NEWCASTLE SYSTEMS

THE HUMAN ELEMENT OF AUTOMATION™

THE COMPLETE GUIDE TO DATA CENTER CRASH CARTS

How Mobile Powered Workstations Improve Uptime, Technician Productivity and Incident Response



EBOOK

newcastlesys.com

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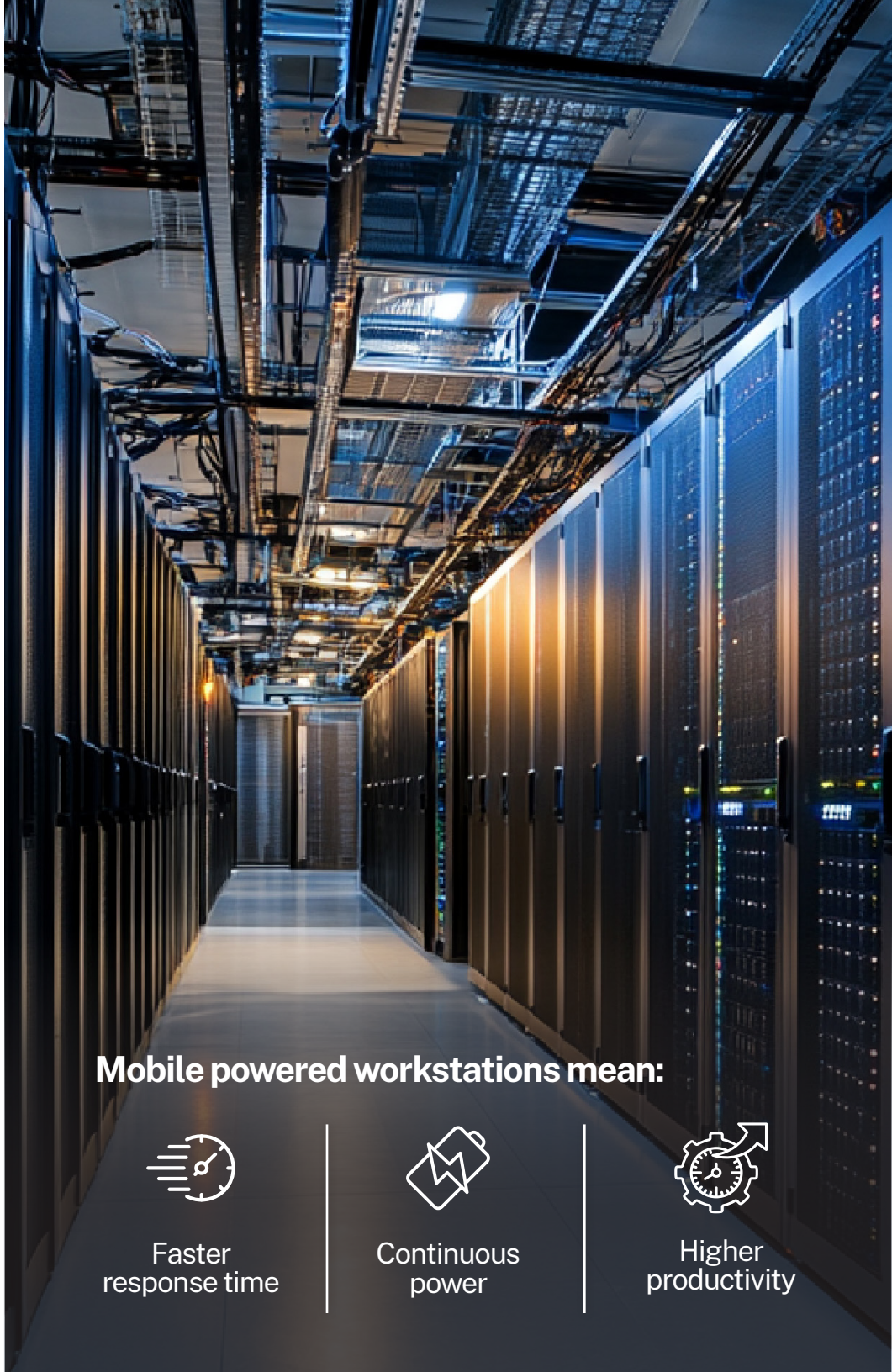


DOWNTIME DOESN'T WAIT

Every minute a technician walks to a fixed workstation instead of working at the rack is a minute the clock is ticking.

Unplanned downtime is expensive. ITIC's 2024 survey found that **90% of organizations lose more than $300,000 per hour** of downtime, with **41% reporting costs of $1–5 million per hour**.

Uptime Institute also found that **human error is the leading cause of outages**, often when technicians leave the point of service to retrieve tools, documentation, or a workstation. A mobile crash cart keeps everything within reach, helping reduce errors, improve efficiency, and minimize costly downtime.





WHAT IS A DATA CENTER CRASH CART?

A mobile, all-in-one workstation that brings power, tools and technology directly to the technician.

In a modern data center where a single row of racks can span 300 feet, that difference is measured in minutes per incident. Across a team of technicians, across a year, it adds up to thousands of hours.



NB Series cart shown with PowerSwap Nucleus power system

LAPTOP
Secure, and ready when you need it

INTEGRATED HANDLES
Easily maneuverable throughout your facility

KEYBOARD & MOUSE
Ergonomic and efficient

SCANNER
Scan, track and manage assets

INTEGRATED BATTERY
All-day power without searching for outlets

WHY TRADITIONAL CRASH CARTS FALL SHORT



TRADITIONAL CRASH CART

- ✗ Limited battery life
- ✗ Shared or unavailable equipment
- ✗ Poor ergonomics
- ✗ Fixed monitor
- ✗ Minimal storage
- ✗ Outlet dependent

NEWCASTLE MOBILE POWERED CART

- ✓ All-day lithium power
- ✓ Dedicated, ready every time
- ✓ Height-adjustable and ergonomic
- ✓ Adjustable monitor positioning
- ✓ Ample secure storage (optional)
- ✓ Truly mobile - outlet independent

5 WAYS MOBILE POWER CARTS IMPROVE DATA CENTERS

Most IT managers think of crash carts as emergency tools — deployed when something breaks. In reality, the highest-performing data center teams use mobile workstations across the full operational life cycle. Here's where they make the biggest difference.

1. FASTER TROUBLESHOOTING
Diagnose problems at the rack instead of returning to fixed workstations

2. REDUCED DOWNTIME
Restore services sooner and keep operations running

3. LESS WALKING
Technicians stay focused on solving problems—not searching for equipment

4. CONTINUOUS POWER
Operate for an entire shift without searching for outlets

5. EVERYTHING IN ONE PLACE
Monitor, keyboard, laptop, cables and tools travel together



ESSENTIAL FEATURES CHECKLIST



HEIGHT ADJUSTABILITY
Ergonomic design reduces fatigue

BATTERY RUNTIME
All-day lithium power for complete freedom

LOCKING CASTERS
Secure positioning when it matters

MONITOR MOUNTS
Flexible positioning for any workflow

RUGGED CONSTRUCTION
Built to withstand the demands of data centers

PERIPHERAL SUPPORT
Integrated power and mounting for devices

CABLE MANAGEMENT
Keep cables organized, secured and safe

SMALL FOOTPRINT
Built for tight aisles and narrow spaces

Don't overlook weight

A fully loaded crash cart — including a monitor, laptop, KVM, tools, and cables — can exceed 150 lbs. Ensure the cart frame and casters are rated for the actual operating weight, not just the empty cart specification.



HOW TO CHOOSE THE RIGHT CRASH CART

The traditional crash cart was designed for a specific scenario: emergency access to servers during an outage. But as data centers have grown more complex — and as the range of tasks performed on the floor has expanded — many organizations are moving toward something broader: a fully powered mobile workstation designed for everyday operations, not just emergencies.

Newcastle Systems works directly with data center operators and IT teams to spec the right solution for your facility — including size, battery configuration, device mounting, and quantity. Whether you're equipping a single server room or a 200,000 sq ft hyper scale campus, we'll get it right before the racks go in.

KEY QUESTIONS TO CONSIDER	IMPORTANCE
How long should it run on battery?	★★★★★
Will technicians need multiple monitors?	★★★★★
Does it fit in narrow aisles?	★★★★☆
Can accessories be added later?	★★★★☆
Can batteries be swapped or serviced easily?	★★★★★
Can it support future work flows?	★★★★★

THE ROI IS CLEAR

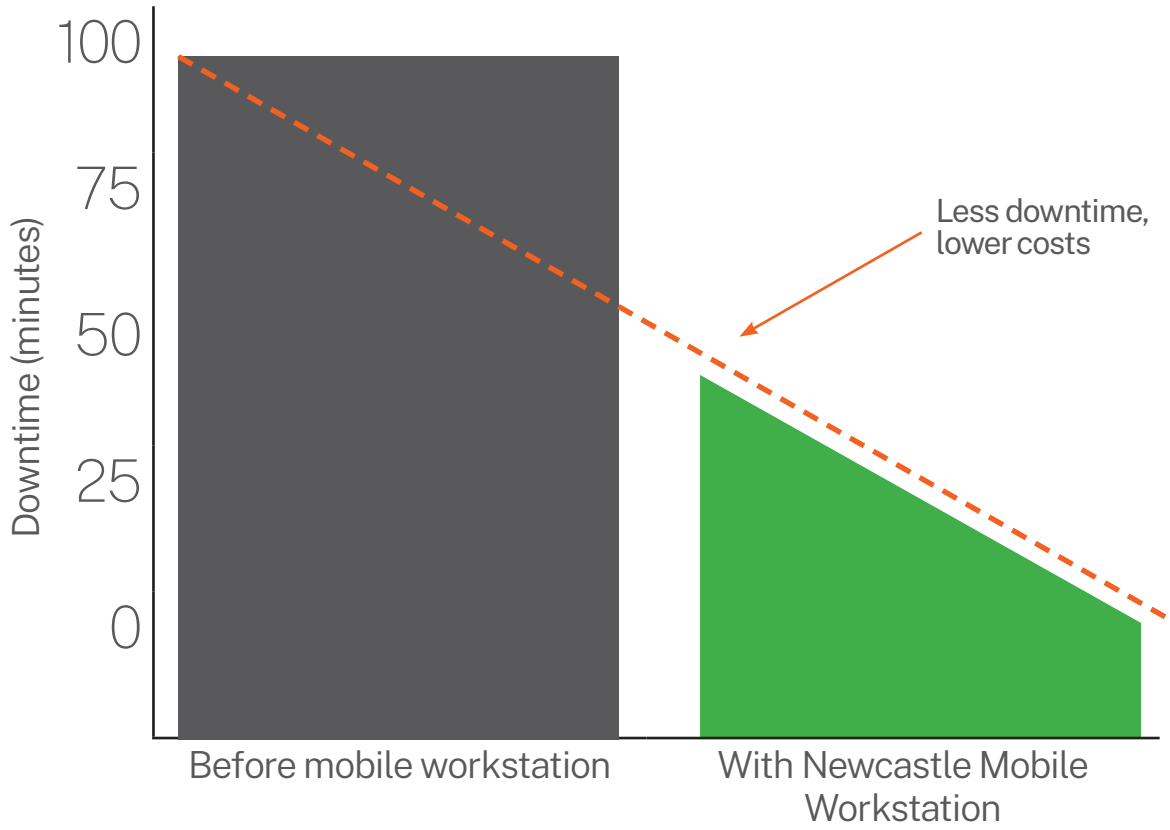
6-8 MONTHS
Typical payback period

20-30%
Increase in technician productivity

70-90%
Reduction in time spent walking for equipment

DOWNTIME REDUCTION IMPACT

Faster response. Shorter incidents. Lower costs.



WHICH INDUSTRIES BENEFIT?



ENTERPRISE DATA CENTERS

Improve uptime and technician efficiency



CLOUD PROVIDERS

Scale operations with mobile agility



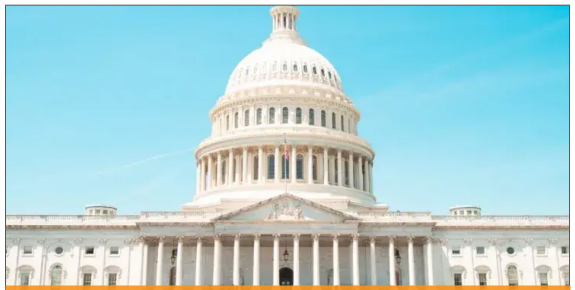
COLOCATION FACILITIES

Support more clients with fewer resources



UNIVERSITIES

Empower IT teams across campus infrastructure



GOVERNMENT

Ensure mission-critical systems stay online and secure

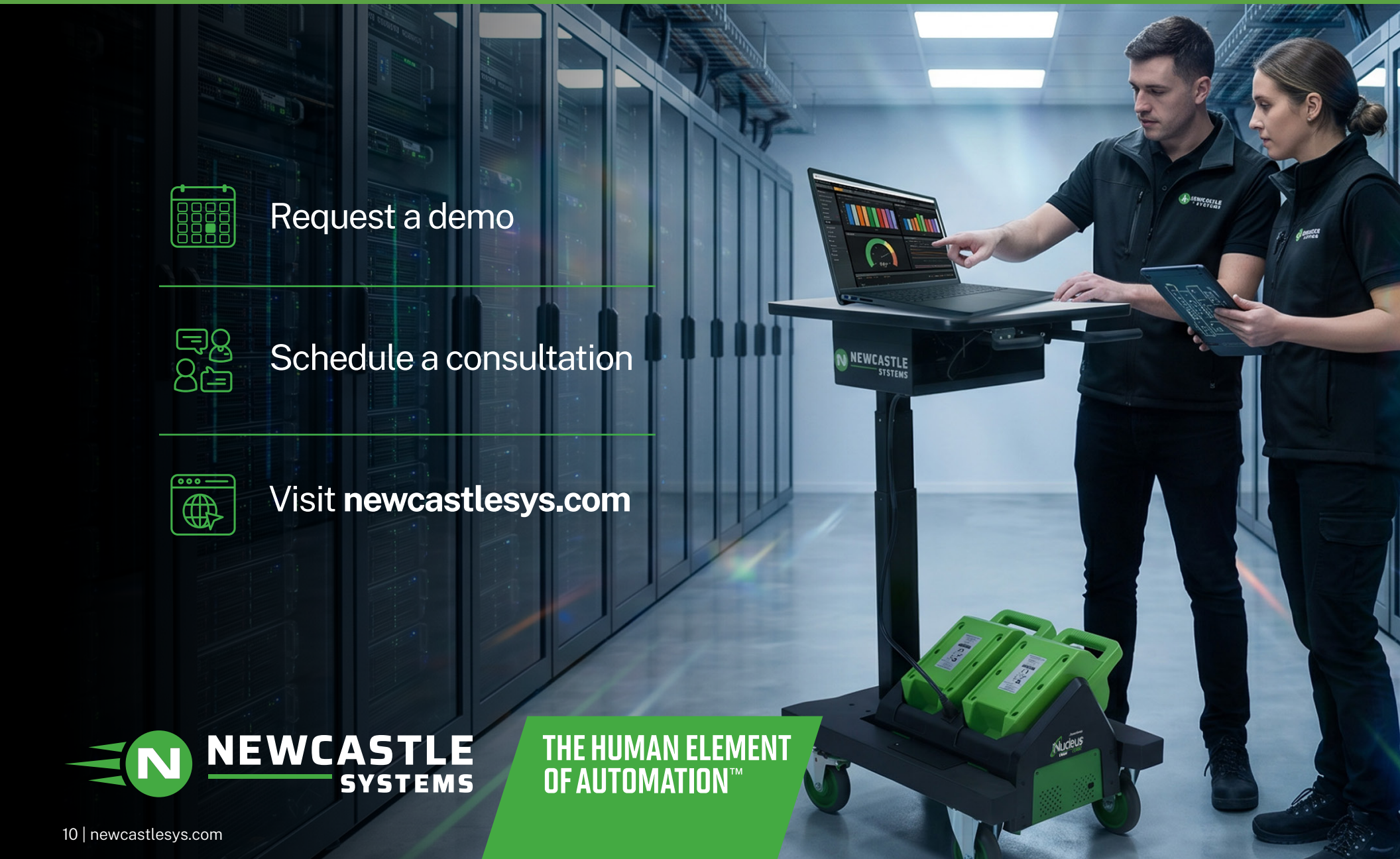


RESEARCH LABS

Enable innovation with reliable infrastructure

READY TO MODERNIZE YOUR DATA CENTER?

Let's build the right mobile workstation solution for you.



Request a demo

Schedule a consultation

Visit **newcastlesys.com**

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