# Top five IT networking trends

For small businesses

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### Introduction

Small businesses are the backbone of every country's workforce and arguably the hardest working. They create the most jobs and deliver growth – usually without the tools, resources, and support that larger enterprises take for granted – particularly in their use of technology.

### **NEW IT NETWORKING INNOVATIONS CAN REDRESS THE BALANCE**

Now small businesses can compete with the big guys on equal terms, and even outpace them. With new IT networking innovations, small businesses can solve everyday issues and also deliver on their strategic ambitions.

### THE 21ST-CENTURY BUSINESS ENVIRONMENT IS DIFFERENT

Today's small businesses are not like their predecessors. That is because technology is so deeply woven into their business environment:

### Employees

A multigenerational workforce is increasingly staffed with people born digital.

### Customers

Real-time expectations exist for product and service availability, delivery, and supplier responsiveness.

### Competitors

Multifaceted competition operates across physical and virtual channels.









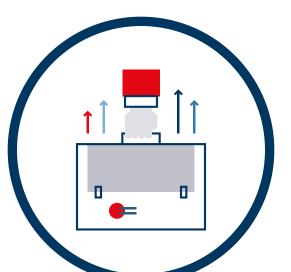
### **FIVE CORE CHALLENGES**

Small business leaders say core challenges exist in five key areas, and IT networking can help with each of them:



### **Fitness**

Streamline processes to grow productivity and manage costs



### **Business perception**

Make the business more visible and differentiated in the competitive market



### Workspace

Offer an inspiring workspace where employees can excel and remain loyal



### Security

Ensure employee and customer communications are compliant to compete effectively



### Innovation

Leverage innovation to foster exciting new ways to create value

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# The small business workforce is diverse, but all can benefit from IT networking innovations



### The consultant

Advising remote clients with cloud collaboration

### The manufacturer

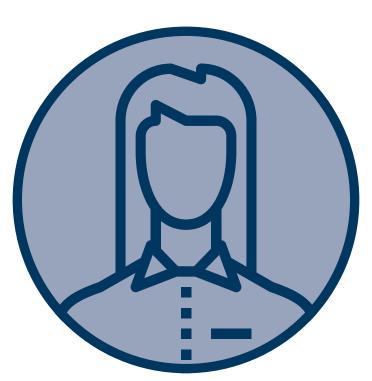
Going global with e-commerce





### The app developer

Born digital and entirely cloud dependent



**The retailer** Tracking and analyzing clients' in-store purchases

### The housebuilder

Using augmented reality for faster design sign-off





### The restaurant

Taking more orders online than via walk-ins







# #1 Fitness: Get fitter, faster, smarter



### **Cyber Security is the number** one tech challenge

IT innovations keep small businesses safe and healthy

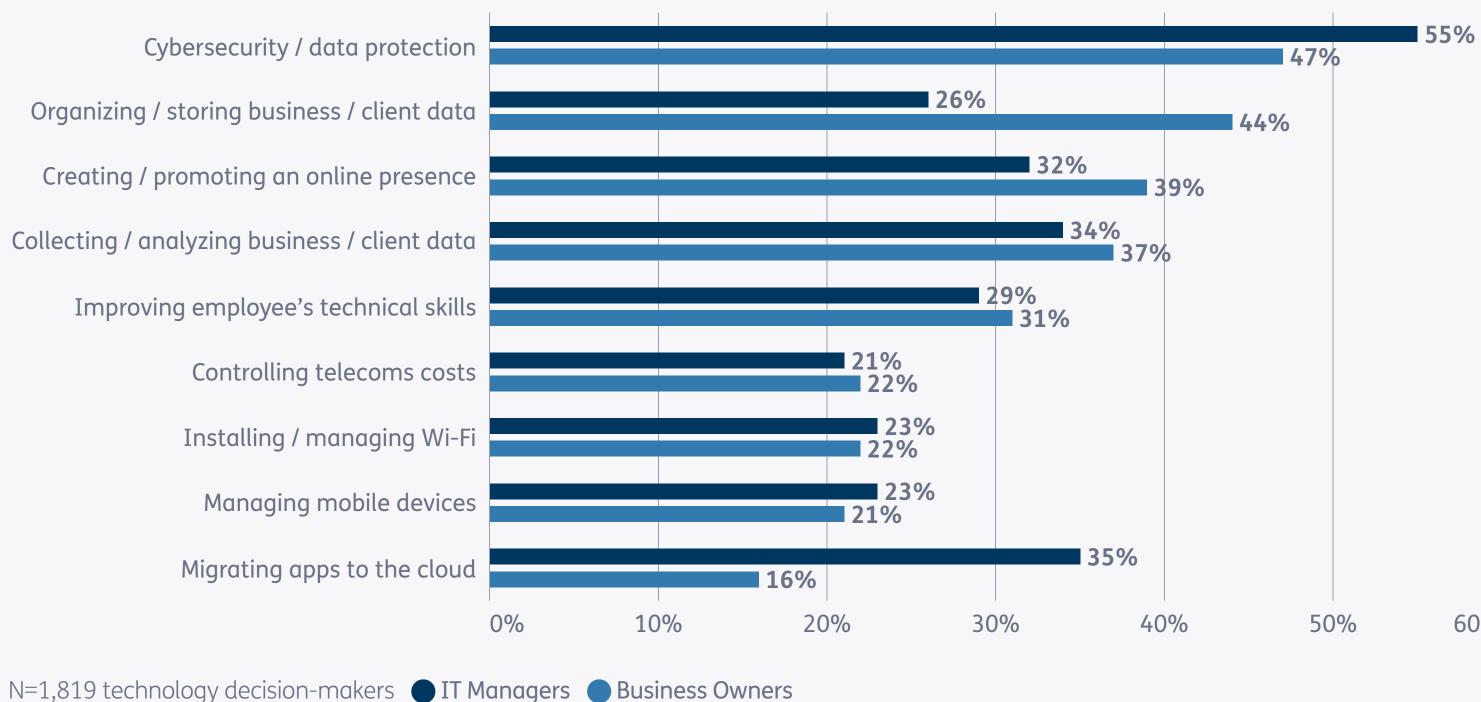
#### **SMALL BUSINESS:** TOP TECH CHALLENGES

Organizing / storing business / client data

Creating / promoting an online presence

Collecting / analyzing business / client data

**SOURCE:** OVUM

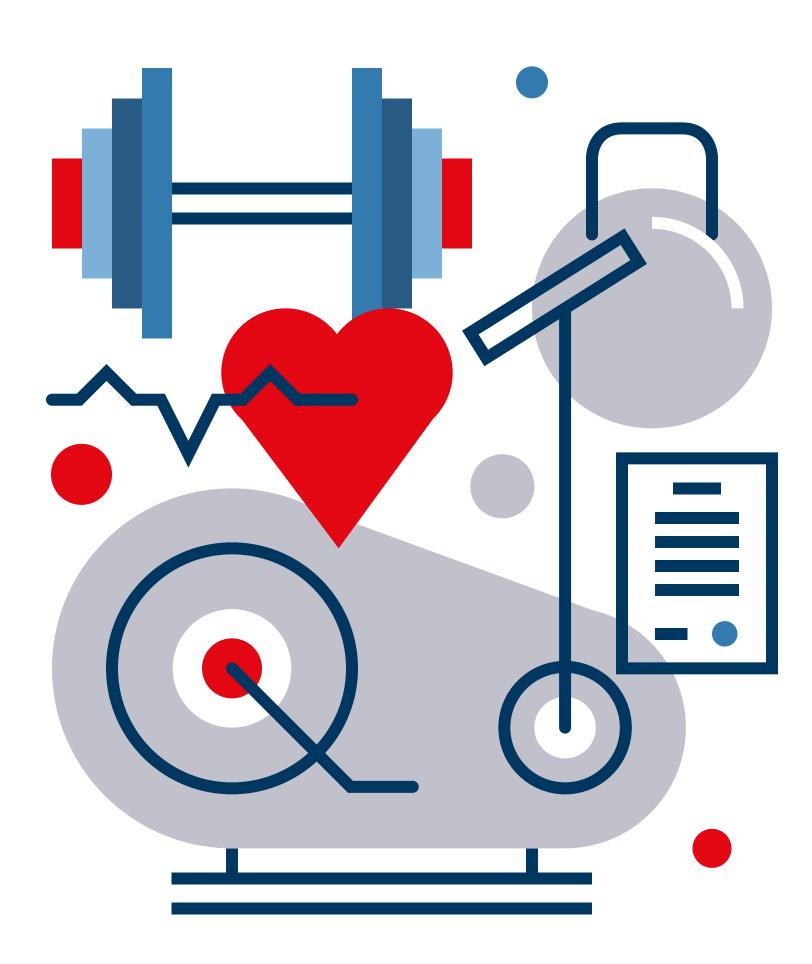








## #1 Fitness: Get fitter, faster, smarter



### THE CHALLENGE

- and do so immediately.

• Gain accurate insight. Besides cybersecurity, business owners and IT managers can agree on one thing: staying on top of operational data is a challenge. Collecting and analyzing data about customers and business health is essential but difficult. Even routine checking to ensure new equipment meets the latest standards can be a big challenge for a small IT team.

• **Become real time and data driven.** Small businesses want better notice about business health and how to maintain and optimize it – and not after a problem emerges. No wonder business intelligence and analytics have become the number one app investment that small businesses are considering. Intent-based networking can now take this even further with deeper visibility, enhanced management capabilities and machine learning.

• **Deliver intelligence on demand.** Small businesses need to digitize assets, enable data collection, and make intelligence accessible on demand. This requires an underlying IT network infrastructure that can cope with and adapt to increasing performance pressures







## #1 Fitness: Get fitter, faster, smarter



### **HOW IT NETWORKING CAN HELP**

- can stop.

• Automate complexity. Network applications can collect data in the background and even perform basic analysis. Manual data collection and running the business from spreadsheets

• Make decisions in real time. Small businesses can collect live data for immediate decisionmaking and improved customer experience with tools that draw insights from diverse data sources such as internet traffic data, customer marketing details, and supplier communications.

• **Become predictive.** From cyberthreats to emerging customer trends, IT networking tools can orchestrate deep insights to drive preventive and proactive actions.

• Scale at will. Small businesses can adapt to peaks of demand with an infrastructure that is secure, easy to manage and designed to scale so it can be fit for purpose for the long term. Consider this when investing in a new Wireless (Wi-Fi) solution. Make scalability, manageability and On-premises vs. Cloud part of the consideration process.





# #2 Business perception: Make a bigger splash



### of small businesses are marketing via digital channels

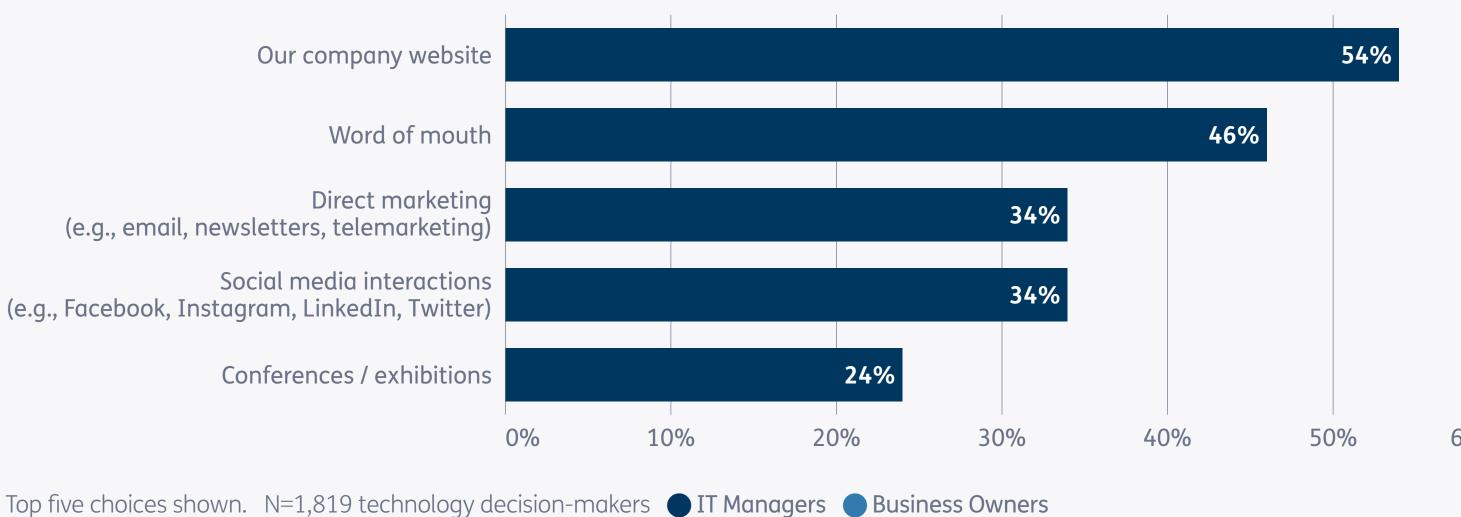
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(e.g., Facebook, Instagram, LinkedIn, Twitter)

Innovations in IT help small businesses get noticed, seen, and heard

**SOURCE:** OVUM

#### **SMALL BUSINESS:** HOW DO YOU PROMOTE YOUR BUSINESS?



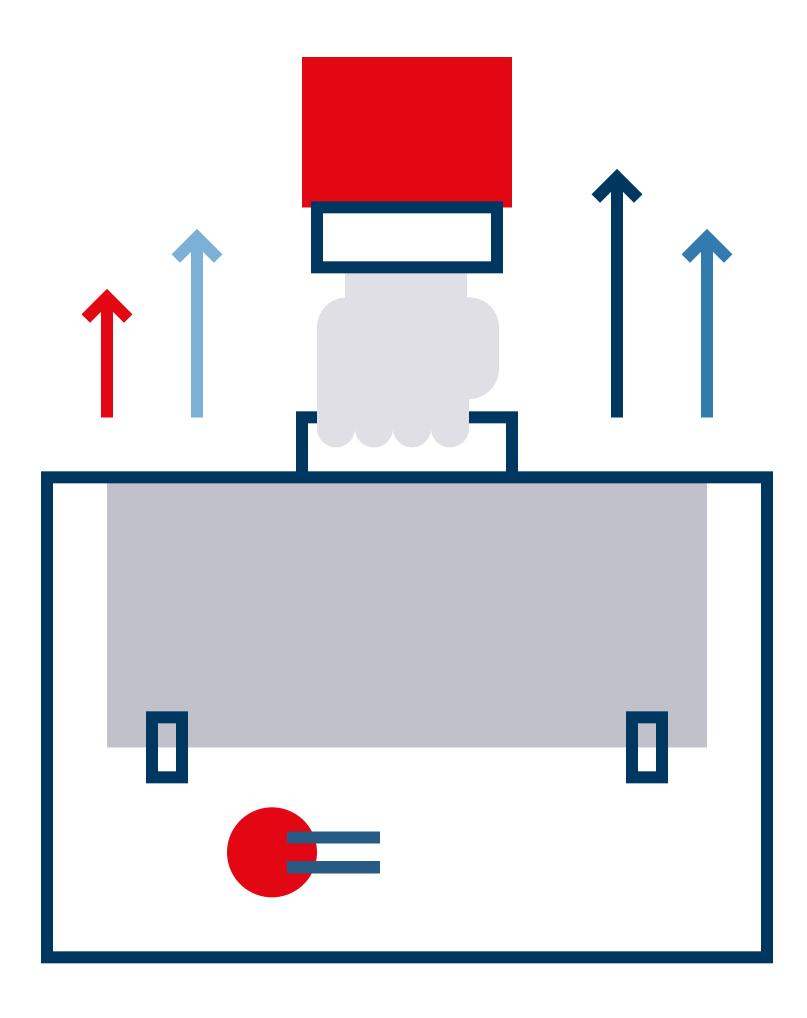








# #2 Business perception: Make a bigger splash



### THE CHALLENGE

- Get the brand noticed, seen, and heard. Being seen is a fundamental requirement for any business. But today's competitive digital environment is noisy and crowded.
- Create a monetizable digital brand. Seven out of 10 small businesses make some money via a digital channel, but only one in 10 generates even a quarter of their revenue online.
- Build a functioning digital storefront. Sales and marketing is the number one process that small businesses want to improve. But many admit that their digital storefront is poor.
- Let customers lead the conversation. Small businesses want to be more customer centric. They want to allow customers to interact with the business freely using whatever channel or location they choose and at the time of their choosing







# #2 Business perception: Make a bigger splash



### **HOW IT NETWORKING CAN HELP**

- customers and prospects.

• **Protect and improve reputation.** With control over connectivity, applications performance, and real-time data accuracy, small businesses are better prepared to drive online sales. Like their larger peers, small businesses must provide responsive and secure digital experiences to

• Monetize the website. Integrate the website with company Wi-Fi, and small businesses can gain powerful social features. These include guest and campaign analytics and integration with email and social media. New ways to engage include surveys, contests, and vouchers.

• Prime the sales funnel. With the latest data collection tools, marketing-savvy small businesses can craft targeted campaigns that drive both walk-in and online prospects through the sales funnel. Automated funnel building and email communications can swiftly build brand power.

• Secure loyalty. Small businesses can keep interacting with customers whether in store, online, or on the move. IT networking can help deliver effective, seamless experiences that customers will remember for the right reasons.

















# #3 Workspace: Inspire and create loyalty

### of all jobs involve collaboration

Innovations in IT help small business employees collaborate anytime, anywhere

#### **SMALL BUSINESS:** INNOVATION IN IT

68% of all workers routinely harvest information

4 out of 10 professionals work outside an office

A quarter of workers are outdoors once a week

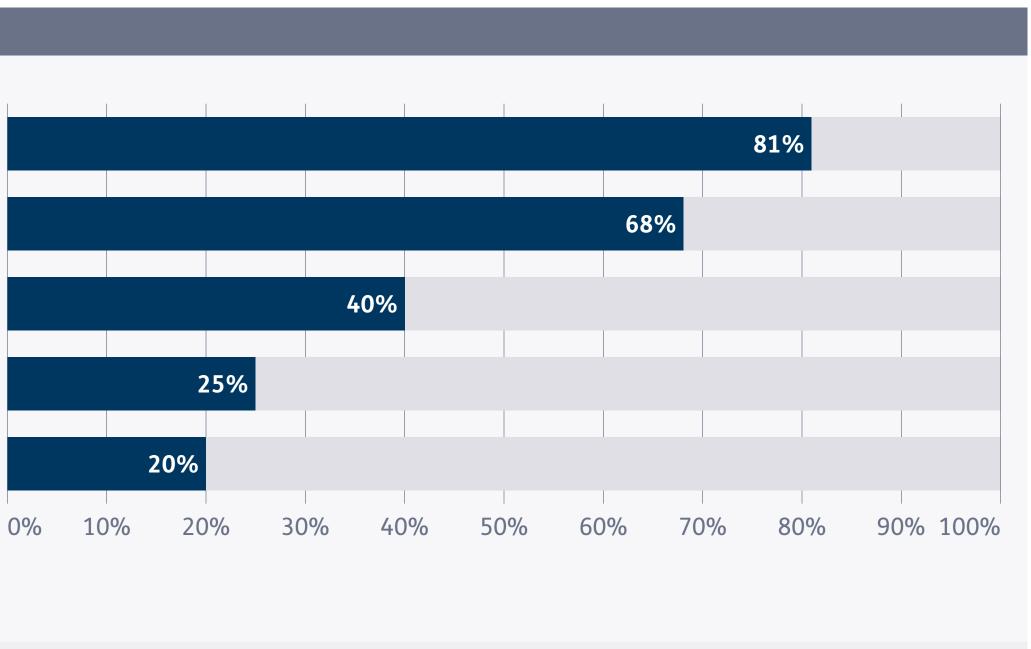
Only 1 in 5 workers is completely sedentary

Behavioural analysis of 1,000+ occupations

**SOURCE:** OVUM

TOP FIVE IT NETWORKING TRENDS

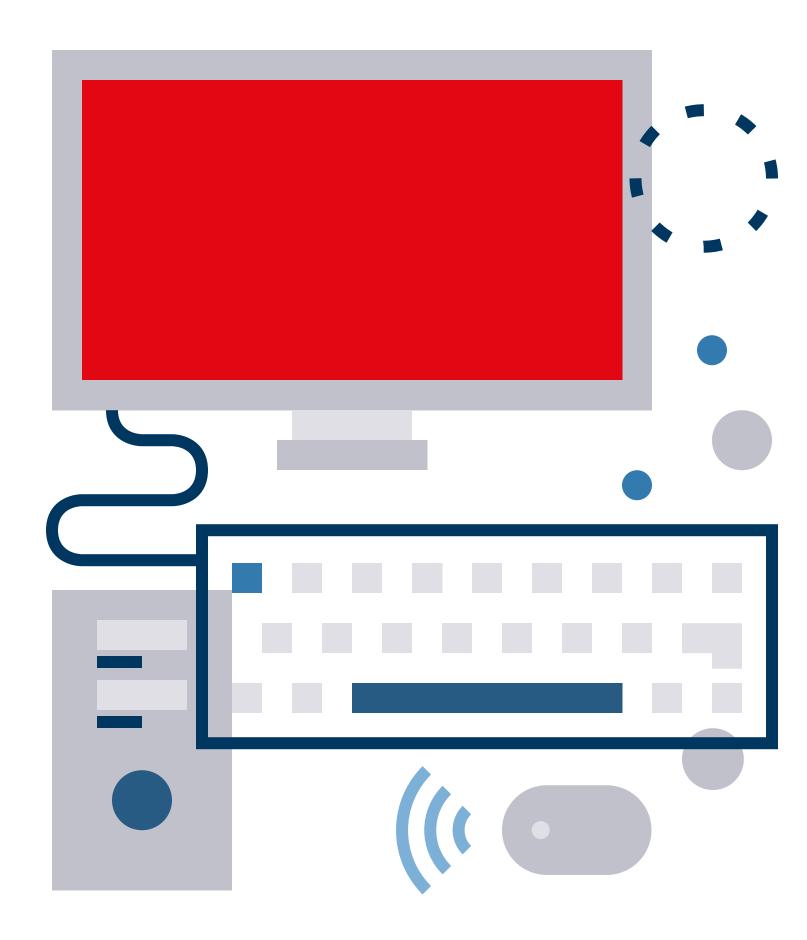
- Collaboration is mainstream: 81% of works are involved in group work
  - Everyone collects data:
  - Work is not a location:
  - It's better out than in:
    - Mobility rules:







# #3 Workspace: Inspire and create loyalty



### THE CHALLENGE

- compensation alone.
- their willingness to remain.

• Find and keep the right people. Employee retention is a growing problem for small businesses. Increasingly, employees have other job satisfaction criteria than

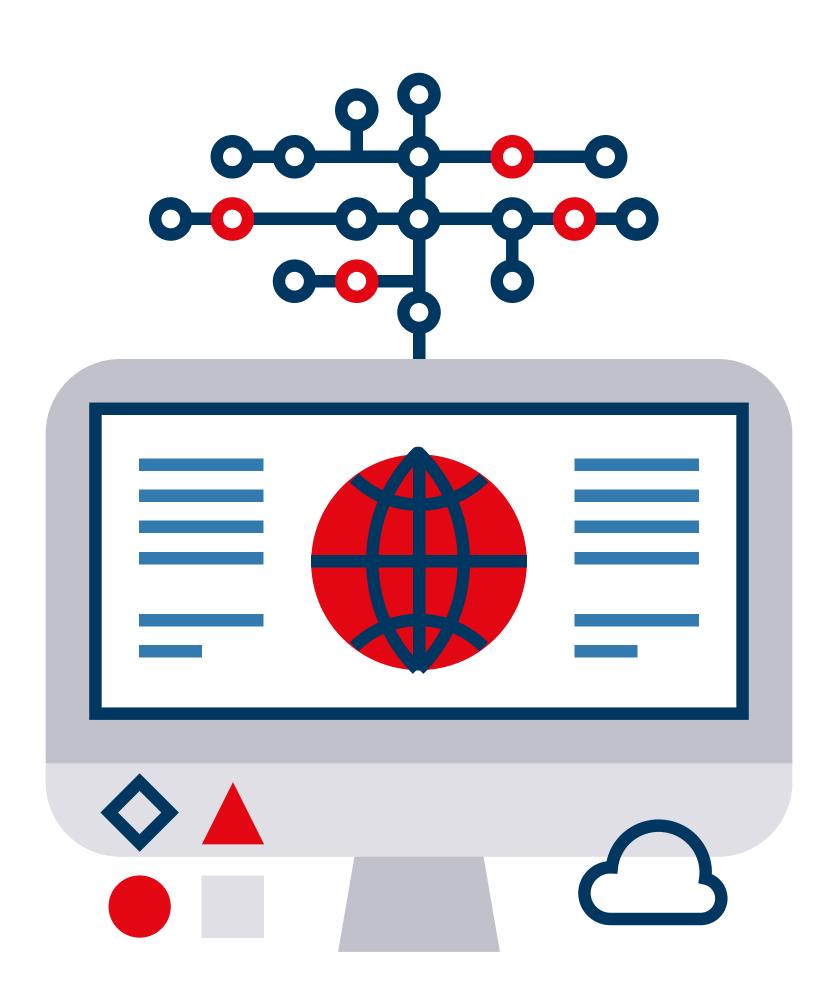
• Inspire loyalty. Two-thirds of millennial-age employees make a direct link between access to the latest digital tools in the workplace and their job satisfaction and – by implication –

• Enable nonterritorial working. Work is no longer a physical location but an accessible environment. Many employees do not want to be desk jockeys, and they expect more flexible arrangements. Small businesses need to understand how different employees work and have the right digital infrastructure to support them, whatever the work context.





# #3 Workspace: Inspire and create loyalty



### **HOW IT NETWORKING CAN HELP**

- share data in real time.

• Collaborate effortlessly. Deploying on-demand cloud collaboration and communication tools means that small businesses do not discriminate among their employees – whether they are working in the field, a café, or in the office.

• Enable a truly agile workforce. Employees gain more than just collaboration capabilities; simple-to-use yet powerful tools help them create and test new concepts, troubleshoot, and

• Support new types of conversation. The 21st-century workforce in small businesses contains both humans and things. But IT networking technologies can cope: the new Wi-Fi 6 is fast, adaptive, and more secure for conversations that now include P2P (people to people), P2T (people to things), and T2T (things to things).



# Small businesses can now support all their 21st-century workers







### #4 Security: Be secure and lawful

# 

of small businesses say company intelligence is the top asset to protect

#### SMALL BUSINESS: SECURITY INVESTMENTS

Preventing unauthorized release or sharing of

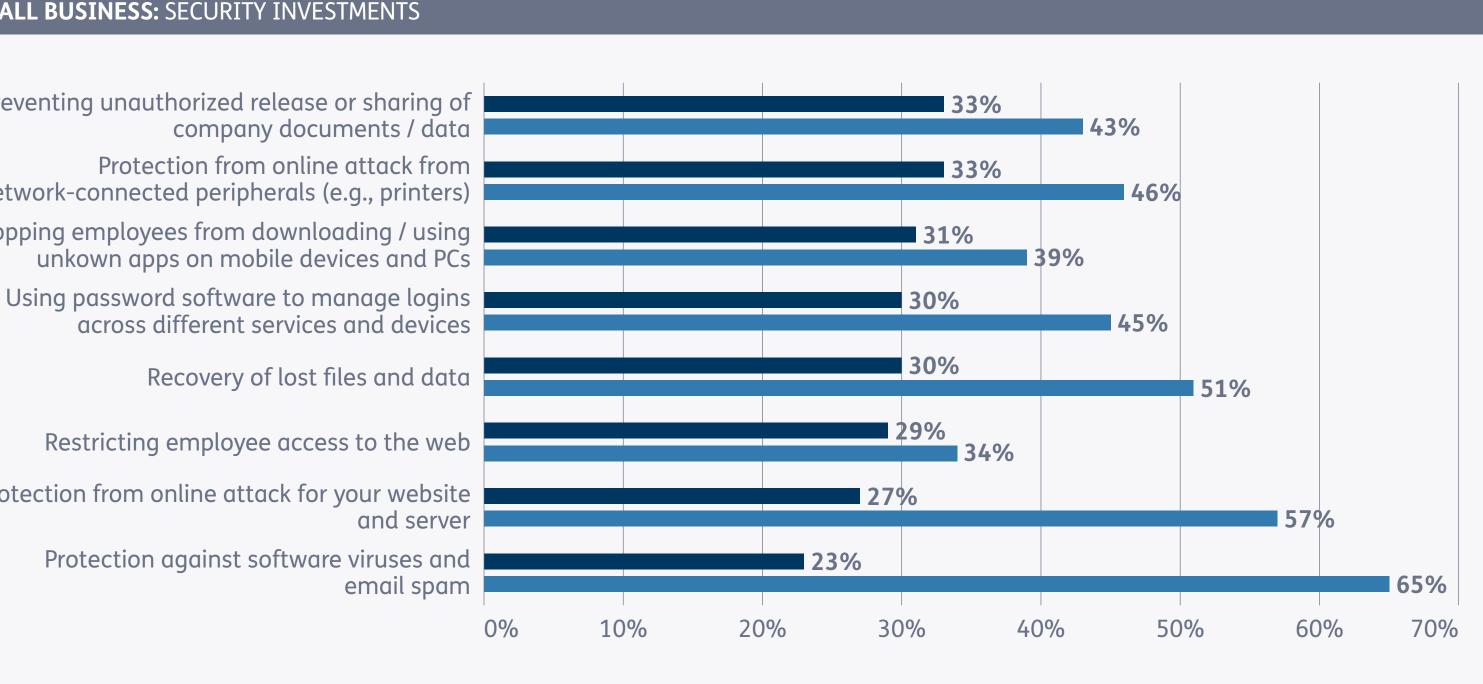
network-connected peripherals (e.g., printers)

Stopping employees from downloading / using

Protection from online attack for your website

N=1,819 technology decision-makers **Considering Using** 

**SOURCE:** OVUM







### #4 Security: Be secure and lawful



### THE CHALLENGE

- more mobile.

• Failure can cripple. Security has become the top technology spending priority among small businesses. A data breach can literally kill a business and damage its supply chain if hackers can penetrate that too.

• How to keep ahead. The problem is how to manage all the moving parts that being secure now requires. Risks facing small businesses now span virtual security, physical security, people, and things as well as the financial penalties for noncompliance.

• More complex issues. Small businesses would say that data-loss prevention is not only an enterprise-class issue; it is just as big a problem for them as their workforces become

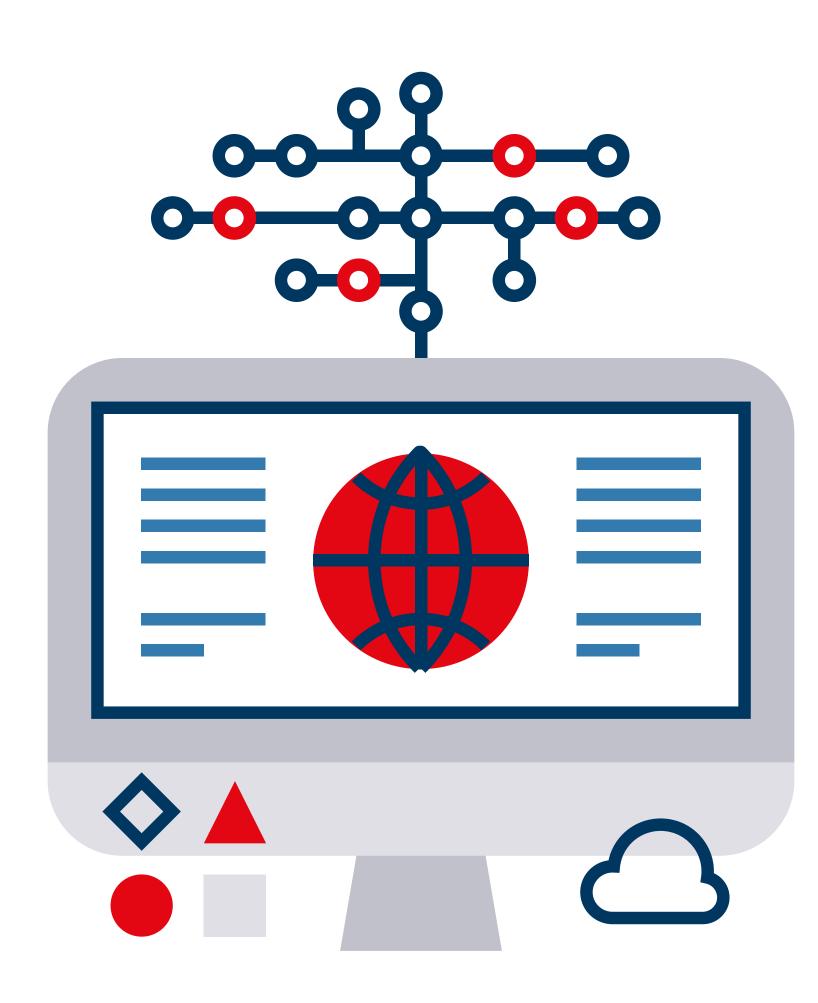
• Serious skills gaps. Technical skills in the small business workforce remain limited even as their digital dependency and exposure are growing. For the IT department, keeping up with risks and educating the wider organization about them is a daily struggle.







### #4 Security: Be secure and lawful



### **HOW IT NETWORKING CAN HELP**

- defined networking.

• Unify security through the IT network. Spanning access control, apps, devices, antivirus, and firewalls, now all IT networking devices build in security with easy management.

• **Simplify threat management.** There is now a powerful single point of surveillance and response with increased automation for small businesses with limited IT support.

• Assert predictive control with intent-based networking. Now remote management tools can preempt threats before they even start through the use of predictive analytics.

• Secure new and ad hoc locations. IT departments can power up new and temporary sites immediately without compromising security using remote management and software-









### **#5 Innovation: Innovate and overtake**

### HOW SMALL BUSINESSES ARE HARNESSING IT INNOVATION

68% are exploring AI and machine learning to reshape their processes

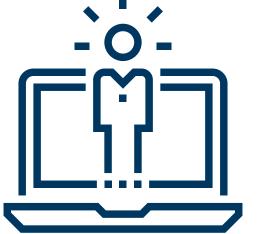
> Virtual assistants can take orders and handle simple web during non business hours.



plan to exploit the Internet of Things' ability to transform key business costs



Wi-Fi-based environmental services can track building energy costs and adapt lighting to keep employees and employers happy.

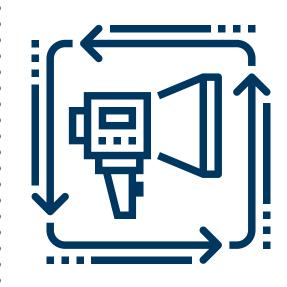


client queries via mobile or

# 59%

50%

look to use automation combined with analytics for smarter marketing outreach



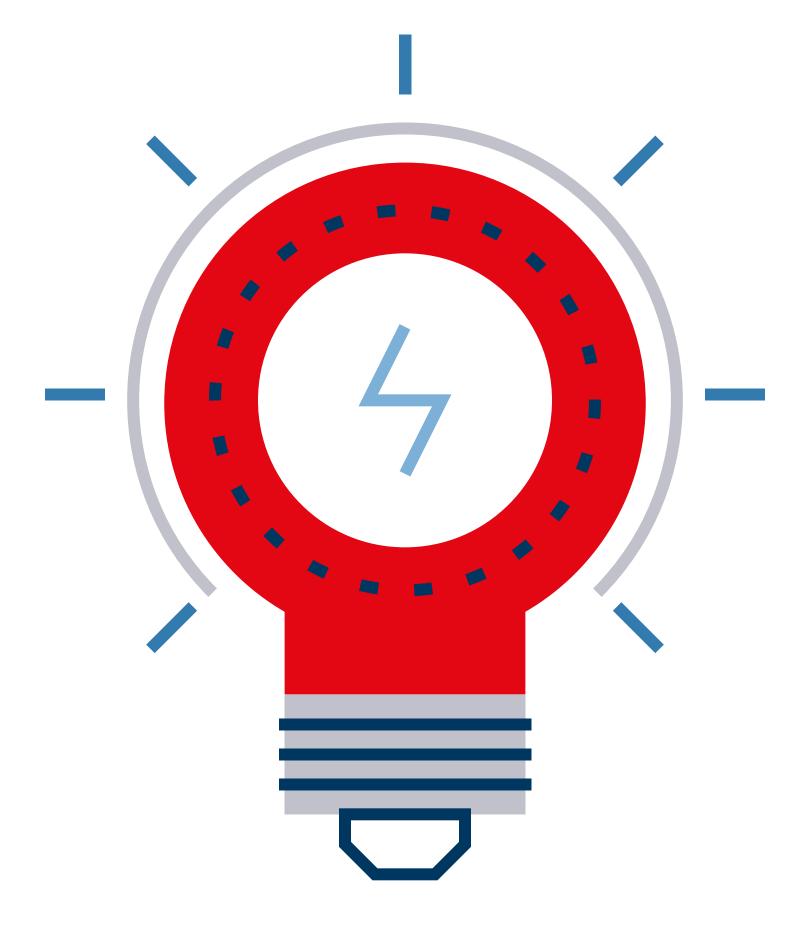
Smart data tools can pinpoint different buyer personas among customers and then create effective campaigns and engagement.

**IT NETWORKING IMPROVES SPEED OF INNOVATION FOR SMALL BUSINESSES** 





### **#5 Innovation: Innovate and overtake**



### THE CHALLENGE

• It's about time. Three-quarters of an IT department's time is spent keeping the lights on, and finding time to ideate is a problem for line-of-business teams too. And now there are ways available to control and manage your network, like provisioning and configuring devices in minutes via one simple dashboard.

• Being proactive. Reacting to customer needs or a rival's moves keeps small businesses running after market leaders. They need headspace and insight to take the lead.

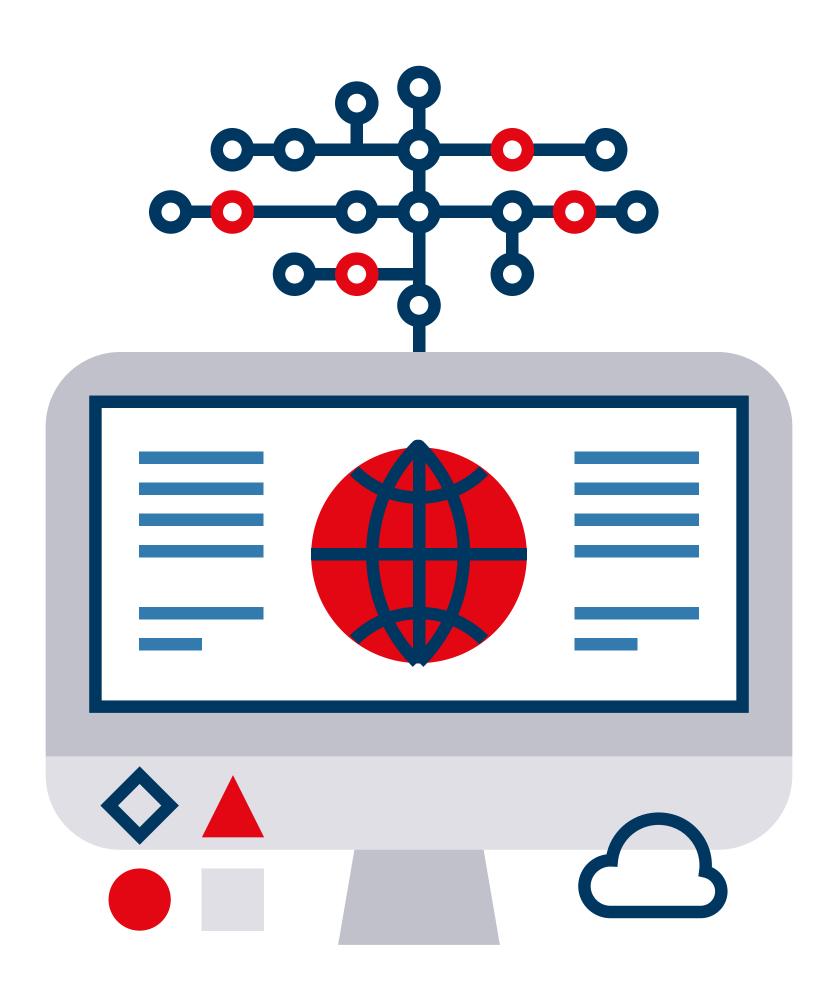
• Create an agile culture. Employees are not necessarily afraid of change, but few possess effective ways to share new ideas and useful feedback.







### **#5 Innovation: Innovate and overtake**



### **HOW IT NETWORKING CAN HELP**

• Create new value. Instead of maintaining the status quo, automation, AI, and better IT management tools free up time for strategic planning rather than firefighting.

• Anticipate needs. Social Wi-Fi and marketing tools can build an accurate picture of what customers want before they ask for it.

• Lead transformations. Great collaboration tools and on-demand data insights enable workforces that ideate, test, and launch new products and services fast.



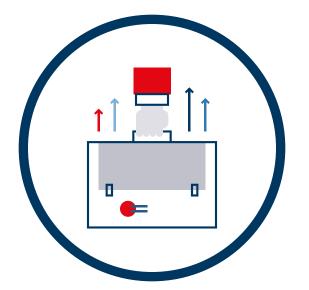




# Conclusions: IT innovation is here today



- Automate complexity
- Make decisions in real time
- Become predictive
- Scale at will



### **Impressive** –with next-generation Wi-Fi

- Protect and improve reputation
- Monetize the website
- Prime the sales funnel
- Secure loyalty



### **Inspirational** – with cognitive collaboration

- Collaborate effortlessly
- Enable a truly agile workforce
- Support new types of conversation

### **POWERFUL TOOLS ARE AVAILABLE NOW TO HELP SMALL BUSINESSES TRANSFORM**



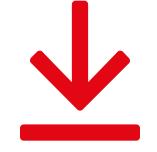
### **Secure** – with orchestrated defense

- Unify network security
- Simplify threat management
- Assert predictive control
- Secure new and ad hoc locations



### **Innovative** – with AI-networked analytics

- Create new value
- Anticipate needs
- Lead transformations







## Appendix

### DEFINITIONS

### **Networking basics**

A network connects computers, mobile phones, peripherals, and even the Internet of Things (IoT) devices. Switches, routers, and wireless access points are the essential networking basics. Through them, devices connected to your network can communicate with one another and with other networks, like the Internet.

### Intent-Based Networking

Aligning the network to business intent by enabling the digital business with a network that is constantly learning, adapting, protecting.

#### Switches

Switches are the foundation of most business networks. A switch acts as a controller, connecting computers, printers, and servers to a network in a building or a campus. Switches allow devices on your network to communicate with each other, as well as with other networks, creating a network of shared resources. Through information sharing and resourceallocation, switches save money and increase productivity.

There are two basic types of switches to choose from as part of your networking basics: managed and unmanaged.

- An unmanaged switch works out of the box but can't be configured.
  Home-networking equipment typically offers unmanaged switches.
- A managed switch can be configured. You can monitor and adjust a managed switch locally or remotely, giving you greater control over network traffic and access.

#### Routers

Routers connect multiple networks together. They also connect computers on those networks to the Internet. Routers enable all networked computers to share a single Internet connection, which saves money.

> Routers connect your business to the world, protect information from security threats, and can even decide which computers receive priority over others.

Beyond those basic networking functions, routers come with additional features to make networking easier or more secure. Depending on your needs, for example, you can choose a router with a firewall, a virtual private network (VPN), or an Internet Protocol (IP) communications system.

#### **Wireless Access Points**

An access point allows devices to connect to the wireless network without cables. A wireless network makes it easy to bring new devices online and provides flexible support to mobile workers.

An access point acts like an amplifier for your network. While a router provides the bandwidth, an access point extends that bandwidth so that the network can support many devices, and those devices can access the network from farther away.

But an access point does more than simply extend Wi-Fi. It can also give useful data about the devices on the network, provide proactive security, and serve many other practical purposes.





# Appendix

### Wireless networking

To create your wireless network, you can choose between four types of deployment. Each deployment has attributes that will work better for different solutions: basic, centralized, converged and cloud-based.

### Hyper-converged infrastructure

The simplicity of the converged solutions, where all the components (such as storage, server, and networking) are contained in a single solution has seen them gain significant traction in the market. This has also seen the rise of hyper-converged solutions. These are a new breed of infrastructure that is based on a software-defined approach, where the hardware components are integrated by the software layer.

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### Appendix

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