

Will Your Company Survive The Next Big Disruption?

IT As The Great Enabler

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The Global Picture.

Business is changing fast. Even companies that believe they have a competitive edge today are at risk of falling behind. Information Technology (IT) keeps businesses booming, but it's a stretch for busy executives to drop into the data center to ensure that server racks and network boxes are humming. Leadership is preoccupied with growing the customer base, keeping costs down, profitability and growth. At a time when disruptive products and services are the name of the game, it's become clear that doing "enough" with your technology investment simply isn't enough to survive.

A global study of 1800 IT decision-makers (ITDMs) and 904 business decision-makers (BDMs) found that significant gaps between IT and the C-Suite are stalling business transformation – the very thing that allows for growth across industries.

To remain relevant in the future, companies need to address impending disruption by rethinking their approach to IT for ongoing innovation.

New data from Wakefield Research sponsored by Juniper Networks, an industry leader in network automation technologies that enable business growth, has revealed the roadblocks that keep companies from innovating for today's – and more importantly, tomorrow's – business climate. This report calls out some startling statistics and findings for companies trying to stay competitive, including:

- A disconnect between the C-Suite and IT teams
- Outdated infrastructure and a skills gap that are causing IT to fall behind
- The business advantages realized from automation technologies

Throughout the study findings, a common business theme emerges. Key decision-makers in surveyed organizations recognize the value of C-Suite engagement in technology decisions, and that the network is at the heart of business transformation. The global results are overwhelming in commonality.

The survey results also revealed that network and automation technologies are delivering even greater than anticipated benefits. Overall, IT and network automation solutions are giving businesses of all sizes, across industries, the ways to stay ahead of disruption.

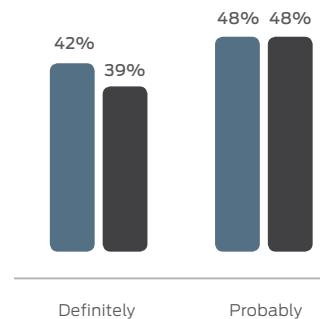
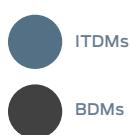
Section 1

Your Flourishing
Business May Be
Fine Today, But
It's Not Ready
For Tomorrow.

Companies believe they have a competitive advantage today.

With the right technology investments, businesses today can stay ahead of the game. BDMs and ITDMs think their company has a competitive advantage over competitors.

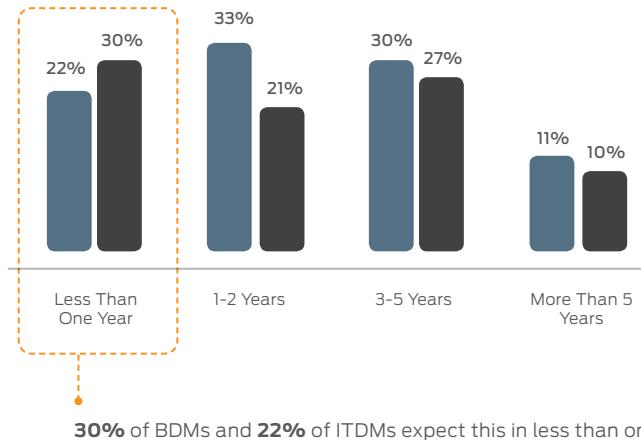
Percentage of respondents that say their company's primary products and services have a competitive advantage over their competitors



But business is changing fast.

Being ahead today does not guarantee staying on top in the future. BDMs and ITDMs expect their industries will soon be disrupted. The majority of BDMs and ITDMs anticipate a new disruptive technology, product or service to be introduced into their industry in two years or less.

Percentage of respondents that expect a new disruptive technology, product or service to be introduced into their industry



Companies may not be able to adapt quickly enough for today's pace of change.

BDMs and ITDMs say it would take at least one year to keep up if a competitor offered a drastically superior product or service.

Percentage of ITDMs and BDMs that expect it would take one year or more for their company to develop and support an improved product or service



“ True innovation requires an understanding of the value that technology brings and enables. The C-Suite doesn't need to code, but leading a company strategy for growth requires a strong relationship between those who set the strategy and those who execute. **”**

– Rami Rahim, CEO, Juniper Networks

Section 2

The Disconnect
Between IT And
The C-Suite.

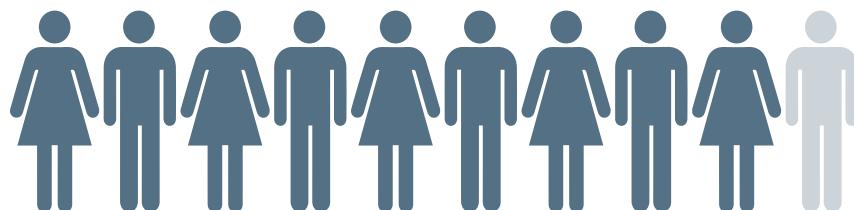
In today's business environment, strong technical skills and knowhow are essential for strategic decision-making. This expertise is key to getting the most out of IT and enabling your technology to be ready for today's disruptions and tomorrow's success.

Yet many organizations lack this knowledge at the highest levels, hamstrung by a C-Suite that isn't tech-savvy. A market advantage isn't likely to last unless leadership stays at the forefront of innovation.

The vast majority of ITDMs and BDMs agree that their company would perform better if the C-Suite were more tech-savvy.

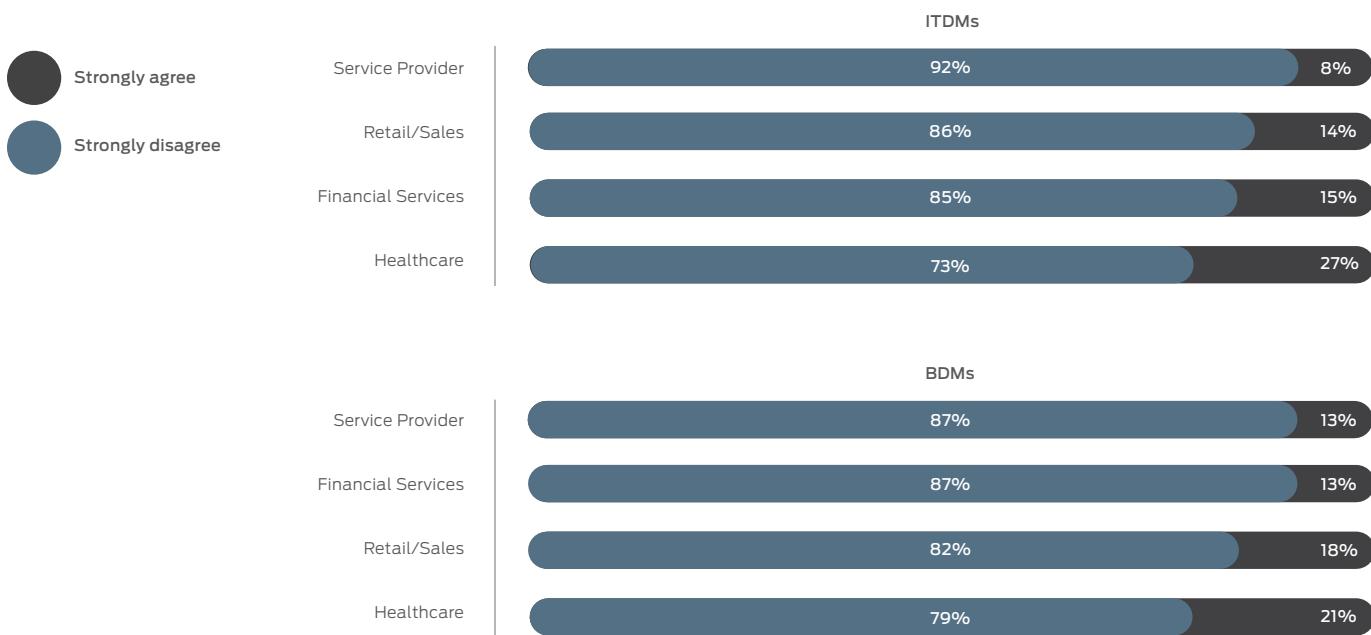
Decision-makers view the C-Suite's lack of tech-savvy as holding the company back.

Nearly 9 in 10 IT and business decision-makers admit their organization would perform better if their current C-Suite were more tech-savvy



Across industries, survey participants recognized a missed opportunity. With the need for businesses to stay ahead of the pace of change, respondents expressed a desire for tech-savvy leadership.

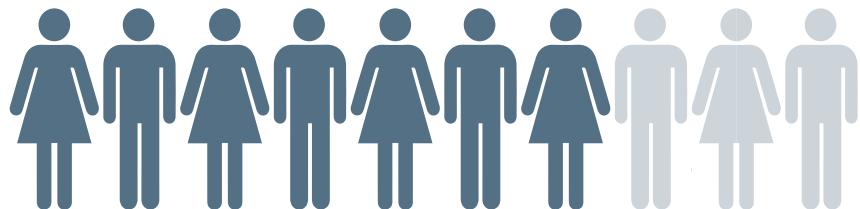
**Percentage of respondents that agree with the following statement:
“Our company would perform better if the C-Suite were more tech-savvy”**



Technical respondents clarified further, asserting that executive leadership could gain greater benefits and value from their network investments.

The C-Suite is out of touch with IT — and they don't see the network as key to their company's success.

7 out of 10 IT decision-makers agree that the C-Suite doesn't view the network as vital to company success



“ IT changes can impact the top and bottom line. Leveraging IT for new revenue opportunities and automating repeatable processes mean that businesses run more efficiently and move from cost-center to profit-maker. ”

— Jonathon Davidson, EVP & GM, Juniper Development and Innovation

Section 3

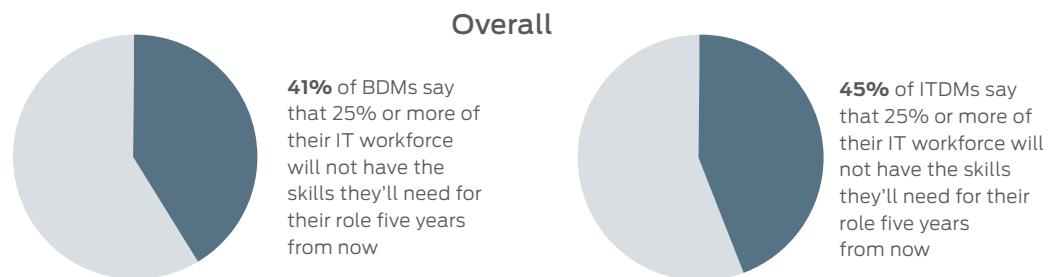
Why Should You
Care About The
C-Suite And IT Gap?
Because It's Causing
IT To Fall Behind.

Only thinking about IT for today will hamper tomorrow's success.

Innovation is a must for companies wanting to stay ahead in today's constantly disruptive landscape. But a lack of investment in IT, the group at the heart of making it all happen, is proving to be a barrier and preventing the business from keeping up with the pace of change to stay competitive. The research found that IT roadblocks are troublesome to the core of any business.

Obstacle 1: The Talent Gap

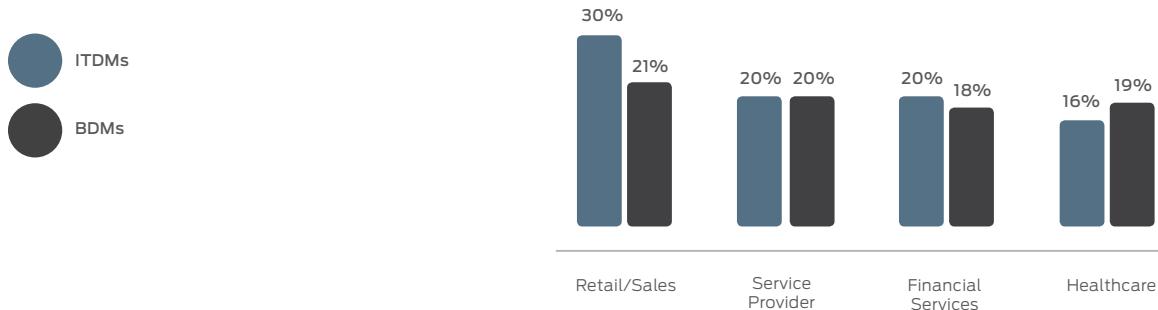
IT staff are challenged with keeping up with companies' growing needs. More than two in five ITDMs and BDMs think that 25% or more of their company's IT workforce will not have the skills they'll need for their role five years from now.



And from an industry view, the statistic is even more alarming, with some respondents expressing concern that over half their workforce won't have the required skills.

Industry by industry

Percentage of respondents that find it "somewhat" or "very" likely their company's IT infrastructure would be an obstacle to accelerating a new product or service



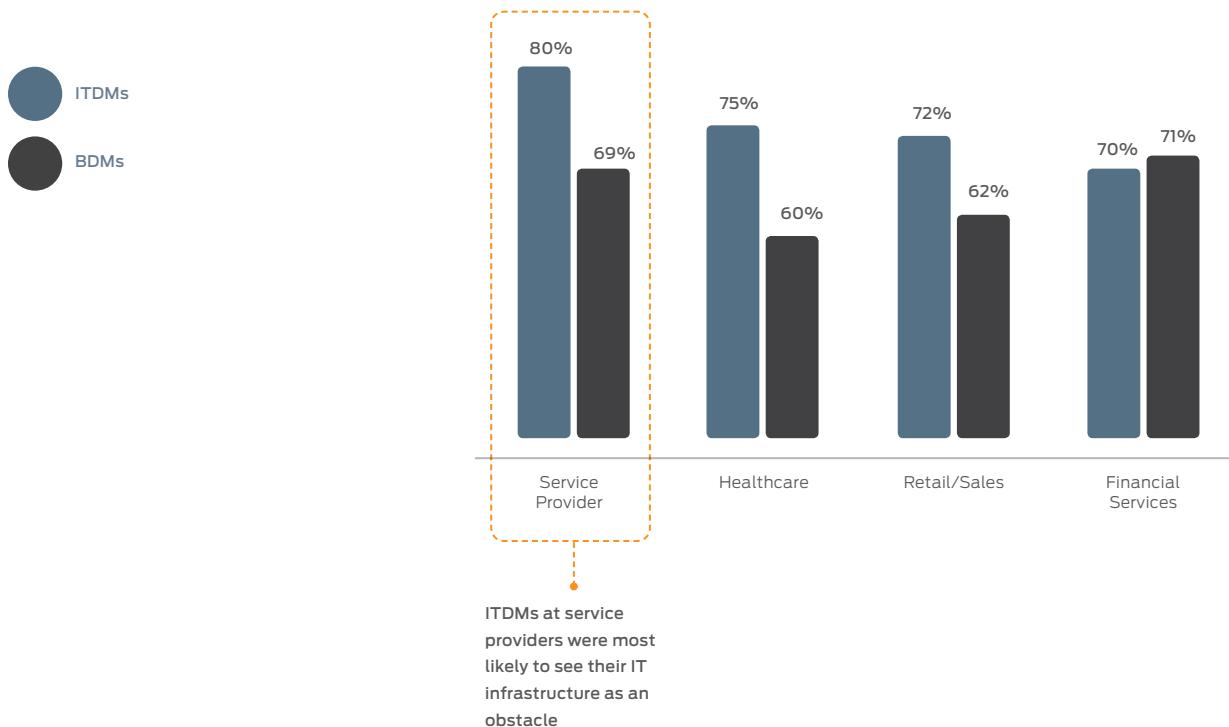
Obstacle 2: Outdated IT Infrastructure

Across all industries, IT infrastructure is holding companies back.

ITDMs and BDMs believe their company's current IT infrastructure presents an obstacle to introducing new products and services. From siloed databases to high-cost roll outs for service providers, legacy infrastructure can hurt and hinder business growth.

The vast majority of respondents say it's likely their IT infrastructure would be an obstacle to accelerating a new product or service.

Percentage of respondents that find it “somewhat” or “very likely” their company’s IT infrastructure would be an obstacle to accelerating a new product or service



And why isn't legacy technology upgraded with the needs of the business? A common challenge that most companies face: The cost of innovation.

Budget is the main obstacle to upgrading IT infrastructure.

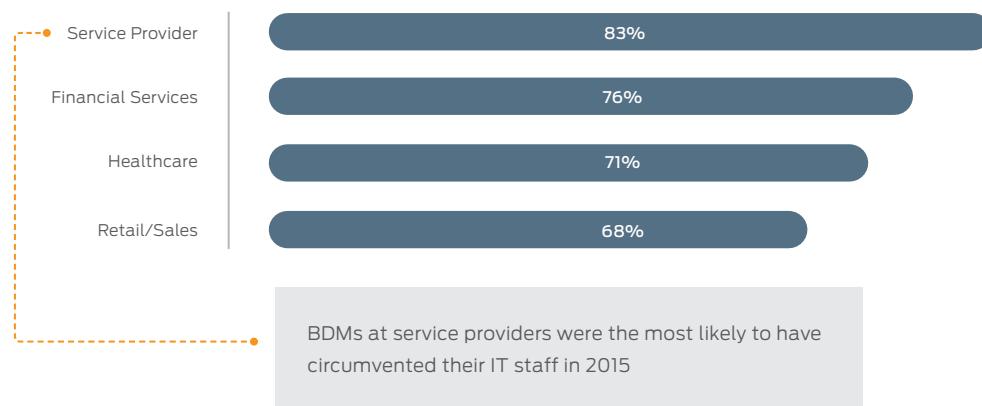
Both BDMs & ITDMs see budget as the primary obstacle to upgrading their company's IT infrastructure, preventing them from keeping up with change.



The top five reasons why technology updates don't happen.

Additionally, “shadow IT” is hindering advancement and innovation in its own way. Three in four business decision-makers say they circumvented their IT staff in 2015 because they couldn’t get the capabilities or responsiveness needed for a company initiative.

Percentage of business decision-makers that circumvented their company's IT staff in 2015



Average number of times that BDMs who have circumvented their IT staff did so in 2015, by industry:



“ Our 100% cloud strategy gives IT the infrastructure to bring ideas to life today and enable technology innovation and development for the future. Our tools and processes support Juniper Development and Innovation initiatives that challenge the status quo. ”

– Bob Worrall, CIO, Juniper Networks

Section 4

Making The Case For Automation.

A nighttime cityscape with a bridge and a highway. The highway below is filled with long, colorful light trails from moving vehicles, creating a sense of motion. In the background, city buildings are illuminated, and the sky is a deep blue and purple. The overall atmosphere is futuristic and dynamic.

Network automation offers real growth opportunities across businesses.

As much as the research shows a disconnect between the boardroom and the IT command center, it also presents an opportunity to bridge that divide with automation technologies to modernize the network, an enabler of business growth.

More than 90 percent of respondents at companies using software-defined networking (SDN) and network functions virtualization (NFV) solutions say it gives them a significant competitive advantage in the marketplace. Across enterprise and service provider businesses, the benefits of automation are already being realized.

To unlock exponential growth and business transformation, companies need to create a network that's responsive, agile, and easily managed – one that is automated to help companies adapt to shifting business needs.

Case Study: Joe Gibbs Racing

Downtime is unacceptable in a fast-paced environment like NASCAR that requires precision, resiliency and split-second reliable communications.

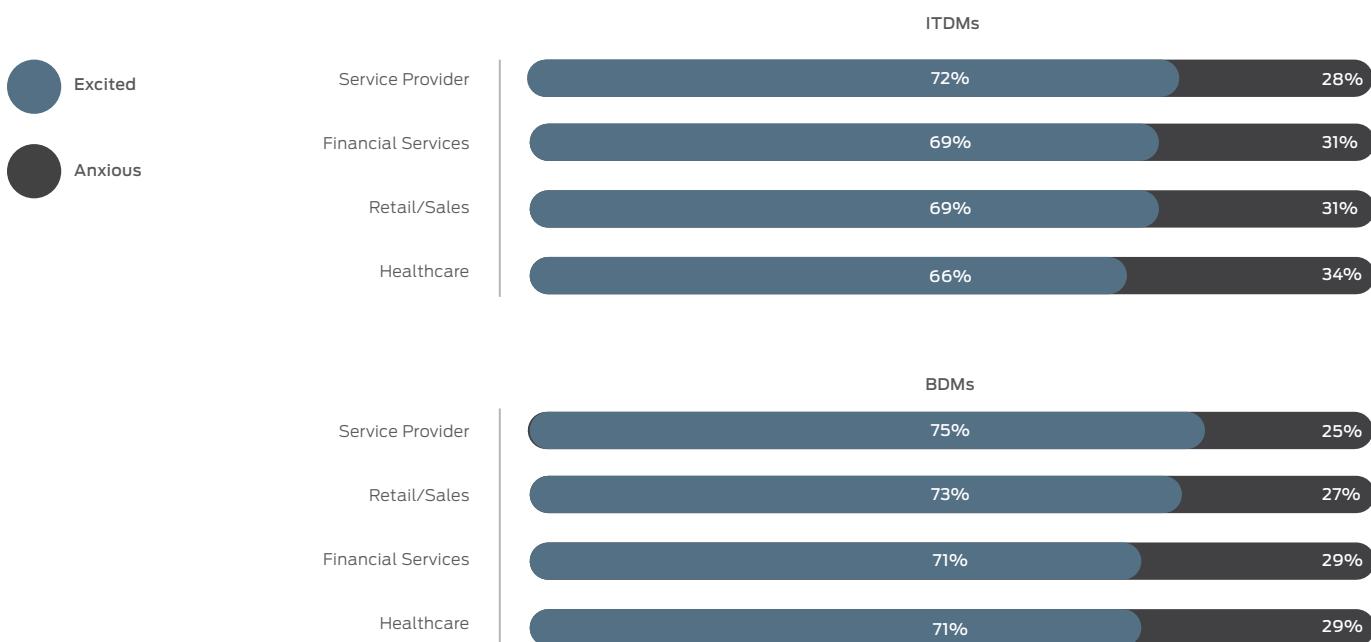
The entire implementation of Juniper's technology took the Joe Gibbs race team only 72 hours to replace the aging network infrastructure, from start to finish – not as fast as a NASCAR pit crew, but still a network with more visibility and speed.



Decision-makers are interested in what network automation can do for their business.

ITDMs and BDMs are excited by the opportunities that network and IT automation can create for their companies and see them as essential for their future competitiveness.

Percentage of respondents that are anxious or excited about network and IT automation

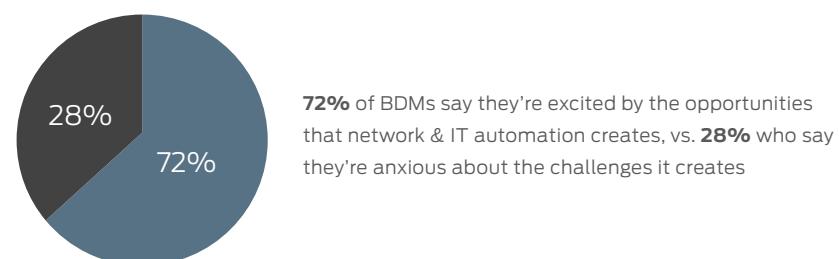
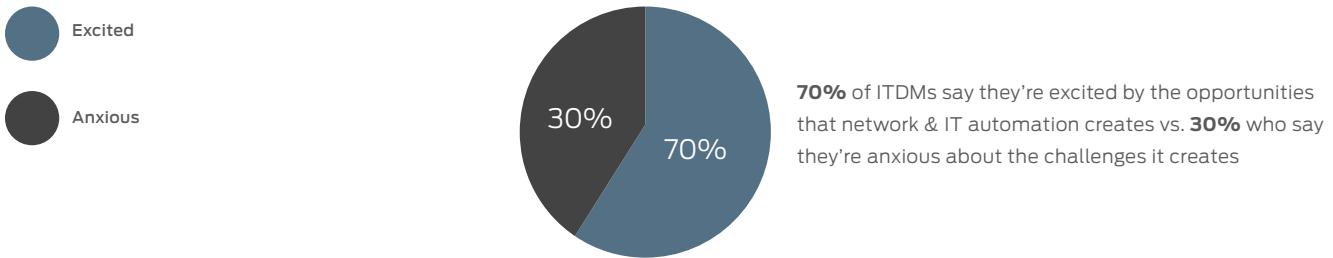


Overwhelmingly, across industries, IT decision-makers expressed the need for automation.

Percentage of respondents that agree or disagree with the following statement: “Network and IT automation are essential for my company to be competitive in the future”



Almost two-thirds of respondents expressed positivity towards deploying automation solutions in their businesses.



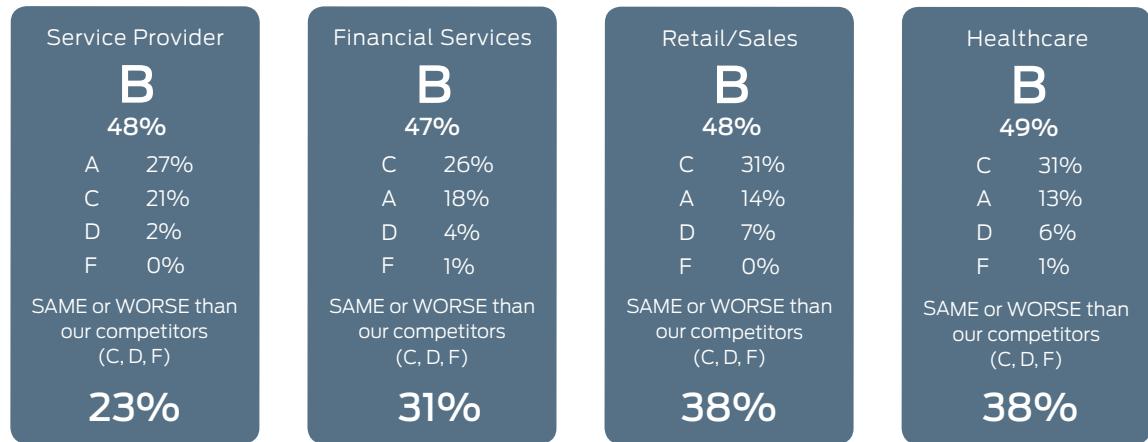
...But companies still have a long way to go on IT & network automation.

An industry by industry report card revealed how companies rank themselves on deploying network automation solutions.

ITDMs



BDMs



Across all industries, responses demonstrated opportunities to take advantage of IT and network automation technologies.

All figures are rounded.

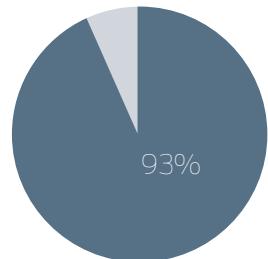
Section 5

Adoption Of SDN And NFV Brings Real Business Value.

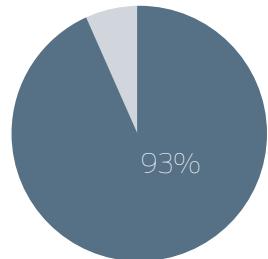
Network automation is here to stay.

Service providers are starting to see how NFV can lead to new business models deemed impossible just years ago. And enterprises are seeing how SDN is giving them the agility and speed they need to capitalize on ever-changing customer and employee demands. Today, the network is paramount in addressing the needs and opportunities for enterprises and service providers alike.

Network automation is related to a company's bottom line



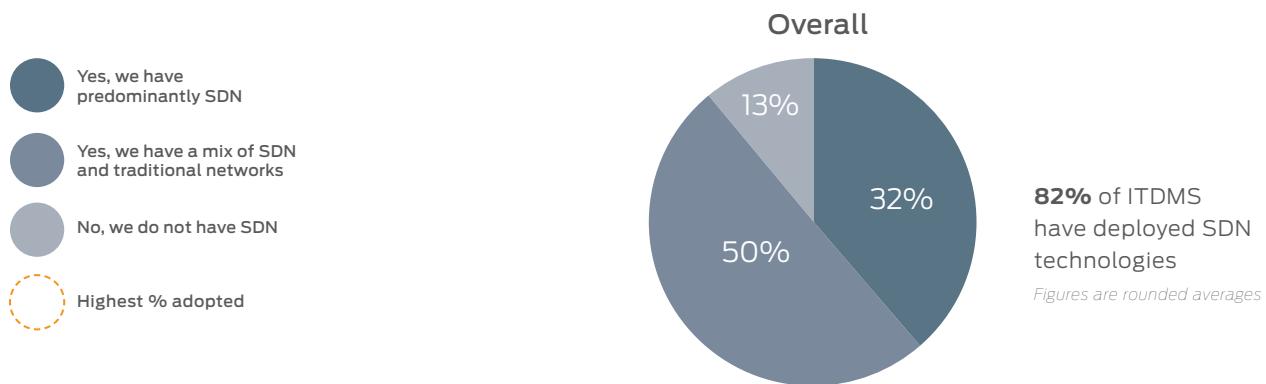
93% of ITDMs at companies **USING SDN** feel they have a significant competitive advantage in the marketplace



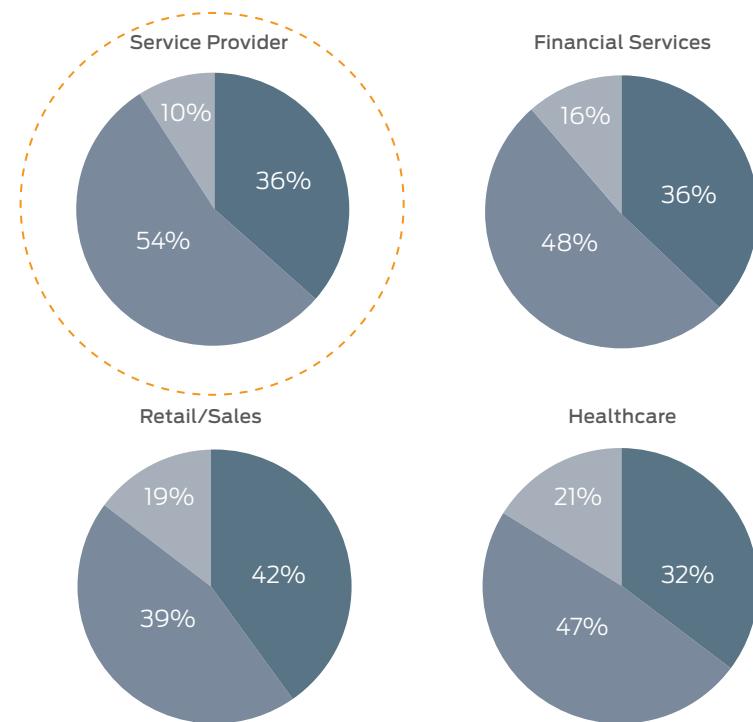
93% of ITDMs at companies **USING NFV** feel they have a significant competitive advantage in the marketplace

The current state of SDN adoption is mixed.

The majority of ITDMs say that their companies are deploying a mix of SDN and traditional networks.



Industry by industry



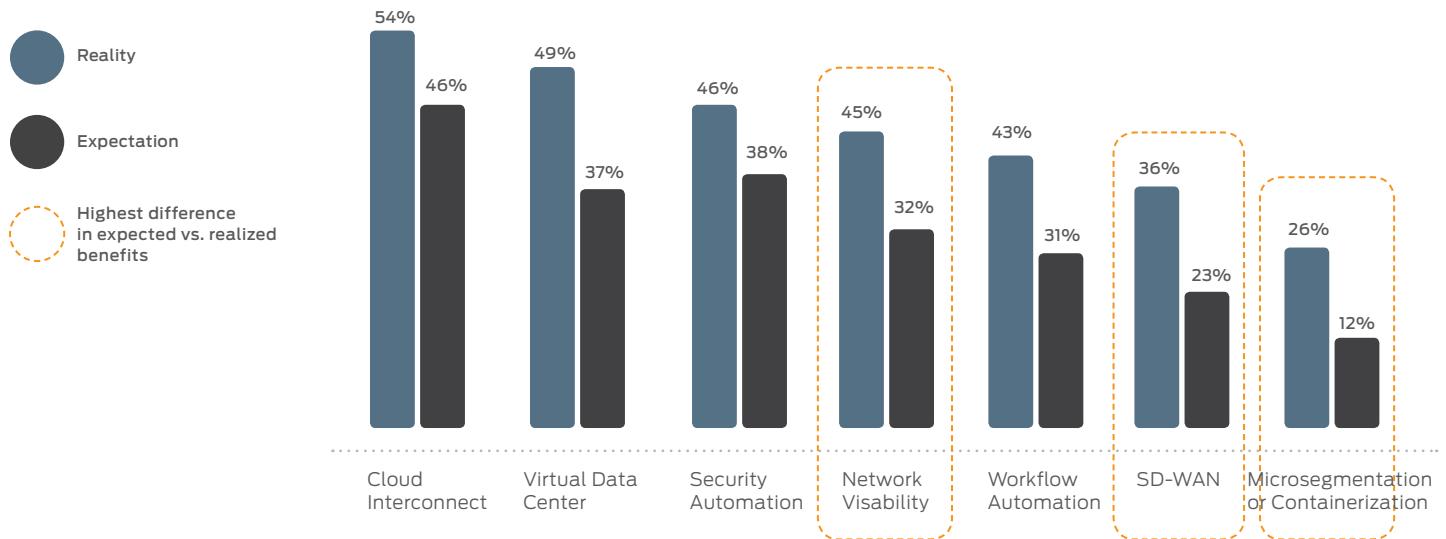
Across industries, service providers prove to have the greatest deployment.

And the great news is that automation solutions are proving they are worth the investment.

Companies are finding that the benefits of SDN adoption are greater than expected.

ITDMs at companies that have adopted SDN reported greater benefits and capabilities than they originally expected.

Expected vs. reported benefits of SDN adoption



ITDMs were most likely to report cloud interconnect, virtual data center and security automation as the business benefits of SDN adoption.

“ Software-defined networking is giving companies of all sizes equal benefits for business growth. Our customers realize the operational benefits of automation and they are reinvesting their resource savings into customer service and development for a fully enhanced customer experience. Adoption of SDN and NFV can bring real business value in savings and opportunity. **”**

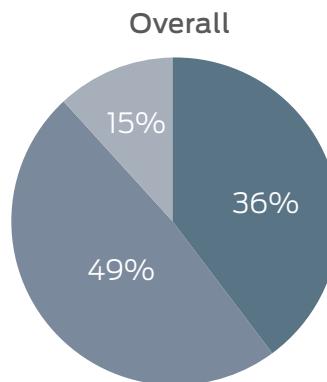
– Jennifer Blatnik, VP of Cloud, Security and Enterprise Marketing, Juniper Networks

The majority of ITDMs say that their companies are testing NFV for select use cases.

Across the board, the majority of companies are adopting NFV in some form.

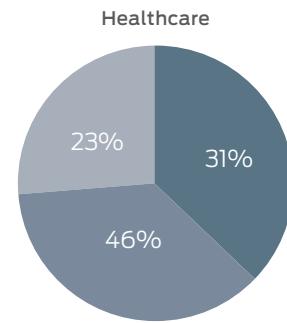
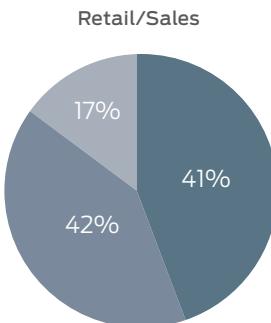
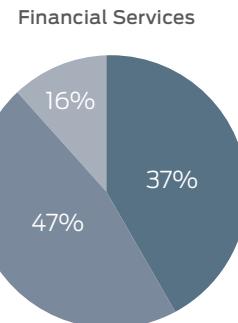
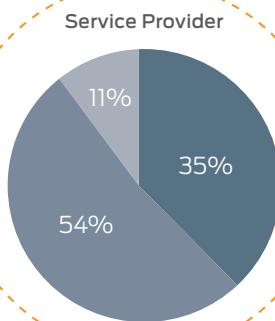
- Yes, we have predominantly NFV
- Yes, we have a mix of NFV and traditional networks
- No, we do not have NFV

 Highest % adopted



85% of respondents are using NFV

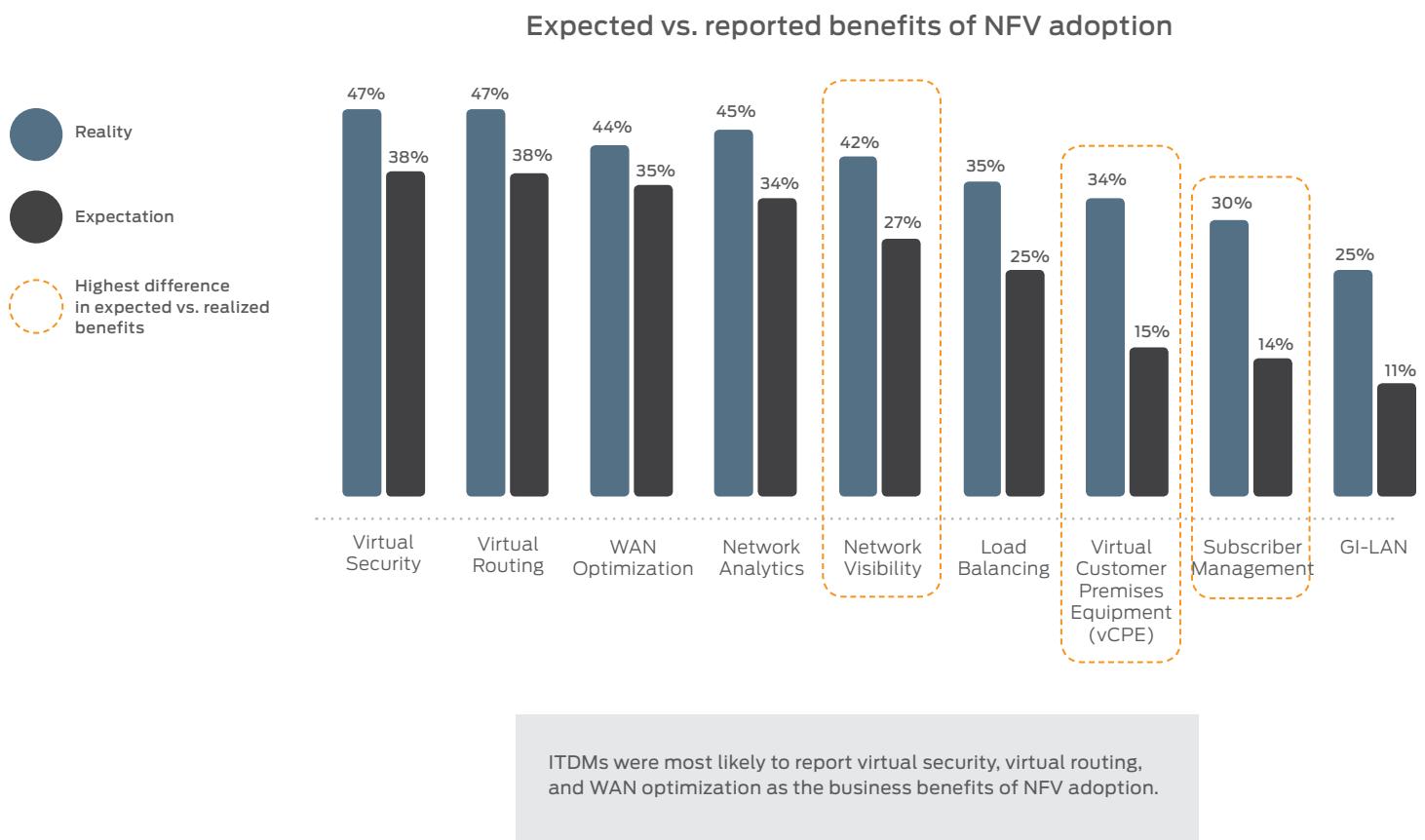
Industry by industry



Service providers are the leading industry to adopt and use NFV solutions.

Just like SDN, NFV adoption leads to far greater benefits than expected.

ITDMs at companies that have adopted NFV reported greater benefits and capabilities than they originally expected.



“ With NFV technologies we’re seeing our service provider customers create and deploy new services faster and more securely. NFV gives customers greater agility in delivering new services while aligning the economics for more profitable new service creation. ”

– Paul Obsitnik, vice president of Service Provider Portfolio Marketing at Juniper

Section 6

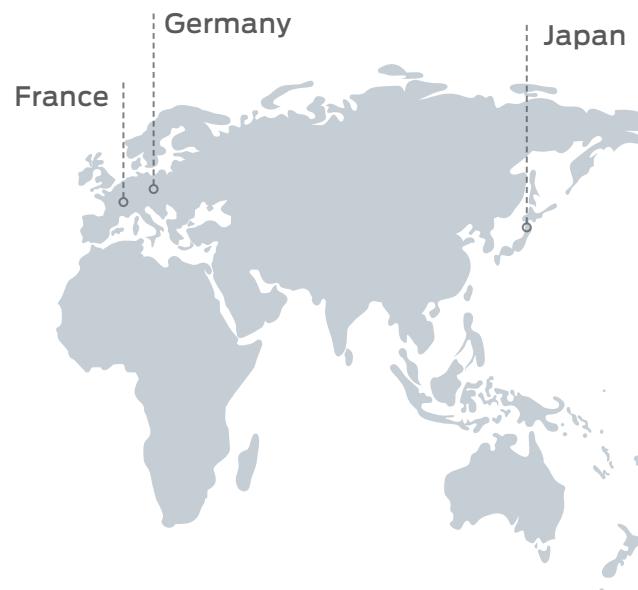
The Global Picture.



Global Results.

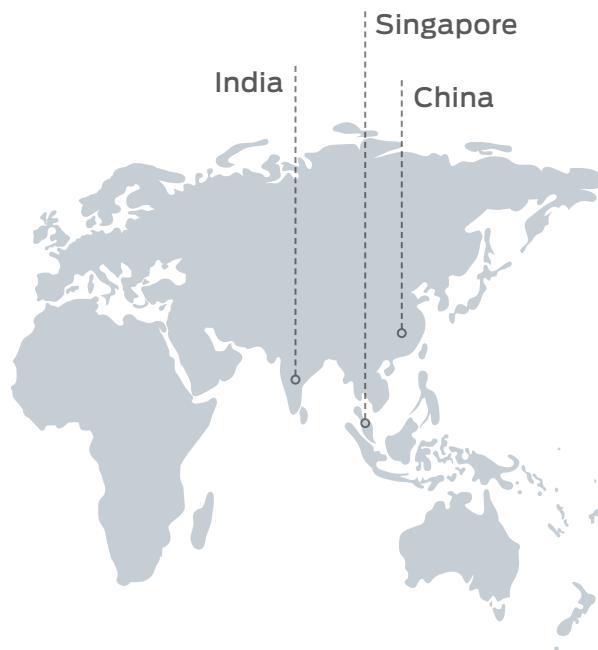
Top three countries:

Percentage of ITDM respondents that agree with the following statement: “Our company would perform better if our current C-Suite were more tech-savvy”

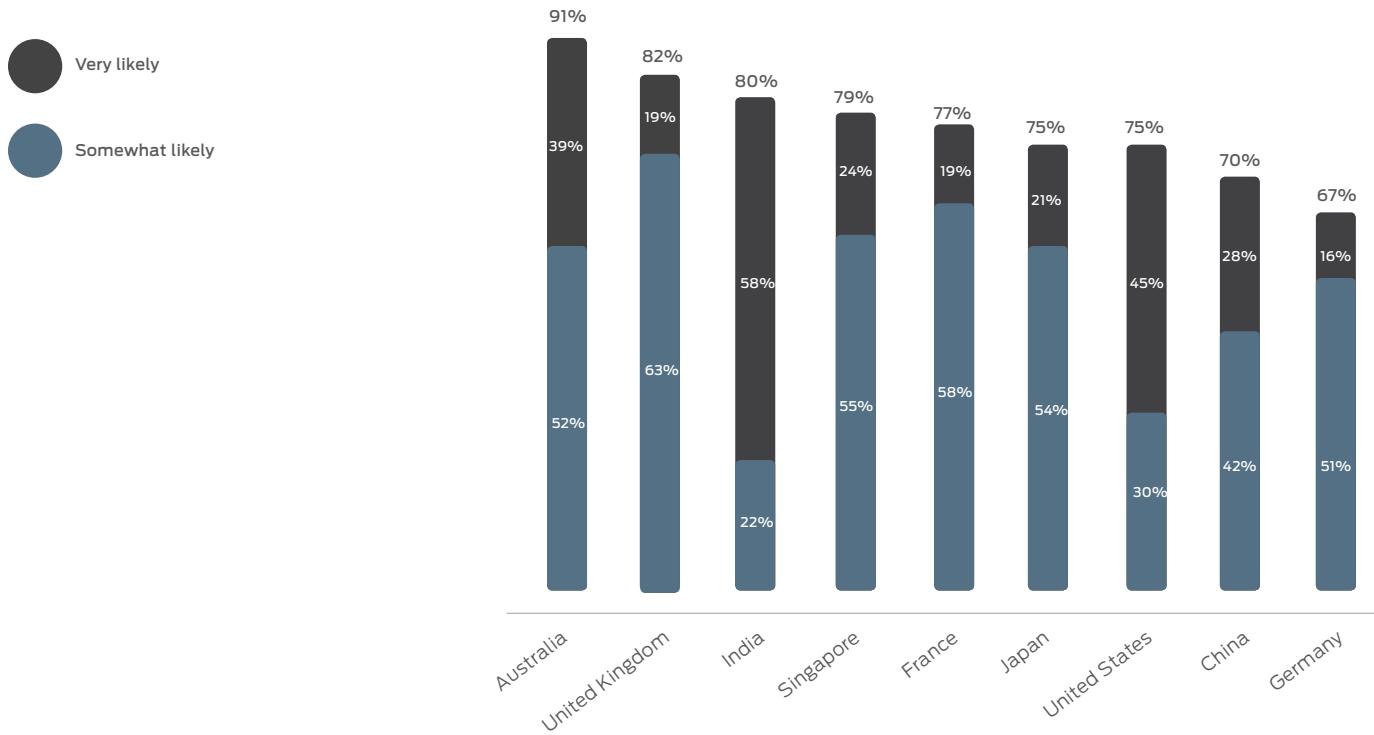


Top three countries:

Percentage of BDM respondents that agree with the following statement: “Our company would perform better if our current C-Suite were more tech-savvy”



Percentage of ITDM respondents that feel it's "very" or "somewhat" likely their company's IT infrastructure would be an obstacle to accelerating a new product or service

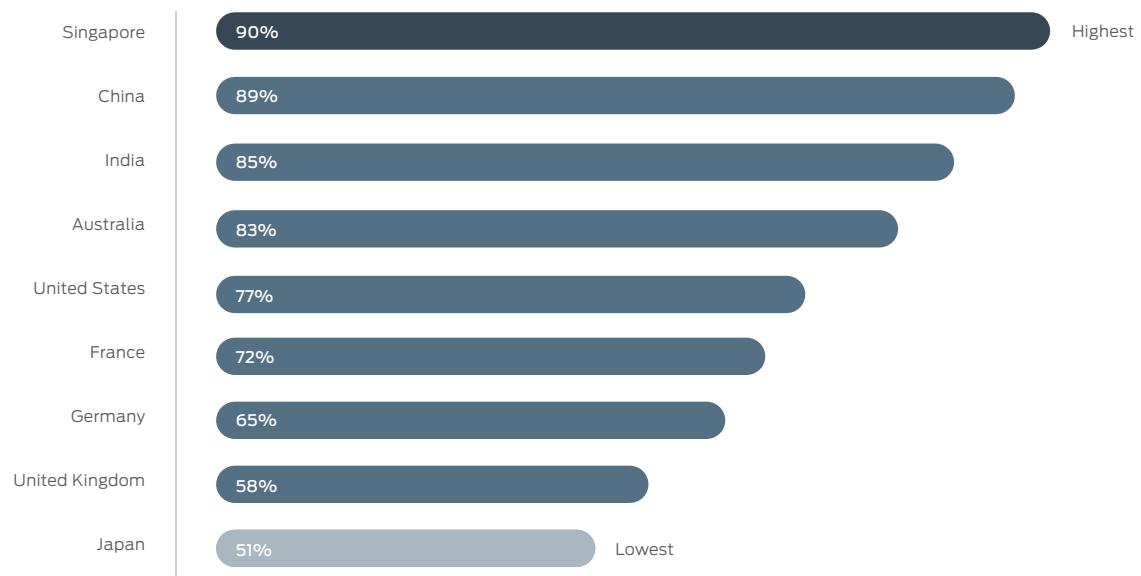


And around the world, respondents expressed the same sentiments as in North America: The current state of their IT infrastructure would not help them innovate.

Just like their North American counterparts, BDMs around the world are finding their own solutions.

“Shadow IT” is hindering advancement and innovation in its own way. Three in four business decision-makers say they circumvented their IT staff in 2015 because they couldn’t offer the capabilities or responsiveness needed for a company initiative.

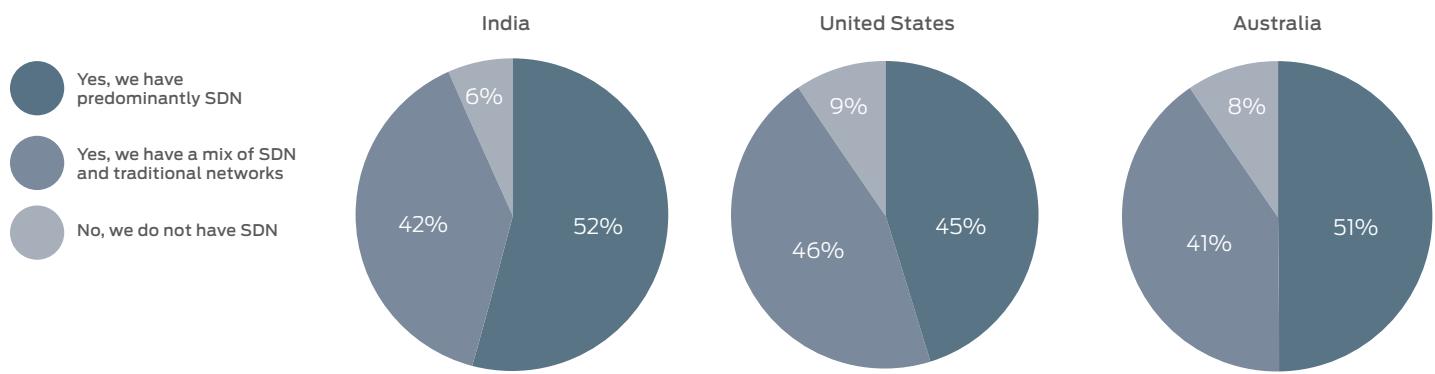
Percentage of business decision-makers that circumvented their company’s IT staff in 2015



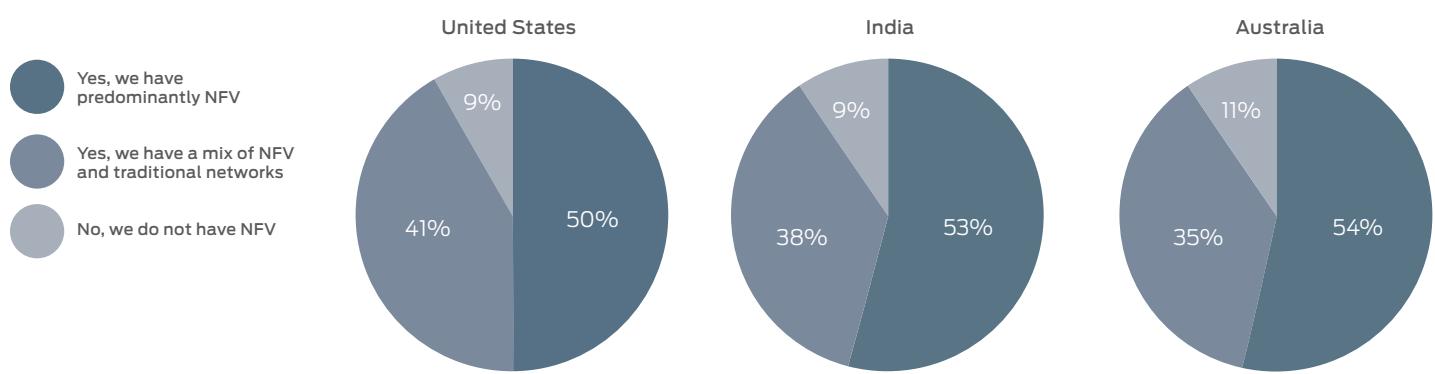
Across nations, there is evidence that BDMs circumvent their IT staff.
Could it be that there is misalignment between the BDMs and IT staff priorities?
Are IT staff overwhelmed with legacy infrastructure maintenance?

How are SDN and NFV adoption mapping across the globe?

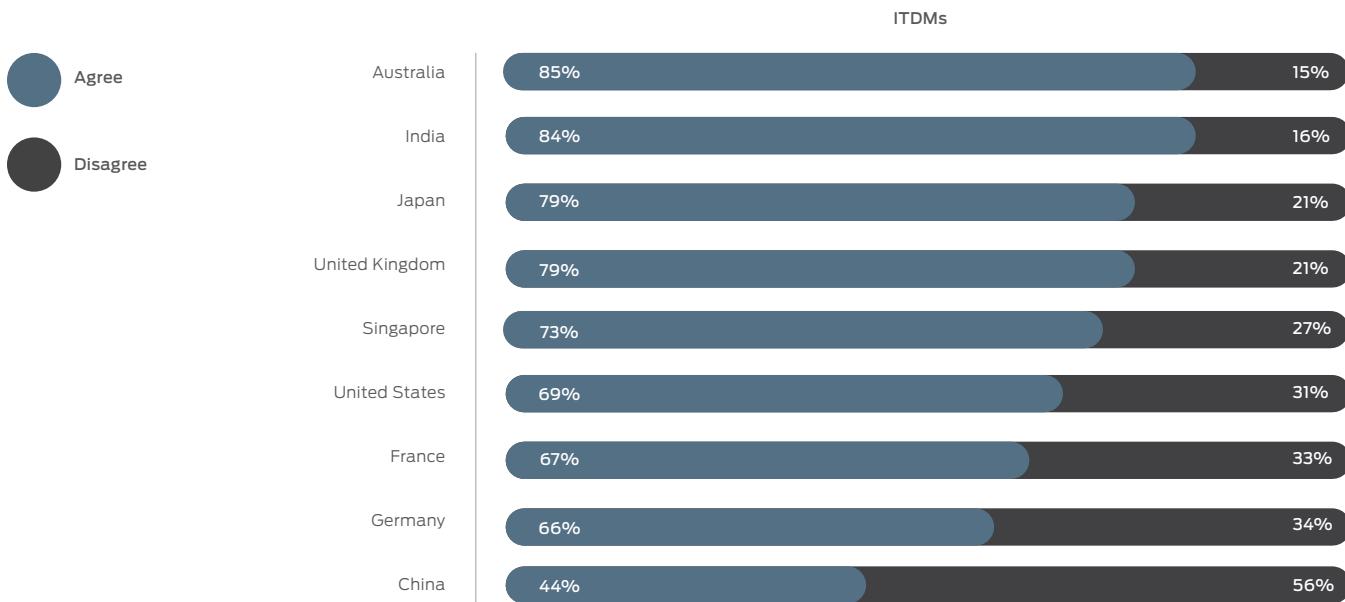
The three countries most likely to have deployed SDN



The three countries most likely to have deployed NFV



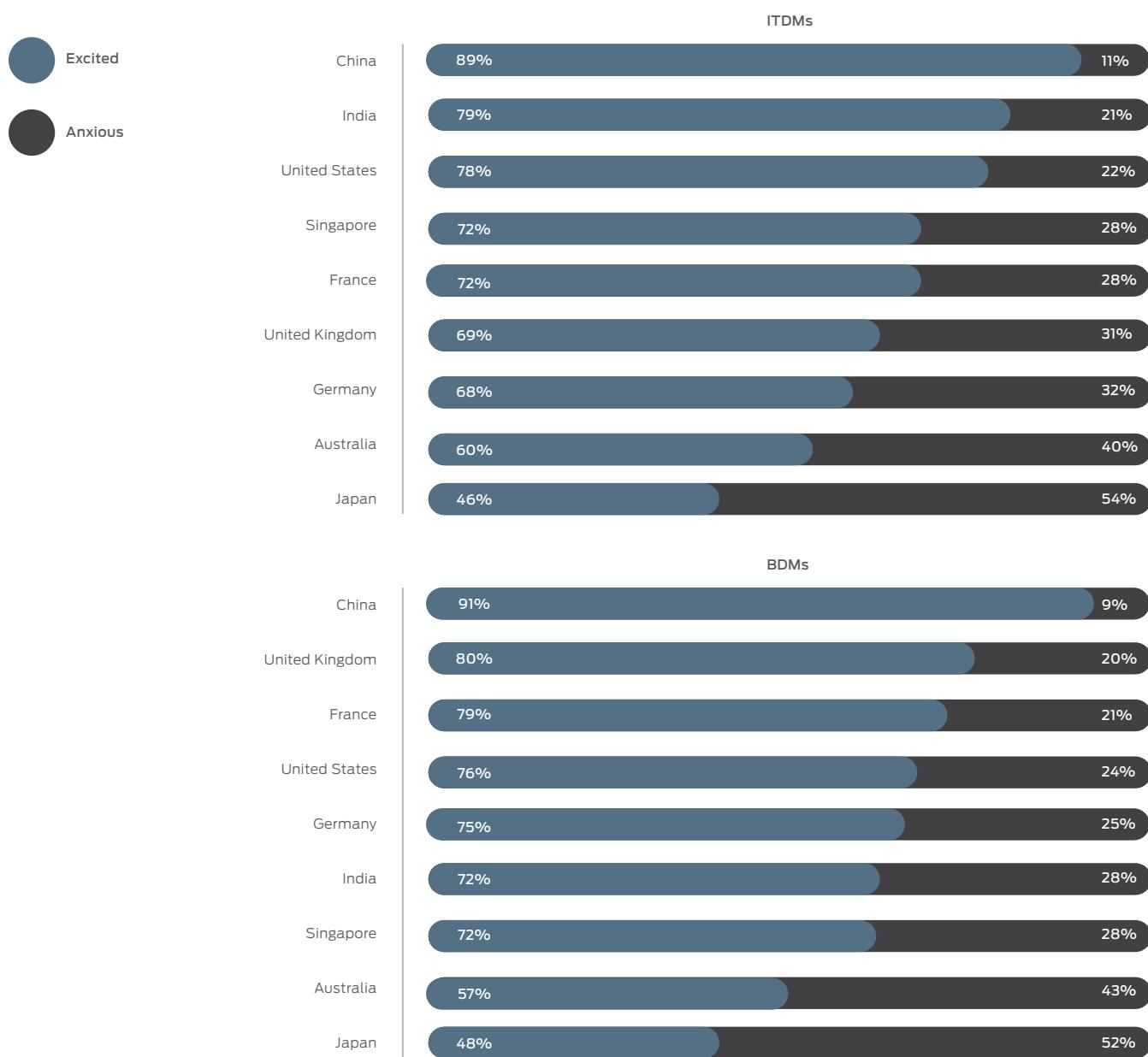
Percentage of respondents that agree or disagree with the following statement: In general, the C-Suite at my company does not view the network as vital to company success



Respondents in China are the most likely to think that their CEOs view the network as vital to the company's success.

Excitement for automation technologies is global.

Percentage of respondents that are anxious or excited about IT and network automation



China is the most excited about the opportunity that network automation creates.

Appendix



About Juniper Networks

Juniper Networks challenges the status quo with products, solutions and services that transform the economics of networking. Our team co-innovates with customers and partners to deliver automated, scalable and secure networks with agility, performance and value.

Visit www.juniper.net for more information.

About the Survey

This study was conducted with independent global research firm Wakefield Research. The data was based on an online study of 20 content questions, plus screeners and demographics of 2704 respondents, in 8 markets: US, China, Australia, Japan, India, UK, Germany, and France. All respondents were restricted to the following industries: service provider organizations, healthcare, retail, and financial services. In this case, the definition of service provider includes companies offering web content services, cable, internet service providers, or telecom.

The 2704 respondents were broken out as follows:

Country:

- United States: 301 (200 ITDM/101 BDM)
- United Kingdom: 301 (200 ITDM/101 BDM)
- France: 300 (200 ITDM/100 BDM)
- Germany: 300 (200 ITDM/100 BDM)
- India: 300 (200 ITDM/100 BDM)
- China: 302 (200 ITDM/102 BDM)
- Singapore: 300 (200 ITDM/100 BDM)
- Japan: 300 (200 ITDM/100 BDM)
- Australia: 300 (200 ITDM/100 BDM)

Vertical:

- Service Provider: 1243
- Healthcare: 299
- Retail: 502
- Financial Services: 660

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