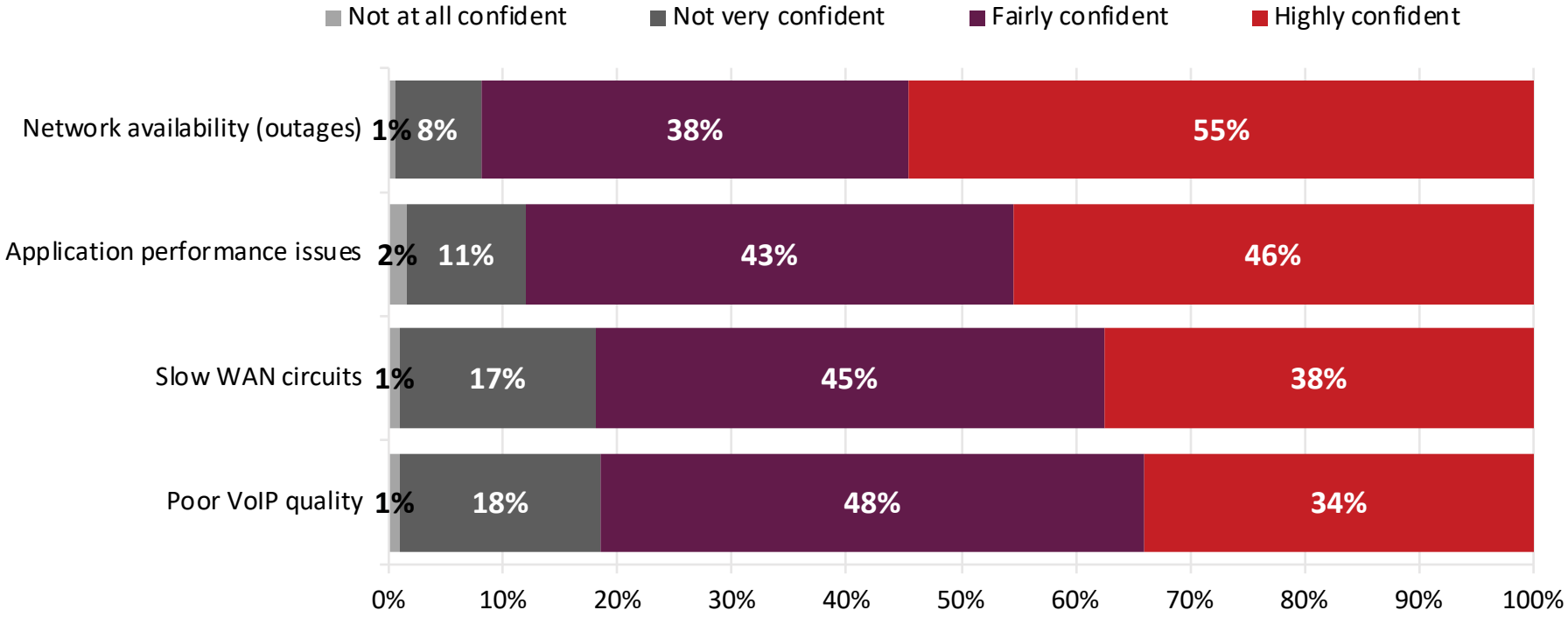
N=200

How confident are you in the reliability of your network?

= statistically significant difference between defense and civilian

Confidence in Detecting, Resolving Network Issues

- In each case, a solid majority is fairly or highly confident they can spot and resolve issues with outages, Application performance issues, or poor VoIP quality.
- Civilian respondents express less confidence with regard to detecting and resolving issues related to slow WAN circuits.



Defense	Civilian
Not very confident total 17%	
10%	24%
Fairly/highly confident total 83%	
89%	75%

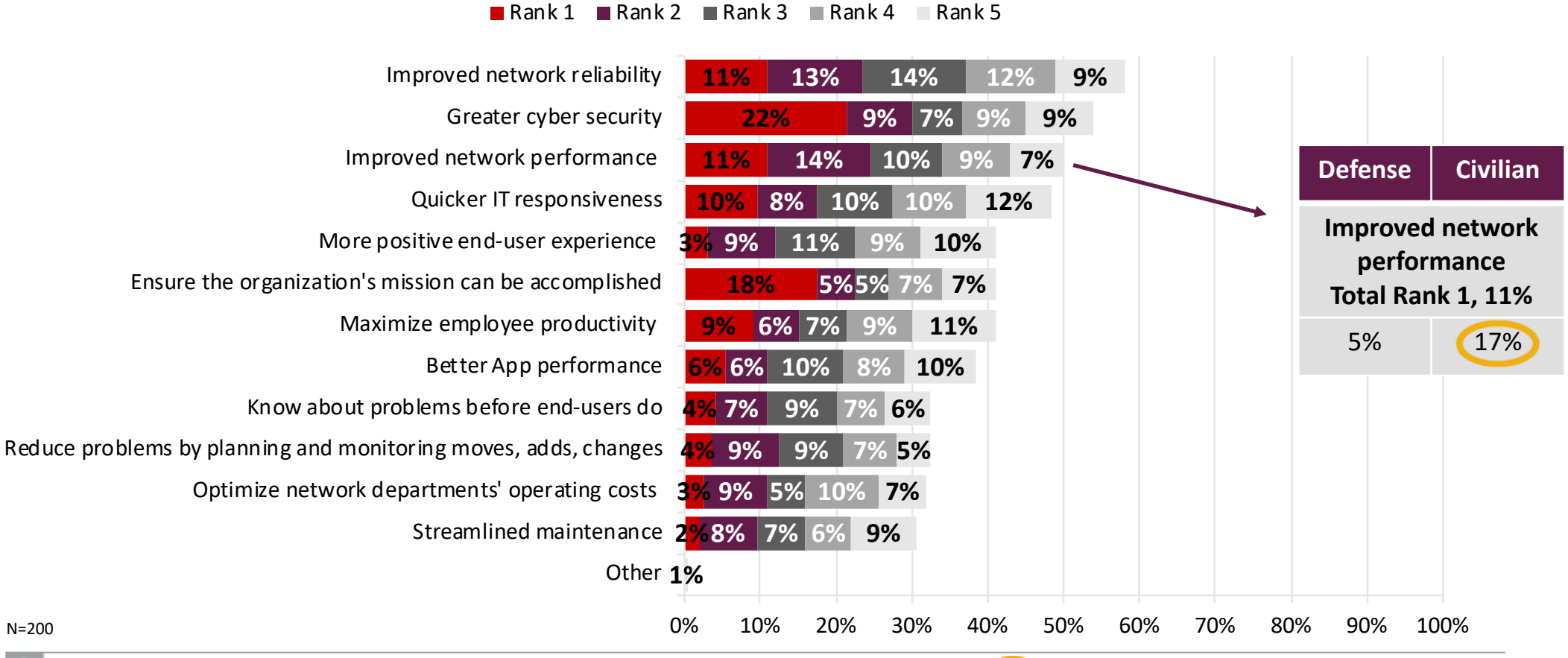
N=200

= *statistically significant difference between defense and civilian*

How confident are you in your agency's ability to detect and resolve the following network and application performance issues before they impact productivity?

Priorities Improved through Better Network Visibility

- Priorities deemed most important to their agency that could be improved through better network visibility are led by improved network reliability, greater cyber security, and improved network performance (rising among civilian respondents).



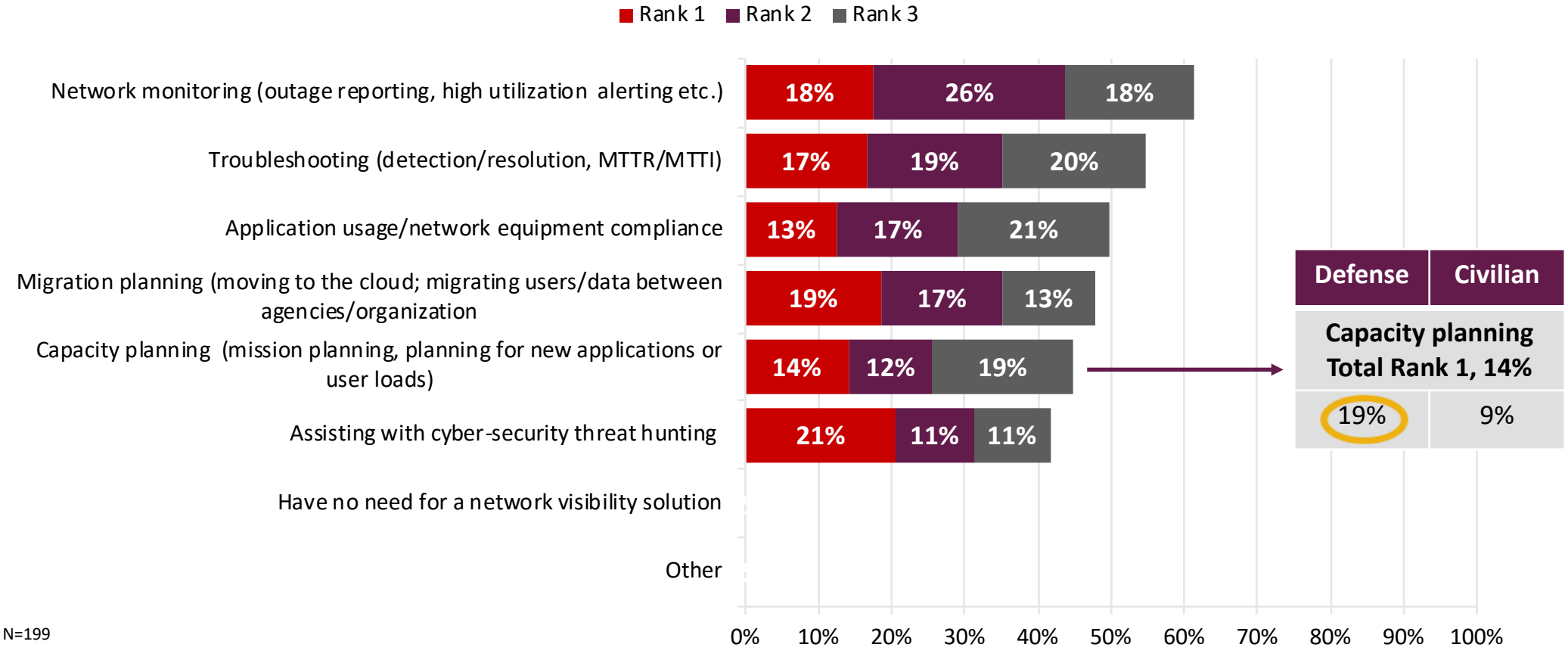
N=200

What priorities are most important to your agency that you feel could be improved through better network visibility?
[Rank top 5, where number 1 is the most important]

= *statistically significant difference between defense and civilian*

Top 3 Reasons Network Visibility Solution Needed

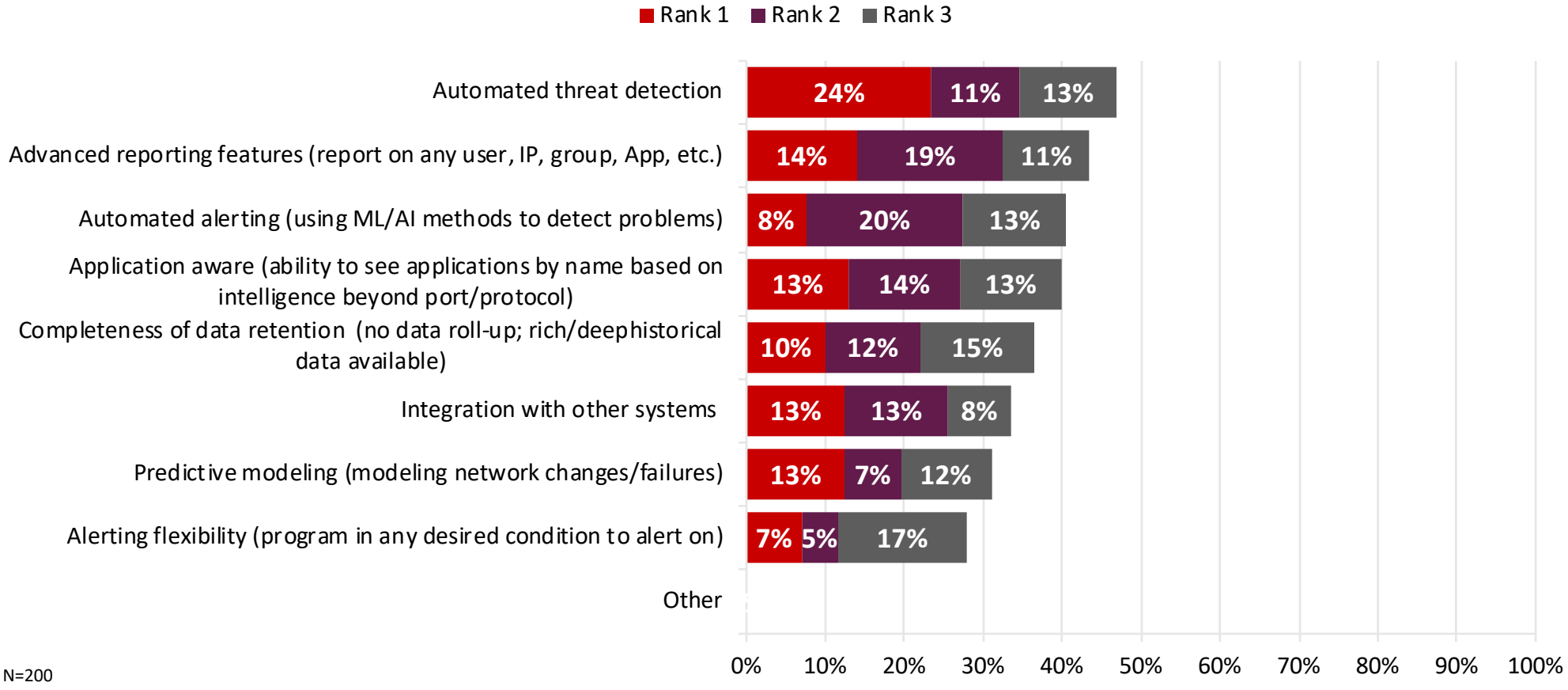
- Network monitoring, troubleshooting and application usage/compliance round out the top reasons why a network visibility solution is needed.



What are the top 3 reasons why you currently need a network visibility solution? [Rank top 3, where number 1 is the most important] = *statistically significant difference between defense and civilian*

Top 3 Expected Visibility Solution Features

- Automated threat detection, advanced reporting features, and automated alerting are the most commonly expected features of a network visibility solution.

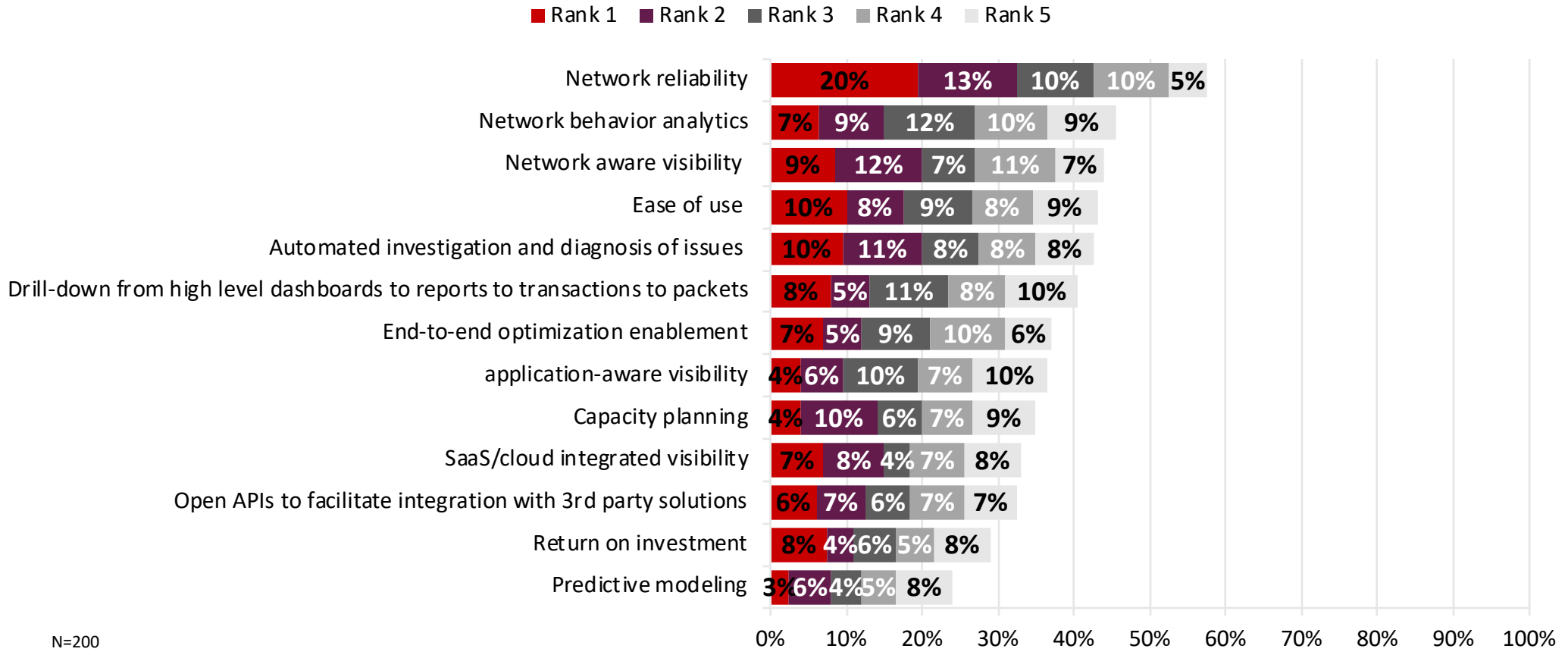


N=200

What are the top 3 most important features you expect from a network visibility solution? [Rank top 3, where number 1 is the most important]

Top 5 Most Important Features of Visibility Solutions

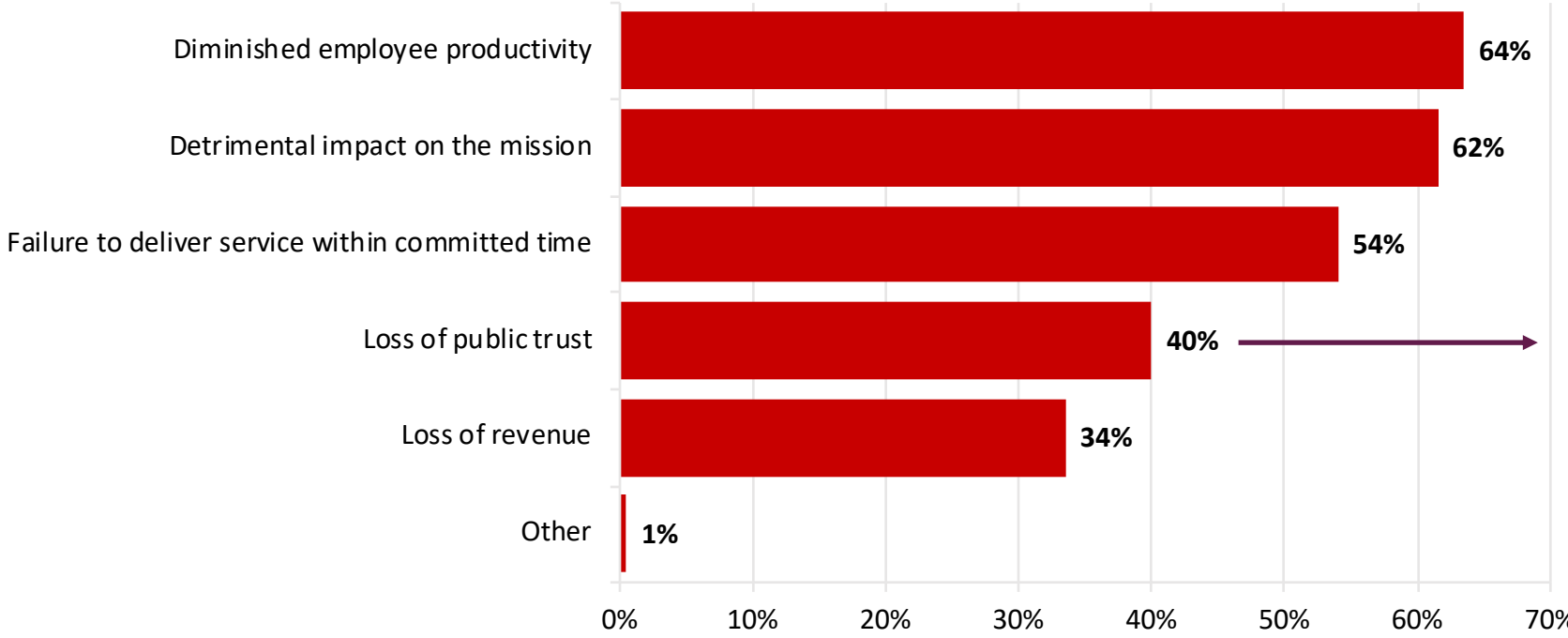
- Network reliability clearly heads the list of the five most important features of network visibility solutions.



What are the five most important features of network visibility solutions [Rank top 5, where number 1 is the most important]

Impact of Poor Network Performance

- Poor network performance most commonly impacts respondents' agencies through reduced productivity, harmful distraction from the mission, and late delivery of services.
- Civilians are significantly more likely to point to a loss of public trust.



Defense	Civilian
32%	48%

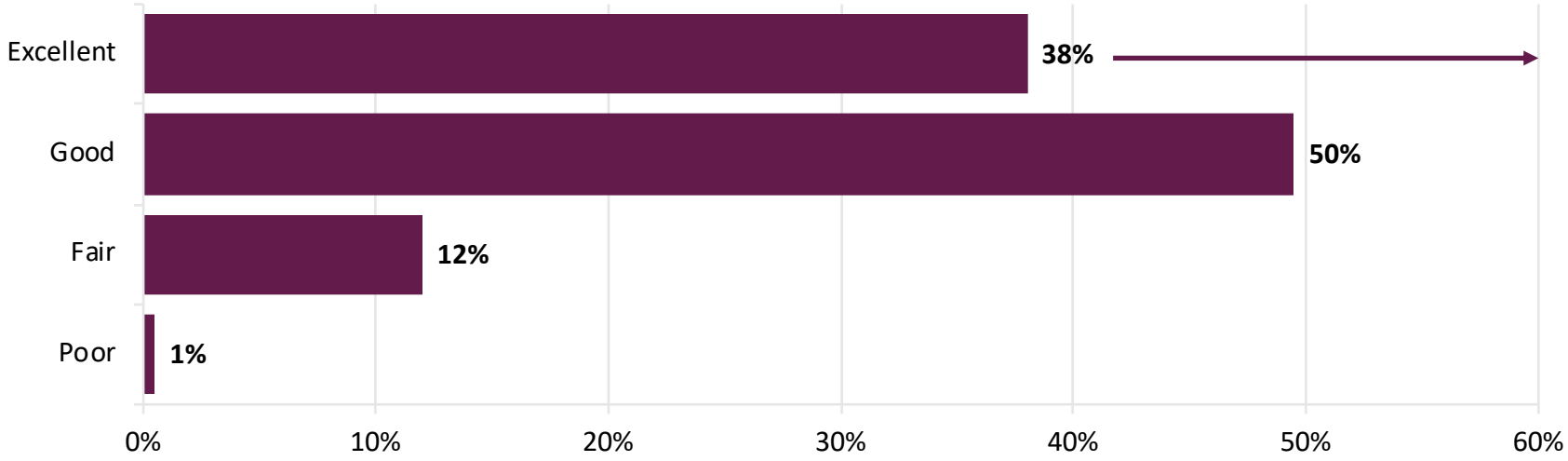
N=200

How does poor network performance impact your agency?

= statistically significant difference between defense and civilian

Visibility's Impact into SaaS Apps

- Nearly four in ten cite the level of visibility into their agencies' SaaS apps as excellent; this proportion climbs significantly higher among defense respondents.



Defense	Civilian
45%	31%

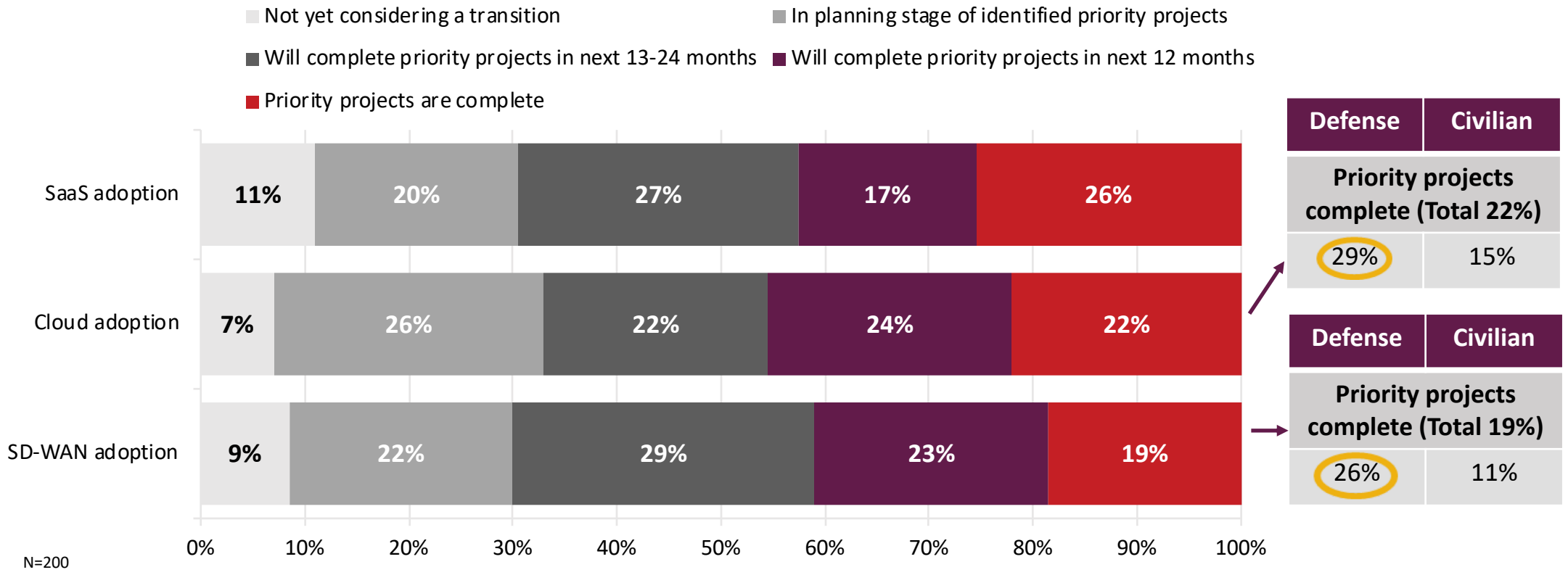
N=200

How would you rate the level of visibility into your agency's SaaS apps?

= *statistically significant difference between defense and civilian*

Stage of Agency Modernization

- About one fifth respectively have completed their priority projects for SaaS, cloud, and SD-WAN adoption; this proportion rises significantly among defense respondents.
- By the same token, roughly a quarter are in the planning stage of their identified priority projects.

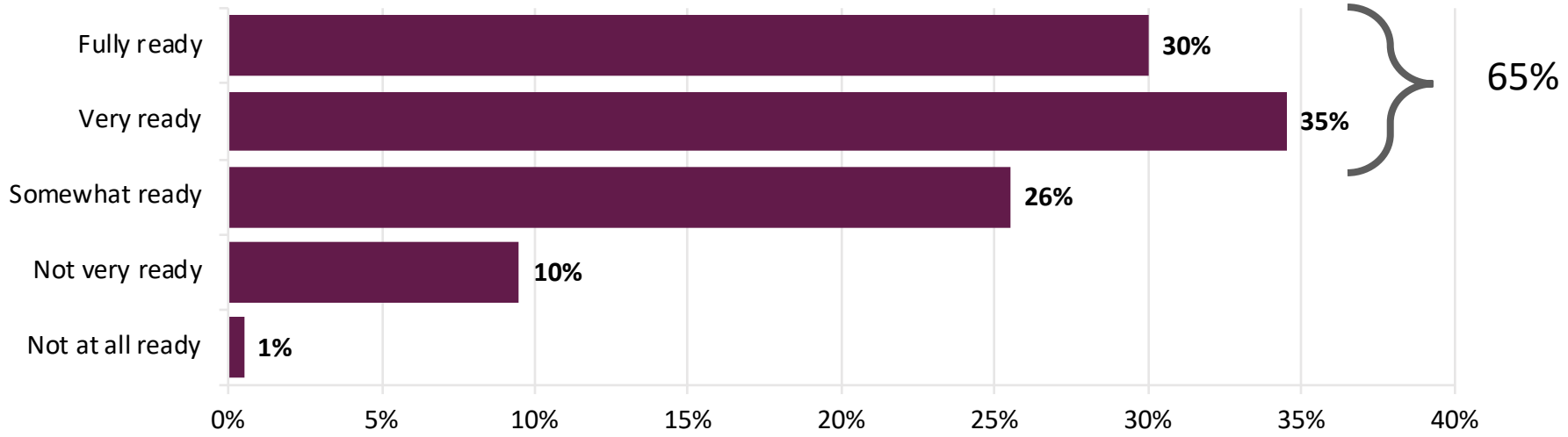


At what stage of modernization is your agency in terms of its readiness to transition your priority network and apps to the cloud?

= statistically significant difference between defense and civilian

Readiness to Transition to Cloud

- Nearly two thirds are either very or fully ready to transition to the cloud.

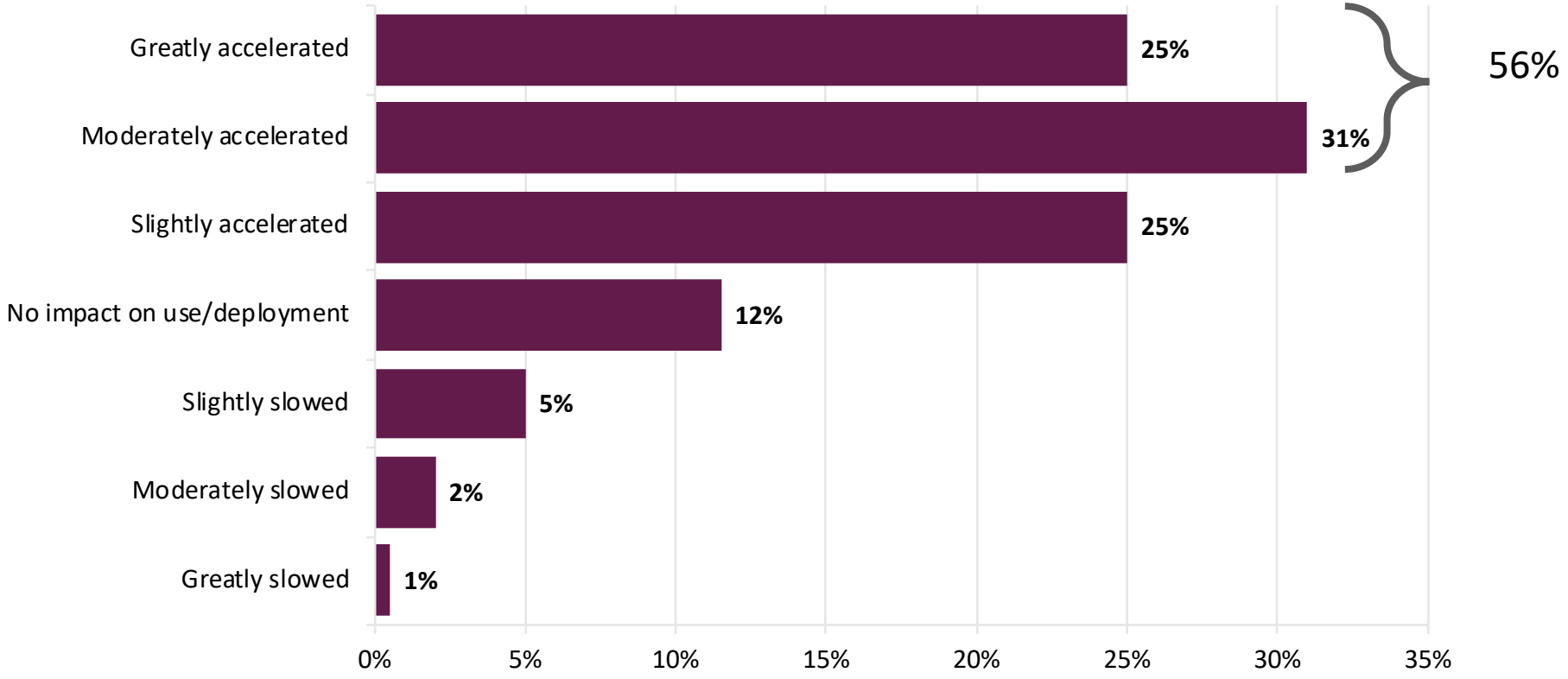


N=200

How would you rate your agency's readiness to transition your network and apps to the cloud?

Impact of Telework on Pace of Visibility Use

- More than half indicate that the increasing use of telework has either greatly or moderately accelerated their agency's use and deployment of network visibility solutions.

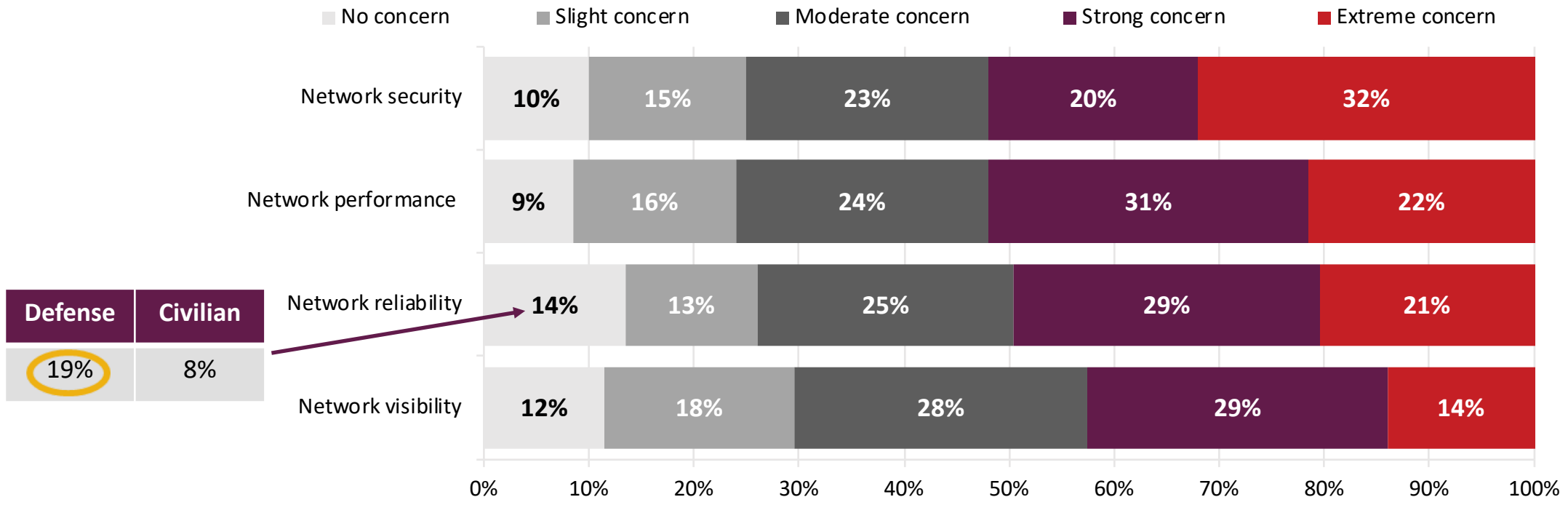


N=200

To what degree, if at all, has the increasing use of telework accelerated or slowed your agency's use and deployment of network visibility solutions?

Network-related Concerns due to Telework

- Network-related aspects causing extreme concern are security, performance, reliability and visibility. By contrast, to others reliability is of no concern – indeed, that lack of concern over reliability rises to 19% among defense respondents.



N=200

With specific regard to today's growing telework environment, what network-related aspects do you consider to be of greater or lesser concern? = *statistically significant difference between defense and civilian*

Key Takeaways

Key Takeaways

Agencies have made great strides to increase their network's visibility.

- **More than nine in ten describe their agency's current network visibility as good (46%) or excellent (51%) . This** is a very positive outcome overall. (Still, the term "good" might suggest some room for improvement.)
- **The visibility trend is clearly in the right direction.** In a powerful finding, more than four in five state that in the past five years their network visibility has improved, far outpacing a tiny minority stating it has worsened.

Key Takeaways

Defense agencies are further along the path to adoption and fulfillment of agency priorities, and in certain instances tend to be more self assured than their civilian peers.

- **Specifically, defense agencies seem to have made greater gains on the path to adoption and fulfillment of agency priorities and are more bullish than their civilian peers.** Illustrating the point, though most overall are highly confident in the reliability of their network, this rises to nearly two-thirds among defense, versus only half among civilian respondents.

Key Takeaways

The need exists for a network visibility solution.

- **None state that they have no need for a network visibility solution, and thus none dismiss this option out of hand.** Network monitoring, troubleshooting and application usage/compliance round out the top reasons why respondents believe a network visibility solution is needed.
- **Mutually supportive benefits abound.** Greater network visibility leads to greater network security and is valuable to assuring secure infrastructure. As well, strong majorities consider network visibility an enabler of cloud infrastructure.
- **Most agencies are well equipped to monitor and troubleshoot their network performance.** Nearly half have most of the tools in place and/or some upgrading needed, while another one-third have all the appropriate tools and procedures in place.

Key Takeaways

A network visibility solution should reflect the areas of greatest value and importance to agencies.

- **Ensure the most valued features are included in your solution.** These include automated threat detection, advanced reporting features, and automated alerting.
- **Network reliability clearly heads the list of the five most important features of network visibility solutions.** This is followed by network behavior analytics, network-aware visibility, ease of use, and automated investigation and diagnosis of issues.

Key Takeaways

Agencies recognize the opportunities of modernization, but with room for improvement.

- **Opportunities for modernization exist.**
  - About one fifth of agency types respectively have completed their priority projects for SaaS, cloud, and SD-WAN adoption; and this proportion rises significantly among defense respondents.
  - By the same token, roughly a quarter are only in the planning stage of their identified priority projects. Furthermore, even though nearly two thirds cite their agency's readiness to transition their network and apps to the cloud, that leaves others only somewhat ready (at best) to do so. Here lies an opportunity to help them out.

Key Takeaways

Teleworking has spurred faster deployment of network visibility solutions.

- **Teleworking opens the door to greater visibility.** Despite the widespread disruption of the pandemic, more than half indicate the increasing use of telework has accelerated their agency's use and deployment of network visibility solutions.
- **With specific regard to today's growing telework environment:** any communications/outreach should address those network-related aspects that cause greater concern to agencies. These include security, performance, reliability and visibility.

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