Optimize Mobility Management TCO Through Automation

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Table Of Contents

Project Director:
Chris Taylor,
Senior Market Impact Consultant

Contributing Research:
Forrester's Infrastructure and
Operations research group

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Executive Summary

Mobile devices are a lifeline for many people, one that is critical not only in their personal lives, but also their professional ones. As a result, over 50% of working professionals now expect their employers to provide them with the right mobile tools and applications to more effectively do their jobs.[1] While this can yield tremendous productivity benefits for employees, it also adds significant burden on companies' internal IT teams to properly manage, monitor, and support their mobile fleets.

In September 2017, Cisco Jasper commissioned Forrester Consulting to explore how enterprises today manage their corporate mobile devices, what their pain points are, and how they are looking to drive efficiencies and savings. To do so, Forrester surveyed 303 companies in the US and Canada that were providing mobile devices for at least 500 employees at their organizations. The results highlighted the struggles that companies face as their mobile fleets grow and identified several benefits that enterprises could gain through improved automation of their mobility management processes.

KEY FINDINGS

› Enterprises tend to focus on reducing telecom bills (which comprises 33% of mobility TCO), but must also consider the larger assets and services management costs (nearly 50% of mobility TCO).

› One in four companies is still using manual spreadsheets to track devices and assignments, resulting in almost 20% unused devices every month.

› Over 50% of service-change requests are made at the last minute. These changes take hours or days to complete.

› Nearly 90% of companies have experienced overages or unplanned mobile charges in the past year.

› Automation helps alleviate most of the current mobility management challenges and optimizes TCO.

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Mobile Workforce Is Becoming The Norm

Mobile devices have become an integral part of an employee's business life in today's connected world. Forrester data shows that companies that invest in mobile devices and applications for their employees see improved customer service, customer satisfaction, and process efficiencies.[2] Businesses feel the pressure as employees now expect them to provide them the right mobile tools and applications: Over 55% of employees expect a mobile device, job-related mobile apps, and mobile access to job-related data and information (see Figure 1).

Figure 1

Employees today . . .

55%	56%	58%
. . . expect a mobile device.	. . . expect job-related mobile applications.	. . . expect mobile access to job-related data and information.
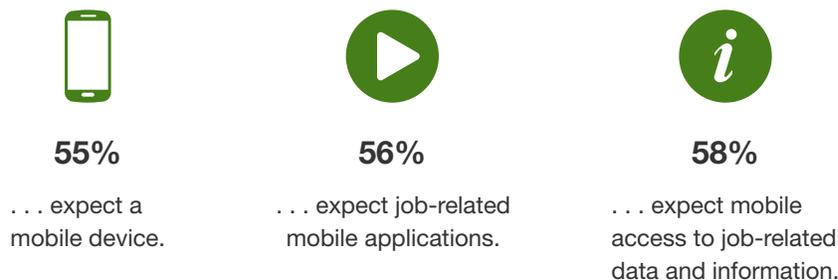
Base: 2,816 working professionals from companies in the US and Canada
Source: Forrester Data's Global Business Technographics® Mobility Survey, 2016

Mobility Management TCO Is More Than Just The Bill

Providing mobile devices and applications to employees is important, but it can be a significant expense. This is especially true for larger companies with more than 5,000 liable devices of which more than a quarter are spending over $5M (USD) on mobility total cost of ownership (TCO) each year (over $1,000 per device). However, controlling cost is not just a matter of finding the best plan and most affordable devices. Instead, mobility management TCO must be totaled from a combination of subscriptions (averaging of 33% of budget), hardware (27%), support and management (20%), and security (20%) (see Figure 2).

› **Subscription costs** — includes monthly telecom bills, overage, reporting, and billing analytics.

› **Hardware costs** — includes procurement of new devices, management of device assignments, managing unused devices, upgrades, and repairs.

› **Mobility support and management costs** — includes asset management, service management, employee support, reporting, and analytics.

› **Security costs** — includes mobile device management (MDM), security personnel, and security breaches.

Figure 2

Average mobility TCO cost breakdown
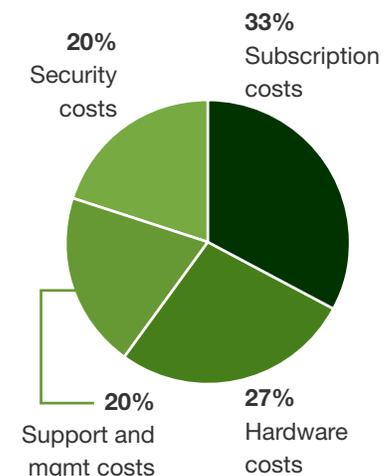
- 33% Subscription costs
- 27% Hardware costs
- 20% Support and mgmt costs
- 20% Security costs

Base: 303 decision makers responsible for procuring and managing mobile devices and services for employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017

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Once a company understands more fully where costs are coming from, it can then begin the task of determining how to lower its TCO. But this is not as straightforward as it sounds. From our survey, respondents identified four of the most challenging areas for reducing mobility TCO (see Figure 3):

› **Internal operations/support costs for manual operations.** Many companies do moves, adds, changes, and deletions (MACDs) manually, which requires more internal personnel to manage. Thirty-one percent lack the online tools to quickly make these changes, which is why MACDs take hours or days to complete for more than two-thirds of companies.

› **Vendor support costs, e.g., telecom expense management (TEM) or managed mobility services (MMS) vendors.** Vendors can provide key support capabilities, but companies need to be cognizant of the cost-benefit ratio that these companies provide.

› **Unused devices.** Devices can go unused in three primary ways: when a device sits in employee drawers or on inventory shelves (32%), when an employee leaves without returning a device (27%), or when a device is lost or stolen. Our survey found that, on average, nearly 20% devices go unused every month.

› **Domestic and roaming overages.** Without proper visibility of device usage, companies can often be hit with bill shock due to overage charges and roaming. In fact, 50% of companies reported overages on nearly half of their bills in the past year.

Tracking Is The Primary Device Management Challenge

Device tracking is critical for controlling device management TCO, yet one in four companies is still using manual records (via spreadsheets) to track devices and assignments. Device tracking isn't just about keeping an inventory of devices; it includes several facets that are often challenging for many companies (see Figure 4):

› **Security tracking** (OS updates, security profile) to ensure device and network security — a challenge for over 40% of companies.

› **Employee status tracking** to quickly deploy devices to new employees or to retrieve devices from employees leaving — a challenge for 35% of companies.

› **Usage tracking** to suspend unused devices — a challenge for over 30% of companies.

Figure 3

Key challenges in managing mobile costs

High support costs due to manual operations

High costs of TEM/MMS vendors

Devices not being returned or being left unused

Overages

Base: 303 decision makers responsible for procuring and managing mobile devices and services for employees
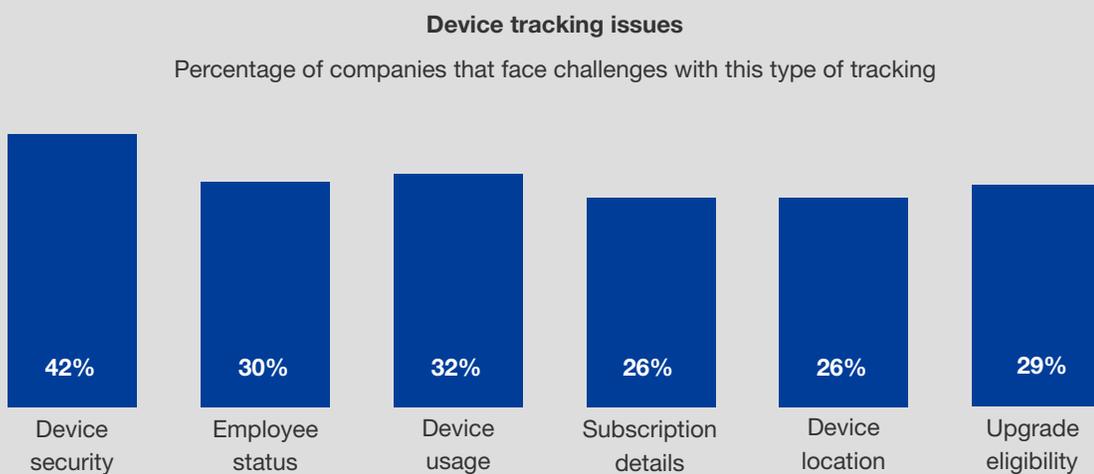Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017

Nearly 20% of devices go unused every month.

› **Subscription tracking** to ensure plans are right for employees' roles — a challenge for over 25% of companies.

› **Location tracking** to ensure devices have a travel plan and security profile based on current location — a challenge for over 30% of companies.

› **Upgrade tracking** for refreshing devices based on eligibility — a challenge for nearly 30% of companies.

Many of these tracking issues create bottlenecks, inefficiencies, and increased hardware costs. Take the example of device assignment: Nearly 40% of companies feel it takes too long to activate, configure, and assign devices to new employees. Part of the challenge is a lack of automation across systems, as mobility teams must manually connect various pieces of information from often disparate tracking systems: checking inventory levels, ensuring the device security and upgrade eligibility is current, understanding employees' roles and services needed from HR systems, and verifying the user has the approval for the device from their manager.

Nearly 40% of companies feel it takes too long to activate, configure, and assign devices to new employees.

Figure 4

Device tracking issues

Percentage of companies that face challenges with this type of tracking

Device security	Employee status	Device usage	Subscription details	Device location	Upgrade eligibility
42%	30%	32%	26%	26%	29%

Base: 303 decision makers responsible for procuring and managing mobile devices and services for employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017

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Processing Mobile Service Changes Takes Too Long

Employees often need to make changes to their mobile device and service based on travel or current usage needs. Changes could include adding an international roaming plan, boosting data allotments, resetting voicemail password, or adding device features.
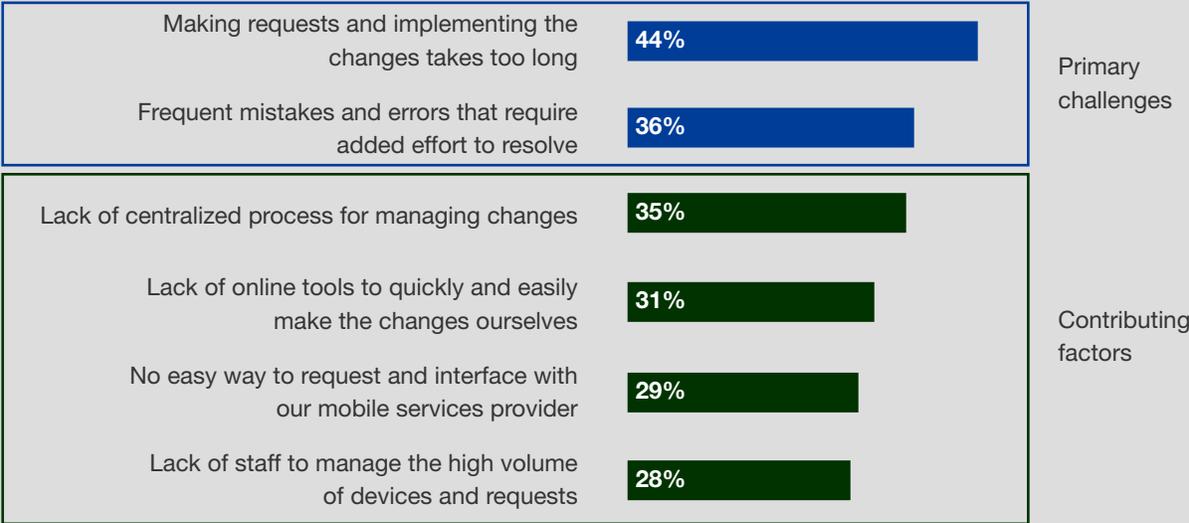
Regardless of the change needed, 52% of companies reported that moves, adds, changes, and deletions (MACD) requests are typically made at the last minute (immediately before a trip or already en route to a location where the services are needed). Responding quickly to these requests is difficult as many companies are manually managing the process: Roughly 30% say they lack the online tools and technology to quickly make changes and find no easy way to request changes from their mobile services provider (see Figure 5).

The average company receives between 1,000 and 4,999 MACD requests in a typical month. Compound this with the fact that nearly one-third of the companies don't have enough support staff to manage this high volume of MACD requests, and you've created a recipe for disaster (see Figure 6).

It is no wonder that over 40% of companies see the MACD process as cumbersome.

The average company receives between 1,000 and 4,999 MACD requests in a typical month. Each takes hours or days to complete.

Figure 5

Key challenges in managing MACD requests

Primary challenges	
Making requests and implementing the changes takes too long	44%
Frequent mistakes and errors that require added effort to resolve	36%

Contributing factors	
Lack of centralized process for managing changes	35%
Lack of online tools to quickly and easily make the changes ourselves	31%
No easy way to request and interface with our mobile services provider	29%
Lack of staff to manage the high volume of devices and requests	28%

Base: 303 decision makers responsible for procuring and managing mobile devices and services for employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017

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Figure 6

Companies feel the MACD process takes too long
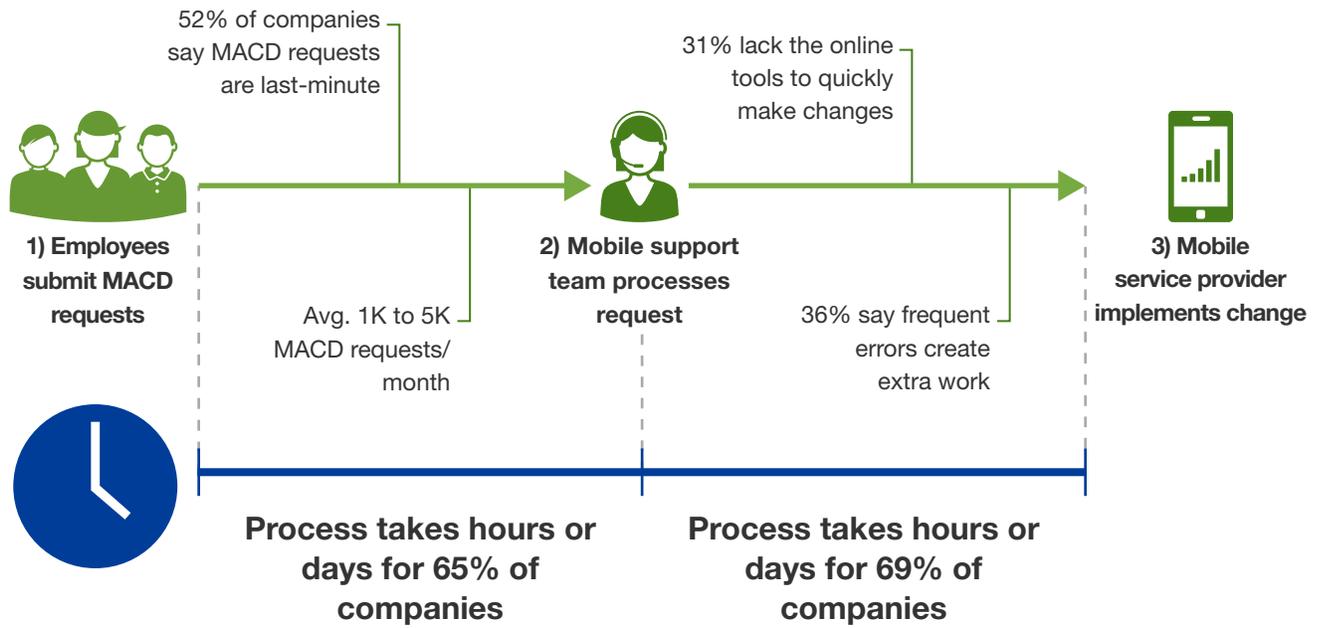
52% of companies
say MACD requests
are last-minute

31% lack the online
tools to quickly
make changes

**1) Employees
submit MACD
requests**

**2) Mobile support
team processes
request**

**3) Mobile
service provider
implements change**

Avg. 1K to 5K
MACD requests/
month

36% say frequent
errors create
extra work

**Process takes hours or
days for 65% of
companies**

**Process takes hours or
days for 69% of
companies**

Base: 303 decision makers responsible for procuring and managing mobile devices and services for employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017
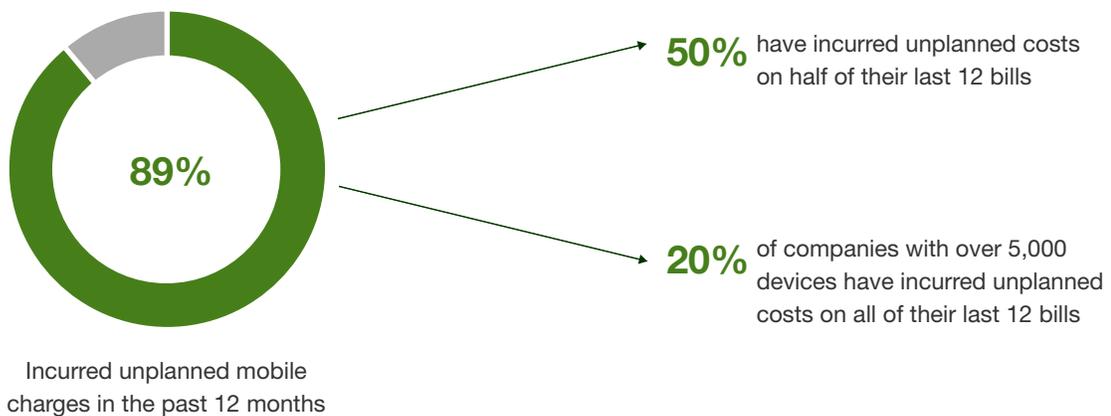
Subscription Fees Are Unpredictable And Costly

Seventy-six percent of the companies we surveyed said they have mostly consistent telecom service costs month over month, but only 17% could say they have predictable monthly costs.[3]

Overages are common: In the past 12 months (or billing cycles), nearly 90% of companies have faced unplanned charges. In fact, 50% of companies reported having overages on nearly half of their bills, in the past year. The likelihood of overages occurring increases as the size of your devices fleet increases: 20% of companies with 5,000 or more devices reported having overages on every single bill. This can add up to a substantial business expense if not managed properly, especially if occurring every other billing cycle (see Figure 7).

In the past 12 months (or billing cycles), nearly 90% of companies have faced unplanned charges

Figure 7

Number of companies with unplanned bills in the past 12 months

89%

Incurred unplanned mobile charges in the past 12 months

50% have incurred unplanned costs on half of their last 12 bills

20% of companies with over 5,000 devices have incurred unplanned costs on all of their last 12 bills

Base: 303 decision makers responsible for procuring and managing mobile devices and services for employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017

The inability to predict costs can stem from multiple issues, primarily:

› **Lack of real-time visibility into mobile usage.** Seventy-five percent of companies have no real-time visibility into how much their employees are using their phones right now (see Figure 8). Most rely on reports they receive at the end of billing cycles. Without a live view into mobile usage, companies can only request ad hoc usage reports or request alerts when employees reach their usage limits. Neither way offers reliable outcomes to completely prevent overages.

› **Insufficient mobile reporting.** Even if companies are reporting on mobile usage, they need to ensure the reporting is in a clear, usable format, and that the data is available to the right people, at the right time. Many companies do ad hoc reporting by piecing together multiple spreadsheet files or have no reporting at all (see Figure 8).

Figure 8

"How companies monitor their employee mobile usage?"

Invoice reports at the end of every billing cycle	23%
Periodic reports from services provider	19%
Service provider alerts based on usage limits	18%
Request ad hoc reports as needed	15%
Real-time visibility of mobile usage	25%

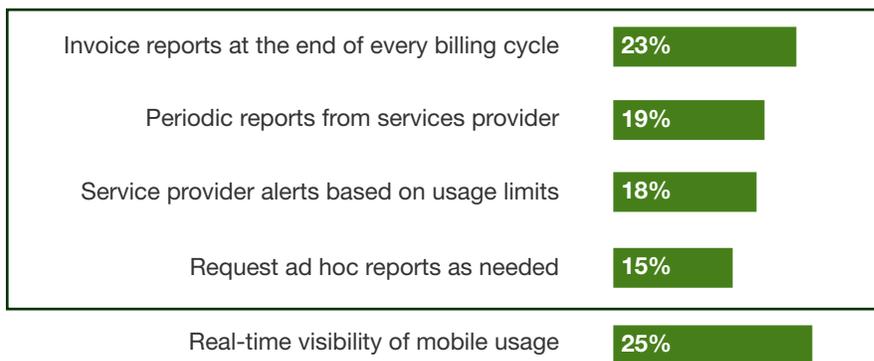75% of companies have no real-time visibility into mobile usage

Base: 303 decision makers responsible for procuring and managing mobile devices and services for employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017

The Need For Unified, Automated Mobility Management

Lowering mobile telecom bills is the number one driver behind mobility management improvements (see Figure 9). Companies are keenly aware of the need to control mobility costs. When asked to rank where they saw the greatest opportunity for cost savings, the results were as follows:

› Rank 1: More efficient management of mobility operations.

› Rank 2: Managing and reducing the number of used devices.

› Rank 3: Renegotiating mobile contracts.

› Rank 4: Managing and reducing domestic and roaming overages.

This ranking supports the notion more effective management of the entire mobile ecosystem is going to have a greater impact than focusing on just one cost area.

A UNIFIED VIEW WILL DRIVE EFFICIENCIES

We asked companies how they thought would help them achieve their desired efficiency and cost-savings objectives. Respondents identified a variety of opportunities, including (see Figure 10):

› **Easier, faster mobile device deployment.** In addition to the manual tracking and configuration, the various device types and OSs add to the complexity of device deployments. In support of faster deployment, 74% of firms said the ability to make batch process changes to mobile devices is extremely or very important to easing the process and enabling cost savings.

› **Real-time visibility into employee usage is crucial.** IT stakeholders' responses reveal that many firms only have access to employee service and device usage on a monthly or even a quarterly basis. Real-time visibility into employee usage would help firms know before they incurred overages and ensure their employees have the right plans when needed.

› **Self-managed services enabled through a unified platform.** One of the quickest ways that companies will realize cost savings is through consolidation of tools into a single view. This can save time and money. This type of tool should also enable greater self-management of changes and devices, thus reducing the burden and requirement on support teams.
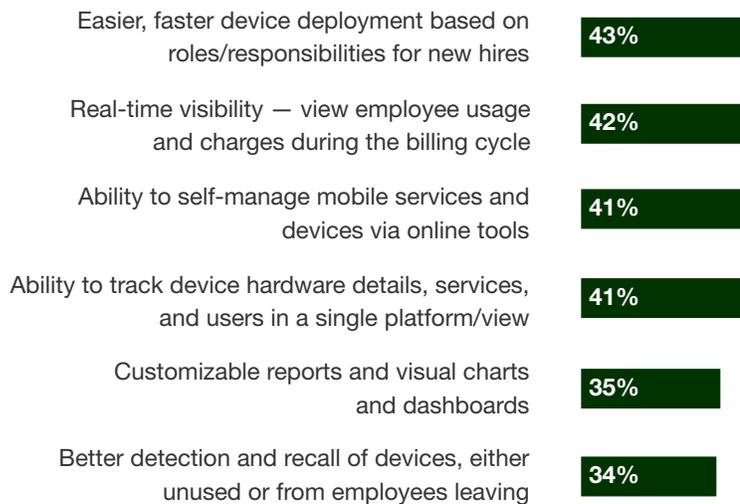
Figure 9

Primary expected benefits of improved mobility management

$ Lower mobile telecom bills

Better expense planning and budgeting

Improved employee productivity

Base: 303 decision makers responsible for procuring and managing mobile devices and services for employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017

Figure 10

Key capabilities companies want for better management of their mobile devices and services

Easier, faster device deployment based on roles/responsibilities for new hires — **43%**

Real-time visibility — view employee usage and charges during the billing cycle — **42%**

Ability to self-manage mobile services and devices via online tools — **41%**

Ability to track device hardware details, services, and users in a single platform/view — **41%**

Customizable reports and visual charts and dashboards — **35%**

Better detection and recall of devices, either unused or from employees leaving — **34%**

Base: 303 decision makers responsible for procuring and managing mobile devices and services for employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017

AUTOMATION: THE NEW MOBILITY MANAGEMENT APPROACH

Automation is reinventing mobility management. Through automation, firms can receive alerts on usage anomalies, as well as automate the deployment, tracking, and management of their mobile services and devices.
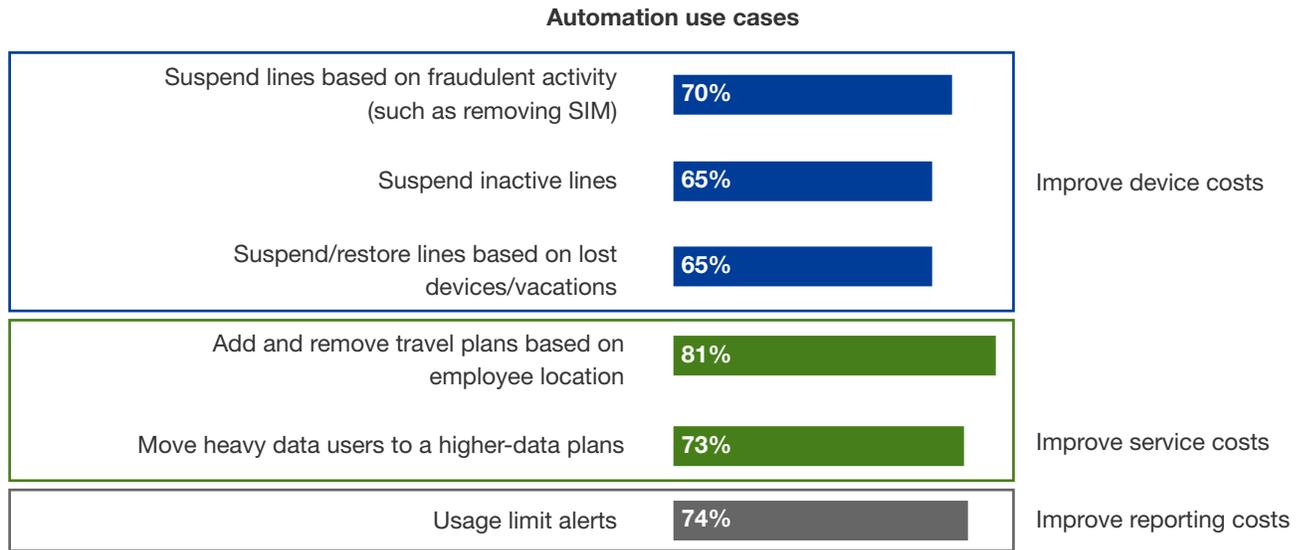
Companies believe that automation can give them complete hands-free control across all aspects of their mobility TCO (see Figure 11):

› **Automation reduces services costs.** Over 80% of companies believe that automatically adding and removing travel plans based on employee location would help them avoid overages. Additionally, firms also said they would better manage their mobile services from automated rules that moved heavy data users to a higher data plan and vice-versa.

› **Automation reduces hardware costs.** Automation can help control hardware costs by automatically suspending lines due to lack of use or fraudulent activity. Sixty-five percent also see value in being able to automatically suspend/restore lines for lost devices or planned absences.

› **Automation reduces reporting costs.** Automation can give nearly 75% of companies the visibility they need, reducing the ad hoc reporting requests during the billing cycle. Through automated alerts triggered by real-time employee usage, firms can know and act in the moment rather than being surprised when the bill arrives.

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Figure 11

Use cases where automated policies would help better manage your mobile devices and services
(Percentage of companies that feel this automation would help)

Automation use cases

Use case	Percentage	Category
Suspend lines based on fraudulent activity (such as removing SIM)	70%	Improve device costs
Suspend inactive lines	65%	
Suspend/restore lines based on lost devices/vacations	65%	
Add and remove travel plans based on employee location	81%	Improve service costs
Move heavy data users to a higher-data plans	73%	
Usage limit alerts	74%	Improve reporting costs

Base: 303 decision makers responsible for procuring and managing mobile devices and services for employees
Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017

Key Recommendations

Mobility is front and center for companies as they use smartphones, tablets, and other types of mobile devices to streamline the way business is conducted. Employees now expect their employers to provide them the right mobile tools and applications needed to be productive. To meet this rising expectation of employees, companies should do the following:

Measure the total cost of ownership, not just your monthly fees. Most companies recognize the importance of monitoring their monthly mobile subscription fees. However, to understand the comprehensive impact of your mobility management investment, you need to look at your mobility TCO. In calculating your TCO, consider incorporating asset tracking and management costs, help desk personnel costs, training costs, service management time and effort, fees for third-party tools, and employee productivity loss.

Make automation a key pillar of your mobility management approach. Automation empowers you to be proactive, instead of reacting to past events and charges. This approach provides real-time usage alerts, prevents unexpected overages, and enables you to automate your mobile services, asset, and employee life cycles. Look for ways to automate your mobility management operations and reduce your overall mobility TCO.
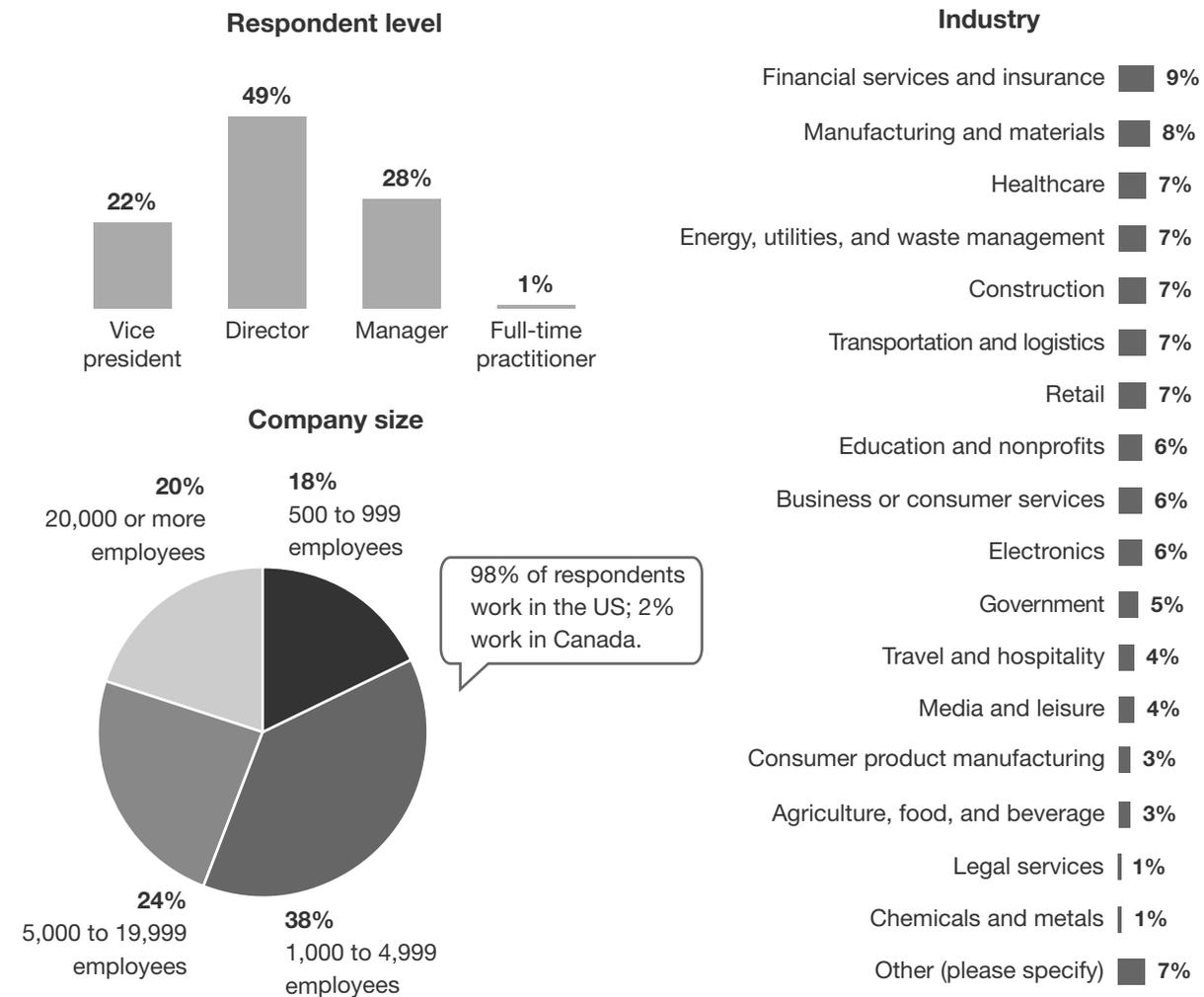
Discuss your automated mobility management requirements with your service providers. Enterprises often seek mobility management assistance from various third-party TEM or MMS vendors. While this approach can alleviate some of your mobility management pains, it does not eliminate them. We find that progressive telecom service providers are reinventing their business portals to address the evolving customer needs: (1) they are integrating their various business portals for a unified view, and (2) they are enhancing their business mobility portals with automated mobility management solutions. Before looking for 3rd party tools, discuss your mobility needs with your service provider and learn if they plan to enhance their business customer experience with automation.

Appendix A: Methodology

In this study, Forrester interviewed 303 IT and business decision makers responsible for procuring and managing mobile devices and services for employees. Questions provided to the participants asked about their current mobile policies and challenges related to supporting their mobile fleets. Companies surveyed were from the US and Canada, with 88% from US companies. Respondents were offered a small incentive as a thank you for time spent on the survey. The study was completed in September 2017.

Appendix B: Demographics

Respondent level

- 22% Vice president
- 49% Director
- 28% Manager
- 1% Full-time practitioner

Company size

- 18% 500 to 999 employees
- 38% 1,000 to 4,999 employees
- 24% 5,000 to 19,999 employees
- 20% 20,000 or more employees

98% of respondents work in the US; 2% work in Canada.

Industry

Financial services and insurance	9%
Manufacturing and materials	8%
Healthcare	7%
Energy, utilities, and waste management	7%
Construction	7%
Transportation and logistics	7%
Retail	7%
Education and nonprofits	6%
Business or consumer services	6%
Electronics	6%
Government	5%
Travel and hospitality	4%
Media and leisure	4%
Consumer product manufacturing	3%
Agriculture, food, and beverage	3%
Legal services	1%
Chemicals and metals	1%
Other (please specify)	7%

Base: 303 decision makers with responsibility procuring and managing mobile devices and services for employees
Note: Percentages may not total 100 because of rounding.
Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco, September 2017

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Appendix C: Endnotes

[1] Source: Forrester Data's Global Business Technographics® Mobility Survey, 2016.

[2] Ibid.

[3] The survey only included US (98%) and Canadian (2%) companies, which potentially skews the data toward having more consistent billing due to the maturity of mobile services. Many North American mobile services carriers offer unlimited group plans so that companies don't have to worry about individual overages — 63% of companies surveyed subscribe to unlimited data/talk/text plans.