Space Optimization Strategies for Modern Campuses

LABSTATS

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Introduction

Universities today face increasing pressure to optimize their physical spaces while ensuring students, faculty and staff have access to the technology they need. IT asset management (ITAM) in higher education extends far beyond student computer labs–it encompasses faculty workstations, administrative offices, research facilities, collaborative spaces, and even remote learning environments.

Computer labs, classrooms, and study areas often suffer from inefficiencies—some remain underutilized for long stretches, while others become overcrowded at peak times. Similarly, faculty offices may house underused equipment and administrative departments may struggle with outdated or redundant technology, Research labs require specialized hardware and software that must be carefully managed to support cutting-edge innovation, Additionally, hybrid and online learning models demand well-maintained digital resources, including loaner laptops, virtual desktops, and cloud-based applications.

With rising real estate costs and limited budgets, and growing expectations for digital transformation, IT leaders must take a comprehensive approach to IT asset management.

This means going beyond tracking student-facing devices to include faculty and staff workstations and the broader IT infrastructure that supports modern education. By leveraging data-driven insights, universities can allocate resources more efficiently, reduce waste and ensure that all users–students, faculty, staff and administrators–have access to the right technology at the right time.

ITAM and Space Optimization

IT asset management is often viewed through the lens of inventory tracking and hardware lifecycle management, but its impact goes far beyond that. When leveraged effectively, **ITAM becomes a powerful tool for space optimization**. By understanding how and where computing resources are used, universities can make data-driven decisions about lab configurations, equipment placement, and

resource allocation. This approach ensures that technology investments align with real student needs, reducing wasted space and improving accessibility.

However, making changes to campus spaces requires more than intuition—it demands concrete data. IT leaders are frequently called upon to justify decisions about purchasing hardware, closing labs, or reconfiguring study spaces. Without clear usage insights, these discussions can be difficult. That's where data-driven tools like LabStats come in, providing detailed reports that reveal how computing resources are utilized across campus.

This ebook explores the modern challenges facing IT leaders in higher education, and offers solutions for how they can confidently recommend adjustments that enhance efficiency, improve student experiences, and maximize return on investment.

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The Modern Campus Space Challenge

Many universities struggle with inefficient use of classrooms, computer labs, and study areas. Some computer labs remain open and staffed throughout the day despite being empty for long periods, wasting valuable resources. At the same time, study areas may be overcrowded, leaving students without access to the technology they need. With rising real estate costs and increasing pressure to optimize campus resources, IT leaders need data-driven solutions to improve space utilization.

Modern campuses rely on technology-driven learning, meaning that space planning must account for evolving student and faculty needs. The rise of remote and hybrid learning models has reduced the demand for large, fixed-location computer labs, as students increasingly rely on personal devices and cloud-based applications. With many essential software programs available through the cloud, students no longer need to be tied to specific campus workstations to complete their coursework.

Additionally, virtual desktops and remote access solutions allow students to use university-provided software from their personal devices, further reducing the need for physical computer labs. **Collaborative tools are also reshaping the way study spaces are designed**, as students expect environments that support group work and provide access to shared technology. By understanding how students interact with

technology, IT teams can make informed decisions about hardware placement, lab configurations, and software availability.

IT leaders have the power to transform campus spaces by using real-time data to improve efficiency. Tracking actual device and software usage helps identify which areas are underutilized and which experience high demand, allowing IT teams to right-size computer labs accordingly. Instead of maintaining large physical deployments of workstations, universities can shift toward remote access solutions, enabling students to use institutional software from their own devices and reducing the need for dedicated computer labs. Additionally, reallocating resources based on usage data ensures that computing power and software are available where and when students need them most, leading to a better student experience and more cost-effective IT investments.

IT Asset Management as a Space-Saving Tool

IT asset management (ITAM) is typically associated with inventory tracking and lifecycle management, but it also plays a crucial role in space optimization. By understanding how and where computing resources are used, IT teams can ensure that physical spaces—such as computer labs, classrooms, and study areas—are designed for maximum efficiency. When IT leaders have a clear picture of which devices are actively used and which are sitting idle, they can make informed decisions about downsizing, consolidating, or repurposing technology to better meet student needs.

One of the biggest challenges in IT space management is determining whether hardware is being fully utilized. LabStats provides real-time and historical data on device usage, helping IT teams distinguish between high-demand workstations and those that remain idle for long periods. Instead of relying on assumptions or outdated records, universities can use LabStats to pinpoint which computers and labs are consistently used and which could be reallocated or removed without disrupting student access.

Reducing unnecessary hardware can also free up valuable campus space that can be repurposed for other academic or student support functions. Instead of maintaining oversized computer labs with low usage, universities can create collaborative study spaces, flexible work areas, or specialized learning hubs that better support modern educational needs.

Maintaining underutilized hardware is not just a space issue—it's a budget issue as well. Every unused or rarely used device still incurs costs in terms of maintenance, licensing, energy consumption, and potential upgrades.

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Energy costs alone can add up significantly over time. For example, a single computer running for eight hours per day consumes approximately 146 kilowatt-hours of electricity per year*, costing around $20.72 annually.

Now, consider a university with 1,000 underutilized computers across various labs, faculty offices, and administrative departments. These devices could be consuming 146,000 kilowatt-hours annually, amounting to $20,720 per year in electricity costs alone—funds that could be better allocated to technology upgrades or student resources. Higher-powered desktops and gaming computers, often found in research labs and specialized classrooms, can consume between 200 and 500 watts, further increasing energy expenses.

Beyond direct power costs, every unnecessary device also contributes to additional cooling requirements, driving up HVAC expenses. By identifying redundant or unnecessary hardware, IT teams can reduce waste and lower operational costs without negatively impacting students, faculty, or staff.

*(*Source: Energy Sage)*

Using Data to Justify Equipment Relocation or Repurposing

IT leaders are often asked to justify decisions related to hardware purchases, lab closures, or space reconfigurations. Without concrete data, these conversations can be challenging. LabStats provides detailed usage reports that allow IT teams to demonstrate when and where devices are needed most. If certain labs or classrooms show consistently low usage, IT can present data-backed recommendations to relocate, repurpose, or eliminate unnecessary equipment.

Key Benefits of Using ITAM for Space Optimization:

- **Improved resource allocation** by ensuring computing devices are available where they're needed most.
- **Reduced costs** associated with maintaining underutilized hardware.
- **Better space utilization**, allowing campuses to repurpose rooms for more effective student use.
- **Data-driven decision-making** that supports strategic IT planning.

CUSTOMER SPOTLIGHT

A university's flexible lab design project incorporated adaptable spaces to accommodate evolving needs. To guide the design process, the team analyzed student and faculty usage patterns through data sampling. LabStats provided critical insights into lab machine usage and software requirements, while people counters identified preferences for physical machines, docking stations, and virtual desktop terminals (VDI). With this data-driven approach, the university optimized lab spaces, improving accessibility and efficiency for current and future demands.

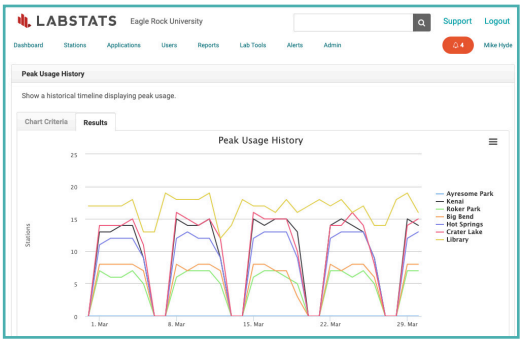
Practical Strategies for IT-Driven Space Optimization

Effective space management is no longer just about allocating rooms and facilities; it's about creating environments that enhance learning, maximize resources, and adapt to evolving educational needs. Leveraging IT-driven strategies, institutions can transform their approach to space optimization, making campuses more efficient and student-friendly.

LabStats plays a critical role in this transformation by providing universities with actionable insights into the usage of IT assets. By tracking which computers and software are being used, when, and for how long, IT teams can gather concrete data on how students and faculty interact with technology across campus.

Right-size Existing Computer Labs

This granular level of tracking empowers decision-makers to rightsize computer labs based on actual demand rather than assumptions. For example, if LabStats reveals that certain computer labs are underutilized while others are in high demand, institutions can reallocate resources, reducing redundant workstations and enhancing access where it's needed most.

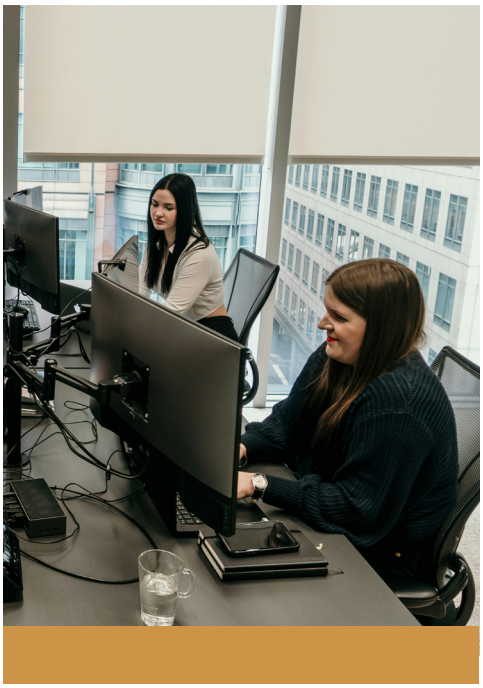


Loaner Laptop Lockers

Loaner laptop lockers provide a flexible and accessible solution for students who need on-demand computing, supporting both remote and in-person learning models. Higher ed IT leaders can use LabStats to track loaner laptops and analyze usage patterns, ensuring devices are available where and when they're needed most. Unlike traditional lab computers, loaner laptops are often utilized much more heavily, making them a high-value resource for students—especially those who may not have personal access to powerful devices. With self-service lockers, institutions can offer 24/7 access to technology without requiring additional staffing. By leveraging LabStats, IT leaders can optimize their loaner laptop programs to improve student access and enhance the total cost of ownership.

Enhance Remote Learning Options

Moreover, as remote learning becomes more prevalent, enhancing remote access to digital tools can further optimize physical space. By ensuring students have robust access to necessary software from anywhere, universities can reduce the number of on-campus workstations required, freeing up valuable space for other uses. This approach not only optimizes physical resources but also supports flexible learning environments that cater to diverse student needs.



Integrate IT into Facility Planning

Integrating LabStats with facility planning takes this a step further by providing a holistic view of space utilization across campuses. By combining IT usage data with facilities information, universities can design smarter, more efficient layouts that align with actual usage patterns and student behaviors. For instance, computer labs that are frequently used for collaborative projects can be redesigned to include more group workspaces, enhancing the overall learning environment. Similarly, underutilized classrooms can be repurposed to support new teaching modalities, such as hybrid learning or specialized research spaces.

Beyond improving daily campus operations, IT-driven space optimization is critical in addressing long-term infrastructure challenges. Many colleges and universities today struggle with aging and inefficient buildings, contributing to a growing deferred maintenance backlog. According to APPA, "higher education institutions in the U.S. spend about $36.8 billion annually on facilities operations, maintenance, and utilities, and an average of $27.8 billion annually for the construction of new facilities and/or the renovation of existing buildings." Yet, despite these massive investments, the deferred renewal backlog has ballooned to $112.3 billion, with public institutions facing a $76.1 billion shortfall and private institutions $36.2 billion. Many of these buildings, averaging nearly 50 years old, were not designed for modern technology demands or flexible learning environments.

*(*Source: APPA Facilities Manager)*

To maximize the value of their physical footprint, universities must rethink which buildings house which services—ensuring that IT assets, student resources, and faculty needs align with the available infrastructure. Strategic decisions about computer lab placement, shared device accessibility, and remote learning support (such as loaner laptop lockers) can help institutions prioritize renovations and target investments where they have the greatest impact. For example, repurposing low-traffic buildings into high-tech learning centers or incorporating self-service kiosks for printing, device checkouts, or virtual student support can improve accessibility while reducing operational strain.

As federal and institutional investments seek to modernize campus infrastructure, universities must become active stewards of their existing portfolios, leveraging data to drive smarter resource allocation and long-term sustainability. IT-driven space optimization through tools like LabStats enables universities to create more efficient, adaptive, and student-centered campuses.

By rightsizing computer labs, reallocating resources, and integrating IT data with facility planning, institutions can make informed decisions that enhance the student and faculty experience while maximizing the value of every square foot.

Measuring Success and Continuous Improvement

Optimizing campus spaces is not a one-time initiative—it requires ongoing measurement, analysis, and refinement. By leveraging key metrics and continuous data analysis, universities can ensure their IT investments align with real-world demand.

One of the most effective ways to measure success in space optimization is by tracking **key usage metrics**. These include:

- Summary of logins by location, user, or machine
- A historical timeline of active sessions
- Average number of logins on a single computer, lab, or classroom
- Average usage history of a computer by week or day
- Peak times computers or labs are accessed
- Inventory of computers

With LabStats, IT teams can generate reports that reveal which computers are actively used, how long they are in use, and which software applications are accessed most frequently. This data provides a clear picture of IT resource utilization, helping leaders identify inefficiencies, such as underutilized workstations or overburdened lab spaces.

Prioritizing Long-Term Success

Beyond daily operations, **LabStats reports can inform long-term campus planning.** By analyzing trends over multiple semesters, IT teams can make data-backed recommendations for adjusting lab sizes, reallocating resources, and even redesigning learning spaces. For example, if data consistently shows that a particular lab is operating at low capacity, the university may decide to repurpose the space for other student needs, such as study areas or collaborative workstations.

Several universities have already seen success with **IT-led space optimization initiatives.** Some institutions have been able to downsize underused labs while expanding remote access to high-performance software, allowing students to work from anywhere. Others have leveraged usage data to secure funding for additional resources, demonstrating

to stakeholders the need for updated technology investments. By taking a data-driven approach, these universities have not only improved efficiency but also enhanced student accessibility and overall learning experiences.

Space optimization is an ongoing process, but with the right metrics, continuous data analysis, and strategic IT planning, universities can create smarter, more efficient learning environments. By leveraging tools like LabStats, IT leaders can drive measurable improvements, ensuring that campus spaces and resources are fully aligned with the evolving needs of students and faculty.

CUSTOMER SPOTLIGHT

A university in Australia uses LabStats to monitor over 1,000 student-facing computers, helping them optimize software budgets and meet student needs.

For the past decade, the university's IT team has leveraged LabStats to track device usage across multiple campuses. This data-driven approach helps them manage requests for hotdesks—shared computer stations and docking setups for staff. Instead of relying on estimates, they analyze real usage patterns to make informed decisions about capacity and resource allocation.

Conclusion

Looking ahead, IT-driven campus planning will play an even greater role in shaping the student experience. As technology continues to evolve, data-driven insights will be essential for maintaining flexible, responsive, and cost-effective learning spaces. Institutions that harness usage data can proactively adapt to shifting needs, maximize their existing resources, and strategically plan for the future.

LabStats empowers IT leaders with the data needed to make informed decisions, ensuring that computer labs, study spaces, and remote access solutions align with actual student demand. By tracking real-time usage, institutions can rightsize their IT infrastructure, reduce unnecessary costs, and create a more efficient learning environment.

For IT leaders ready to enhance space efficiency, the next step is clear: leverage LabStats to gain a deeper understanding of resource utilization. Now is the time to take action—start optimizing your IT asset management with LabStats today.

What is LabStats?

LabStats enables strategic IT asset management by delivering advanced monitoring solutions designed exclusively for higher education institutions. It provides cutting-edge insights and powerful tools to empower IT decision-makers to strategically manage their IT resources, maximize investments, streamline operations, and improve the student experience.

Take The Next Step

Discover how LabStats can transform IT management at your institution. Contact sales@labstats.com or visit www.labstats.com.

Maximize your IT investments while empowering student success.