Thriving in the 'Next Normal'

Digital transformation, post-pandemic business success and the importance of SD-WAN
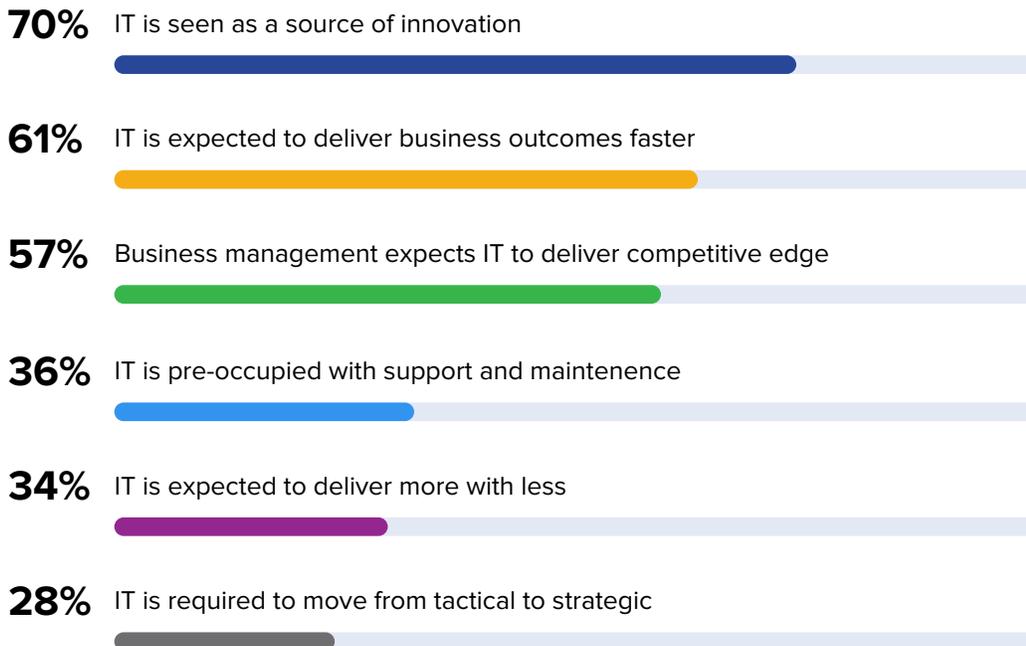
Connecting the Hybrid Business

Businesses have learned many lessons from the COVID-19 crisis. Chief among these is the realization that today, business operations start with, rely on, and are (in many cases) constrained by access to capable digital infrastructure. Thus, agility isn't simply an outcome of a management objective – it is a function of advanced digital capability and the foundation of growth and competitiveness in the 'next normal' economy.

Think about what your business needs from IT. A Techaisle survey found that SMBs of all sizes depend on IT to support innovation, deliver business outcomes faster, and create capabilities that provide a competitive edge. Add to this list the requirements that arose in response to the pandemic: the ability to enable operational resiliency by delivering needed tools and data to employees wherever they were based, to support processes that were in a near-continuous state of flux, and to connect with customers, suppliers, and the world at large. It's clear that 'hybrid' does not only describe a mix of IT systems or the networks that integrate people and resources into a single, dynamic environment – it is a term that describes any viable business in the 'next normal.'

What is the role of IT?

70% IT is seen as a source of innovation

61% IT is expected to deliver business outcomes faster

57% Business management expects IT to deliver competitive edge

36% IT is pre-occupied with support and maintenence

34% IT is expected to deliver more with less

28% IT is required to move from tactical to strategic

Digital Transformation: Where is your organization on the journey?

In the wake of the pandemic, the need for digital transformation is clear to every organization – but SMBs approach the journey from a wide range of starting points. Techaisle research shows that going into the pandemic, 22% of SMBs described their digital transformation status as holistic ("digitalization is an essential aspect of overall business strategy").

Today, most SMB IT and business leaders view 'holistic' as a vital end state. Those SMBs who started with siloed approaches to digital transformation have been steadily losing competitive ground. SMBs that were proactive about digital transformation before the pandemic report high-growth rates than those with no or simplistic digital transformation strategies: **67% of high-growth small businesses (and 80% of high-growth midsized firms) have holistic approaches to digital transformation.** In the 'next normal,' the SMBs who are proactive in building digital transformation into their business infrastructure will be those that survive and thrive.

IT's vision: Connected systems, connected capabilities

Post-pandemic, IT attention is increasingly focused on connected capabilities. Techaisle's visionary model, the Interwork platform, identifies seven key areas: edge, applications, collaboration, insights, workspace, security, and cloud — that deliver on the SMB's critical digital transformation objectives.

Three core requirements will strike IT leaders reviewing the model.

1. **Need for data integration:**
    Without consistent data that moves seamlessly across the network, the entire construct fails.
2. **Hybrid:**
    The emphasis on edge and cloud references the need to deliver platform and application interoperability spanning multiple environments.
3. **The most fundamental requirement is the network:**
    There are no 'connected' capabilities without connectivity!

Job 1 | Simplify management

All discussions of user experience and integration – of data, or processes, or users, hardware and software systems, and the networks that link them – start with an examination of manageability. Techaisle research shows that SMB IT professionals who are trying to deliver advanced services get stymied by three persistent challenges:

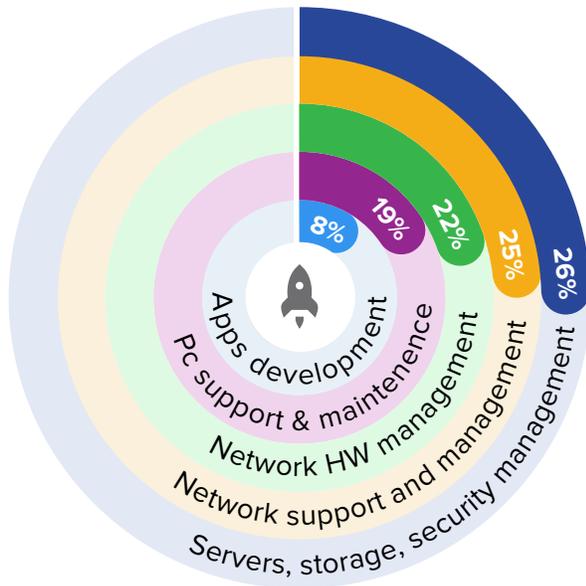|		
60%	**55%**	**46%**
Lack of control and visibility into IT infrastructure	Challenges in keeping up with business requirements	Lack of time/ overburdened IT staff

Together, these issues underscore the need to define a digital business platform that can evolve with new opportunities and demands while delivering a meaningful level of management control. In addition, of course, SMBs will want to adopt new platform and application technologies to demonstrate the ability to reduce cost, improve performance or extend reach into areas that provide a competitive advantage. But new options can't come at the expense of rendering the IT environment as a whole impossible to manage or maintain.

As the two pie charts below show, this **manageability imperative is critical in networking.** The chart on the left states that networking-related issues use **47% of SMB IT time.** The chart on the right illustrates why the network is a high priority: **nearly 90% of SMBs** believe that proactive, consistent network management aimed at delivering ideal performance is either **"important"** or **"very important."**
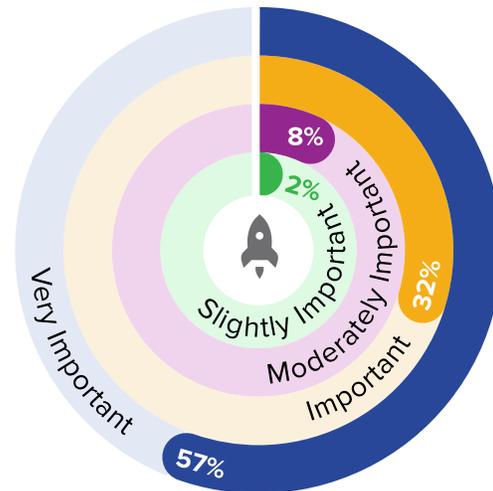
Three views of network manageability

Percent of IT staff time spent on tasks

- 8% Apps development
- 19% Pc support & maintenance
- 22% Network HW management
- 25% Network support and management
- 26% Servers, storage, security management

How important is it to proactively and consistently manage networks to ensure ideal performance?

- 2% Slightly Important
- 8% Moderately Important
- 32% Important
- 57% Very Important

Which of the following frustrations does the IT department experience regularly?

60% Lack of visibility into IT infrastructure

55% Challenges in keeping up with business requirements

46% Lack of time / overburdened IT staff

34% Lack of skills in identifying source of problems, potential solutions & repair

27% Provide limited or no proactive support

25% Unaccepted response and resolution time

21% Not enough IT budget

19% Employees not following IT policies creating unplanned support workloads

14% Unable to contribute to business success

Taming the network

Networks are a clear pain point for SMBs as they embark on digital transformation to align with the emerging requirements of the post-pandemic world: networks consume scarce IT resources. Yet, they are the critical link providing the connectivity that unlocks all other digital opportunities and potential.

What do SMBs need to consider as they define the network foundation for the hybrid future?

A recent research initiative engaging thought leaders from many different organizations found that requirements fall into one or more of three categories: IT management and technology (including the terms in red in the word cloud), technical capabilities (green), and business needs (blue).

This research found that security (a technical capability) and SD-WAN (software-defined wide-area networks, a technology/IT management item) as the most critical issues in establishing a network foundation that will support the hybrid requirements arising from digital transformation initiatives.

The emphasis on SD-WAN, though, can catch some less technical decision-makers by surprise. **Is SD-WAN attracting widespread attention in the SMB market? And if so, what compelling benefits are driving this interest?**
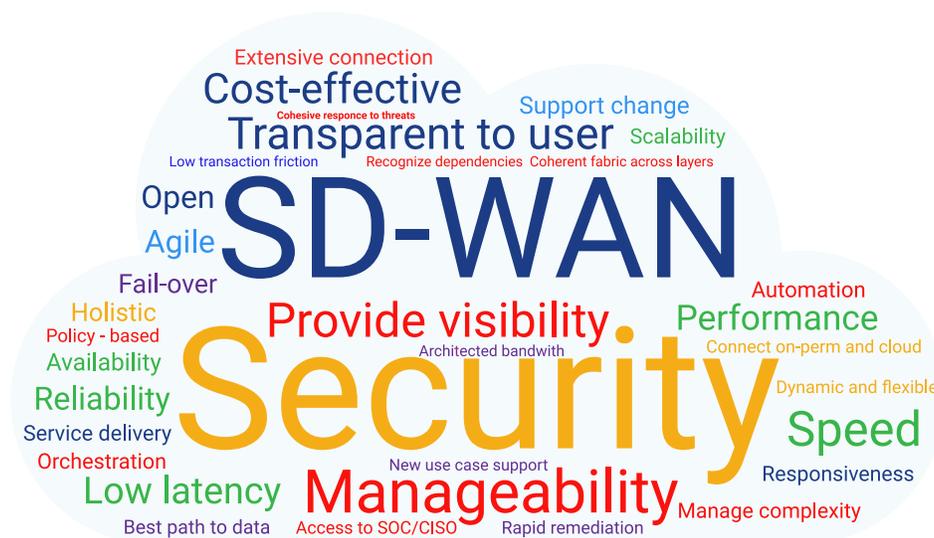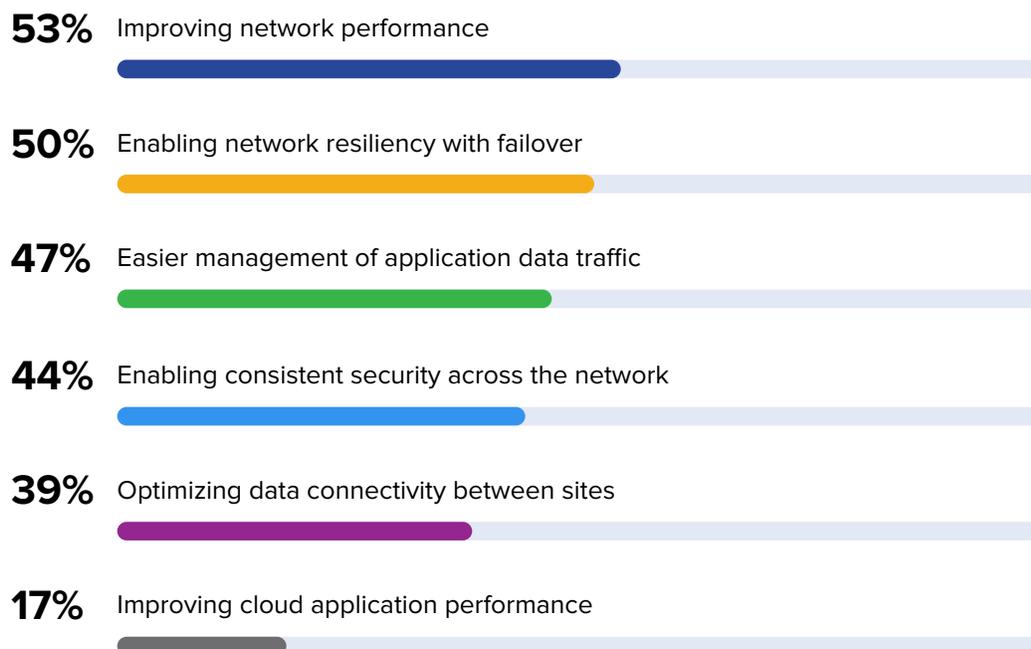
SD-WAN: Awareness and adoption

Awareness of SD-WAN – a software layer that enables organizations to manage various networks and network devices as components of an integrated environment – has been growing steadily since the term's first introduction in 2014. SD-WAN deployments are becoming common in large enterprises and are gaining momentum within midsized (100-500 employees) businesses. Techaisle survey research found that two-thirds of midmarket firms were aware of SD-WAN. Under one-quarter of midmarket firms have adopted SD-WAN, and an additional 32% were planning to deploy SD-WAN within a year – meaning that, within the next 1-2 years, 56% of midsized businesses in the US will have deployed SD-WAN.

> ## Within two years, 56% of midsized businesses in the US will have deployed SD-WAN

Critical motivations for SD-WAN adoption

A review of the reasons given by midsized firms for evaluating SD-WAN illustrates why the technology is rapidly gaining traction among companies looking to build digital business foundations. Moreover, the top motivators for SD-WAN adoption align directly with critical aspects of the core requirements of a connected digital business discussed earlier.

Which of the following are the top 3 motivations for considering an SD-WAN deployment?

53% Improving network performance

50% Enabling network resiliency with failover

47% Easier management of application data traffic

44% Enabling consistent security across the network

39% Optimizing data connectivity between sites

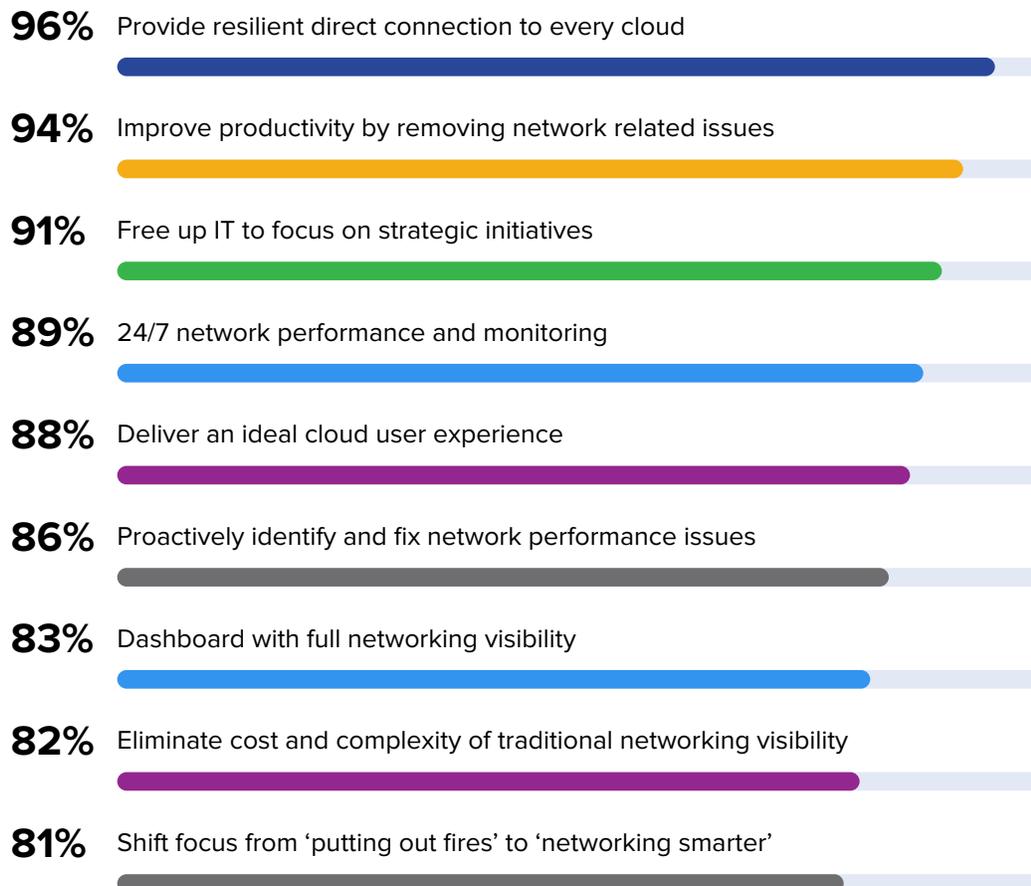**17%** Improving cloud application performance

Compelling benefits drive SD-WAN adoption

A digital business strategy extends well beyond a single technology, but market focus on SD-WAN reflects the need to base network strategy on a robust, flexible foundation. Additional Techaisle survey research with midmarket businesses found that **more than 80% believe that SD-WAN can effectively address nine key digital transformation issues.**

> **Within two years, 56% of midsized businesses in the US will have deployed SD-WAN. Here is why: the ability to position the network as a business asset, the potential for cost savings, the opportunity to enable innovation, better support for business-critical cloud connections**

In your experience, do you think an SD-WAN solution can address these issues?

96% Provide resilient direct connection to every cloud

94% Improve productivity by removing network related issues

91% Free up IT to focus on strategic initiatives

89% 24/7 network performance and monitoring

88% Deliver an ideal cloud user experience

86% Proactively identify and fix network performance issues

83% Dashboard with full networking visibility

82% Eliminate cost and complexity of traditional networking visibility

**81%** Shift focus from 'putting out fires' to 'networking smarter'

Percentages = Yes

1. **Resilient, direct connections across different cloud environments:** are significant as SMBs integrate multiple SaaS applications within business processes and, ultimately, into their corporate environments.

2. **Improving productivity by removing network-related issues:** a concern/benefit that applies both to IT and business users relying on the network to access needed resources.

3. **Free up IT to focus on strategic initiatives:** most SMBs have limited IT resources, enabling key staff to work on user priorities rather than troubleshooting accelerates needed digital business initiatives.

4. **24/7 network performance and monitoring:** this, too, is both an IT and a business issue: IT because network support consumes such a large portion of available time, and business because in the digital economy, the network is the 'front door' to the business as a whole.

5. **Proactively identify and fix network performance issues:** the expanding web of interconnections between business locations, customers, suppliers, and mobile staff exponentially increases possible causes of performance problems or outright failures and simultaneously increases the difficulty of identifying and resolving these problems. SD-WAN provides both visibility and automated tools that scale with the network and deliver the capabilities needed for rapid resolution.

6. **Dashboard with complete networking visibility:** as the network becomes a core business attribute, clear visibility into its status becomes a core business requirement. Therefore, dashboards should support diagnostic drill-down while delivering a big picture view of the business network.

7. **Eliminate the cost and complexity of traditional networking solutions:** SD-WAN allows SMBs to use standard hardware and public internet connections in place of high-priced, complex proprietary networking gear tied to a raft of specialized networking protocols.

8. **Shift focus from 'putting out fires' to 'networking smarter':** similar to the point on freeing up IT resources; this statement addresses the opportunity to improve overall digital performance by taking a strategic approach to network enhancement, rather than being consumed by a succession of network trouble tickets.

9. **Deliver ideal cloud user experience:** ultimately, digital transformation leads to the cloud – meaning that employee productivity and customer satisfaction will depend, in large part, on the ability of a business to deliver a superior cloud experience.

SD-WAN: Cornerstone of digital transformation

Earlier in this paper, we noted that SMBs that have established advanced approaches to digital transformation are achieving higher growth and profitability than those still in the early stages of the digital transformation journey. Research also reveals that SMBs that are using SD-WAN are more advanced in their digital transformation status than those who are still relying on older-generation networking technologies. SMBs that are holistic or inclusive in their approach to digital transformation are 232% more likely to be using or actively planning to use SD-WAN than less advanced peers.

Current and planned SD-WAN use by digital transformation status

- Currently using
- Planning to use
- Not using, not planning to use
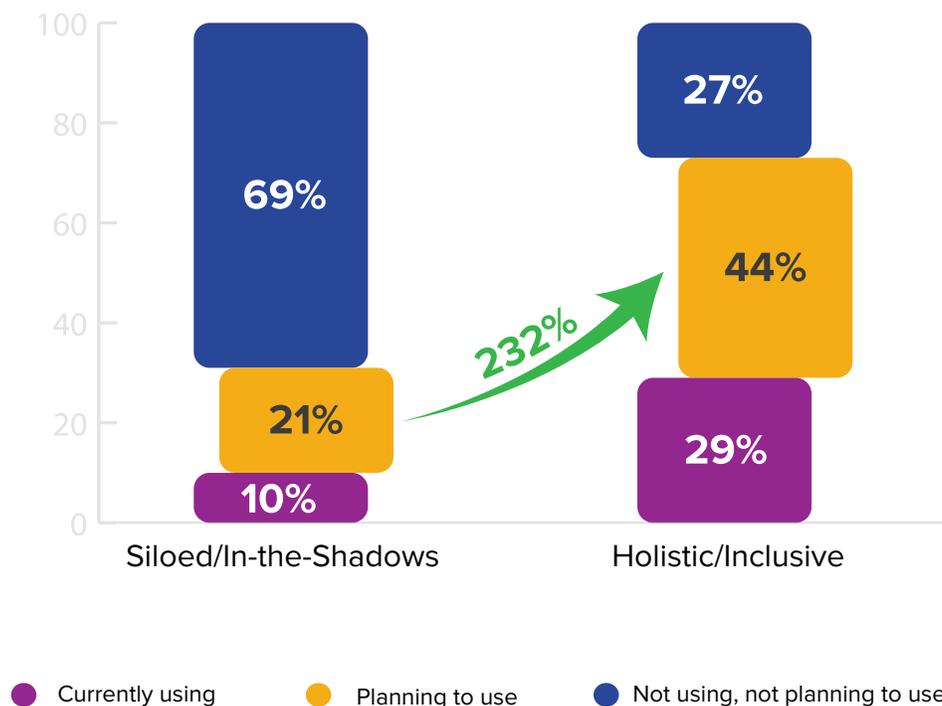
All aboard? Which SMBs are/should be deploying SD-WAN

SD-WAN has developed an enormous presence within enterprise-grade operations. SMBs, though, often need to be more selective with new technologies. Unlike large corporations, which can test new technologies in a department or even a 'sandbox,' SMBs often have to commit the entire organization to a new solution. **SMBs, therefore, become cautious concerning significant changes in their environment – and it begs the question, should my SMB invest in SD-WAN?**

At a macro level, the answer hinges on the breadth of the IT environment that the SMB needs to manage. A simple connection between two different systems or end-points does not require advanced management solutions offering superior visibility. SMBs can join three systems or environments through manual maintenance of three connections. On the other hand, five solutions or platforms could require as many as ten discrete connections, which may be demanding from a network

2	3	4	5	6	7	8
1	3	6	10	15	21	28
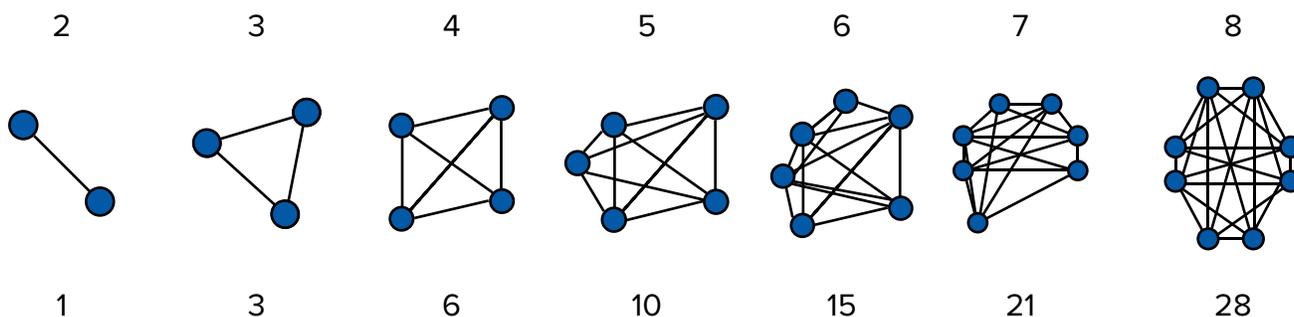
management perspective – especially if some of those systems are in the cloud, where frequent (and often unannounced) changes and upgrades are a regular occurrence. At some point, the number of connections needed to integrate systems (and data that needs to be available to other systems and which is secure and auditable) will outstrip available network management resources. **Automation will move from being 'nice to have' to 'required by our business.'** To understand the current state of SMB connections, Techaisle organized systems into three broad categories:

1. **Core (resident within the data room/data center)**
2. **Edge (resident on distributed devices, notably PCs and smartphones)**
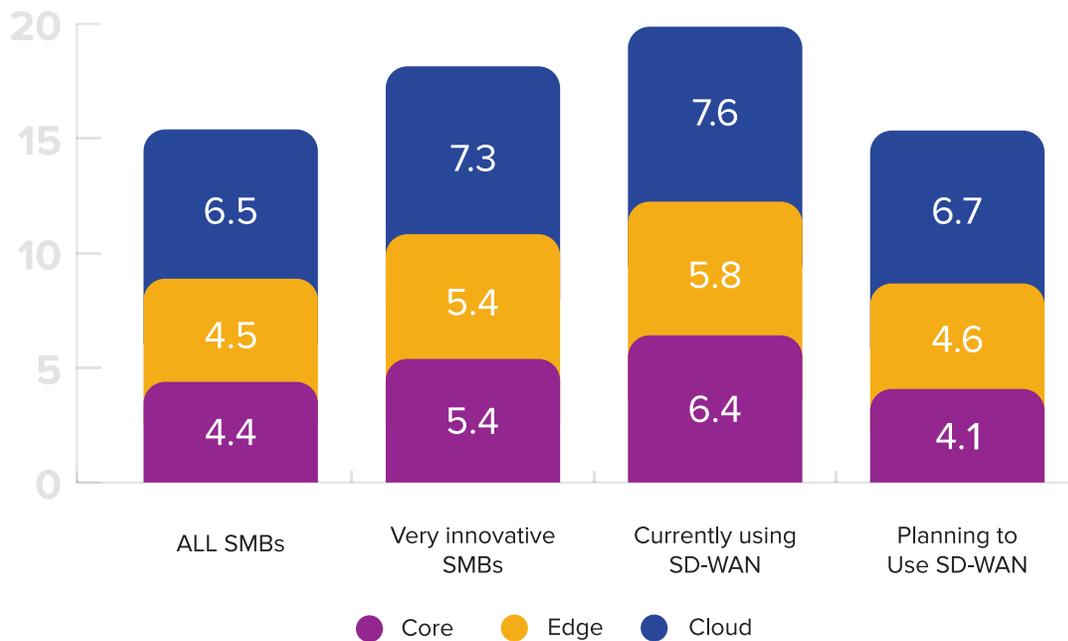3. **Cloud-based systems**

In each area, Techaisle identified nine discrete

categories of solutions. Next, Techaisle mined its extensive survey data to determine how many of these categories are in use across the SMB community and identify key drivers that lead to increased adoption of diverse systems.

As the chart illustrates, on average, SMBs are using 4.4 core solutions, 4.5 edge applications, and 6.5 cloud solutions – a total of 15.4 discrete systems distributed across three platforms. In addition, these SMBs identified an average of eight other systems that they are planning to integrate into their environments.

When looking at variances by SMB characteristics, innovation jumps out as a critical driver of network/IT complexity. For example, SMBs categorized as "very innovative" have an average of 18.2 core, edge, and cloud systems in use today. This figure is 36% higher than the 13.4 total solutions currently used by 'somewhat innovative'/'not innovative' peers.

Discrete system types used by SMBs

		Core	Edge	Cloud

ALL SMBs: Core 4.4, Edge 4.5, Cloud 6.5
Very innovative SMBs: Core 5.4, Edge 5.4, Cloud 7.3
Currently using SD-WAN: Core 6.4, Edge 5.8, Cloud 7.6
Planning to Use SD-WAN: Core 4.1, Edge 4.6, Cloud 6.7

SD-WAN is a critical enabler of this diverse system environment. SMBs currently using SD-WAN have deployed solutions in 19.8 of the 27 total categories tracked in the research. SMBs who are planning to use SD-WAN have 22% fewer systems in use today (15.4). These firms are planning significant expansion – to a total of nearly 24 of the 27 system categories tracked in this research – resulting in increased complexity that is very likely driving the need for the manageability and visibility supported by SD-WAN.

The need for tools that enable better network management is more a function of time than any other factor. So, to answer the question in the section header: at present, innovative SMBs need SD-WAN the most, and SMBs using SD-WAN can support richer, more diverse IT environments supporting staff, customers, and other stakeholders. Through time, though, all IT environments will become more diverse. **At some point, every SMB will need to convert network management from a high-cost, high-exposure task to an attribute of advanced business practice.**

Connecting hybrid SMBs with post-pandemic success

Business imperatives for the 'next normal' are still under construction, but some clear signposts are on the road to success. First, there is no line between 'being digital' and connecting workers and customers and suppliers and the world at large; 'digital business' is business. Second, digital transformation isn't optional for SMB viability. SMBs that were advanced in their digital strategies were already growing faster and delivering better profitability than their competitors before the pandemic. There's no evidence that this trend will reverse. Agile, flexible digital business systems will provide the foundation for growth, competitiveness, and profitability in the future; these platforms will rely on networks to span the connected business capabilities. And SD-WAN will be a crucial component of the network, digital, and business success.

The future may be uncertain, but some clear lines connect today's capabilities with tomorrow's success. Digital transformation is at the core of agility and viability, and SD-WAN is at the core of the networks that enable digital transformation. **Infrastructure built on SD-WAN alone won't lead your organization to success, but it will create a reliable foundation that will make the road less bumpy and allow you to stay focused on your goals and initiatives.**

> **Within two years, 56% of midsized businesses in the US will have deployed SD-WAN. Will yours be one of them?**

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