OXFORD ECONOMICS

SAMSUNG

MAXIMIZING MOBILE VALUE:
IS BYOD HOLDING YOU BACK?

JUNE 2018

INTRODUCTION

Work today is done on the move. Managers expect it. Employees demand it. Mobile devices are critical to business performance, and ubiquitous across the enterprise, wherever and whenever the job gets done. Simply put, most people need mobile phones to do their jobs as well as possible.

Yet when it comes to putting mobile devices into the hands of employees, many companies are not taking a holistic view. Mobile work is a strategic priority, but the fundamental decisions that enable it are too often based on short-term thinking and ad hoc policies.

To better understand the value of various approaches to device adoption, Oxford Economics worked with Samsung in early 2018 to survey 500 senior IT executives, CEOs, and other senior managers across the United States. We focused on the costs and benefits of different ways of providing mobile devices to workers, and on the goals companies have for their mobile efforts.

Our research shows that up-front savings do not always maximize long-term value. Companies that depend on employees to provide their own mobile phones—an approach commonly known as Bring Your Own Device, or BYOD—do save money on acquisition costs. But over time there are other costs to consider, while factors such as increased productivity and operational efficiency can make policies that provide phones to some or all employees worth considering.

Among the key findings from the survey data:

- **Modern work is mobile work.** Nearly 80% of survey respondents say employees cannot do their jobs effectively without a mobile phone, and three-quarters say mobile devices are essential to workflows.

- **Device management, support costs, and stipends—not just device acquisition— are critical considerations over time.** The administration of mobile devices often costs much more in the long run than the purchase price for phones—and even BYOD companies almost always maintain device management

programs. In fact, acquisition costs represent only 10%–13% of the total spent for enabling an employee over two years, depending on company size. BYOD companies also increasingly spend on stipends to cover employee mobile-service fees.

- **Different goals shape different approaches.** Companies that prioritize effectiveness of mobile workflows and applications are more likely to provide devices to all employees (65%); cost, security, and corporate culture are other motivations behind the device policy choice. However, many may not understand which mobile enablement strategy is best for their needs.

- **Strategic value takes investment.** Companies that provide phones to some or all employees see measurable value in terms of productivity, ease of collaboration, and the ability to get the job done in a timely manner. BYOD respondents report lower satisfaction rates with mobile devices as work tools (69%, vs. 78% or more for those who provide devices to a significant portion of their workforce).

- **The right mixed-device policy is a marker of maturity.** Those who provide mobile phones to more than 20% of employees tend to have the most mature mobile enablement strategies, in terms of their management policies and mobile workflows; they also report the most value from their mobile policies.

Our analysis suggests that providing phones to some or all employees is a sound business decision for many companies. This approach recognizes the true potential of mobility by treating the mobile workforce as a strategic investment instead of a cost center.
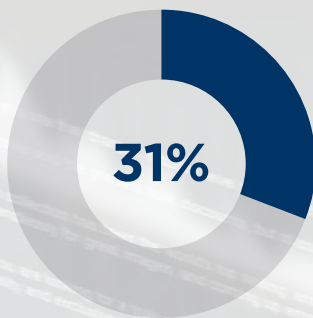
HOW COMPANIES GO MOBILE

We sorted our survey respondents into four groups, based on their approach to supplying employees with mobile devices: Organizations that ask all employees to bring their own devices (BYOD only); those that provide devices to a small percentage of employees (limited Employer-Provided Devices program); those that issue devices to a larger percentage of employees (broad EPD program); and those that provide phones to all employees (EPD only).

While there is considerable diversity within each group, some broad statements can be made about them.
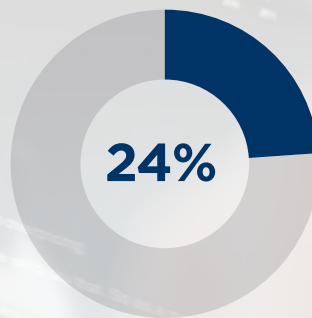
Fig. 1: Getting phones to workers

Which of the following best describes your organization's current mobile device policy?

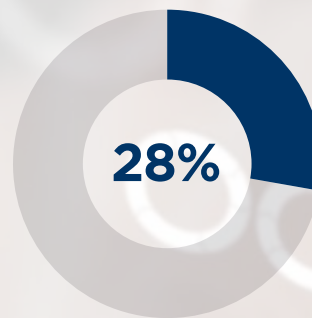| **BYOD** (31% of respondents):	**Limited EPD Program** (24% of respondents):	**Broad EPD Program** (28% of respondents):	**EPD Only** (17% of respondents):
31%	24%	28%	17%

BYOD

These companies do not provide devices to their workforces, but allow employees to use their personal phones for work. They are most motivated by the up-front cost of mobile enablement, although they acknowledge that providing some or all employees with phones can lead to greater value down the road.
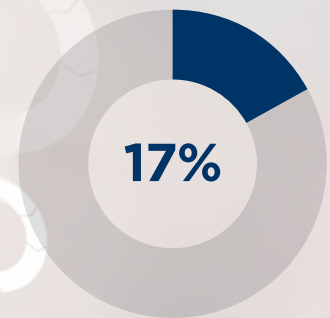
Limited EPD Program

These respondents provide devices to less than 20% of their workforce, and allow other employees to use their personal phones for work. They often get more value from their mobile programs than do pure-play EPD or BYOD companies. Decisions on which employees get phones are most often made by considering both job function and seniority.

Broad EPD Program

These respondents provide devices to at least 20% of their workforce, and allow other employees to use their personal phones for work. These companies tend to be the most sophisticated users of mobile devices in our survey, and to reap the greatest benefit from their mobile strategies.

EPD Only

These respondents provide phones to their entire workforces. They tend to come from the smaller companies in our survey population, with revenues of less than $1 billion. Company size may drive policy, since it is easier to provide devices for everyone if there are fewer people involved.

THE MOBILE IMPERATIVE

61%

of organizations expect employees to be available remotely, even if they don't provide a company phone.
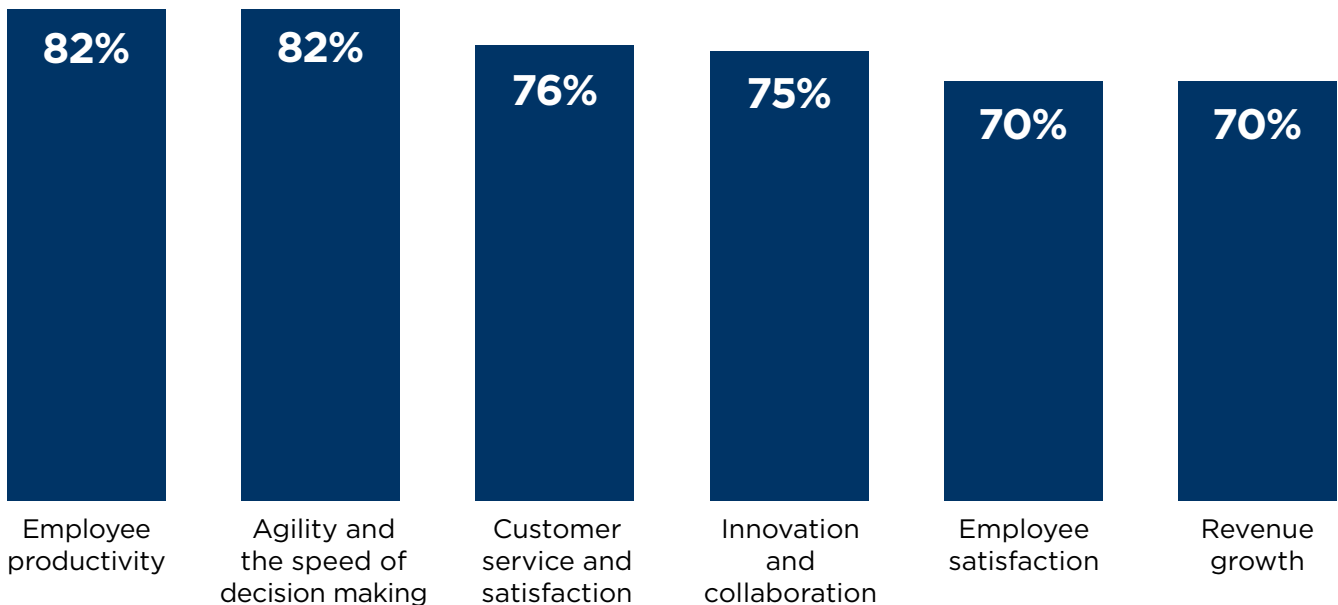
Mobile devices have become as common in the workplace as they are in the rest of everyday life. These familiar tools make a big impact. Our survey respondents say smartphones and similar tools are highly important or quite important to employee productivity (82%), agility and the speed of decision-making (82%), customer service and satisfaction (76%), and innovation and collaboration (75%). They influence everything from employee satisfaction and retention to revenue growth and profitability.

The use of mobile devices is essentially mandatory. More than two-thirds of executives say that management expects employees to be available after hours, with nearly as many saying they expect workers to be available remotely—even if employees do not have company-provided phones.

Yet mobility's importance has grown faster than the ability of organizations to use it effectively or innovatively. Most respondents do not see themselves as leaders in the field, with more than 80% saying their organization's use of mobile technology is of average sophistication. Those most likely to rate themselves as highly sophisticated (27%) are Broad EPD—companies that provide devices to 20% or more of employees. Companies that outsource some or all of their mobile device management are less likely to say they are highly sophisticated (5%, vs. 22% of those who manage in-house).

Fig. 2: Mobile is mission-critical

How critical are mobile devices to the following?
"Quite important" and Highly important" responses combined

Employee productivity	Agility and the speed of decision making	Customer service and satisfaction	Innovation and collaboration	Employee satisfaction	Revenue growth
82%	82%	76%	75%	70%	70%

Many factors contribute to mobile maturity, with organizational, cultural, and technical issues all in play. Our respondents find themselves at varying stages of the journey, and face a variety of obstacles to success. Over half say lack of interoperability between mobile devices and other corporate apps and systems is a challenge, for example, and more than 40% say the lack of a clear, company-wide mobile business strategy holds them back.
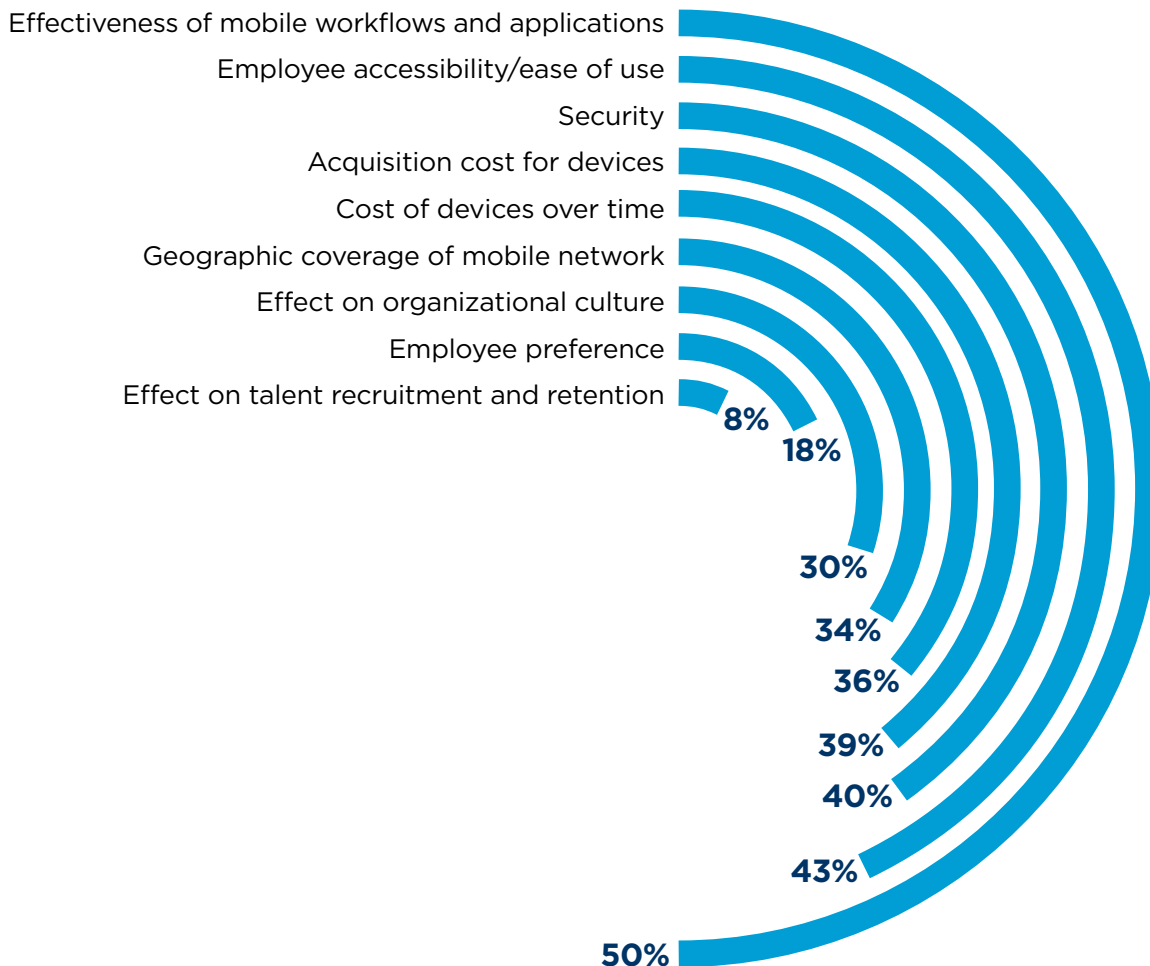
Ultimately, mobile strategy is a leadership issue. Senior management decides who gets a phone and who does not at over half our respondent companies. But there is no broad consensus on the best way of providing mobile devices to workers, and many businesses have not found the right approach to meet their strategic needs.

53%

of organizations say that a lack of interoperability between mobile devices and other corporate apps and systems is at least somewhat challenging.

Fig. 3: What drives device strategy?

Which of the following factors are most important in determining your company's mobile device strategy and policy? *Respondents could select up to three*

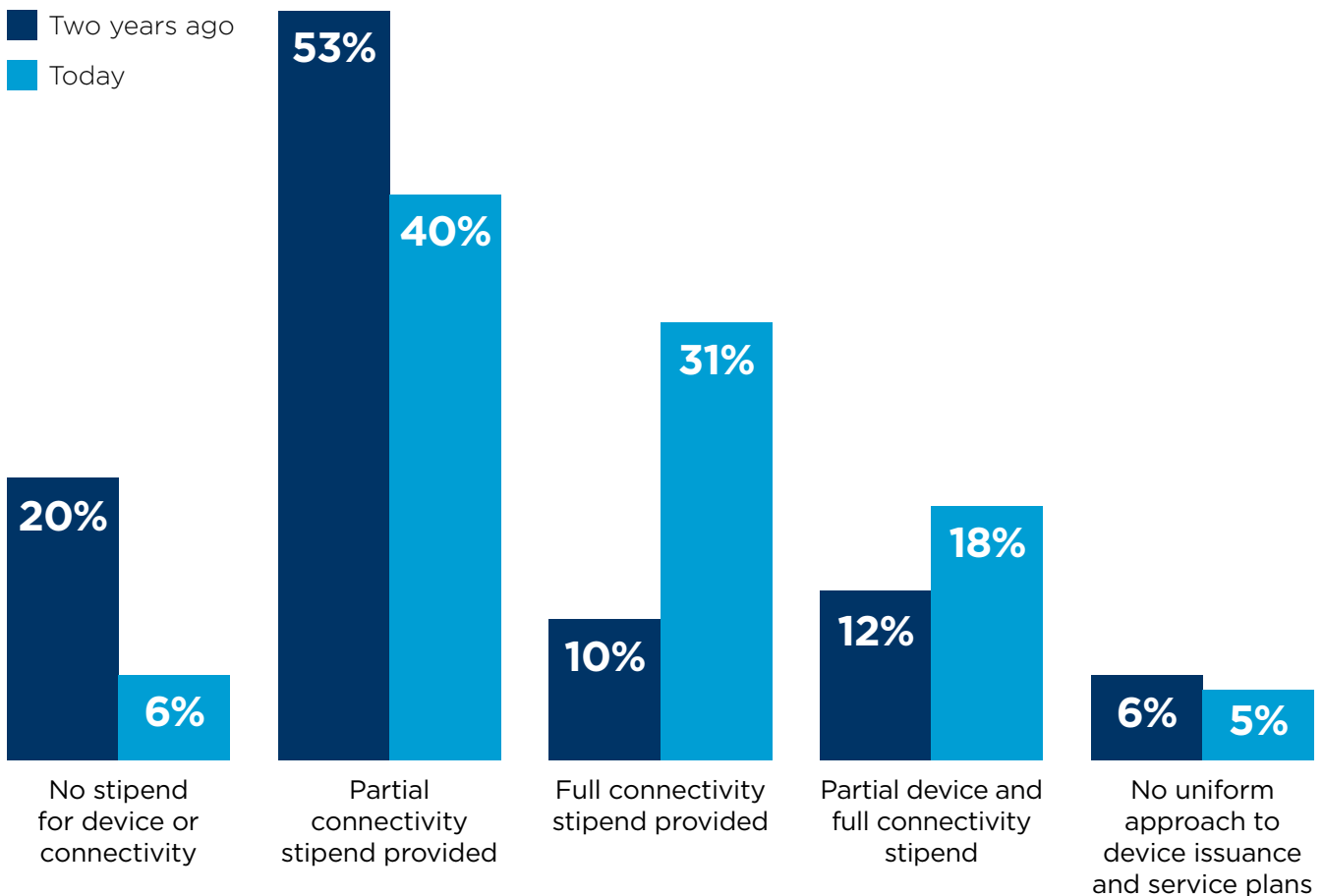| Factor	Percentage
Effectiveness of mobile workflows and applications	50%
Employee accessibility/ease of use	43%
Security	40%
Acquisition cost for devices	39%
Cost of devices over time	36%
Geographic coverage of mobile network	34%
Effect on organizational culture	30%
Employee preference	18%
Effect on talent recruitment and retention	8%

THE COST EQUATION

$1,057

The average cost per user of device and mobile service over 24 months for 1,000-employee organization.

Many factors influence decisions about which—if any—employees are issued mobile devices. Atop the list of concerns are the effectiveness of mobile workflows and applications, employee accessibility and ease of use, and security. But cost is always a consideration.

Perhaps unsurprisingly, a majority of respondents see BYOD as the most cost-effective approach (53%). And it is true that allowing—or requiring—employees to use their personal phones for work purposes delivers up-front savings, because employers do not have to pay for the devices. These costs are not insubstantial: the mean cost of devices for EPD companies in our survey is $309.17, with an additional $51.46 per user per year budgeted for repairs and replacement; companies get back $59.40 for used devices upon trade-in.

Fig. 4: Stipends for BYOD workers are increasingly common

Which best describes your company's policies around paying for mobile service plans? How does this compare to what you did two years ago?

Legend:
- Two years ago
- Today

Category	Two years ago	Today
No stipend for device or connectivity	20%	6%
Partial connectivity stipend provided	53%	40%
Full connectivity stipend provided	10%	31%
Partial device and full connectivity stipend	12%	18%
No uniform approach to device issuance and service plans	6%	5%

LOOKING BEYOND THE COST OF ACQUISITION

A deeper look at costs shows how they can accrue on multiple fronts over time, both at companies that issue phones to some or all of their employees and at BYOD firms. These include the following ongoing costs:

- **Monthly stipends and cellular connectivity costs.** As mobile phones have become essential, even BYOD companies are assuming more post-purchase costs from employees. Two years ago, just 10% of these respondents paid all of their employees' monthly service costs, and 20% did not cover any of those costs. Today, 31% pay the entire monthly cost, and only 6% pay nothing. In two years, 20% of BYOD companies plan to pay a stipend covering a portion of the device cost and the monthly service bill.

- **Mobile device management (MDM).** Companies need to ensure mobile devices that access corporate data are effectively secured and managed. A vast majority of respondent companies, regardless of their device enablement strategy, have an MDM solution in place (including 88% of BYOD-only respondents). This entails a significant investment of resources: the smallest organizations in our survey, in terms of annual revenue and employee count, tend to employ three or fewer people to manage their mobile devices, while most of the largest typically employ at least 10. For a closer look at how BYOD and EPD management costs stack up, see page 8.

- **Outsourcing**. Many companies choose to engage third-party vendors to deal with the details of mobile management. Those with mixed EPD/BYOD strategies are less likely to outsource—39% of these hybrid companies do so, vs. 67% of pure-play EPD firms and 75% of BYOD firms. Broad EPDs are even less likely to outsource (31%). These strategies are likely driven by available resources: the largest companies in our survey are much more likely to manage devices in-house, while the smallest are most likely to outsource.

(For a more detailed breakdown of the costs associated with these support activities, including a breakdown of how EPD and BYOD costs compare, see "The true costs of mobility," on page 8.)

In general, the companies in our survey believe their chosen approach to mobile enablement is the most cost-effective. But our research also shows that there are other factors beyond cost that help determine the ultimate value of mobile strategies.

$36

Average monthly stipend provided to employees who bring their own device.

—

THE SURPRISING TRUE COSTS OF MOBILITY

Organizations that require employees to provide their own mobile devices (BYOD) save much less money than they might expect, when compared to organizations that issue devices to their workers (EPD).

Like any strategic effort, mobility requires investment to realize its full value. How much do organizations actually spend on different approaches to providing mobile devices to their employees? We asked our survey respondents about their costs, with line items for specific expenses including device acquisition, maintenance and upgrades, cellular connectivity, Mobile Device Management, and applications.

We also looked at the cost—and performance—implications of outsourcing some or all mobile responsibilities. Figure 4 (below) shows our cost calculations for both SMBs and large organizations, represented here by results for companies with 500 employees and 10,000 employees, respectively.

Determining overall cost requires a complicated equation with a multitude of variables. While EPD organizations must factor in device acquisition costs and connectivity fees, monthly sti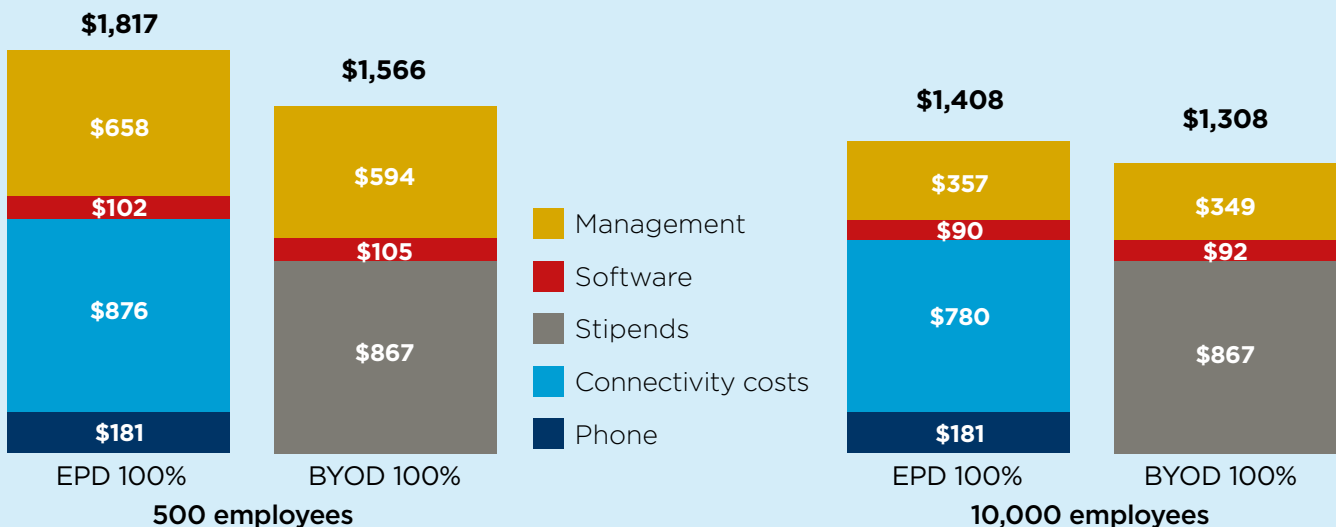pends offered by BYOD organizations largely offset those expenses. In fact, when all the various costs of mobile programs are included, the costs of an EPD plan and a BYOD plan are closer than a casual observer may expect. When the productivity value of EPD is taken into consideration, along with potential savings from the elimination of landlines—factors beyond the scope of our calculations—it becomes even more difficult say BYOD is less expensive.

Different organizations will bring their own sets of variables to the cost equation. For example, the number of employees, the total number of apps installed, and the method of device management (i.e., in-house IT team vs. outsourced vendors) all play significant roles. In addition, some specific industry regulations come into account when considering software and security management. Figure 4 displays the average two-year cost per employee of managing a mobile device, including the purchase at EPD firms of mid-market phones (that is, not bargain-basement devices or the latest, feature-laden releases).

Want to know more about the true costs of your management plan? Use our cost calculator to find out which policy makes the most sense your organization.

Fig. 4: Mobile investments go beyond acquisition costs

Total mobile spend per employee, two year contract

Legend:
- Management
- Software
- Stipends
- Connectivity costs
- Phone

500 employees

EPD 100% — $1,817 ($658 Management, $102 Software, $876 Connectivity costs, $181 Phone)

BYOD 100% — $1,566 ($594 Management, $105 Software, $867 Stipends)

10,000 employees

EPD 100% — $1,408 ($357 Management, $90 Software, $780 Connectivity costs, $181 Phone)

BYOD 100% — $1,308 ($349 Management, $92 Software, $867 Stipends)

VALUE BEYOND COST

Mobility is mandatory for many kinds of work, and mobile enablement is properly seen as a strategic investment. Like any significant undertaking, mobile device policies require a careful cost/benefit analysis—but the value created must not be held hostage to the price of entry. Our survey shows several areas where spending to provide employees with mobile devices can pay off in meaningful ways.

Return on mobile investments can be realized in terms of traditional measures such as productivity, and in digital-era staples like speed and organizational culture. Some of these attributes are difficult to quantify, but respondents from companies that provide some or all employees with devices tend to recognize more value from their mobile efforts than those that require all employees to provide their own phones.
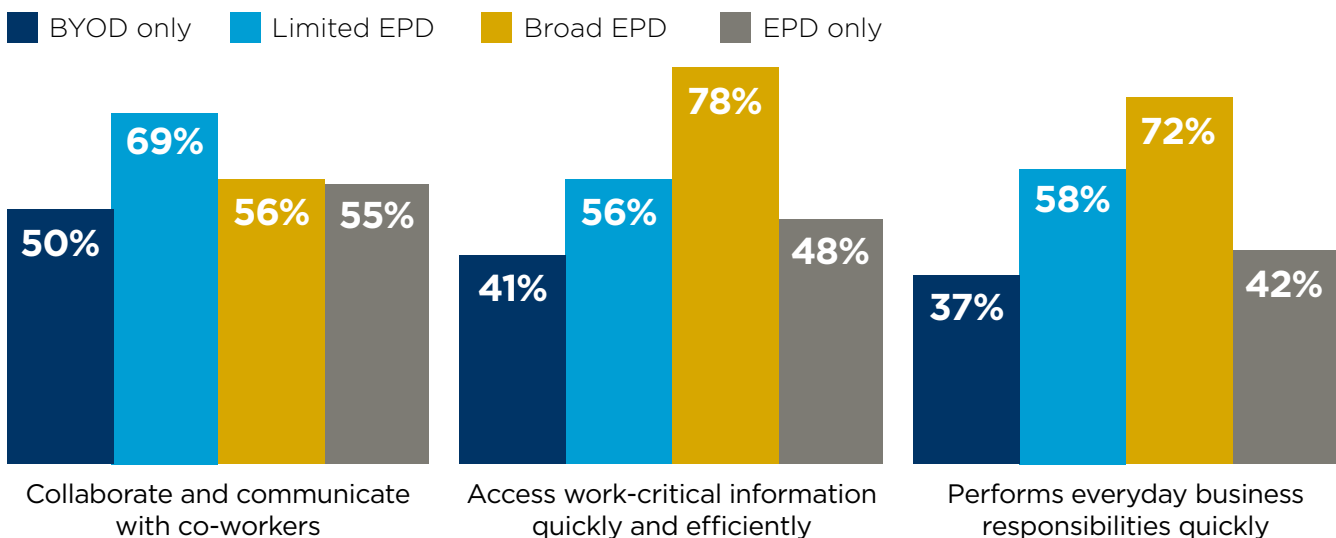
Companies tend to see their own strategy as the one that works best, in terms of workforce productivity and satisfaction. But Broad EPD organizations are more satisfied with the effectiveness of their mobile enablement strategy, while BYOD respondents are least likely to say their mobile enablement strategy allows workers to access work-critical information quickly and efficiently (41%, vs. 48% of EPD, 78% of Broad EPDs, and 56% of Limited EPDs); perform everyday business responsibilities quickly (37%, vs. 42% of EPD, 72% of Broad EPDs, and 58% of Limited EPDs); or collaborate and communicate with coworkers (50%, vs. 55% of EPD, 76% of Broad EPDs, and 69% of Limited EPDs).

Leaders

Organizations providing mobile phones to more than 20% of employees lead across virtually all maturity indicators.

Fig. 5: How mobile strategies deliver business value

To what extent does your current mobile phone enablement strategy allow you to accomplish the following? *"To a meaningful extent" and "To a significant extent" responses*

Legend: BYOD only | Limited EPD | Broad EPD | EPD only

	Collaborate and communicate with co-workers	Access work-critical information quickly and efficiently	Performs everyday business responsibilities quickly
BYOD only	50%	41%	37%
Limited EPD	69%	56%	58%
Broad EPD	56%	78%	72%
EPD only	55%	48%	42%

Getting Work Done

Organizations that opt for BYOD for all employees are the least satisfied with the value they get from mobile devices as a work tool.

Maximizing the benefits of mobile devices is about much more than device selection. Companies with the most mature mobile enablement strategies are developing applications that allow employees to access core business systems, in addition to routine email and calendars (most respondents have developed between 1 and 5 apps). Broad EPD companies are more likely than any other group to say their employees can access all core business systems via their mobile device (17%, vs. 3% of limited EPD, 3% of EPD companies, and 6% of BYOD companies)—another sign of the group's maturity.

Many BYOD respondents acknowledge that their approach makes it harder for them to cash in on some of mobility's promises. These respondents are least likely to say they are satisfied with their organizations' mobile devices as work tools (69% say they are very satisfied or somewhat satisfied, vs. 78% of EPD-only companies and 92% of Broad EPDs or more of employees). Similar patterns emerge for values including access to applications, security, and technical support.

The pattern persists across a range of benefits, including collaboration and security, with EPD companies holding small but consistent leads over BYOD firms; Broad EPDs score much higher than either group.

Employee satisfaction with mobile policies is a closer call, with about half of respondents saying BYOD is superior in this regard, and the rest choosing EPD or hybrid approaches (both EPD and BYOD respondents overwhelmingly say their method is best for employee satisfaction). This metric is an important one—people are very attached to their phones and their privacy, and keeping employees happy is good for business—but other drivers of business value tends to strongly favor EPD or hybrid policies.

CONCLUSION AND NEXT STEPS

Mobile devices are essential to business performance, and companies must find ways to unlock the full value of their mobile strategies. Relying on employees to provide their own mobile phones has cost benefits in the short term, but other costs add up over time regardless of the device-distribution policy, and providing some or all employees with mobile phones delivers value in numerous ways.

Based on our research, we recommend companies take the following steps as they modernize their approach to mobile device distribution:

- Think about the needs of the company overall, and of its individual employees

- Get the full picture; don't evaluate based on acquisition cost alone

- Assess which groups of employees would benefit most from employer-provided devices, and what tools and workflows are needed to facilitate collaboration with BYOD employees

- Build the MDM solutions/infrastructure needed to get full value from modern mobile work

To evaluate your organization's mobile investments, follow the link to our cost-calculator.

insights.samsung.com/mobile-cost-calculator/

ABOUT THE RESEARCH

OE worked with Samsung in early 2018 to survey 504 IT executives and other senior managers in diverse industries across the United States about their strategies and aspirations for mobile device deployment. The fieldwork was conducted via computer-assisted telephone interviews (CATI).

Founded in 1981 as a joint venture with Oxford University's business college, Oxford Economics is a global consultancy specializing in evidence-based thought leadership, forecasting, and economic impact analysis.

This study was commissioned by Samsung Electronics America. Click here to learn about Samsung's portfolio of mobile devices, security and management solutions and business services.

https://www.samsung.com/us/business/solutions/topics/enterprise-mobility/

OXFORD ECONOMICS

Global headquarters
Oxford Economics Ltd
Abbey House
121 St Aldates
Oxford, OX1 1HB
UK
Tel: +44 (0)1865 268900

London
Broadwall House
21 Broadwall
London, SE1 9PL
UK
Tel: +44 (0)203 910 8000

New York
5 Hanover Square, 8th Floor
New York, NY 10004
USA
Tel: +1 (646) 786 1879

Singapore
6 Battery Road
#38-05
Singapore 049909
Tel: +65 6850 0110

Europe, Middle East and Africa

Oxford
London
Belfast
Frankfurt
Paris
Milan
Cape Town
Dubai

Americas

New York
Philadelphia
Mexico City
Boston
Chicago
Los Angeles
Toronto
San Francisco
Houston

Asia Pacific

Singapore
Sydney
Hong Kong
Tokyo

Email:
mailbox@oxfordeconomics.com

Website:
www.oxfordeconomics.com