

SOTI[®]

ONE PLATFORM
CONNECTING EVERYTHING

REDUCE
REUSE
RETHINK:

FROM DISCARD MENTALITY
TO TECH SUSTAINABILITY

WELCOME

An estimated 43 million tons of electronic goods is wasted each year around the world, a number which continues to rise. Within a very pertinent conversation around sustainability, much has indeed been made about how we as individuals and consumers can improve our carbon footprints and recycle more effectively.

But what of enterprise-level tech equipment?

The [Global E-Waste Monitor 2020](#) established that companies simply aren't doing enough to keep their devices out of landfill sites. It highlighted that around 6.9 million metric tons of e-waste were produced in the U.S. alone in 2019.

E-waste refers to prematurely discarded enterprise tech devices, and it's not just a U.S. problem either. In the UK, [a Government report](#) concluded that "new software updates are often not supported on older hardware, meaning it becomes necessary to replace the hardware despite the physical product still working."

Of course, "still working" is a status that is still dependent on compliance, security and maintenance. Globally, a general trend is arising where digital transformation is actually working against efficiency aims, rather than in tandem with them. Such is the need to boast the most modern, advanced and ingenious technologies, which is veering IT decision-makers away from device preservation and towards premature replacement or discarding.

With enterprises housing numerous laptops, tablets, mobiles, printers, rugged devices and many more pieces of hardware, it is vital that they begin to see digital progression and green computing as one and the same, to prevent these e-waste figures from rising further.

To this end, and contrary to current trends, there is a way to preserve, maintain, diagnose, secure and repair existing devices, through the adoption of Enterprise Mobility Management (EMM) strategies. Through this change of strategy, digital proficiency can remain at a high level, while realizing the full lifecycle potential of enterprise devices.

SOTI has long championed the potential of device life elongation through its SOTI ONE Platform. And now we have done so via specific research, surveying IT decision-makers' choices around IT device lifespans, their main influences, and whether a new model based on enterprise e-waste prevention is attractive to them.

Let's take a look at what the research revealed about the realities of tech sustainability, and whether organizations need to rethink their approach and solutions.

Shash Anand

VP of Product Strategy, SOTI



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OVERVIEW

Despite there being significant information around the actual longevity of electronic devices in addition to green growth strategies, this does not seem to be translating into a consistent proactive belief in 'Green IT'. It's a dual stumbling block of organizations not doing enough to protect devices in their active lifecycle, before prematurely discarding them to an early demise.

In essence, companies are seemingly jumping the gun in their search for new upgrades and fresh hardware, as opposed to maintaining, updating, diagnosing and fixing devices they already have.

It is time to find out why, and to do so, we need to explore four key aspects:

- 1** Why green growth strategy isn't sparking green computing efforts
- 2** Whether digital transformation efforts are actually conflicting, rather than harmonizing with an acceleration of green technology innovation
- 3** What the impacts of such a dichotomy are leading to, in terms of wasted money and devices
- 4** And finally, how companies can turn the tide and keep devices operational for longer

SOTI has sought to address all four of these questions in the following pages.



METHODOLOGY

SOTI's research was conducted online between February 17 and March 2, 2022.

As well as seeking to present global, overarching trends, the research was also broken down into demographics according to country, company size, decision-making authority, job role and vertical/sector.



**COMPANIES WITH
50+ EMPLOYEES**



**18 YEARS
& OLDER**

8 COUNTRIES



500



250



250



500



250



250



250



250

**INTERVIEWS WITH
2,500
IT DECISION-MAKERS**



KEY FINDINGS

SAY MOBILE PHONES ARE THE MOST COMMON
UNNECESSARILY DISCARDED DEVICE

69%

AGREE THAT REGULAR SOFTWARE UPDATES WOULD BE VERY/
EXTREMELY IMPORTANT TO EXTENDING THE LIFESPAN OF DEVICES

69%

SAY THEY UNDERSTAND THEIR ROLES
WITH SUSTAINABILITY

65%

BELIEVE HAVING THE LATEST HARDWARE DEVICES
MAKES THE COMPANY MORE ATTRACTIVE TO WORKERS

62%

SAY RUGGED DEVICES, LAPTOPS, TABLETS &
WEARABLES ARE ALL DISCARDED UNNECESSARILY

60%



IT DECISION-MAKERS

KEY FINDINGS

60%

AGREE THAT THE MANAGEMENT OF DEVICES IS AN IMPORTANT ENVIRONMENTAL ISSUE FOR THEIR ORGANIZATION

54%

SAY THEY OPERATE DEDICATED ENTERPRISE MOBILITY MANAGEMENT (EMM) STRATEGIES

52%

SAY TABLETS & LAPTOPS ARE REPLACED ACCORDING TO 'EXPECTED' LIFECYCLES, VS WHEN THEY ACTUALLY STOP WORKING (49%)

44%

OF DEVICES CONTAIN REPLACEABLE BATTERIES, BUT ONLY 33% OF ANNUAL BUDGETS ARE ALLOCATED TO REPLACING THEM



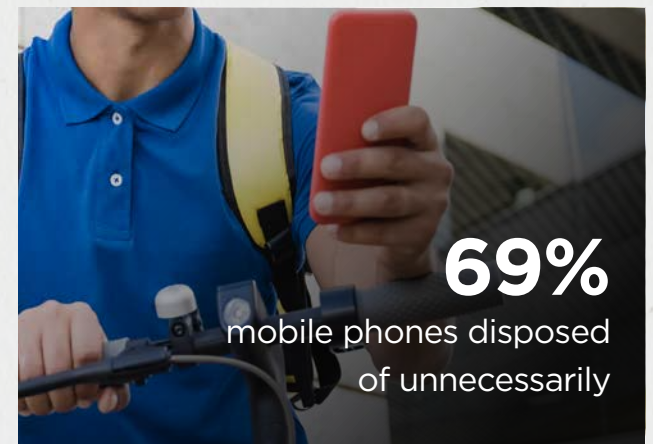
IT DECISION-MAKERS

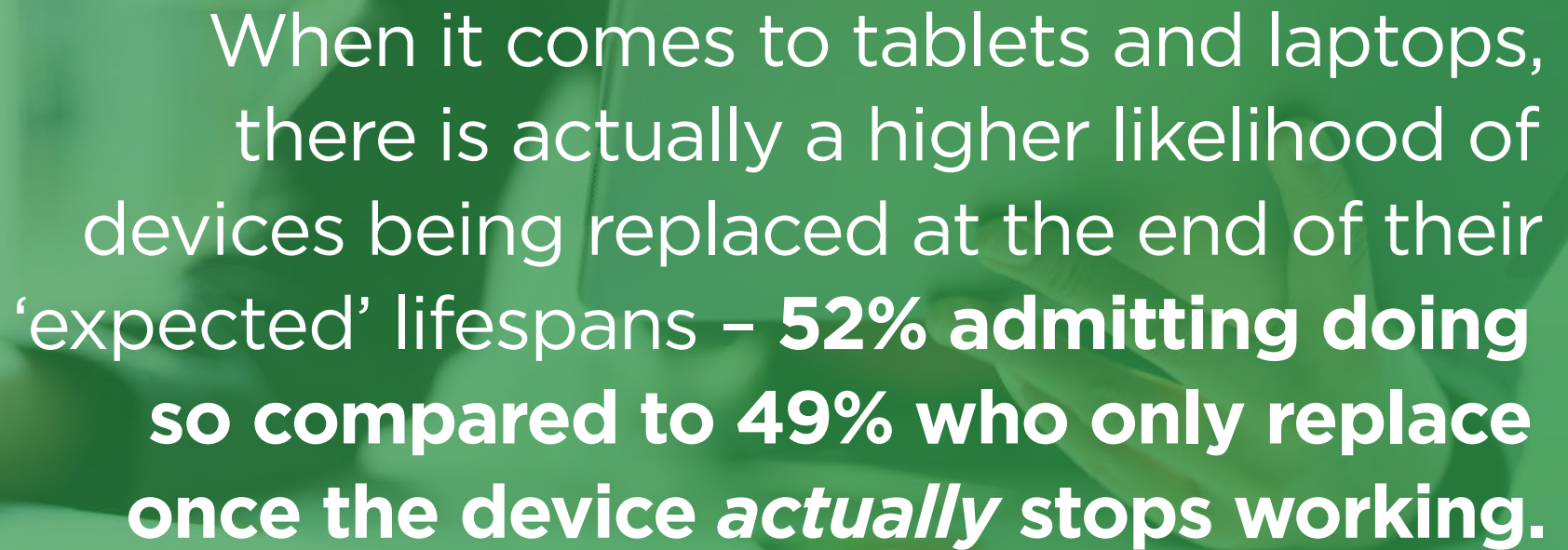
A DISCARD MENTALITY

The enterprise devices in question relate to mobile phones, wearables, tablets, laptops, rugged handheld devices (such as scanners and barcode readers), printers and 'other'. Across this hardware portfolio, it's important to understand just how much IT decision-makers are leaning towards a discard mentality.

At first glance, across the board, it seems they're leaning quite a bit.

Even before delving into the reasons why, or the attitudes involved, the core stats paint a picture on their own...a picture of premature disposal.





When it comes to tablets and laptops, there is actually a higher likelihood of devices being replaced at the end of their 'expected' lifespans – **52% admitting doing so compared to 49% who only replace once the device *actually* stops working.**

A common reason given for general discarding is that the respective devices have stopped working (this could be a battery's death, device power issues or a complete malfunction). When it comes to tablets and laptops, there is actually a higher likelihood of devices being replaced at the end of their 'expected' lifespans – 52% admitting doing so compared to 49% who only replace once the device *actually* stops working.

This suggests an inclination towards action based on presumption or premeditated timelines. 42% support this conclusion by going a step beyond mere 'expectation' and admitting they would replace tablets and laptops whether they are still working or not. Furthermore, 45% simply do so because an updated model is available, still overlooking the factor of whether the existing device needs replacing at all.

When exploring specific demographics, this trend of disposal based on factors beyond the need to do so is largely consistent across the board. However, one standout – and concerning – statistic shows that the most prevalent persona likely to replace laptops/tablets, whether they are working or not, are those who work in the technology sector (47%). The decision-makers in charge of IT devices and the digital solutions being deployed are the biggest offenders of replacing devices that don't need to be replaced.

A discard mentality is clearly rife whether this means completely throwing a device away, donating it or trading it. But could it be the lure of digital transformation and tech development that is driving the trend, rather than a disregard for green computing? It's easier and more appealing to buy something shiny and new instead of saving and repurposing an old device.

DOES DIGITAL TRANSFORMATION OVERSHADOW SUSTAINABILITY INTENTIONS?

Let's consider the discard rationale for a moment - it does seem like there is a dichotomy or tug-of-war at play between sustainability and digital transformation.

65%

of IT decision-makers agree they understand the role they have within their wider organization's sustainability efforts.

62%

believe that having the latest hardware devices at their disposal makes their company a more attractive place to work for staff.

Between these two seems to be a mismatch, and maybe even a sense of confusion, of how to achieve continuous improvement on the tech front while also adhering to green computing goals.

There does seem to at least be an acknowledgement of the green computing issue.

Under the wider banner of sustainability,

59%

of IT decision-makers agreed they have clear sustainability goals for specifically reducing hardware waste.

Building off that,

55%

also claim to have corporate social responsibility (CSR) key performance indicators (KPIs) that set clear goals for sustainable device management.

And a similar

54%

also operate according to dedicated EMM strategies to maximize the use they can get out of devices.

While there is obviously room for improvement across all three fronts, this isn't an altogether damning situation. However, it does still conflict with those previous statistics which showed a haste to dispose of products according to hazy lifecycle predictions, the arrival of an upgraded model or simply for the sake of change.

These are all unsustainable displays of device management strategy.

Adding another decisive layer to this conflict of action versus intention, **60% of IT decision-makers do agree that the management of devices is an important environmental issue for their organization.** Considering the significance that eco-sustainability carries at present, it is perhaps odd that a final leap of thought has yet to be made to stretch device usability and reduce enterprise e-waste.

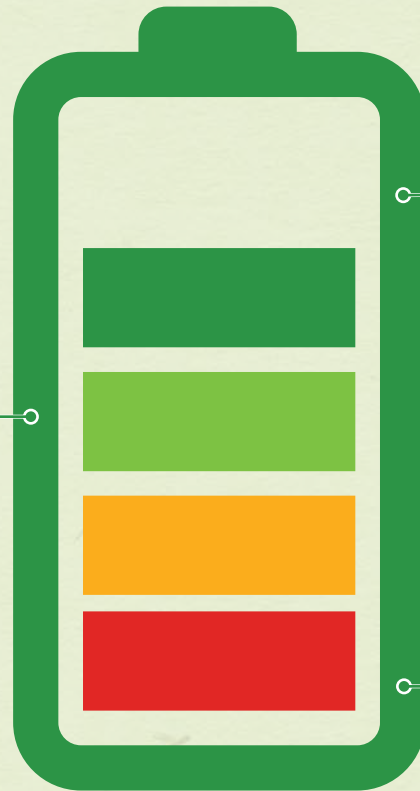


BATTERY LIFE DOESN'T MEAN DEVICE LIFE

It is clear that guidance is needed for organizations to help them remedy the aforementioned struggle between digital transformation and green computing. At the moment, it seems like the pressure to innovate and constantly be on the cusp of modernity is outweighing the urge to better protect existing devices. Or, at the very least, it is clouding strategies that are laid out to reduce e-waste and improve hardware efficiencies.

This theory is perhaps best demonstrated by looking at the issue of batteries.

On average,
44%
of devices used by organizations
contain replaceable batteries



On average, only
33%
of annual budgets have been
earmarked for replacing batteries
in these devices

On average, in the U.S.,
51%
of devices used by
organizations contain
replaceable batteries

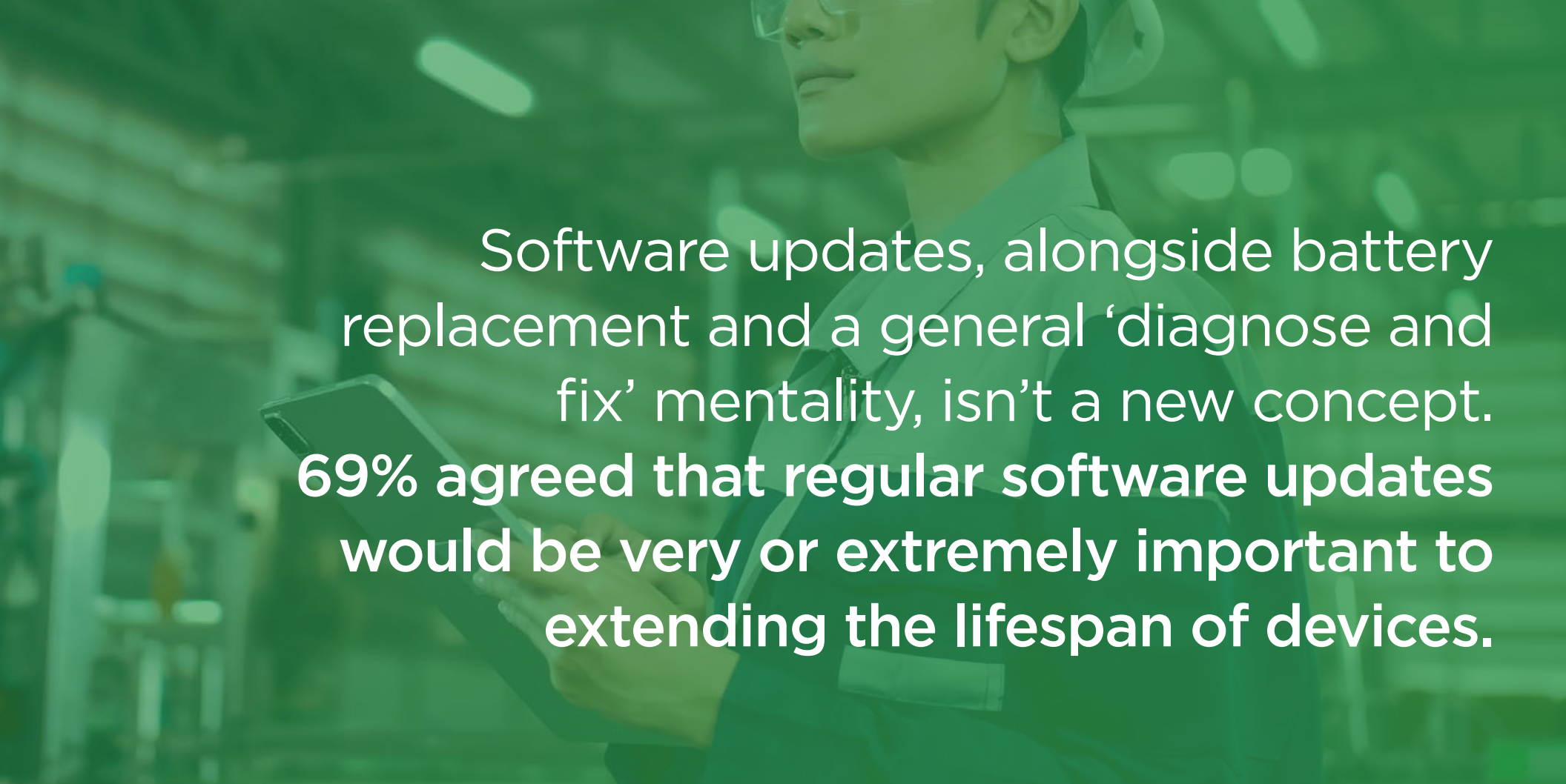


What we can deduce from this is that more organizational budget, allocated proportionally for different sized enterprises, is being allocated to replacing entire pieces of hardware, rather than simply replacing batteries and extending device lifecycles.

What this could alternately mean for IT decision-makers, is that they take the 'replace' course of action, purely because they have more budget to do so or because they fear allocated budget contracting in the future if they don't continuously meet it. This is interesting when you assume that most, if not all, of these IT decision-makers own a vehicle. When the battery dies in their car, the battery is replaced, not the car.

Either way, the result is a trend where organizations are taking the end of a battery's life to mean the end of a device's life. And at this juncture, the issue of wasted money, as well as wasted hardware, can be brought to the table.

Batteries are the core component of not just a laptop or mobile phone, but also the gamut of rugged devices that keep businesses ticking along behind the scenes. Critical to the running of supply chains, logistics, warehousing, distribution, inventory and the new data-driven world, rugged devices are often overlooked, but demonstrate the need for improved lifecycle management better than any other segment.



Software updates, alongside battery replacement and a general ‘diagnose and fix’ mentality, isn’t a new concept. **69% agreed that regular software updates would be very or extremely important to extending the lifespan of devices.**

It is time to ensure that these tidbits of awareness and acknowledgement are no longer clouded by a temptation to replace ahead of time, and are instead supported by an alternative model that proves that digital transformation doesn’t always have to mean device change. And this

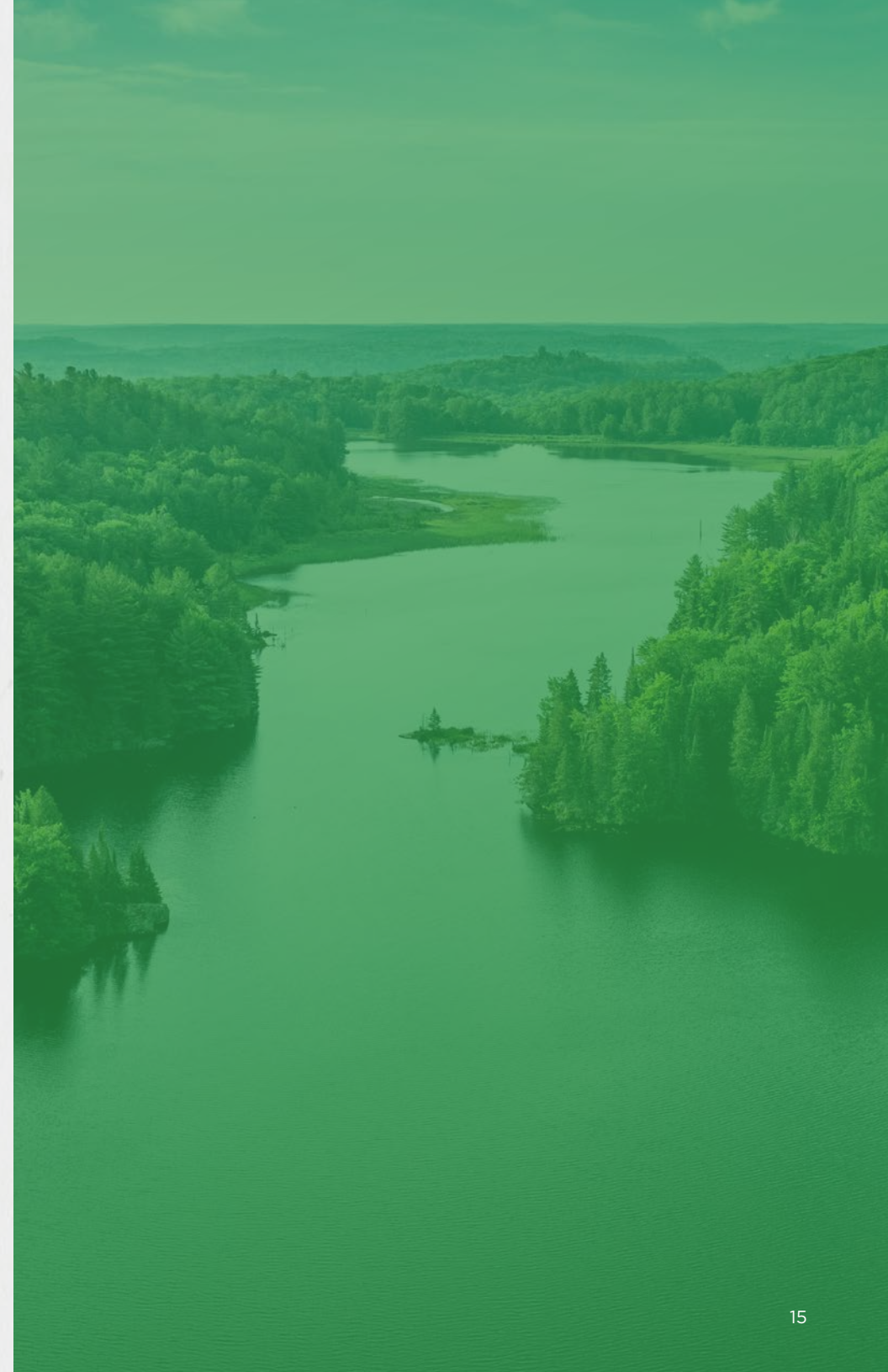
goes not just for the devices themselves, but for critical components like batteries which are also often replaced ahead of time as part of general upkeep processes, rather than through an actual need to do so.

ACTIONABLE, DIGITIZED STEPS TO BETTER MAINTAIN DEVICES

The research is clear – IT decision-makers are choosing convenience over sustainability. Devices aren't thrown away accidentally. There is always a decision to be made. From this research it is clear that these decisions aren't being made without a thought for sustainability. They are being made without the full knowledge of how sustainability can be achieved through hardware preservation in the face of digital transformation pressures. When attitudes around sustainability and how to achieve it change, it will become more convenient and simpler to implement and maintain.

From this point of reflection, we need to aspire to a stage where devices aren't simply discarded based on seeing a new version on the market, or because initial projections suggest the device may be getting old, or even because its battery needs replacing.

There are more cost-effective, sustainable ways to address the issue at hand. One option has become more prevalent – exploring OpEx models where they **rent devices and return them in exchange for newer ones**. The trader, instead of disposing the returned hardware, finds a new home for the used product with a new, suitable organization.



We may see more of this in the future if companies are wanting to retain their current mindsets. But it is important to still lay out the alternative options and to try to adjust our internal mindset towards device preservation and a reduction of enterprise e-waste.

These actionable steps could include:



- **Adopting an EMM solution** as part of an equation that serves to **prolong digital lifecycles**, with the help of digital solutions. So, instead of **investing in new hardware prematurely**, invest in an **outsourced solution that encourages the monitoring, diagnosis and repair of existing devices**.



- Using the same rationale when it comes to the **monitoring of battery lives as a core component of this e-waste conversation**. Making this breakthrough could be the trigger for a **broader mindset shift where diagnose and repair becomes more commonplace than discard and upgrade**.



- Reassessing the extent of your digital footprint and how expensive it is to retain current strategies. **Enterprise devices aren't just mobiles, laptops and tablets. They're new innovations like wearables, old stalwarts like printers and a whole host of rugged handheld enablers in between**. Every time these operational, supply chain or administrative devices are replaced, time is spent integrating, people need training to get up to speed, and money is wasted achieving both. That's before you even get to the waste discussion.



CONCLUSION

FIX & REPAIR IS A VIABLE OPTION

By prolonging and repurposing legacy devices, IT decision-makers are not just ticking an eco-box. With the help of an EMM solution, manual processes are removed, time is saved, existing systems and processes are retained, supply chains are kept efficient, and consumption and emissions are reduced.

Diagnose and reuse may not have seemed a viable option in the past because it seemed to go against a notion of continuous improvement, ongoing digital transformation or keeping ahead of those prominent tech trends. This urge to just replace one device because of concerns around its condition, or its impacts on work

downtime, can quickly lead to an instinct to replace hundreds more 'just in case'.

It's time to find out, categorically, what actually needs replacing and which devices simply need better care to move into the next stage of their operational lives.

With a renewed understanding and rethink around green computing, transformation can be achieved in tandem with, not in spite of, sustainability. And the future state of enterprise e-waste will be on a rightful global downward curve.

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 a commitment to R&D has made it the market leader at delivering exciting, new business mobility solutions. SOTI helps businesses take mobility to endless possibilities.



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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