

# Is the Public Cloud Hiding Business Risk In Plain Sight?

A Global Survey of IT Professionals

January 2019

# Executive Summary

This research finds that nearly every company has network issues within their public cloud environments, with more than half them sharing it takes three or more hours to resolve them. These issues result in lost revenue, increased costs and growing compliance risk. The research shows more than eight out of 10 companies have non-compliant cloud environments today with a majority indicating public clouds create additional security risks. While nearly every IT professional stated that visibility into public cloud environments was critical, a huge majority shared they have lower visibility into the public cloud portion of their network. Additionally, more than half of those surveyed stated they cannot predict network issues or the impact of network changes or new application instances within the public cloud environment.

This report also finds that most IT professionals lack proper tools to provide visibility within their public cloud environments which increases the risks and challenges of managing them. Perhaps driving these results is the surprising finding that only half of network teams are responsible for the network within public cloud environments and that changes can be made to the cloud network **without** their approval.

# Key Findings

## Public Clouds Commonly Have Problems

**97%** of companies have problems with their network within the public cloud

**54%** of companies require three or more hours to resolve public cloud network problems

**85%** of companies have non-compliant public clouds

## Teams Wield Poor Networking Tools

**92%** state it is “very important” or “important” to have public cloud infrastructure visibility

**79%** have poor network visibility within the public cloud

**60%** of companies lack the ability to predict the impact of public cloud network changes

## Network Team Experience Bypassed

Nearly **40%** of companies allow public cloud network changes without the networking team’s approval

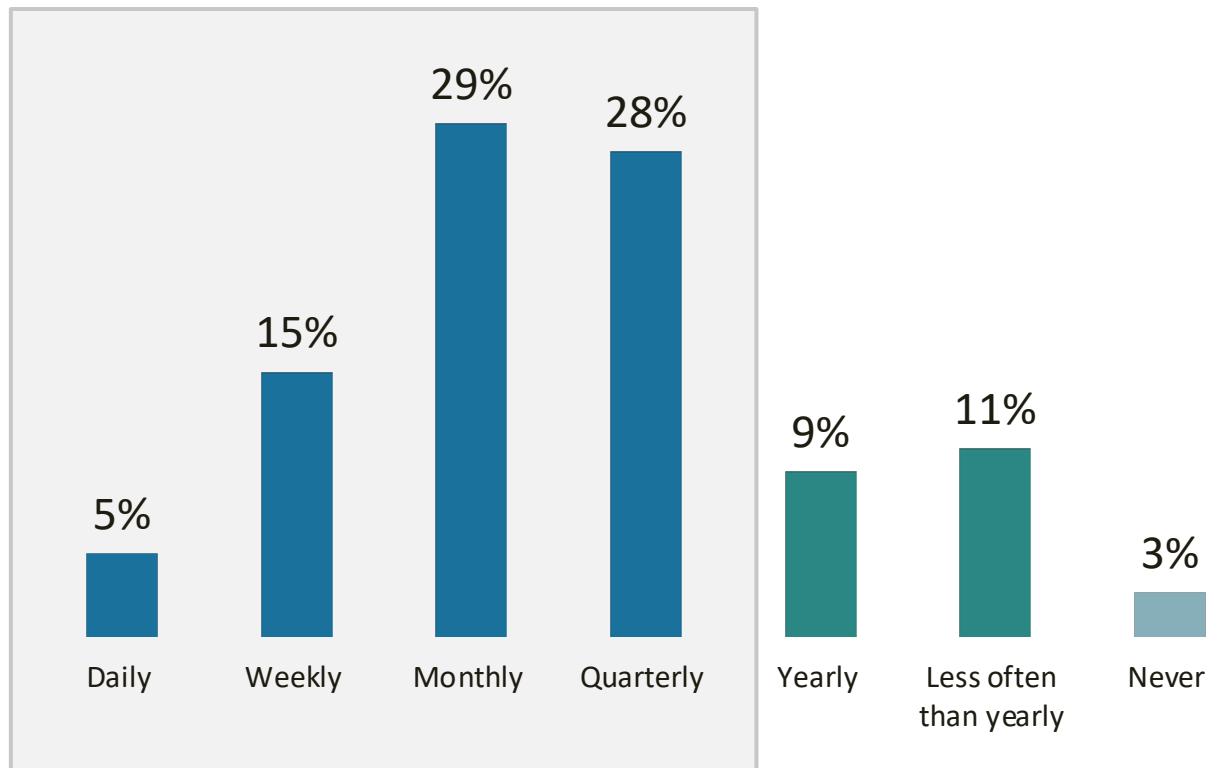


# Detailed Findings

# 77% of Companies Have Problems With Their Public Cloud Network Regularly



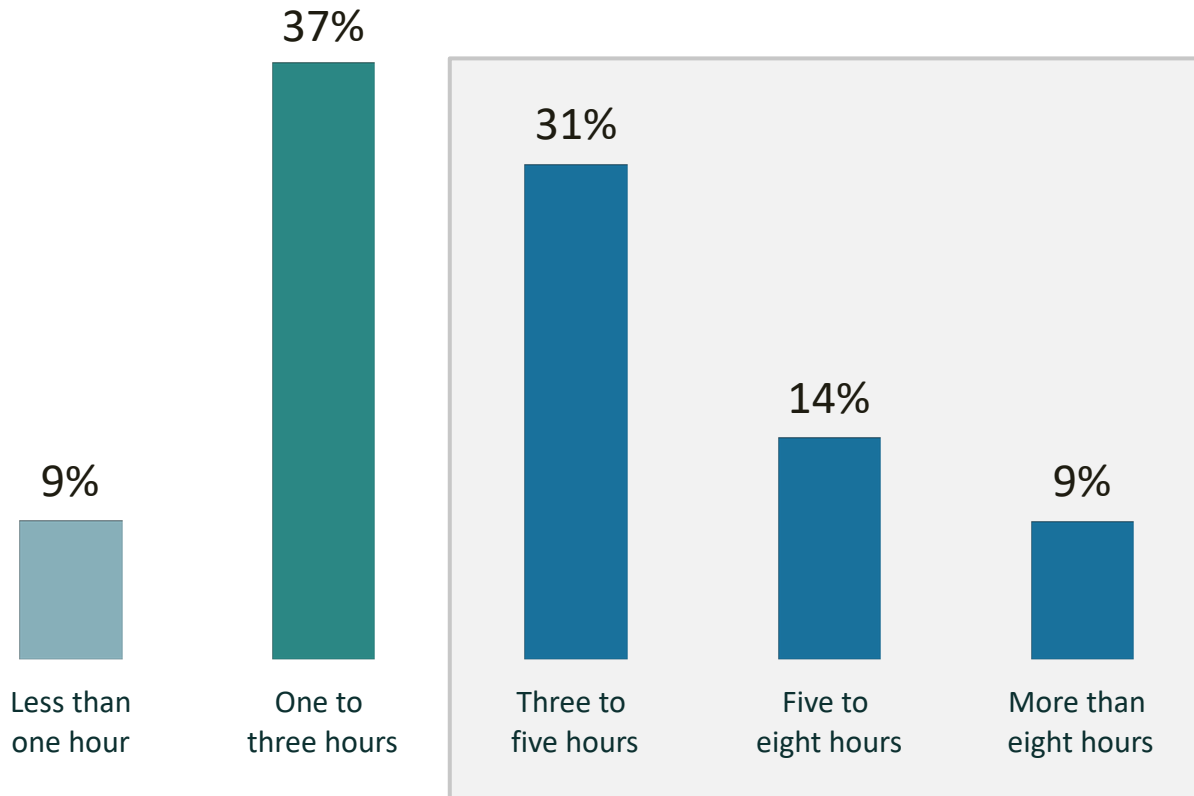
How frequently does your company experience problems with the public cloud portion of the network?



# 54% of Companies Require Three or More Hours to Resolve Public Cloud Network Problems



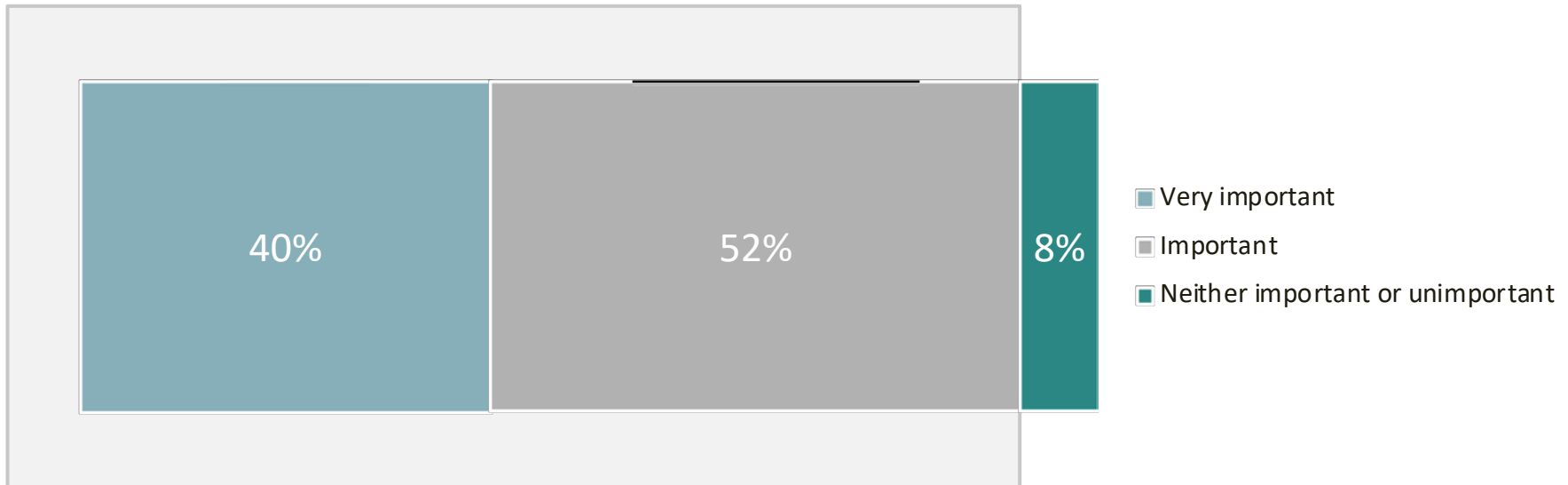
On average, how long does it take to resolve a public cloud network issue?



# 92% State it is “Very Important” or “Important” to Have Public Cloud Infrastructure Visibility



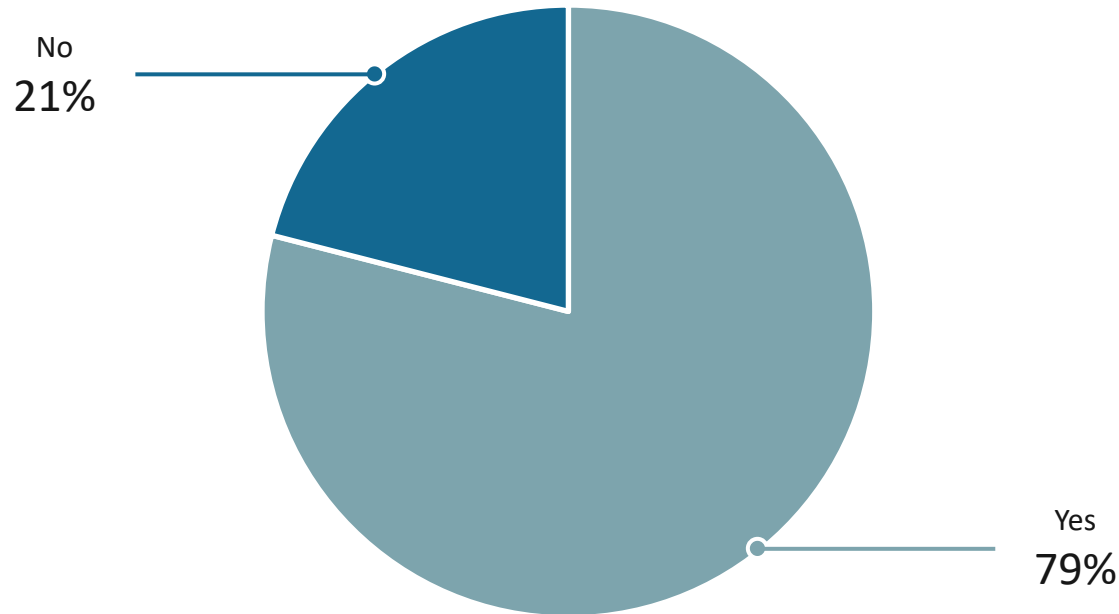
In your experience, how important is it to have visibility into your public cloud infrastructure?



# 79% Have Poor Network Visibility Within the Public Cloud



Do you have less network visibility into the public cloud portion of your network than other parts of your network?

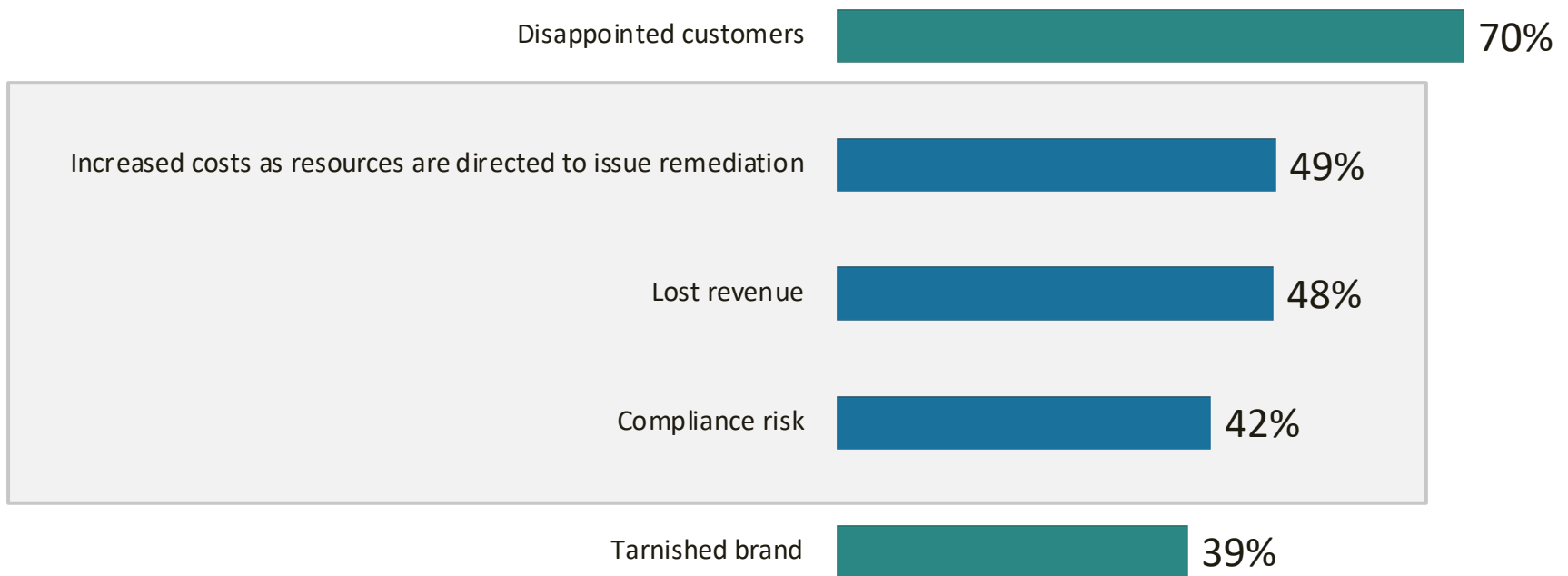




# Companies Immediately Lose Money and Increase Compliance Risk with Cloud Network Outages



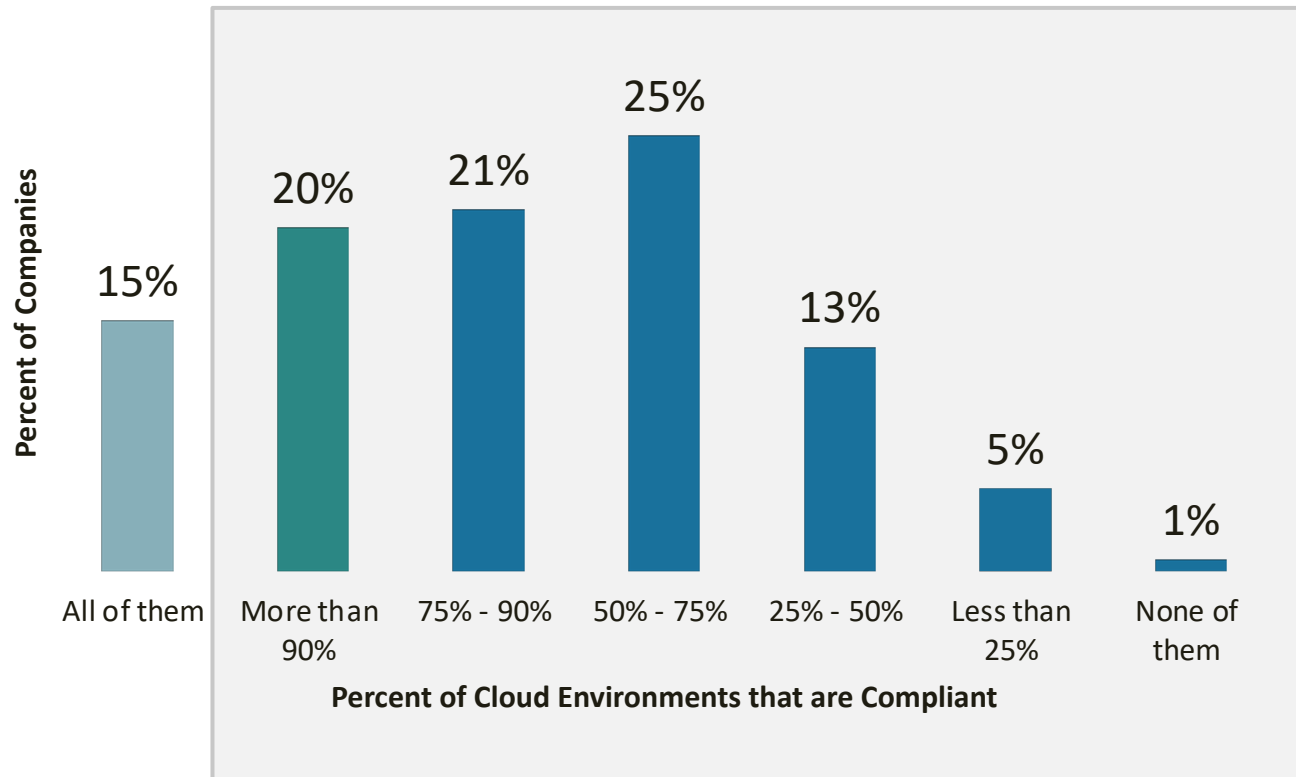
What is the business impact if the public cloud portion of your network fails?



# 85% of Companies Have Non-compliant Public Clouds



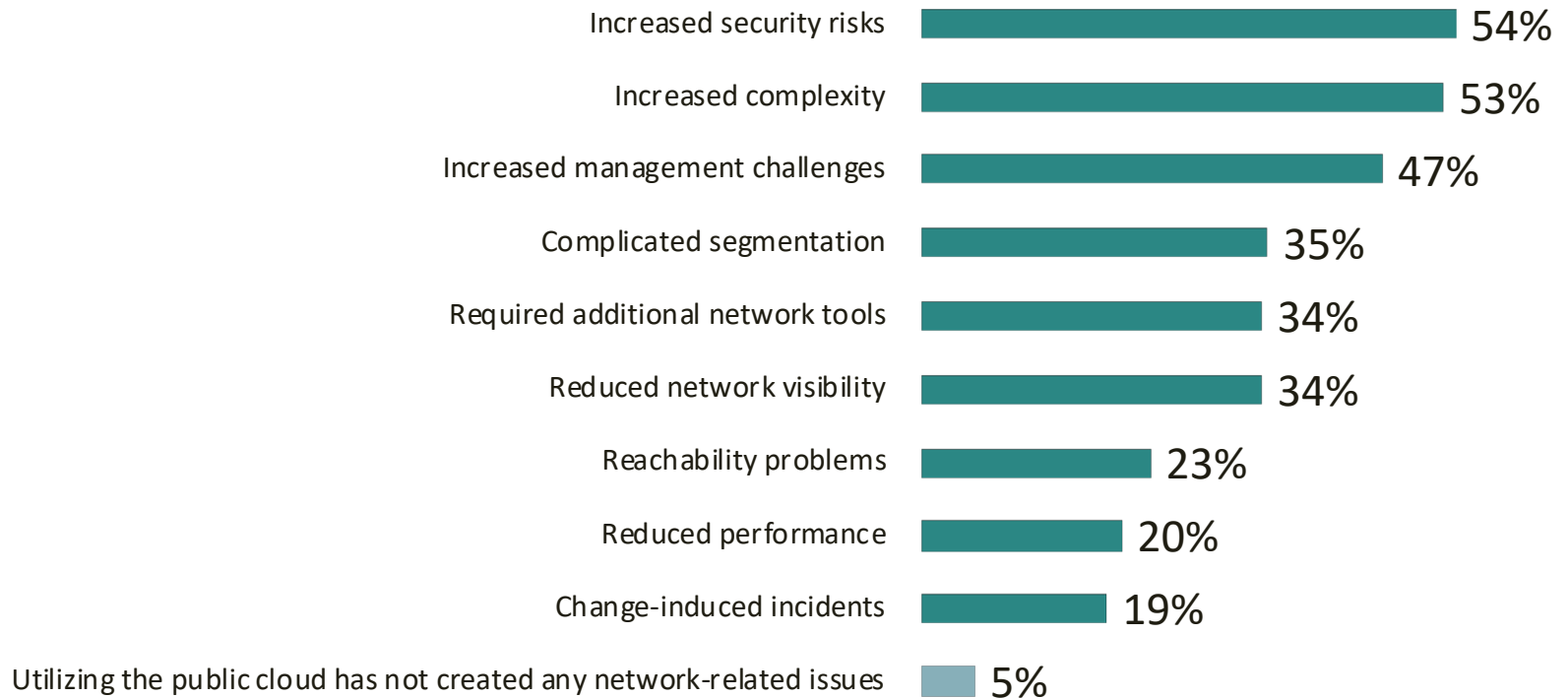
Approximately what percentage of your company's public cloud environments currently meets all compliance requirements?



# Public Cloud Utilization Generates Numerous Network Issues



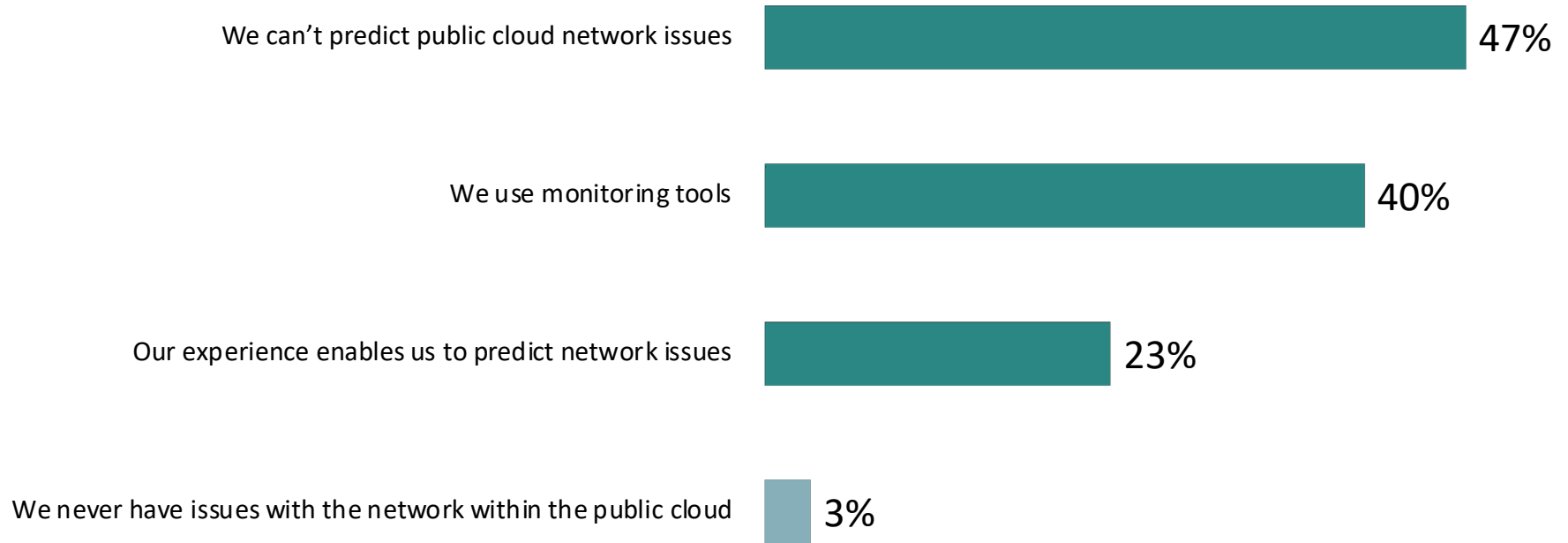
Has the utilization of the public cloud created any of the following network-related issues?



# Nearly Half Can't Predict Public Cloud Network Issues



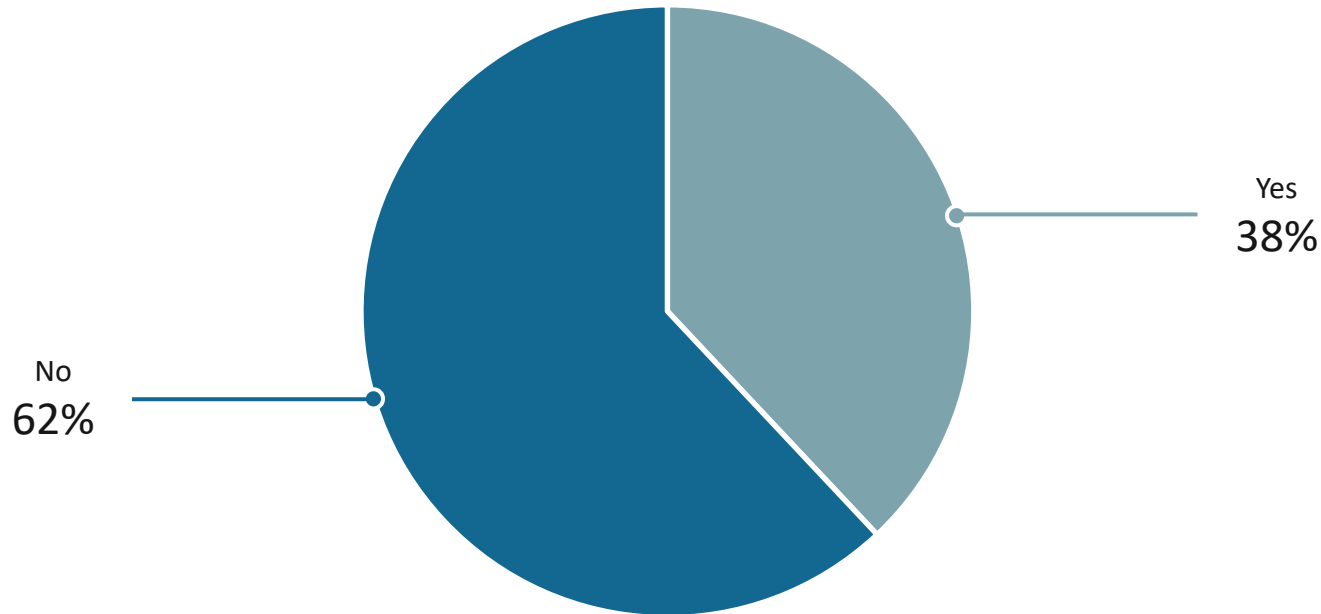
How does your company **predict** issues with the public cloud portion of the network?



# 62% Fail to be Able to Predict the Impact of New Application Instances in the Public Cloud



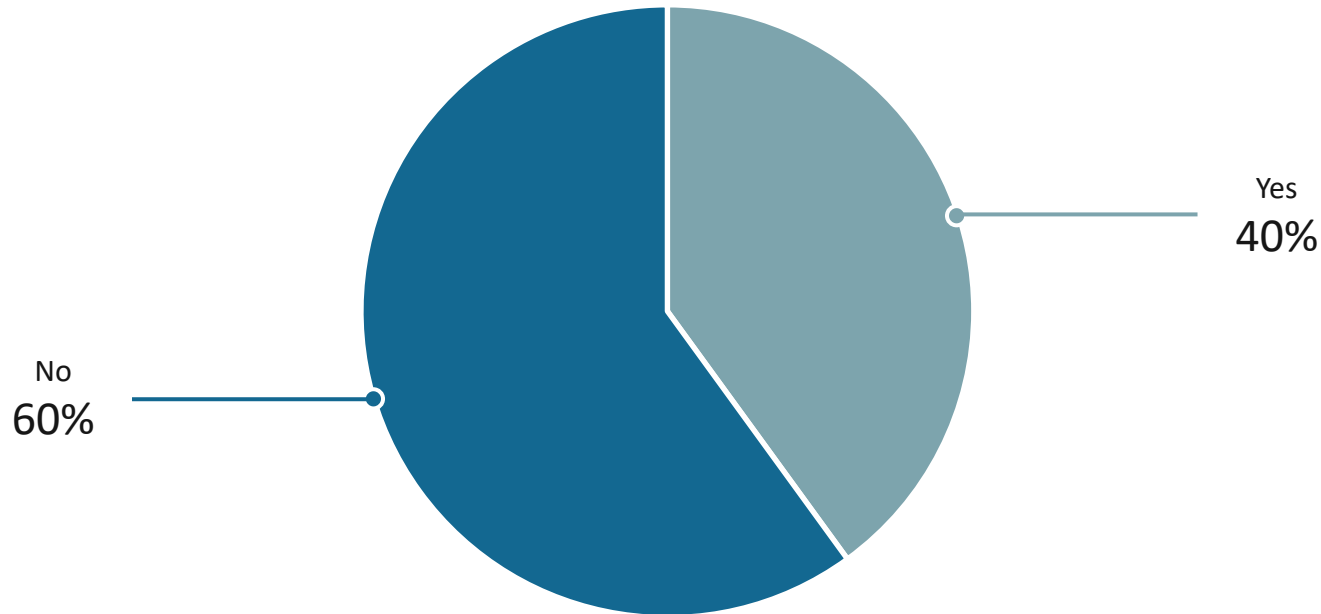
Do your company's network solutions predict the impact of new application instances in the public cloud that are started by DevOps teams and others?



# 60% of Companies Lack the Ability to Predict the Impact of Public Cloud Network Changes



Are your company's network solutions able to predict the impact of changes made to the public cloud?

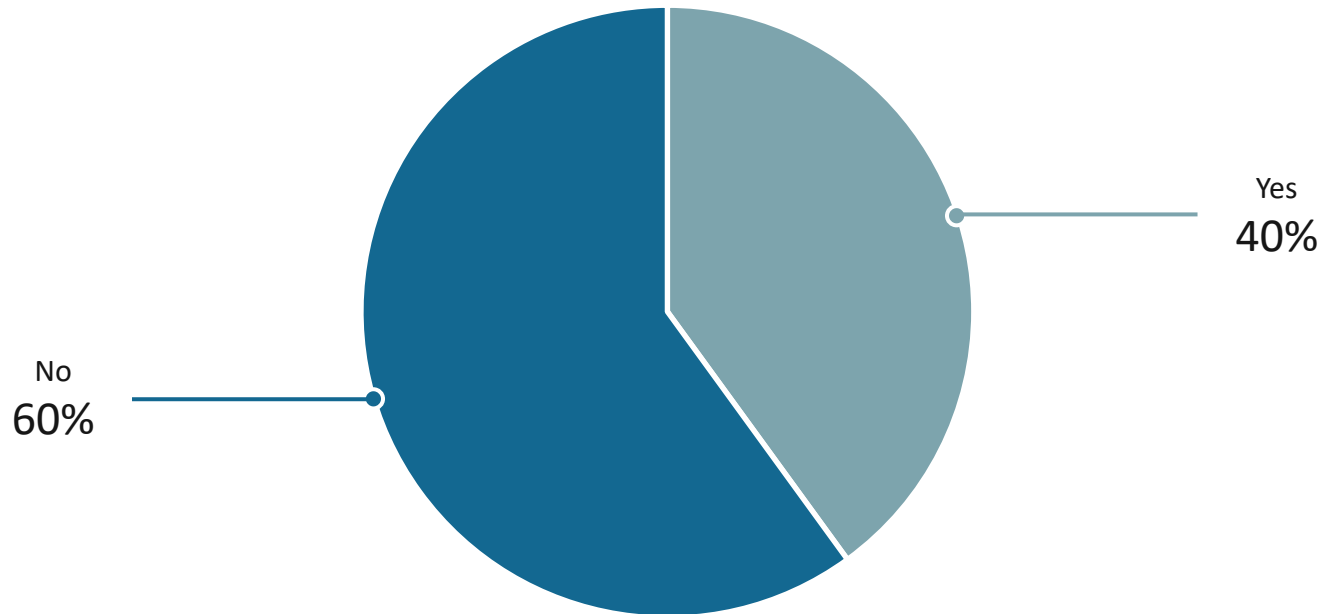




# 60% Lack Tools to Verify Network Segmentation Within the Cloud



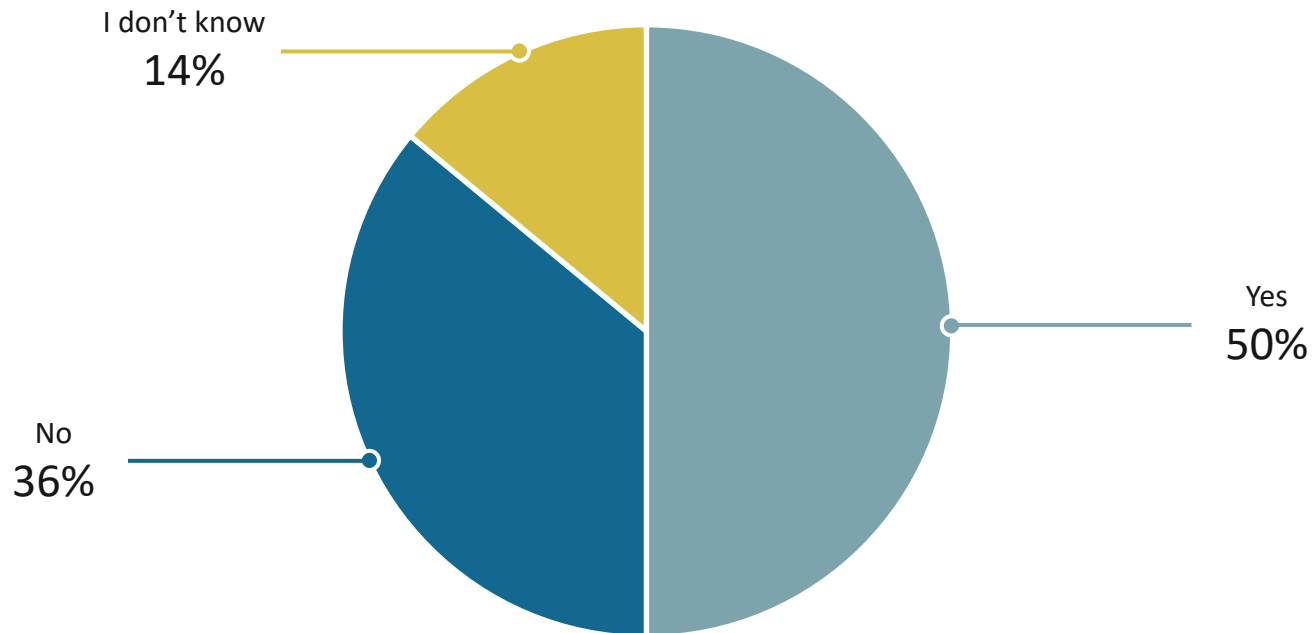
Do you have a solution that allows you to verify network segmentation in the cloud?



# 50% Admit Public Cloud Utilization Increases Security Risks; 14% Don't Know



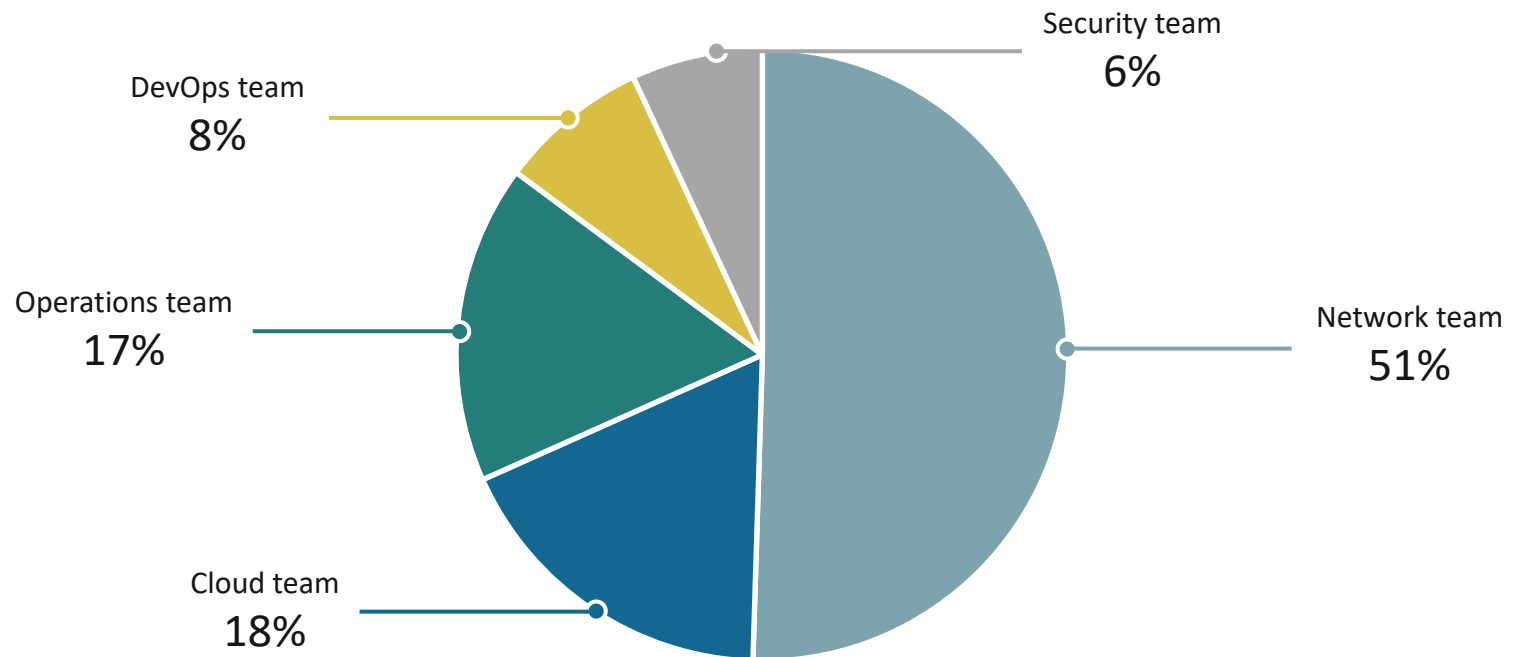
Has the utilization of public cloud infrastructure increased the frequency of security threats?



# Teams Disagree on Who is Responsible for Public Cloud Environments



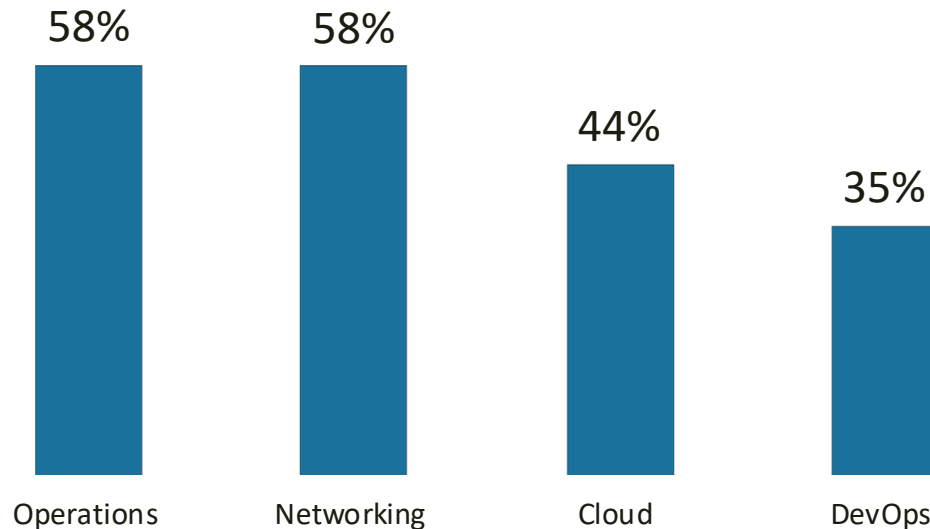
Which team is ultimately responsible for networking within public cloud environments?



# Significant Disconnect Between DevOps and Networking Teams



Which team is ultimately responsible for networking within public cloud environments?

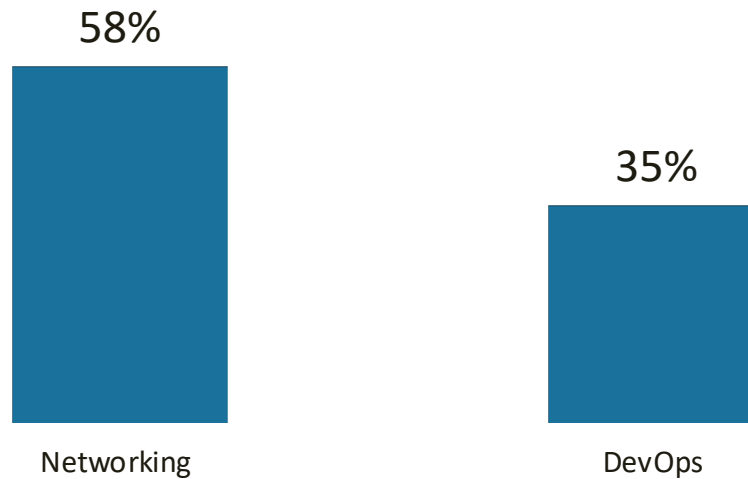


Teams that selected “Network Team” as responsible for public cloud environments

# Significant Disconnect Between DevOps and Networking Teams



Which team is ultimately responsible for networking within public cloud environments?

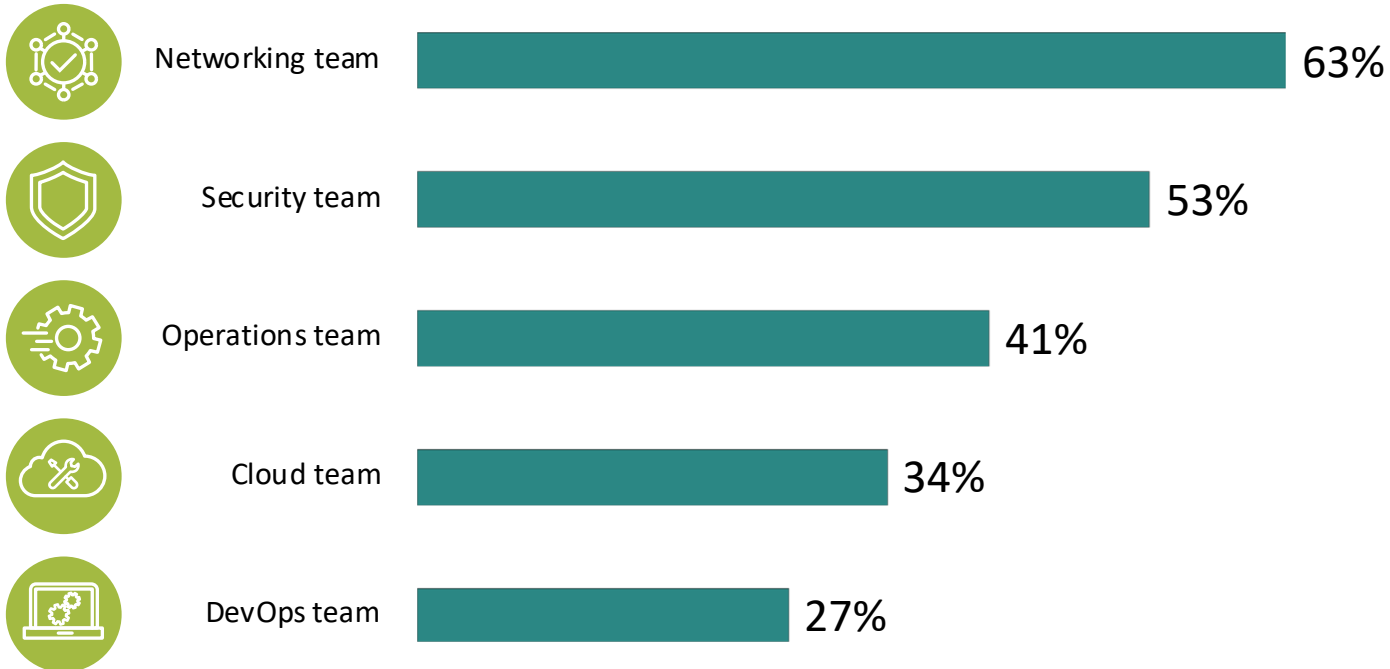


Teams that selected "Network Team" as responsible for public cloud environments

# Nearly 40% of Companies Allow Public Cloud Network Changes Without the Networking Team's Approval



Which teams need to approve changes made to the public cloud portion of the network?

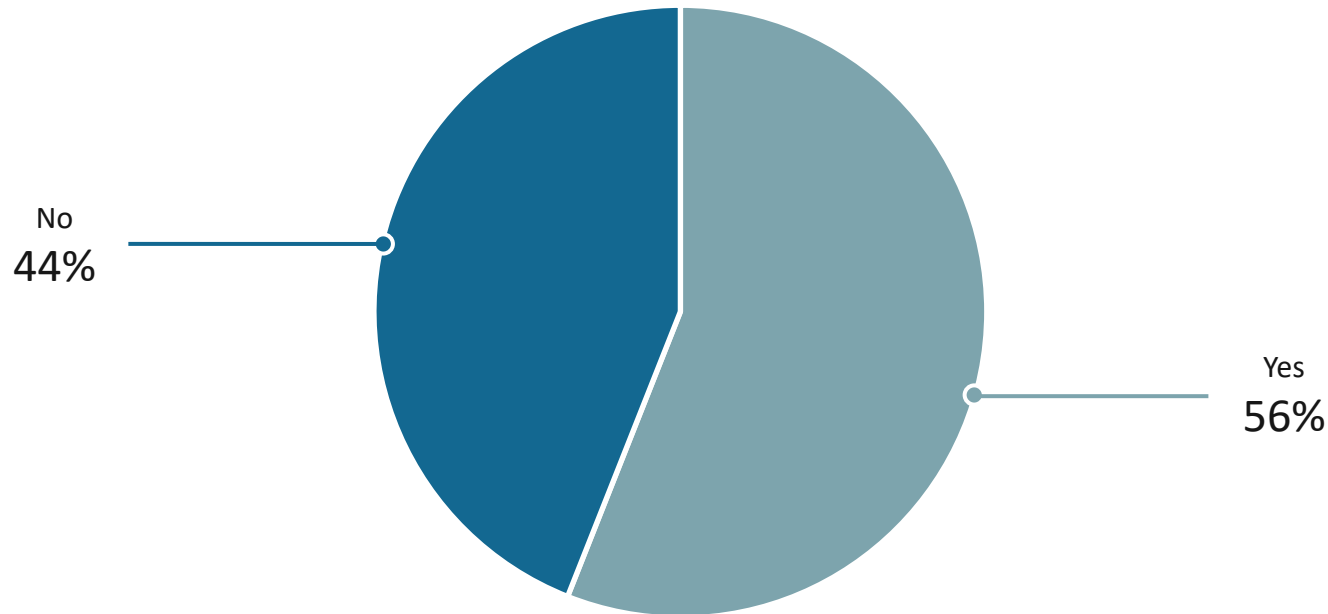




# A Majority Indicate the Network Team is Too Slow for DevOps Processes



In your opinion, does the networking team move too slowly for your company's DevOps team?



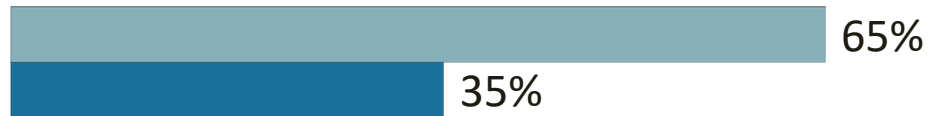
# DevOps and Cloud Voice Network Team is Too Slow



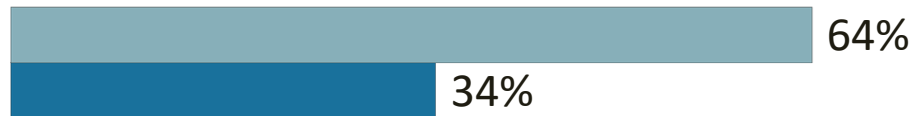
In your opinion, does the networking team move too slowly for your company's DevOps team?



DevOps



Cloud



Operations



Networking

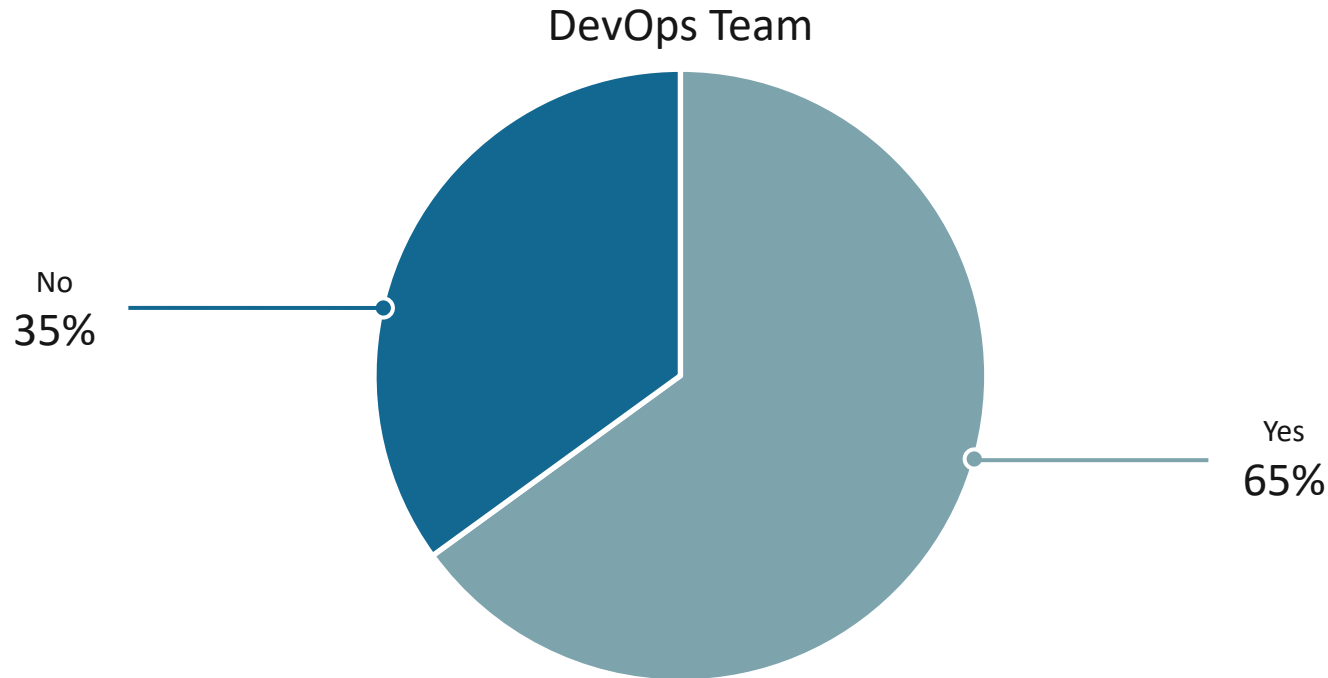


■ Yes  
■ No

# DevOps Teams Voices Network Team is Too Slow



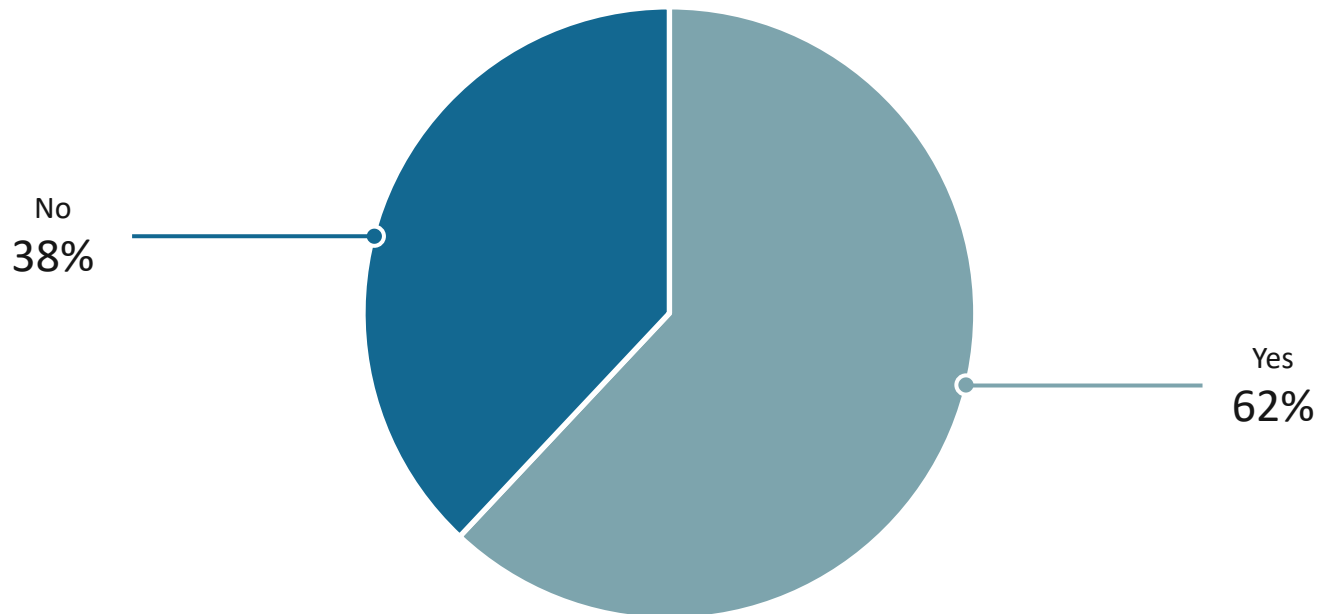
In your opinion, does the networking team move too slowly for your company's DevOps team?



# 38% of DevOps Teams Deploy New Cloud-based Applications Without the Network Team



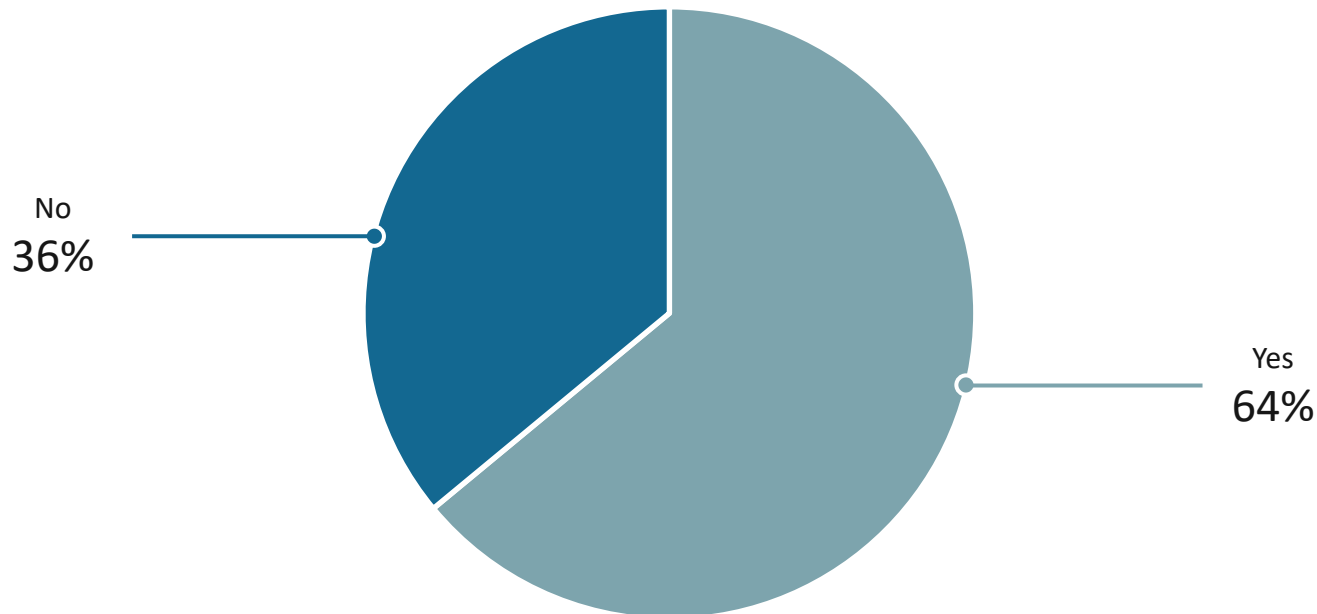
When a DevOps team spins up new cloud-based applications is the networking team involved?



# 36% of DevOps Teams Do Not Involve the Network Team When New Cloud Instances Are Started



When a DevOps team spins up new cloud instances is the networking team involved?



# Methodology and Participants



# Goals and Methodology



## Research Goal

The primary research goal was to understand the challenges of managing and securing the network for workloads running on public cloud infrastructure. Additionally, the research sought to learn current roles and responsibilities for managing public cloud networks.



## Methodology

IT professionals that were responsible for public cloud -based applications and/or infrastructure were invited to participate in a survey on their company's use of public cloud infrastructure.

The survey was administered electronically, and participants were offered a token compensation for their participation.

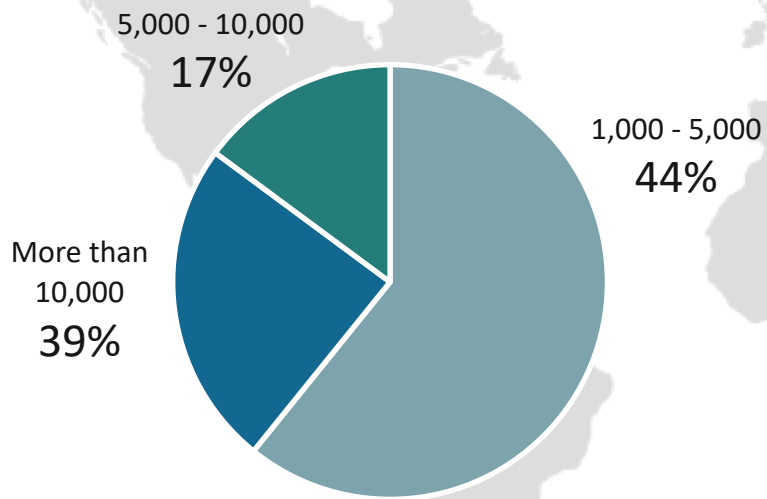


## Participants

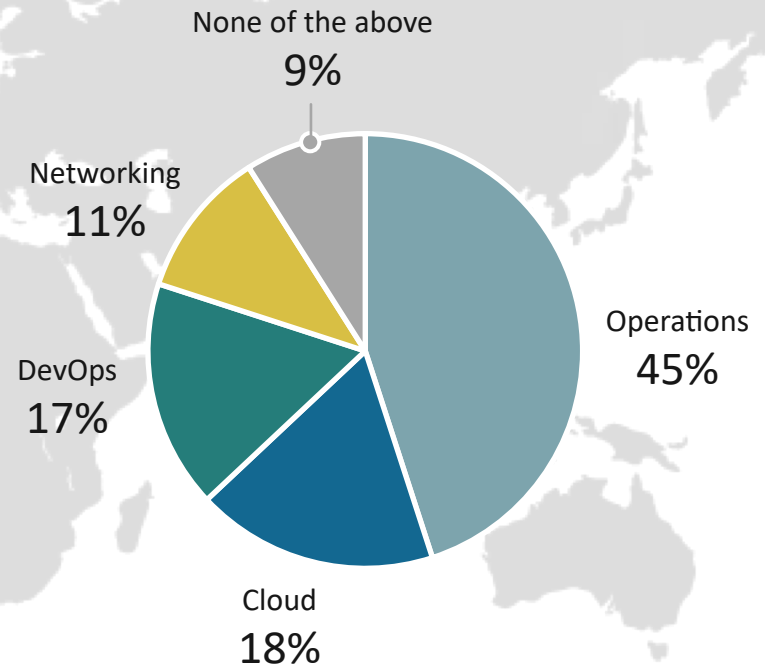
A total of 337 participants that directly manage public cloud infrastructure completed the survey. Participants were from all five continents.

# Companies Represented

Size

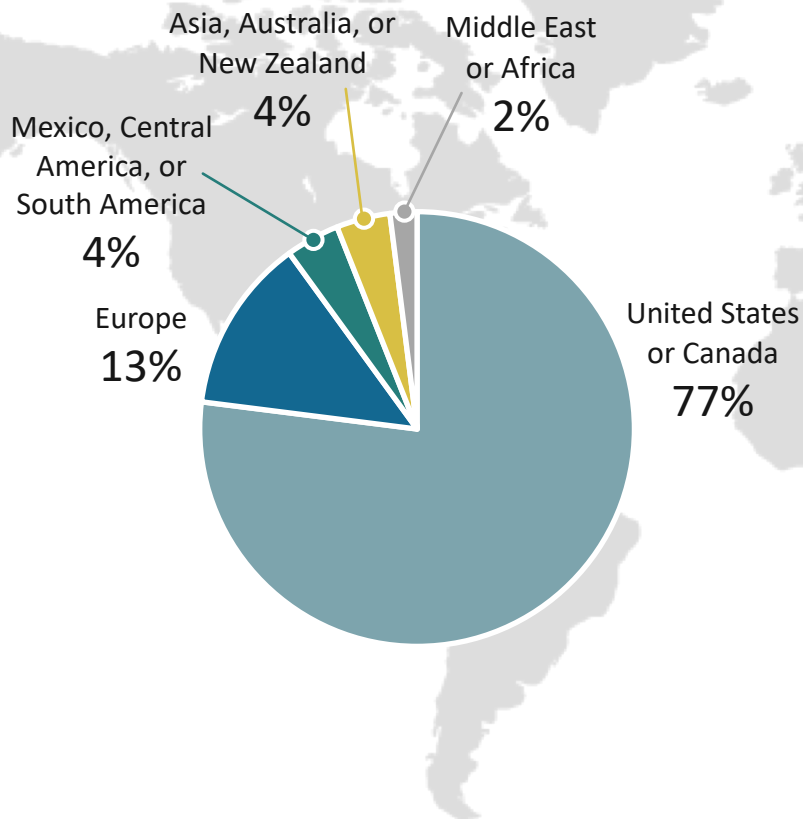


Organization

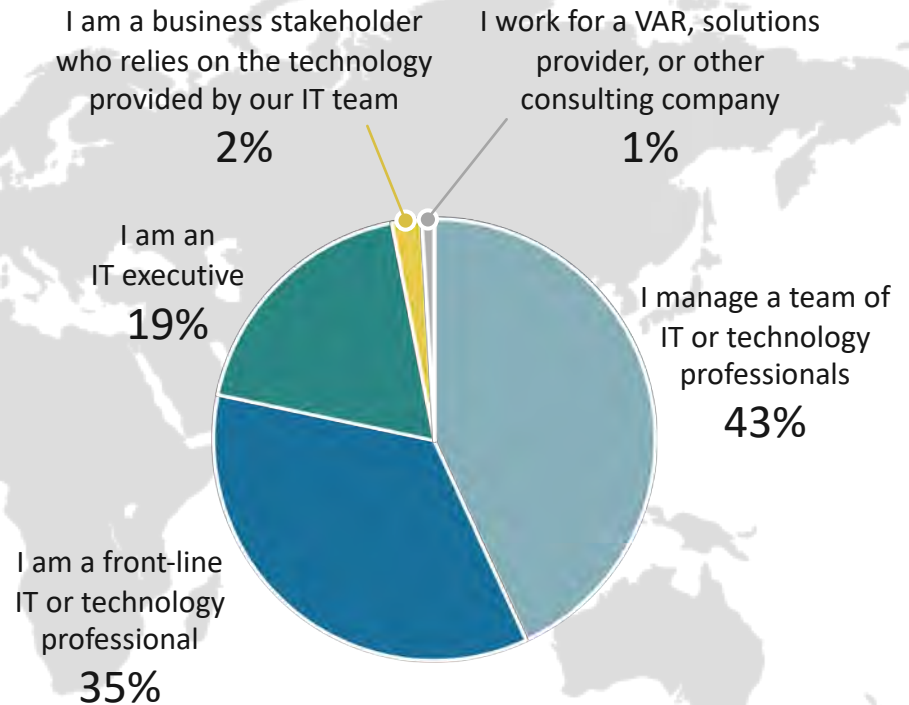


# Individuals Represented

Location



Company Role



# For More Information...

## About Dimensional Research



Dimensional Research provides practical marketing research to help technology companies make smarter business decisions. Our researchers are experts in technology and understand how corporate IT organizations operate. Our qualitative research services deliver a clear understanding of customer and market dynamics.

For more information, visit [www.dimensionalsearch.com](http://www.dimensionalsearch.com).

## About Veriflow



Veriflow brings formal verification to network infrastructure for the first time, continuously ensuring your network operates as intended. Veriflow predicts outages before they impact the business, and vulnerabilities before they are exploited, allowing IT teams to operate secure and resilient networks. Veriflow is backed by New Enterprise Associates (NEA), Menlo Ventures, the National Science Foundation and the U.S. Department of Defense. The company is headquartered in San Jose, California.

For more information, visit [www.Veriflow.net](http://www.Veriflow.net)

# Appendix

# 25% of Network Teams are Not Involved When New Public Cloud Infrastructure is Utilized



Typically which teams are involved when new public cloud infrastructure is utilized?



Network team

75%



Security team

71%



Operations team

59%



Cloud team

50%



DevOps team

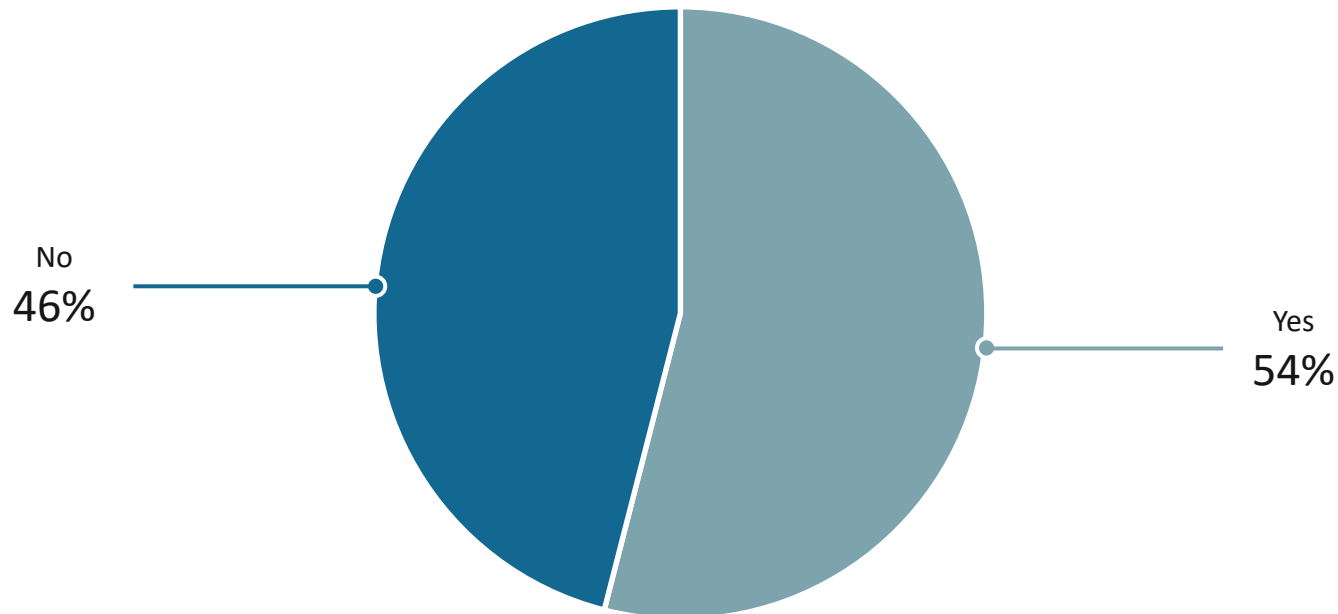
49%



# Only 54% Have Visibility Into Public Cloud Infrastructure



Do you have a networking solution that provides visibility into the virtual network within public cloud infrastructure?



# Individuals Represented

Public Cloud Role

