WHEN WORK IS ANYWHERE:

MANAGING TECHNOLOGY'S ROLE IN THE DISTRIBUTED WORKFORCE

INTRODUCTION

The distributed workforce has arrived.

Shash Anand, SVP, Product Strategy

Distributed workforce refers to businesses with multiple employees working in varied locations. This term can include remote offices and hybrid work models. For this report, we are focusing on the distributed workforce for company headquarters and IT teams based in one location, with employees in other locations, such as warehouse staff, field workers and those travelling to multiple locations for work. This also includes employees located in retail stores and distribution centers.

The notion of a distributed workforce is the direct result of advancements in technology, the Internet of Things (IoT), e-commerce, the need for real-time supply chain visibility and the requirement for critical communications across the global landscape.

As industries decentralize and break away from traditional ways of working, the need for groundbreaking innovations to complement an ever-broadening scope of work is growing. If an employee is no longer fixed to one consistent location, how does this impact their role and technological requirements?

As the distributed workforce grows, the device ecosystem becomes complex and companies need to depend on technology that securely manages devices that are now located anywhere.

Rooted in the development of the Internet and catapulted by the pandemic, technology is changing rapidly and plays a major role in facilitating the way we work across sectors. The proliferation of corporate and personal data often requires transparency and reliable protection in tandem.

Across all industries, distributed workforces rely on innovative, secure and mobile technologies to yield efficiency and enhance productivity. However, recent years have undoubtedly accelerated the transformation.

The goal of this report is to determine how this transition is being driven, managed and optimized on a global scale across all sectors and device types – from rugged handsets to mobile computers, barcode scanners, printers and applications.

As a result, this report will explore:

• How IT professionals have responded to the pace of change in technology across industries and sectors

• Challenges associated with managing an increased device fleet in a decentralized workforce

• How an organizations' size impacts the management of IT infrastructure and business workflows

CONTENTS

METHODOLOGY

SOTI's research was conducted in February 2023 with 2,500 IT professionals working in companies with 50+ employees globally. The 2,500 interviews were split across eight markets.

Canada
Sweden
UK
Germany
U.S.
France
Mexico
Australia
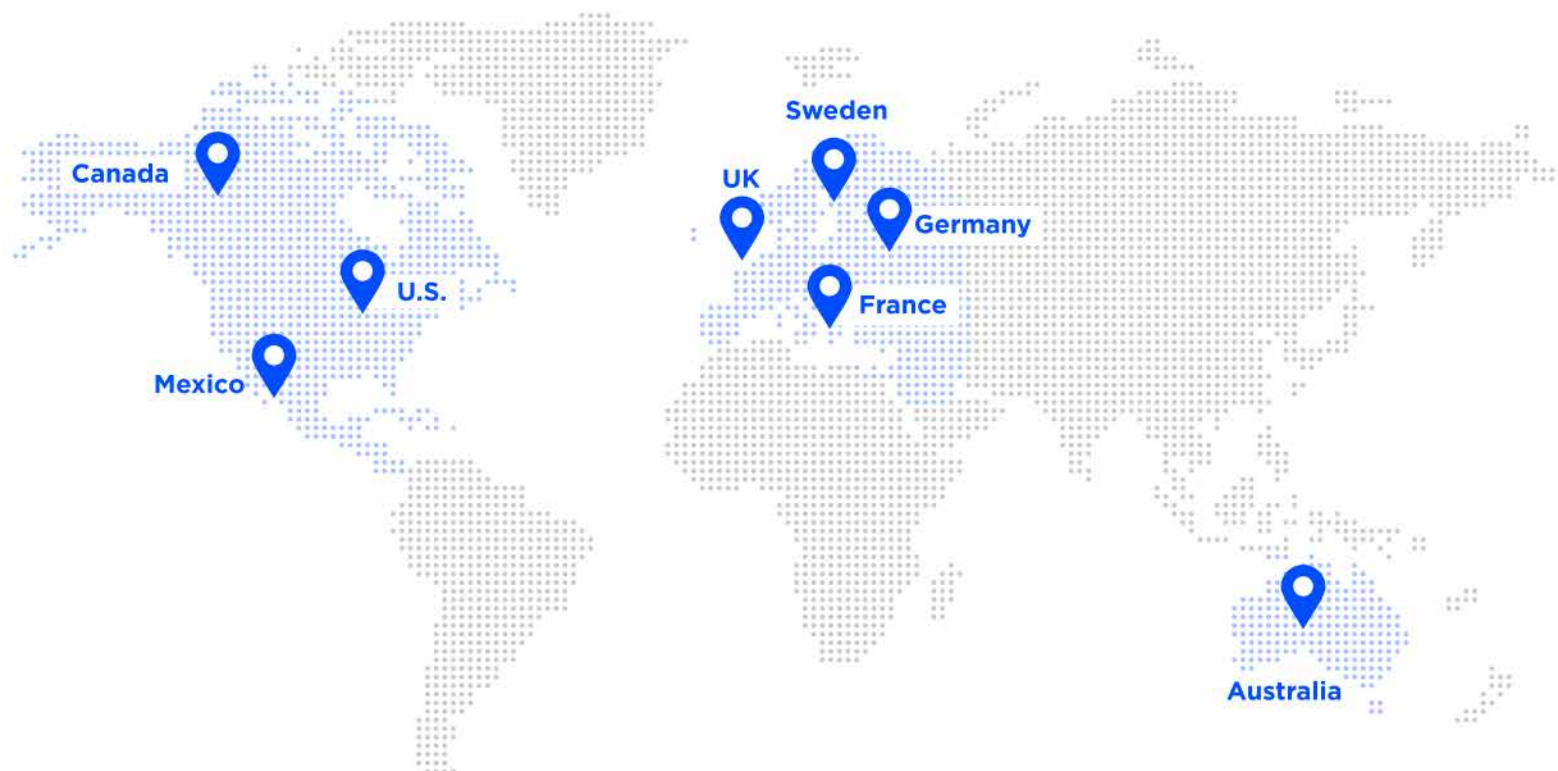
2,500 INTERVIEWS

These were: U.S. (500), Canada (250), Mexico (250), UK (500), Germany (250), France (250), Sweden (250) and Australia (250). The results highlighted global trends and are organized by these individual markets while cross-referencing companies by size and sector.

52%

of organizations have increased their IT budgets over the last year, while only **18%** said theirs decreased – despite economic challenges

45%

of IT teams have grown, while only **15%** became smaller

38%

The mix of device types, such as rugged handsets, mobile computers, barcode scanners, etc., used across organizations has increased by **38%**

The total number of devices used has grown by **37%**

Decentralized working has transformed IT teams by changing where they work and the technology in place to help them track, manage and troubleshoot issues. The number of devices under management, budgets and IT resources all impact how these teams collaborate and their ability to enable workers across locations.

This general shift creates the need for new technology to simplify the distributed workforce:

70% **(NET)** of IT professionals confirmed they have seen one or more device-related increase in the last year, such as the number of company and personal devices used within the organization.

62% **(NET)** of companies have enacted changes around personal device usage including flexibility of apps and tools used.

96% **(NET)** of IT teams manage at least one device type (smartphones, printers, on-premise software, rugged devices, software as a service (SaaS) applications) in-house rather than outsourcing.

How does this change differ across sectors and regions? How are newly added devices managed? How can we understand where they are, what data they hold and how they are being used?

THE DISTRIBUTED WORKFORCE IS ANYWHERE

When looking at tech trends by region and sector, we see increased activity in the following areas:

Device Adoption

Workflow Enhancement and Applications
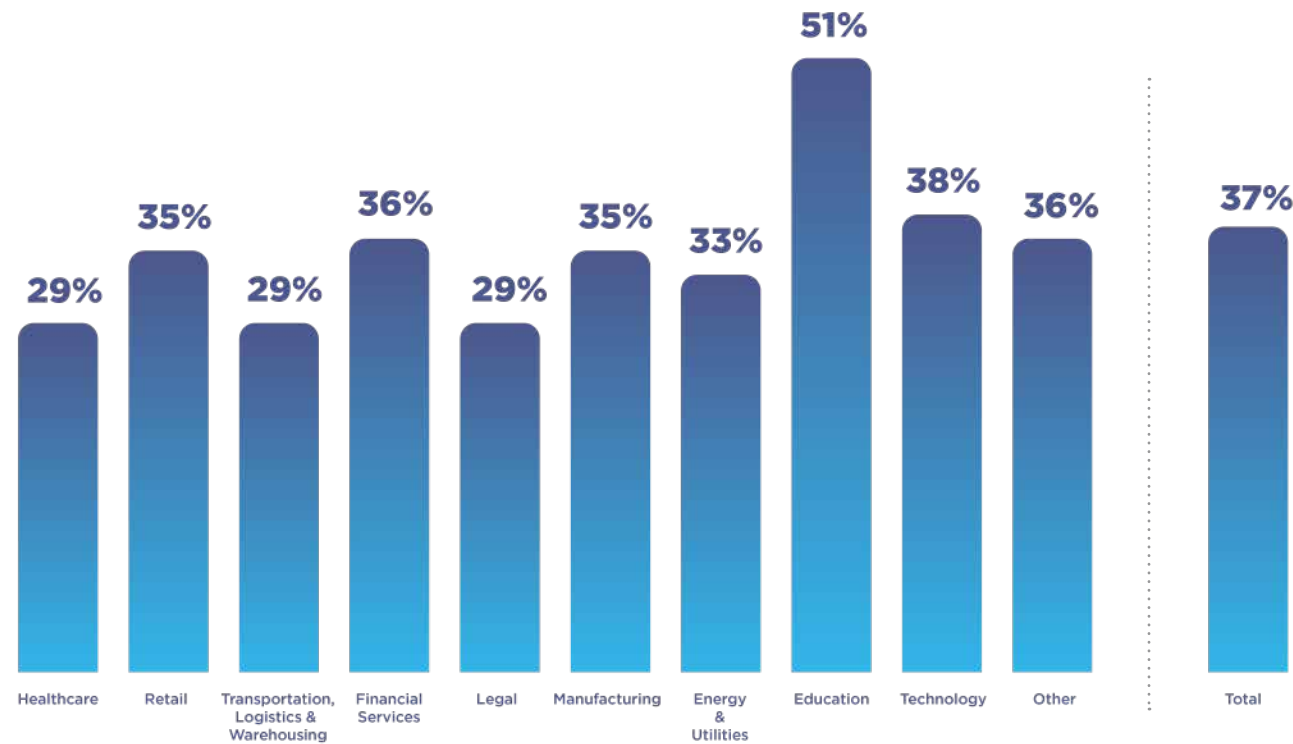
Automation Replacing Manual Processes

There is still plenty of room for advancement.

This suggests that not all organizations have aligned on how to effectively deploy new technologies across different locations. Acquiring the resources, people and budgets needed to fund and properly execute this transformation is a challenge.

Device Adoption

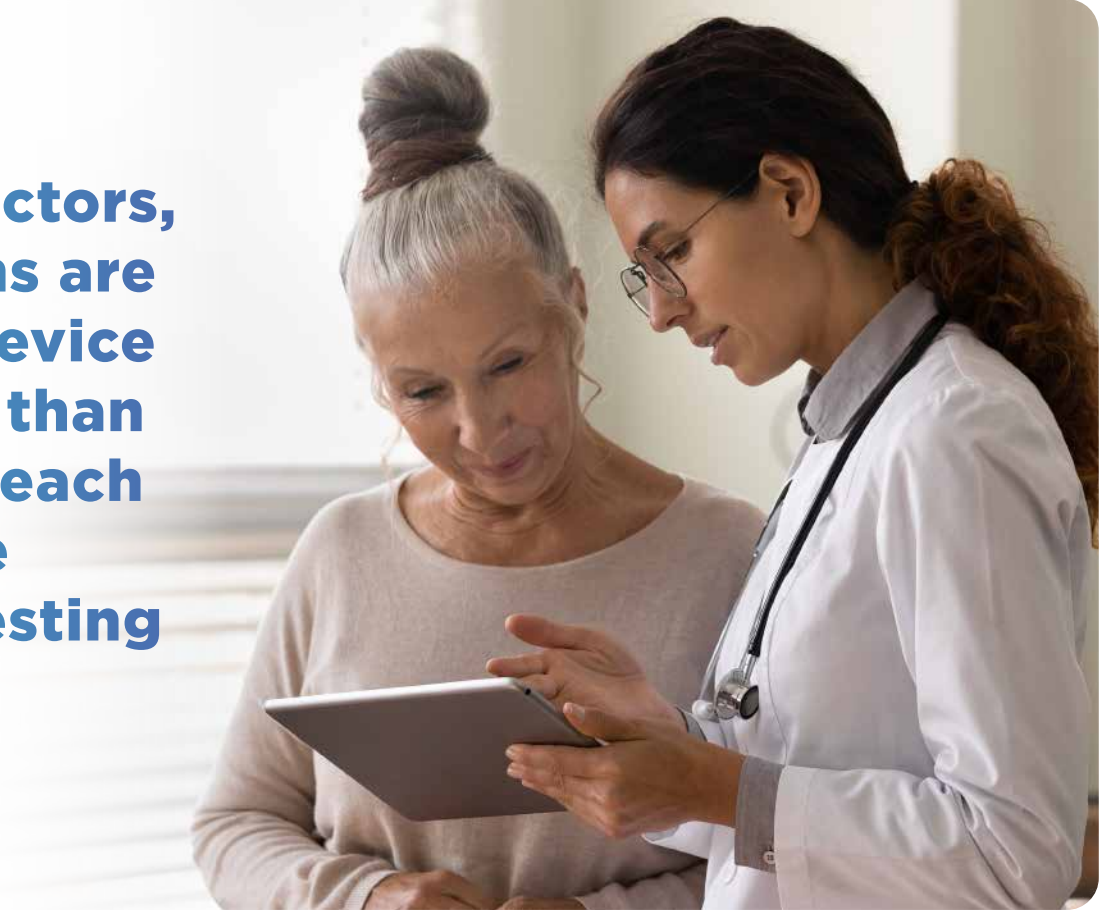**The number of devices in organizations has increased over the past year:**

By Sector:

Healthcare	Retail	Transportation, Logistics & Warehousing	Financial Services	Legal	Manufacturing	Energy & Utilities	Education	Technology	Other	Total
29%	35%	29%	36%	29%	35%	33%	51%	38%	36%	37%

By Country:

As seen below, U.S., Australia and UK have the highest increase in adoption of new devices.

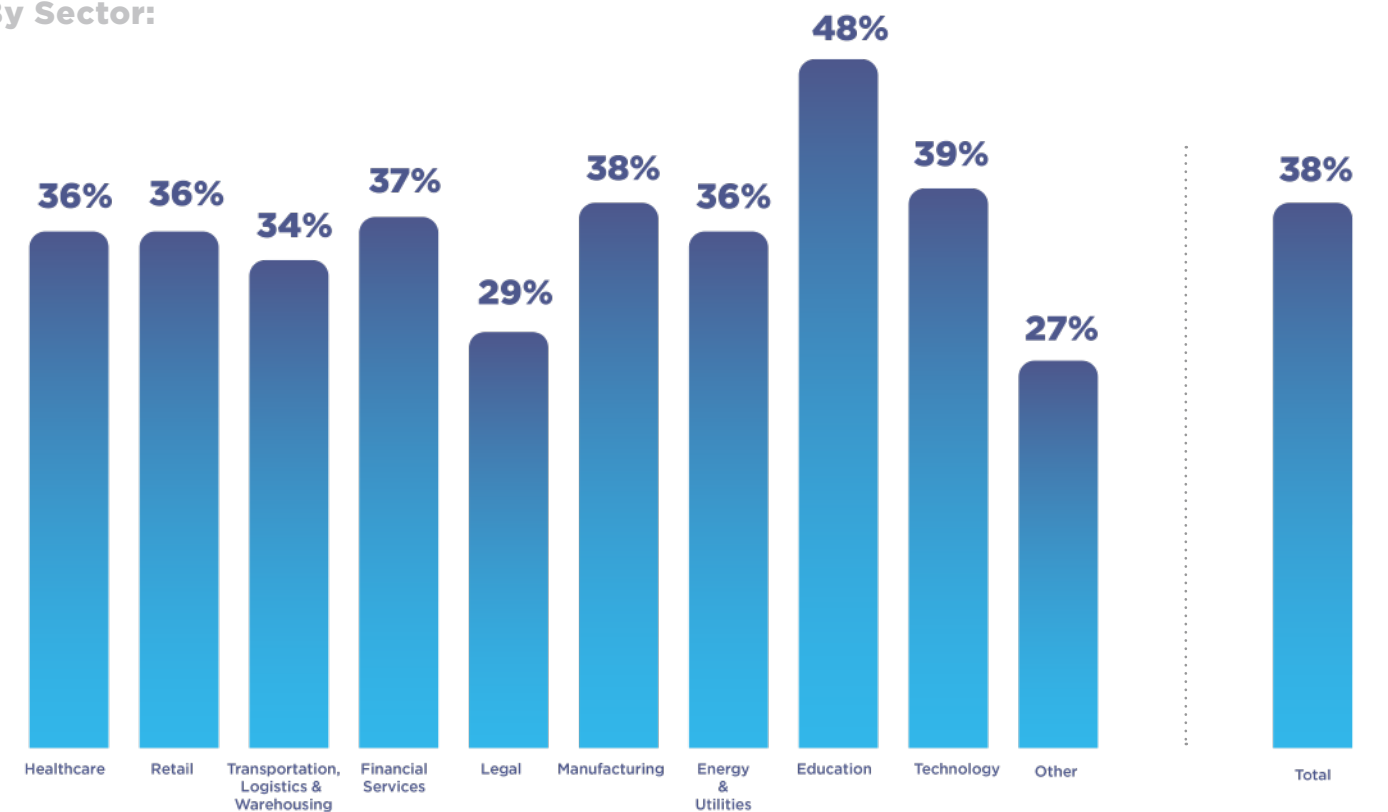|	
U.S.	48%
Canada	33%
Mexico	32%
UK	36%
Germany	30%
France	34%
Sweden	29%
Australia	44%
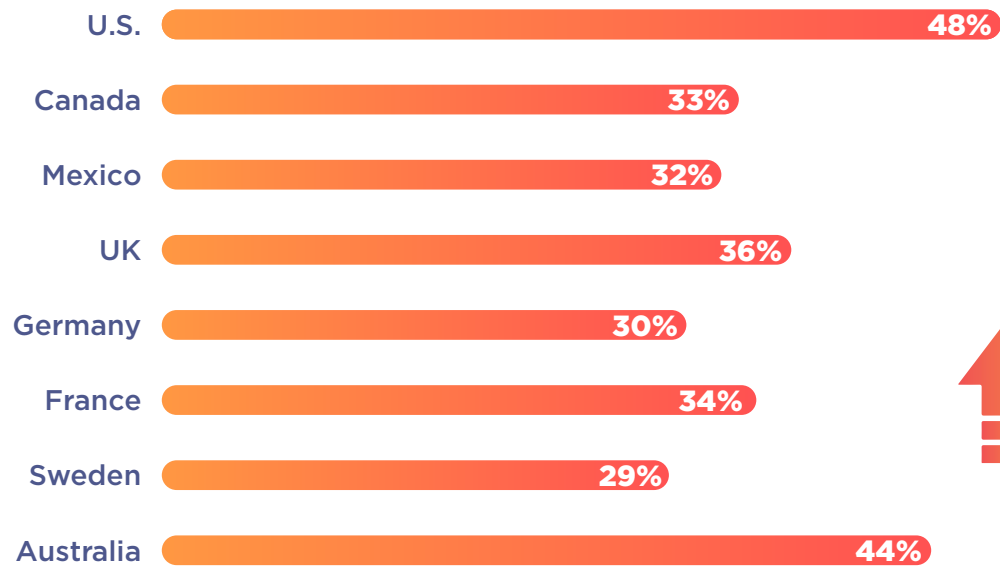
↑ **37% TOTAL**

Across all sectors, organizations are increasing device usage. More than one-third in each category are actively investing in new tech.
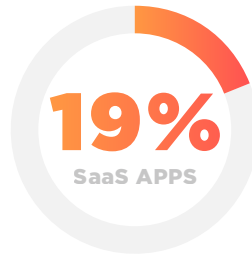

The mix of devices (smartphones, scanners, rugged devices, SaaS applications) in organizations has increased over the past year:

By Sector:

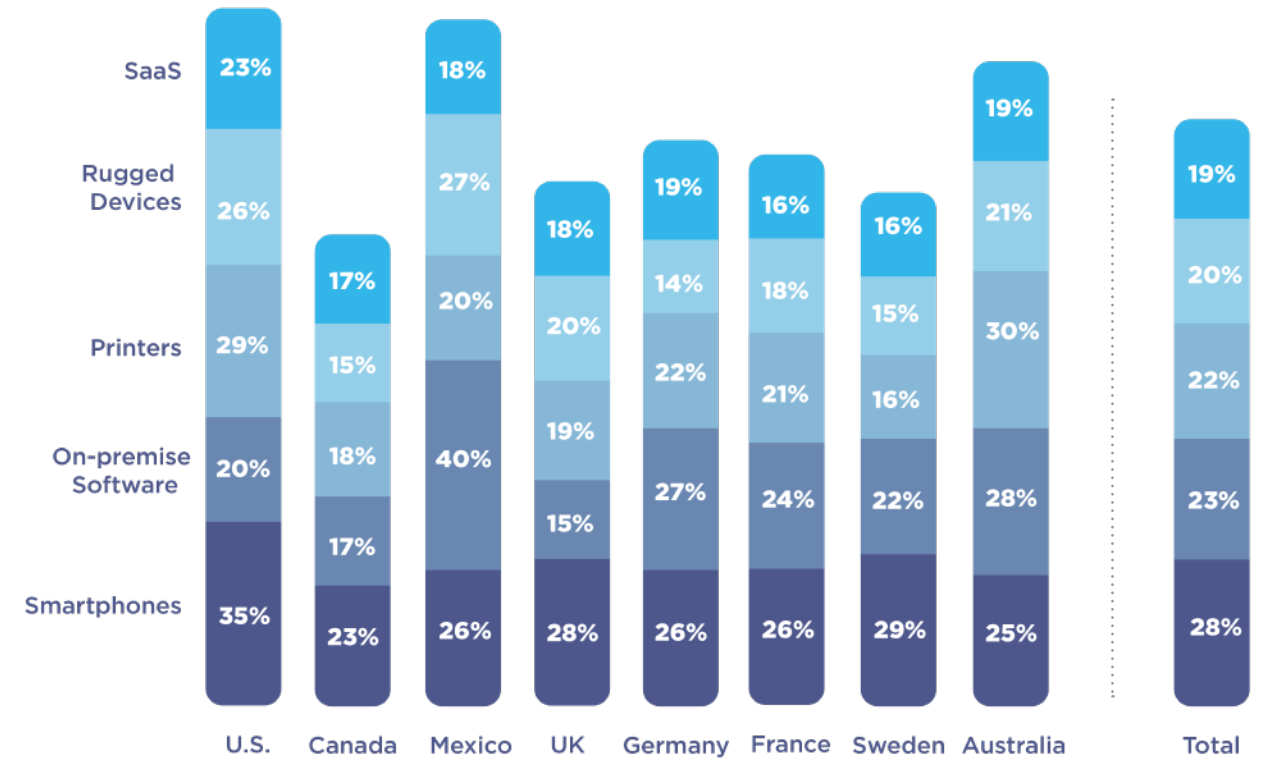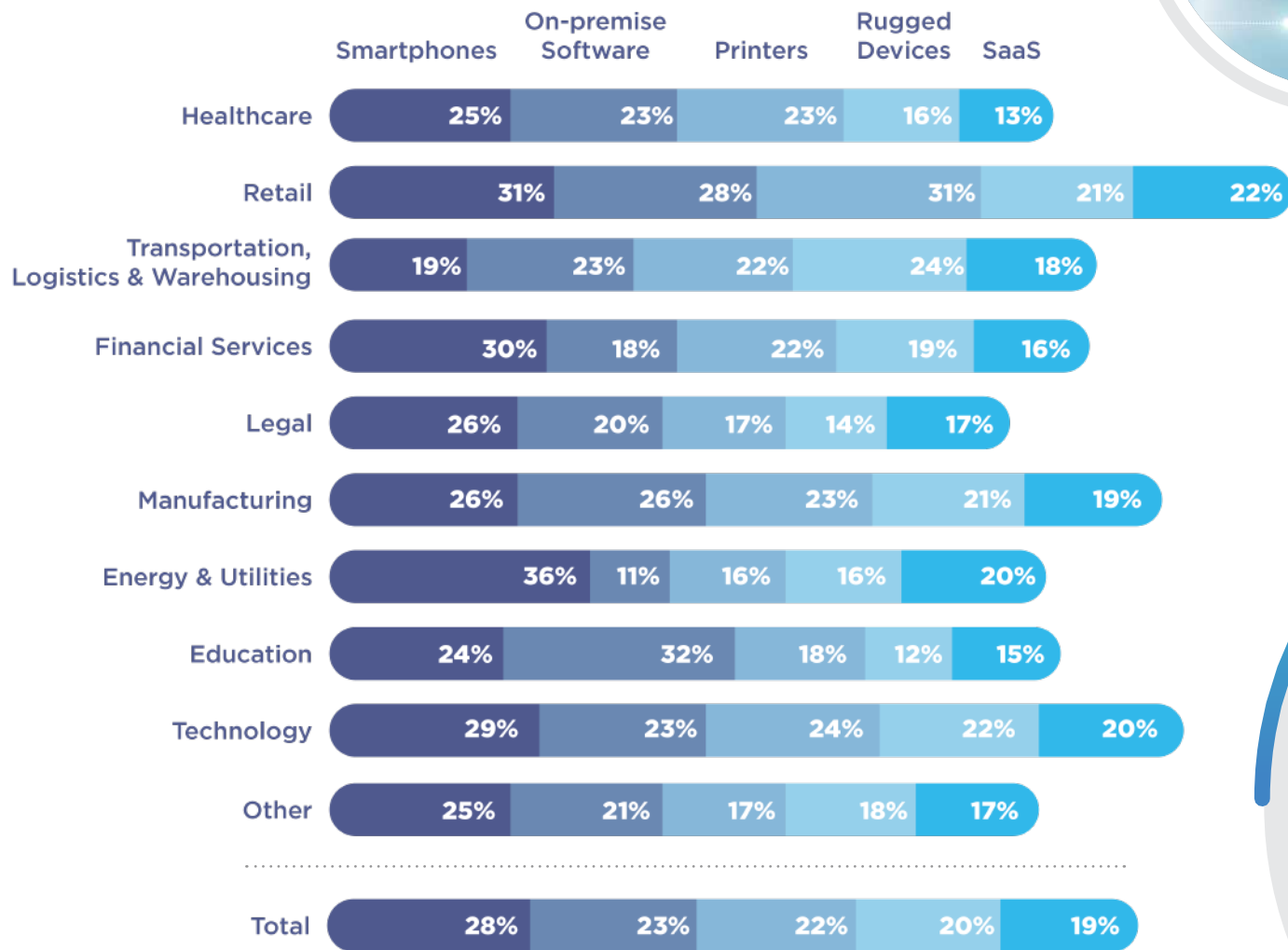| Healthcare	Retail	Transportation, Logistics & Warehousing	Financial Services	Legal	Manufacturing	Energy & Utilities	Education	Technology	Other	Total
36%	36%	34%	37%	29%	38%	36%	48%	39%	27%	38%

Workflow Enhancement and Applications

Bespoke applications are the new norm as organizations seek innovative ways to manage workflows and onboard employees. Smartphones were the most common device to be managed in-house over the last year at 28%, compared to SaaS apps which only 19% of companies manage in-house.

28%
SMARTPHONES

19%
SaaS APPS

By Sector:

	Smartphones	On-premise Software	Printers	Rugged Devices	SaaS
Healthcare	25%	23%	23%	16%	13%
Retail	31%	28%	31%	21%	22%
Transportation, Logistics & Warehousing	19%	23%	22%	24%	18%
Financial Services	30%	18%	22%	19%	16%
Legal	26%	20%	17%	14%	17%
Manufacturing	26%	26%	23%	21%	19%
Energy & Utilities	36%	11%	16%	16%	20%
Education	24%	32%	18%	12%	15%
Technology	29%	23%	24%	22%	20%
Other	25%	21%	17%	18%	17%
Total	28%	23%	22%	20%	19%

By Country:

	U.S.	Canada	Mexico	UK	Germany	France	Sweden	Australia		Total
SaaS	23%		18%		19%	16%	16%	19%		19%
Rugged Devices	26%	17%	27%	18%	14%	18%	15%	21%		20%
Printers	29%	15%	20%	20%	22%	21%	16%	30%		22%
On-premise Software	20%	18%	40%	19%	27%	24%	22%	28%		23%
Smartphones	35%	23%/17%	26%	28%/15%	26%	26%	29%	25%		28%

Compared to last year, in-house management of rugged devices in the transportation, logistics & warehousing sector is now at 24% and has risen more than any other sector.

From a regional standpoint, it was the U.S. and Australia that sparked the sharpest rise in application management in-house, corresponding with similar approaches to increased device use.
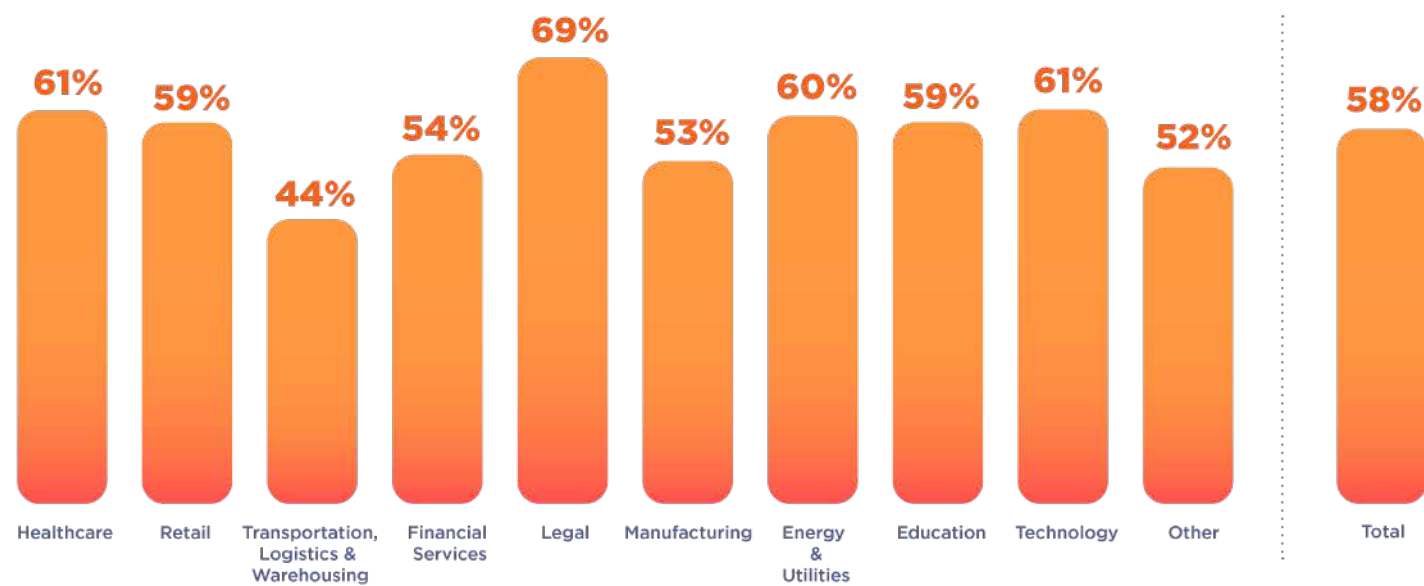
Manual Processes Still Exist

58%

GLOBALLY

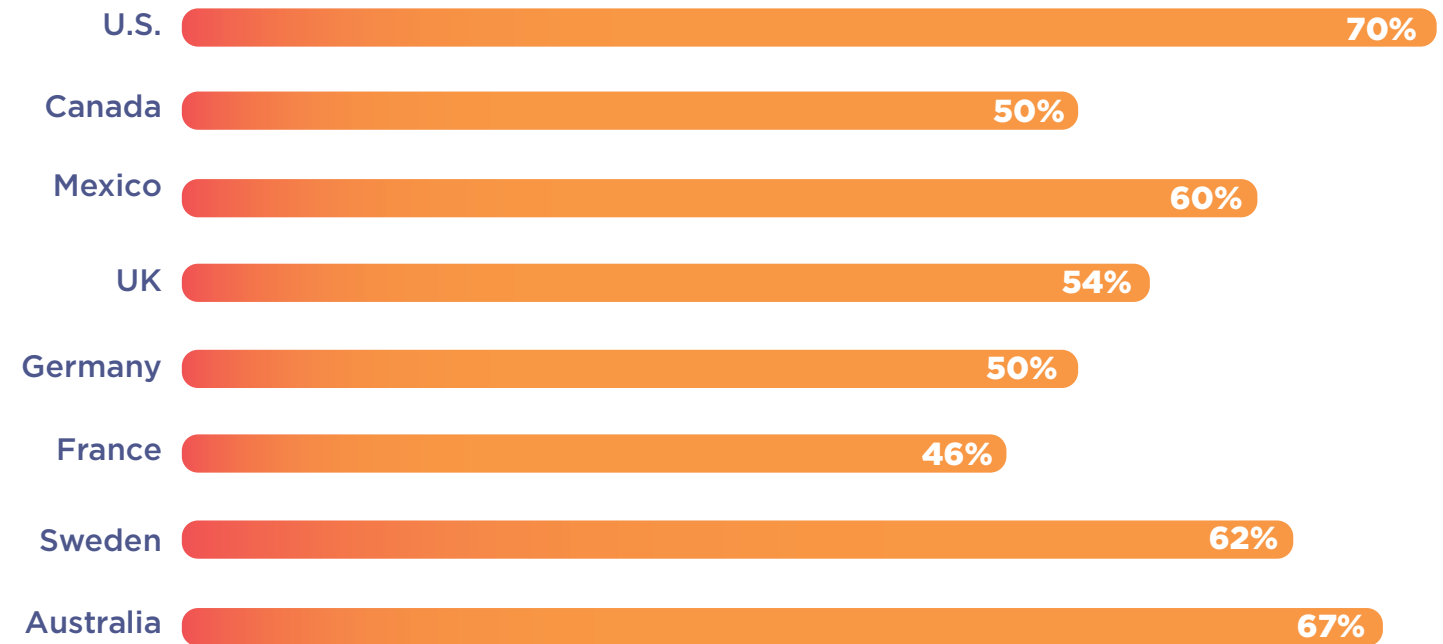The research shows that **58%** of the following sectors manage devices manually.

By Country:

Country	%
U.S.	70%
Canada	50%
Mexico	60%
UK	54%
Germany	50%
France	46%
Sweden	62%
Australia	67%

TOTAL **58%** Managed Manually

Percentage of workflows being managed manually.

By Sector:

Sector	%
Healthcare	61%
Retail	59%
Transportation, Logistics & Warehousing	44%
Financial Services	54%
Legal	69%
Manufacturing	53%
Energy & Utilities	60%
Education	59%
Technology	61%
Other	52%
Total	58%

Paper-based processes are still prevalent for businesses. However, most organizations have adopted a mix of digital and manual.

Paper-based processes are still used frequently in large corporations worldwide. In fact, 31% of all manual workflows over the last year were done on paper. Meanwhile, 44% are managed via email, confirming that a substantial number of organizations still conduct business through unsecured, non-digitized methods.

This is especially concerning in the healthcare sector where the information is likely to be patient data and 47% of business workflows are still managed manually via email. This sector is also behind both the retail and transportation, logistics & warehousing industries where digital adoption is driven by consumer demands.

# MANAGING A DECENTRALIZED DIGITAL FOOTPRINT

For 52% of organizations, IT budgets increased over the past 12 months.

Almost 80% of organizations are now managing at least one technology they did not manage during the previous year. For 45% of companies, the number of people now working within IT Teams has increased. There are two key questions to consider regarding the adoption of IT infrastructure and how it is managed:

- **Where are funds being directed to support employees?**
- **Is the money being spent wisely?**

To answer these questions, we discovered three key areas where organizations have been impacted significantly by the disperse workforce; security, infrastructure development and day-to-day operations.

Security
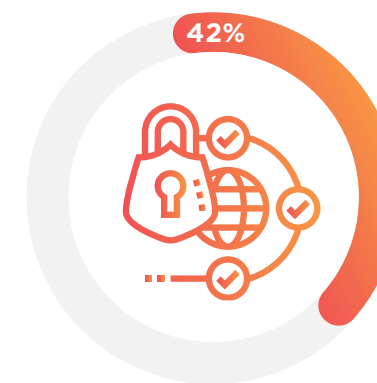
42% Cited the need for better access control to protect their networks

34% Have increased their spend on mobile technology security

Increased spend on mobile technology security was most likely in France and Australia (both 38%) and Germany (37%), and least likely in Mexico (27%).

It's no secret that organizations have struggled to cope with the speed of change. Accelerated digital transformation coupled with a broadening mix of devices creates a perfect opportunity for hackers. A distributed workforce provides a wider and more fragmented tech footprint to breach and exploit. However, while some isolated demographics rise above the average (for example, 46% have increased mobile security investments in the education sector), a modest approach to network protection is consistent across all industries and regions. Given that more than 100 million email accounts were breached between July and September 2022 alone, and high profile breaches are still happening, enhanced device infrastructure and security should be a top priority.

Infrastructure Development

As the workforce becomes more widespread, so does the tech infrastructure a company needs.

40%

Migrated to the Cloud

33%
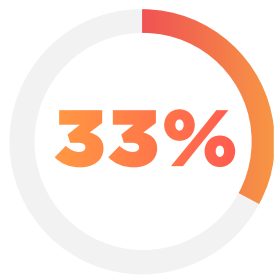
Invested in new software and applications

32%

Increased application use within the organization

30%

Increased the number of operating systems deployed

79% are managing at least one IT technology that was not previously managed a year ago.

With the sharing and connectivity of data, and easy communications across borders and devices, seamless access to data, device performance and visibility, in addition to consistency across all devices and operating systems are crucial. New applications and shared spaces in the Cloud open up vital opportunities for workers as they move in and out of centralized information sources through their devices. The infrastructure is getting wider, and there is scope for investments into Cloud migrations, new software and new systems.

Day-to-Day Operations

IT departments are managing bigger, more disparate teams, new applications and more devices. Although the emphasis on device management as it relates to remote support and device monitoring is important, for a future forward organization the focus should also be on elevating areas of operations that can be automated to enhance workflows.

31%
have been impacted by the automation of business processes
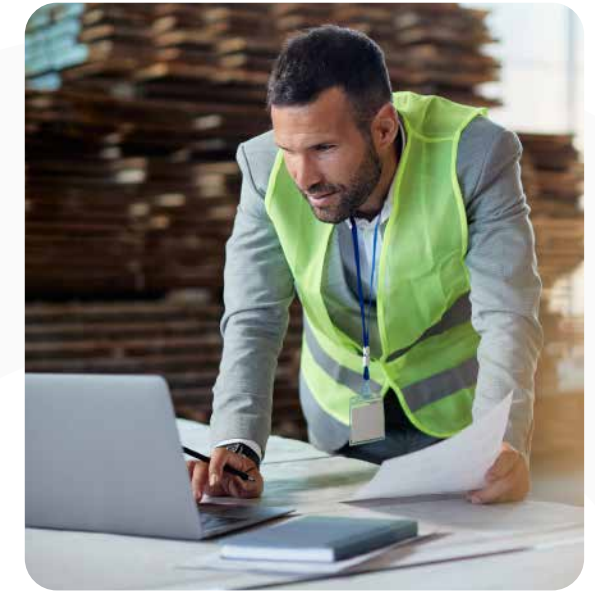
54%
can provide talk, text or video support to remote workers through their current digital setups

30%
have adopted mobile technologies

60%
can specifically conduct this tracking and management remotely

74%
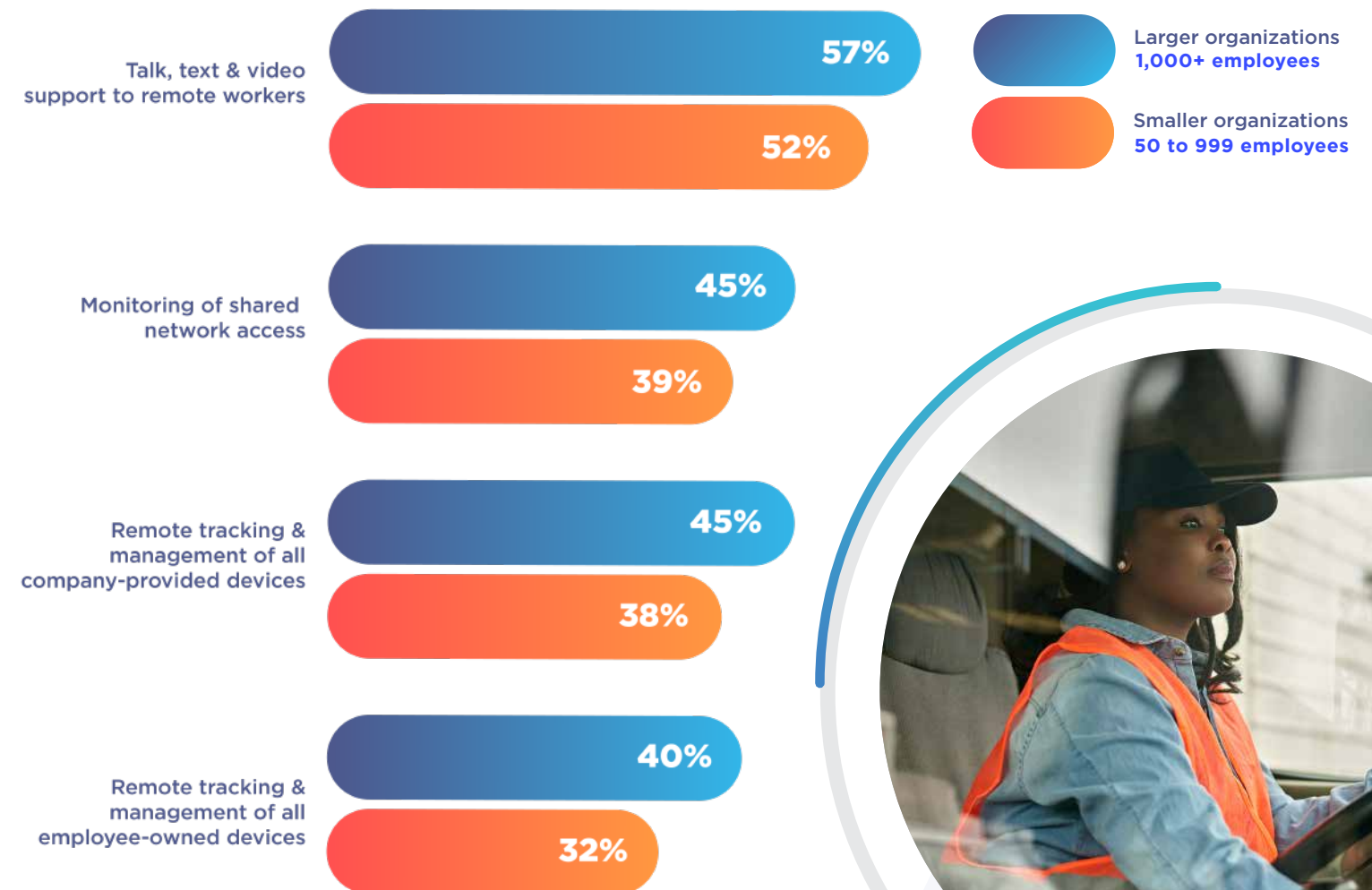say they can now track devices either on-premise or remotely

LARGER ORGANIZATIONS ARE AHEAD OF THE CURVE

The proactive approach from larger organizations (1,000+ employees) was clear with 71% managing business workflows through customized applications compared to only 63% from smaller businesses (50-999 employees). In fact, 34% of smaller organizations were more likely to manually manage workflows on paper compared to 26% of larger organizations.

Larger organizations have made greater advancements over the past year across areas of digital support, monitoring and tracking, but there is still opportunity for advancements in IT infrastructure.

Larger organizations 1,000+ employees

Smaller organizations 50 to 999 employees

Talk, text & video support to remote workers
- 57%
- 52%

Monitoring of shared network access
- 45%
- 39%

Remote tracking & management of all company-provided devices
- 45%
- 38%

Remote tracking & management of all employee-owned devices
- 40%
- 32%

Despite being more agile, smaller businesses are less equipped to support and manage a distributed workforce compared to larger entities.

The data points to inefficiencies, sustainability shortfalls, performance declines, reduced employee and customer loyalty and perhaps most importantly, a lack of security.

From Distributed Work to Distributed Business Success — Through Digital Transformation.

The results explored in this report point to a global transition occurring among more distributed organizations of all sizes across the surveyed sectors. While some countries and sectors have been more proactive in facilitating a distributed workforce, it should also be noted that some will be embarking from starting points that are more advanced than others.

IT Managers and their organizations need to prioritize ensuring dispersed networks are monitored, secured, compliant, collaborative and supported. The benefits extend far beyond progress in digital transformation.

These benefits include: employee attraction, retention and onboarding; efficient office and facilities management; more sustainable and low emission operations due to remote troubleshooting capabilities; a productive workforce; and a better proposition to customers as a result of all the above.

Investing in devices that promote improved operations, support and management for a newly distributed workforce in the short term can trigger a snowball effect that ultimately leads to business success and profitability in the long term.

The tech infrastructure organizations need to rely on now calls for investment across all areas of digital innovation. Whether it is to facilitate the access, sharing and connectivity of data across regions, or to enable seamless communication across borders and locations, new devices are needed to maintain strong business performance across a less rigid and more widespread company footprint. Optimum visibility and utmost security of the data and information being handled is crucial.

Urgency around these investments should be encouraged if they are underpinned by a forward-looking strategy. In the future, we expect to see a greater reliance on operational and diagnostic intelligence to help businesses better understand where their devices are going to be placed and their impact. By creating an environment where new devices can thrive, it will also increase the ROI of these investments.

With the current pace of change, futureproofing is as critical as ever across all regions and sectors. Organizations have started to grasp the evolving distributed workforce and the technology required to manage it, but when it comes to the volume and mix of devices that will secure ultimate productivity and job satisfaction, it is a process that is just beginning.
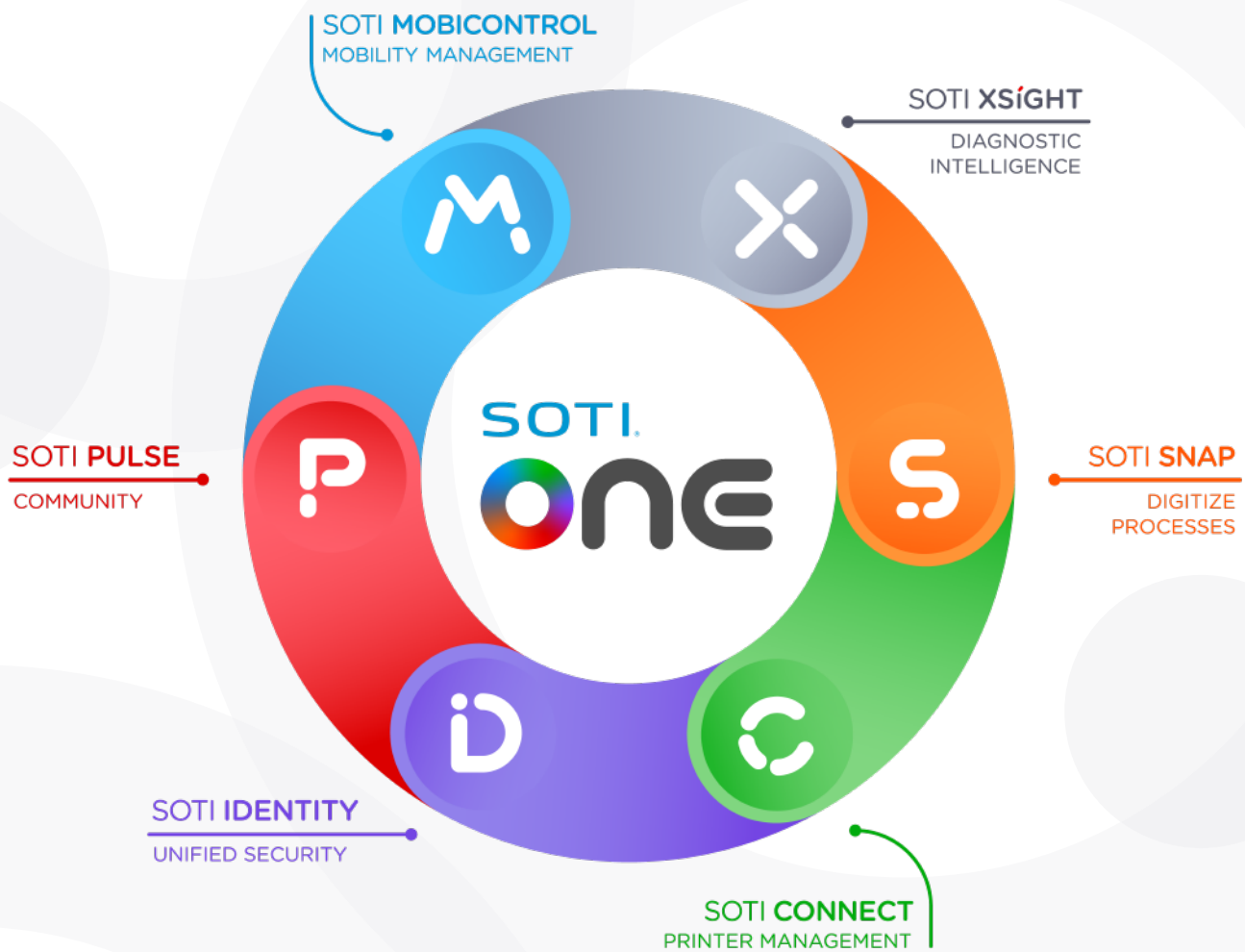
ABOUT SOTI

SOTI is a proven leader at creating innovative solutions that reduce the cost and complexity of business-critical mobility and the IoT. Thousands of companies around the world depend on us to secure, manage and support their mobile operations.

The company's two decades of success has built strong partnerships with leading mobile platform providers and device manufacturers. These relationships give us unparalleled insight into new technology and industry trends before they happen.

A proven innovator, SOTI's clear vision, laser focus and commitment to R&D have made it the market leader at delivering exciting, new business mobility solutions. SOTI helps businesses take mobility to endless possibilities.

SOTI MOBICONTROL — MOBILITY MANAGEMENT
SOTI XSIGHT — DIAGNOSTIC INTELLIGENCE
SOTI SNAP — DIGITIZE PROCESSES
SOTI CONNECT — PRINTER MANAGEMENT
SOTI IDENTITY — UNIFIED SECURITY
SOTI PULSE — COMMUNITY

TO LEARN MORE:

For additional information on how SOTI can set your business up for success, **click here.**
To learn more about the SOTI ONE Platform, **click here.**
To find out how SOTI can help with your mobile investments, contact us today at **sales@soti.net.**

SOTI is a proven innovator and industry leader for simplifying business mobility and IoT solutions by making them smarter, faster and more reliable. SOTI helps businesses around the world take mobility to endless possibilities.

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