

# Painful device refreshes?

Break free with data-driven PC lifecycle management.

Transform costly and inefficient PC lifecycle challenges into streamlined, predictable processes through intelligent refresh powered by SHI®.



# Table of contents

Executive summary .....	3
Introduction .....	4-5
From market shifts to internal gaps .....	6-7
Momentum behind data-driven refresh .....	8
The SHI® Intelligent Refresh Program .....	9-10
Step 1 - Current state analysis .....	11
Step 2 - Device evaluation and selection .....	12
Step 3 - Configuration and deployment .....	13
Step 4 - Lifecycle management .....	14
Step 5 - Continuous optimization and next cycle planning .....	15
Governance, risk, and compliance (GRC) .....	16
Qualitative and quantitative validation .....	17-18
Conclusion .....	19
Sources .....	20



# IT lifecycle management has evolved from a back-office task into a catalyst for business growth.



As a reflection of its growing maturity, nearly [nine in ten organizations now have a formalized process for managing end-of-life hardware](#), according to Revivn's State of Hardware Lifecycle and IT Asset Disposition 2025 report.

But growing maturity doesn't eliminate growing complexity. Hybrid work, AI-enabled devices, and end-of-life operating systems (OS) are straining traditional PC lifecycle models, creating major friction between rigid refresh schedules and modern workforce realities.

End-user computing (EUC) leaders managing thousands of devices face a no-win scenario: fixed refresh schedules and guesswork retire healthy devices too early, while leaving aging ones in service until failure. Then, emergency replacements act as disruptive and costly band-aids — addressing symptoms, not causes. Ongoing unplanned device replacement further disrupts the workforce, impacting overall productivity and user experience.

The core of the issue isn't scheduling or expertise; it's foresight.

A data-driven refresh strategy solves this by replacing rigid timelines with real-time insight. Recent research from Omdia confirms the payoff: lower total cost of ownership (TCO), greater IT agility, and measurable savings through optimized asset utilization.

## **SHI® brings this approach to life with our Intelligent Refresh Program.**

The Intelligent Refresh Program is a comprehensive, data-driven framework that transforms PC lifecycle management from a rigid, reactive process into a dynamic cycle of continuous optimization — without adding extra work for your IT teams.

By combining real-time insights into device health, performance, and user experience with end-to-end lifecycle services, organizations can anticipate refresh needs, prioritize investments, and configure devices to maximize productivity and employee experience. Charting a new course for device refresh, this proactive framework replaces guesswork with foresight, ensuring refresh cycles always align with business goals and workforce demands.

In the pages ahead, we'll explore why data-driven device lifecycle management is essential — and how our Intelligent Refresh Program transforms traditional PC refreshes into a strategic advantage.

# Evolving conditions are exposing the shortcomings of traditional device refresh models.

As the workforce landscape changes, so does IT's role. The pandemic accelerated remote and hybrid work, and now return-to-office mandates are redefining expectations. According to GroWrk's State of IT Lifecycle Management 2025 report, [37% of IT professionals say their organizations have transitioned to fully remote teams, while another 28% report most of their workforce operates outside of headquarters.](#)

On top of these workforce realignments, a new wave of disruptive forces is reshaping device lifecycle planning, including:

## 1. Technology evolution and user demands

- AI-capable devices that introduce new purchasing considerations.
- Growing interest in generative AI tools that fuels user demand for AI-ready devices.
- Diverse user needs that require tailored devices, shifting from one-size-fits-all.
- Rising workforce expectations that elevate enterprise DEX priorities.

## 2. Financial and resource constraints

- Shrinking IT budgets and reduced headcounts that amplify operational strain.
- Aging machines and emergency replacements that strain fixed budgets.
- Organizational layoffs that burden IT with urgent device recovery, reassignment, and security risks.


## 3. Market and vendor complexity

- Intensifying PC OEM competition that creates market confusion.
- Greater competition among silicon platforms that complicates OEM vendor decisions.
- Device as a service (DaaS) models that alter subscription contracts.
- Hyperscaler demand for AI in data centers that cause disruption to device component manufacturing and supply chains, extend lead times, and raise prices.

## 4. Operational and compliance challenges

- End-of-life legacy operating systems (OS) that drive urgency.
- Global tariffs and geopolitical tensions that destabilize pricing and supply chains.





# Looking ahead, organizations will need a better way to plan device refresh cycles.

According to Gartner®, “these forces — which began challenging the status quo and changing the way employees were outfitted in 2024 — will escalate during 2025, requiring customers to revisit their current buying standards and make adjustments to adapt to changing forms of work. This includes the design and specification of devices, expectations about lifecycles and how buying decisions are made.”<sup>1</sup>

While nearly a year has passed since this prediction, its guidance remains highly relevant for EUC leaders navigating refresh complexities today. And as we look toward 2026, new challenges are emerging — particularly around hardware costs and supply constraints.

[Memory prices are projected to rise another 20% in early 2026 after climbing 30% in late 2025](#), according to Counterpoint Research’s latest Memory Solutions in GenAI bi-weekly report. Ongoing supply shortages and cost spikes for critical device components like dynamic random access memory (DRAM) are expected to further complicate device procurement and extend lead times.

Unfortunately, these dynamic shifts changes across the workforce and market landscape have rendered many previously effective device lifecycle processes inadequate, while magnifying existing operational gaps within IT teams.



## The real blockers to refresh success are often operational.

While external forces can complicate device selection and deployment strategies, internal limitations play a role as well.

According to GroWrk's State of IT Lifecycle Management 2025 report, [82% of IT professionals report experiencing challenges in procuring IT equipment for remote employees](#), and [33% cite managing devices through their entire lifecycle as their biggest challenge](#).

**So, what is it about IT lifecycle management that creates these operational gaps?**

# Like many organizational sticking points, the contributors to painful refreshes span tools, processes, and people.

## 1 Limited visibility

Automox's 2025 State of Endpoint Management report found that [only 16% of organizations said they have consolidated visibility into every endpoint. Another quarter of respondents said they have 75% visibility, at best.](#) Without complete inventory visibility, IT teams struggle to identify underperforming, overutilized, or nearing end-of-life machines — let alone optimize their allocation. The outcome? Power users remain stuck on aging hardware, while light users hoard high-performance devices. Lack of visibility also creates security blind spots and prevents organizations from capitalizing on residual device value, which further compounds operational inefficiencies.

## 2 Outdated asset tracking methods

Ivanti's 2025 Digital Employee Experience Report revealed that [more than one in three organizations still use spreadsheets to track IT assets.](#) This outdated approach offers only static snapshots, not real-time visibility, and lacks integration with other systems — creating more opportunity for errors and inconsistencies. Without accurate asset data and usage insights, IT teams struggle to align refresh decisions with financial goals and business priorities. As a result, healthy devices often get replaced well before their useful life ends, leaving value on the table.

## 3 Reactive organizational culture


IBM's 2025 CEO Study found that [64% of CEOs admit the risk of falling behind drives them to invest in technologies before understanding their value.](#) This reactive approach doesn't just affect strategy — it cascades into IT operations, often resulting in rushed deployments and fragmented device lifecycle management. Large, periodic rollouts strain IT resources and complicate updates, troubleshooting, and compliance — leaving users scattered across different hardware generations, OS builds, and configuration policies.

When left unaddressed, these gaps result in:

- **Lost workforce productivity from slow devices and reactive break-fix actions.**
- **Increased security risks from unsupported hardware or delayed patches.**
- **Unclear ROI due to device spend being disconnected from measurable outcomes.**

These operational hurdles cast a shadow over IT efficiency.

But a data-driven approach illuminates a smarter path forward.



## Advisory firms and real-world results indicate a data-driven direction of travel.

Revivn's State of Hardware Lifecycle and IT Asset Disposition 2025 report highlighted the growing desire among IT leaders to realize the benefits of data-driven device lifecycle management. In their survey, they found that [36% of IT professionals rank tracking and reporting through software as their top investment priority for the future.](#)

Analysts echo this appeal. According to Gartner®, "By 2028, 70% of IT organizations will use data to trigger the replacement of PCs rather than blanket year-based refresh cycles."<sup>2</sup>

In particular, analysts have identified DEX tools and analytics as a key contributor to better device lifecycle management. As stated by Gartner®, "Analytics from DEX tools are playing an increasingly important role in informing replacement decisions. By improving failure prediction, uncovering performance problems and measuring employee sentiment toward their device and productivity impacts, DEX tools can better fit the life span of the device to the real-world context."<sup>3</sup>

Global semiconductor company AMD has seen firsthand how a data-driven approach to device refresh can make a measurable difference. They reported earlier this year that [they cut their monthly blue screen of death \(BSOD\) metric by 50% in just one year by adopting a telemetry-informed refresh strategy](#) — demonstrating how data-driven decisions translate into measurable improvements in reliability and user experience.

The findings from analysts and practitioners alike tell a consistent story — data-driven refresh strategies deliver tangible benefits. Yet even when organizations have the right tools in place, many struggle to fully leverage them. Turning raw data into actionable insights that EUC leaders can use to optimize device lifecycle management requires more than technology — it demands expertise and a proven framework.

**That's where SHI® comes in.**



# Proprietary tools, end-to-end services, and expert guidance can drive refresh success.

In response to the challenges and pain points of traditional PC lifecycle management, SHI® has built a unified, data-driven approach to help organizations select, manage, and refresh their devices — our Intelligent Refresh Program.



## THE TOOLS AND SERVICES THAT UNDERPIN THE INTELLIGENCE

When device health and user experience data flow through a continuous optimization cycle, IT leaders gain the foresight to refresh at the right time, reduce risk, and maximize lifecycle value.

### BenchSmart

Reports and tracks CPU/GPU/NPU utilization across real AI workloads, enabling side-by-side device comparisons and TCO analysis.

### SHI® Next-Gen Device Lab

Lab environment where you can discover and test real workloads from new and emerging providers on leading devices and AI PCs, compare OEMs, and validate performance before purchase and deployment.

### SHI® Capital

Offers tailored payment structures and flexible terms, including hardware leases or rentals, DaaS, and financing options for software and services.

### SHI® End-User Integration Center

Provides secure, multivendor configuration, imaging, kitting, and global deployment services — ensuring devices are optimized and ready to plug and play.

### Device Lifecycle Management

Delivers end-to-end lifecycle management, including DaaS, deployment, support, and asset recovery — powered by standardized processes, vendor management, and optimized DEX.

### SHI® One

Unified platform that provides real-time visibility and control over hardware, software, and cloud assets, enabling proactive management and cost optimization.

### DEX

Monitors endpoints in real time, measures device health and employee sentiment through DEX scoring, and delivers automated remediation capabilities.

## BUILD A CLEAR BASELINE FOR DATA-DRIVEN PLANNING.

Gain full visibility into device performance and workforce computing needs — the foundation for building an aligned, data-driven refresh strategy.

### Key activities

- **Connect data sources**  
DEX tools, BenchSmart, and SHI® One enable visibility into device telemetry, existing AI workload performance (if applicable), incident tickets, warranty details, asset inventory, and DEX metrics.
- **Run AI device assessments to score AI readiness**  
Evaluate organizational preparedness by examining CPU/GPU/NPU capabilities, as well as available memory and storage capacity.
- **Map personas and workloads**  
Identify who needs what, where, and why across major persona categories — covering roles such as designers, developers, field sales, contact center staff, executives, and task workers.
- **Classify devices**  
Categorize devices based on utilization and risk — identifying which to redeploy (underutilized devices), prioritize for refresh (over-utilized devices), address preemptively (at-risk devices), or remediate for compliance and security posture (non-compliant devices).

### SHI's role

- Configure DEX analytics and SHI® One dashboards to unify visibility.
- Facilitate stakeholder workshops to align metrics and guardrails.
- Deliver a baseline intelligence report with quick wins and risks.

### Benefits

#### Smarter budget decisions

Business leaders gain a clear line of sight from spend to outcomes — enabling smarter budget decisions and measurable ROI.

#### Operational efficiency

IT teams can prioritize devices more objectively — reducing firefighting from escalations and improving operational efficiency.

#### Enhanced employee experience

Those with the highest support demand and poorest-performing devices get prioritized first — ensuring critical pain points are resolved and productivity is restored where it matters most.

## COMPARE, VALIDATE, AND ENSURE EVERY PERSONA GETS THE RIGHT DEVICE.

Evaluate leading devices and AI PCs from every major OEM, using real-world testing to select options that meet workload demands, maximize performance, and align with budget goals.

### Key activities

- **Hands-on device testing**  
Leverage the SHI® Next-Gen Device Lab to conduct hands on testing of your workloads and requirements across market-leading OEMs like Apple, Dell, Google, HP, Lenovo, and Microsoft.
- **Benchmark AI PC performance**  
Analyze BenchSmart data to compare AI PC performance under real AI workloads across critical factors like battery life and CPU/GPU/NPU utilization — ensuring the right fit for your environment.
- **Persona-based standardization**  
Build persona based bills of materials (BOMs) to standardize on a minimal, right sized catalog — ensuring each role has the optimal device for performance and cost efficiency.
- **Flexible financial models**  
Define commercial models that fit your financial strategy — choosing from CAPEX, leasing, or DaaS options, with flexible terms available through SHI® Capital.

### SHI's role

- Provide OEM neutral guidance anchored in real benchmarks and field data.
- Validate device compatibility and AI workload fit.
- Co-build decision matrices across cost, performance, risk, and sustainability.

### Benefits

#### Strategic investment decisions

Business leaders achieve the right balance of cost, capability, and risk — ensuring confidence in every device purchase.

#### Simplified procurement processes

IT leaders reduce complexity and improve manageability of device selection with a standardized catalog that supports proactive planning.

#### Role-optimized devices

Employees receive devices optimized for their specific needs, ensuring AI functionality is applied where it adds the most value.



## DELIVER SECURE, READY-TO-WORK DEVICES AT SCALE.

Ensure every device is configured, secured, and deployed for immediate plug-and-play usage — enabling productivity from day one across your global workforce.

### Key activities

- **Persona-based configuration and policies**  
Create standardized configuration and security policies for each persona, leveraging zero-touch enrollment options like Apple Business Manager and Autopilot to streamline setup.
- **Asset tagging and experience monitoring**  
Tag each device for accurate tracking and integrate DEX tools to monitor digital experience — ensuring full visibility into health, usage, and user experience.
- **Global deployment and migrations orchestration**  
Coordinate deployments and migrations across regions with defined change windows and proactive communication to minimize disruption.
- **Scale with the SHI® End-User Integration Centers**  
Stage, kit, and ship fully configured devices at scale from SHI's network of End-User Integration Centers around the world — reducing IT burden and accelerating time-to-productivity.

### SHI's role

- Build ideal configurations, establish compliance baselines, and enforce security hardening.
- Orchestrate regional rollouts and readiness communications.
- Establish KPI baselines, including boot times, crash rates, ticket volumes, and DEX scores.

### Benefits

#### Accelerated time-to-value

Business leaders gain cost predictability and faster ROI through streamlined deployment and standardized configurations.

#### Reduced operational burden

IT teams reduce operational burden — minimizing tickets and manual work with automated imaging, zero-touch enrollment, and global rollout orchestration.

#### Instant workforce enablement

Employees experience immediate productivity — receiving fully configured and secured devices that deliver a seamless experience from day one.

## DRIVE BUSINESS CONTINUITY THROUGH SECURE, HEALTHY, AND COMPLIANT DEVICES.

Maintain device health and compliance throughout the lifecycle — delivering proactive support, secure recovery, and uninterrupted productivity for every user.

### Key activities

- **Proactive device health management**  
Deliver ongoing patching, policy enforcement, and endpoint analytics through our Device Lifecycle Management, ensuring compliance and optimal performance across the fleet.
- **Rapid break-fix support**  
Provide field-based repair and replacement services to minimize downtime and keep employees productive when issues arise.
- **Lifecycle hygiene and continuity**  
Track warranties, manage spare and loaner devices, and maintain readiness to prevent disruptions and extend asset value.
- **Secure recovery and responsible disposal**  
Perform certified data erasure, recycling, and remarketing with full chain-of-custody reporting, meeting compliance requirements and sustainability goals.

### SHI's role

- Provide a single operating model for device health and experience.
- Use telemetry for proactive interventions across battery health, disk performance, thermal conditions, and application stability.
- Manage asset recovery with chain of custody and compliance reporting.

### Benefits

#### Strengthen operational resilience

Business leaders maintain uptime, compliance, and sustainability reporting for stronger governance and measurable business continuity.

#### Predictability and control

IT teams reduce incidents through proactive monitoring and establish a sustainable refresh cadence that supports their organization's evolving needs.

#### Minimal employee disruption

Employees benefit from faster issue resolution and consistent performance — reducing downtime and maintaining productivity.

## KEEP YOUR DEVICE STRATEGY EVOLVING WITH PRECISION.

Turn refresh into a living strategy — continuously optimizing performance, aligning with business goals, and planning future cycles with precision.

### Key activities

- **Real-time performance and sentiment tracking**  
Leverage DEX tools and SHI® One to continuously monitor device health, user experience scores, and incident trends — ensuring decisions are based on current realities.
- **Quarterly optimization reviews**  
Conduct structured reviews to assess persona shifts, evaluate new OEM models, and analyze AI workload changes — keeping your device strategy aligned with evolving needs.
- **Forecast refresh waves**  
Replace rigid, calendar-based refresh cycles with data-driven forecasting — planning smaller, strategic waves that minimize disruption and optimize budget allocation.
- **Link refresh outcomes to business KPIs**  
Connect device performance improvement to measurable business metrics such as sales productivity, developer build times, and support handle times — demonstrating clear ROI.

### SHI's role

- Maintain living roadmaps tied to budget seasons and hiring plans.
- Combine BenchSmart, DEX, and SHI® One insights to recommend right time refreshes.
- Test next-generation devices in our lab as a part of future seeding refresh plans.

### Benefits

#### Measurable ROI

Business leaders ensure ongoing alignment between refresh decisions and strategic objectives for predictable performance and cost control.

#### Proactive planning

IT teams shift from reactive to proactive refresh strategies — leveraging continuous insights to drive improvement and maintain operational stability.

#### Consistent experience

Employees benefit from steady performance improvements and an enhanced digital experience over time.

# A device refresh cycle is only as good as the controls it maintains.

We embed GRC principles throughout our Intelligent Refresh Program to ensure security, compliance, and financial accountability throughout the device lifecycle.

This includes:

- 1 Policy alignment**  
SHI® enforces security baselines (BIOS/UEFI, disk encryption, OS builds), admin rights, and app controls tailored to each persona during configuration and deployment.
- 2 Data protection**  
Certified erasure, audit trails, and chain of custody are built into asset recovery and end-of-life processes, reducing risk and meeting compliance requirements.
- 3 Financial governance**  
We provide flexible leasing, CapEx, and DaaS options with built-in chargeback and showback capabilities – enabling transparent cost allocation and improved budget control.
- 4 Change control**  
We enable structured release management for image and policy updates, complete with rollback plans, ensuring stability, minimizing disruption, and maintaining compliance throughout the change process.



# What our customers are saying and the ROI they're realizing.

Real-world results validate the impact of the SHI® Intelligent Refresh Program. [A recent report from Omdia](#) highlights how IT leaders are achieving measurable improvements by partnering with SHI.

## Improved TCO

*“We definitely see improvements related to inventory management and predictability. SHI partnered with us to determine inventory based on better forecasting. Inventory issues are now a thing of the past. SHI helps us always monitor the supply chain ecosystem.”*

## IT operational efficiency

*“We had 5-10 people spending 15-20 hours a week trying to fix inventory issues, vendors messing up orders, or simply not finding orders. Now with SHI, devices are shipped to our end-user location, ready for an out-of-the-box experience. Our asset lifecycle management team is down to 1 FTE, focusing on managing our partnership with SHI.”*

## Increased business agility

*“SHI partnered with us to support our shipment of devices to people's homes. This increased the velocity of our supply chain and saved us at least two weeks per system shipped.”*

## Deployment speed

*“When we had to deploy 300 loaners a week ourselves, we were falling behind. Our agreement with SHI is that our users get their device in one business day. SHI being able to take that was a huge resource relief for us.”*

## User continuity

*“SHI is 100% on their SLAs every month. Whereas direct to OEM was maybe 75% or so. I had to have a team to fix orders or chase down where things are. You have irate employees looking for their devices. That is all gone with SHI.”*



## A QUANTITATIVE SNAPSHOT OF THE PROGRAM'S BENEFITS



### TCO improvements

Up to **21%**  
reduction in TCO over  
three years.

#### Benefits include:

- Predictable pricing.
- Automated provisioning workflows.
- Centralized lifecycle governance.



### Increased agility

**20 FTE**  
year three  
productivity gain.

#### Benefits include:

- Faster onboarding for new hires.
- Streamlined global refresh cycles.
- Zero-touch provisioning and advanced exchange.
- Reduced IT bottlenecks during scaling.



### Asset optimization

**\$2.59M**  
in asset optimization value  
over three years.

#### Benefits include:

- Redeployment programs.
- Lifecycle extension.
- Secure disposal.
- Remarketing with revenue share.

# Data builds the bridge to smarter device decisions. Continuous optimization helps you cross it.

Data-driven insights and continuous optimization work together to create an intelligent, adaptive refresh model.

Data delivers the visibility needed to make informed choices — prioritizing the right refreshes, redeploying underutilized assets, and aligning technology investments with business goals. Continuous optimization ensures those decisions remain relevant as systems evolve and user needs shift — challenging assumptions, adjusting thresholds, and keeping performance aligned with reality.

Together, they transform device refreshing from a static, schedule-bound process into a dynamic capability that improves user experience, operational efficiency, and measurable business outcomes.

The risk lies in standing still. Organizations that cling to rigid cycles and guesswork face mounting costs and operational inefficiencies. According to Gartner®, “By 2029, 80% of organizations that underprovisioned devices in 2026 will refresh devices two years earlier than planned.”<sup>4</sup>

**Is your IT budget designed to absorb the rising costs of static refresh models and the potential of misaligned provisioning?**



## Next steps

Book a 60-minute discovery assessment to define your goals.

Schedule a session with our Next-Gen Device Lab experts to assess your AI readiness and analyze your persona-based requirements.

**Together, we can shape a data-driven refresh strategy that evolves with your business — delivering smarter decisions, stronger performance, and measurable results at every stage.**



1, 2, and 3 Gartner, Market Guide for Enterprise Desktops and Laptops, Steve Kleynhans, Erin Pierre, Autumn Stanish, Katja Ruud, 8 April 2025

4 Gartner, How to Optimize PC Costs and Maximize Employee Experience, Erin Pierre, Steve Kleynhans, Autumn Stanish, Katja Ruud, 12 November 2025

Gartner is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and Internationally and is used herein with permission. All rights reserved.

#### **SOURCES IN ORDER OF APPEARANCE (EXCLUDING GARTNER)**

Revivn. [The State of Hardware Lifecycle and IT Asset Disposition 2025](#). May 2025.

GroWrk. [State of IT Lifecycle Management 2025](#). June 2025.

Counterpoint Research. [Memory Solutions and GenAI Bi-Weekly Report](#). December 2025.

Automox. [2025 State of Endpoint Management Report](#). January 2025.

Ivanti. [2025 Digital Employee Experience Report](#). September 2025.

IBM Global C-Suite Series, 32nd Edition. [5 Mindshifts to Supercharge Business Growth](#). May 2025.

AMD. [Future-Ready IT – AMD Smart Laptop Refresh Strategy Powers Productivity and Efficiency](#). July 2025.

Omdia. [The Economic Benefits of the SHI Device Lifecycle Management](#). January 2026.