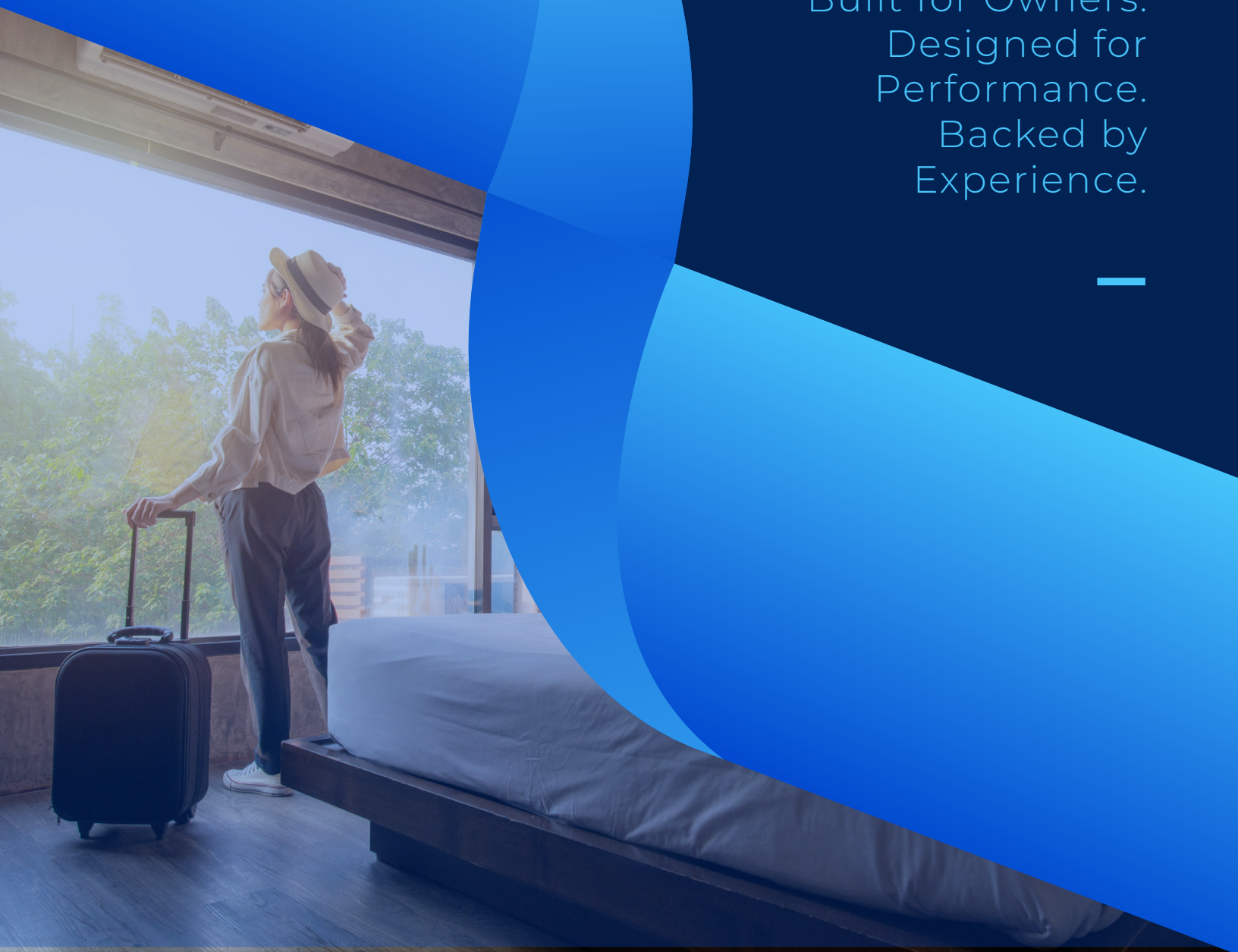
AAHOA
ASIAN AMERICAN HOTEL OWNERS ASSOCIATION

WORLDVUE®

The Hotel Technology Toolkit

Built for Owners.
Designed for Performance.
Backed by Experience.



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Introduction

AAHOA hoteliers represent one of the most entrepreneurial ownership communities in hospitality. Many members operate multiple franchised properties. Others manage independent assets while balancing brand standards, staffing realities, and capital planning.

Guest expectations continue to rise. Brand requirements continue to evolve. Online reviews influence booking decisions every day. Technology affects revenue, operations, and inspection outcomes.

Streaming, casting, mobile device connectivity, and smart-room features are common expectations. When systems fail, the front desk feels it first. Owners see the impact later in guest scores, reviews, and brand evaluations.

The AAHOA Technology Toolkit helps hotel owners evaluate, modernize, and future-proof their properties with confidence.

This guide covers the full technology environment, from network infrastructure to in-room streaming. It outlines best practices, common pitfalls, and flexible deployment options. Each recommendation aligns with property goals and brand requirements.

The objective is simple. Build a network foundation that supports reliable Wi-Fi, smooth streaming, strong data protection, and scalable in-room entertainment. Protect long-term return on investment.

SECTION 1

Streaming Depends on Network Design

Streaming performance reflects network design. Bandwidth, access point density, and switching capacity shape performance long before guests press "Play."

Buffering and failed casting often stem from legacy infrastructure. Many older designs did not anticipate today's device counts or video usage.

Common signs of network strain include:

Buffering or dropped streams.

Inconsistent video quality during peak occupancy.

Repeated troubleshooting calls to the front desk.

Vendor finger-pointing during outages.

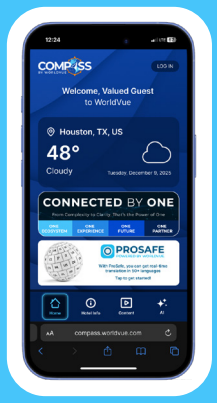
Unexpected upgrade costs after a streaming rollout.

Before upgrading in-room entertainment, owners should confirm that the underlying network can support current and future demand.

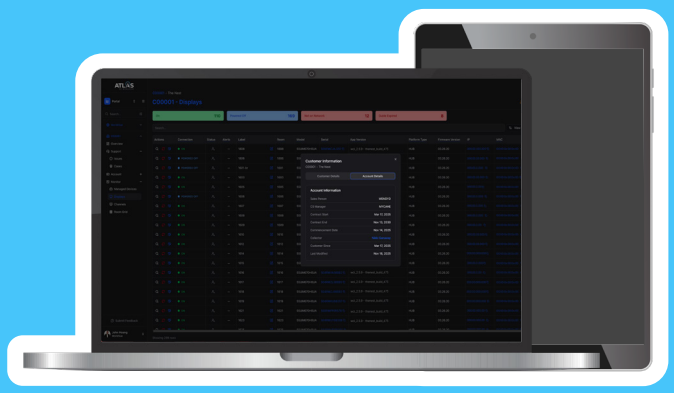
SECTION 2

Bandwidth and Device Demand in Modern Hotels

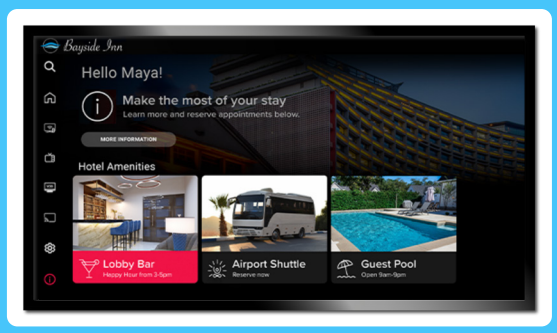
Guest rooms now function as workspaces and entertainment hubs. A single occupied room may support:



Two to four smartphones



One or more laptops or tablets



A streaming-enabled television

Connected thermostats, door locks, or other IoT devices

Commonly, guests may bring six to ten devices per room. Extended-stay and upscale properties may see even higher counts.

Planning for capacity

For streaming-ready hotels, owners should plan for 25–50 Mbps per occupied room. Conference hotels, extended-stay properties, and higher-tier brands may require more to maintain performance during peak periods.

For example, a 100-room hotel at 70% occupancy with a 35 Mbps target per room may need roughly 2.5–3 Gbps of total internet capacity. This estimate includes headroom for spikes.

Internet bandwidth alone does not guarantee performance. A larger pipe will not fix poor network design. Internal switching, uplinks, and access point placement determine whether the network delivers that bandwidth reliably to each guest.

SECTION 3

Infrastructure Gaps that Affect Performance

Many properties uncover infrastructure limits during a streaming upgrade.

Typical gaps include:

- Legacy access points not designed for HD or 4K video traffic.
- Poor AP placement or coverage gaps.
- Low AP density for current device loads.
- Shared networks that force guest and operational systems to compete for bandwidth.
- Lack of prioritization for high-bandwidth uses such as streaming.
- Outdated switching hardware that creates bottlenecks.
- Insufficient capacity between MDF and IDF closets (equipment rooms).

Many hotels still operate networks that cannot support dense, video-heavy environments. These limits reduce performance even when the streaming platform functions properly.

Cabling and upgrade strategy

AAHOA owners often manage renovations while preparing for brand property improvement plans. Owners should align infrastructure planning with both timelines.

In some cases, properties can continue to deliver television services over existing coax. This approach may preserve prior investment. For Wi-Fi, Cat6 or Cat6a cabling supports Wi-Fi 6 and Wi-Fi 6E effectively. Fiber cabling between MDF and IDF locations can improve throughput and long-term scalability.

Every property differs. Construction materials, layout, occupancy patterns, and ownership goals should guide network architecture decisions. WorldVue assesses these variables and recommends the right approach for each property.

SECTION 4

Wi-Fi Design Considerations for Video-Ready Hotels

1. Access point density and placement

Device density and video usage drive access point strategy for streaming performance.

A 1:4 ratio of hallway access points to rooms may support moderate demand. Many streaming-focused hotels now deploy one access point for every one to two rooms. In-room placement reduces interference and improves signal strength. Newer Wi-Fi standards deliver higher speeds but shorter range, which makes thoughtful placement essential.

Construction materials also affect performance. Concrete and metal require different strategies than wood-frame structures.

Your WorldVue team considers all these factors in network design. Engineers conduct heat mapping and professional site surveys to confirm coverage. Teams design each deployment to reflect the property's layout and brand requirements.

2. Wi-Fi standards and future readiness

Hotels should evaluate Wi-Fi 6 and Wi-Fi 6E for most deployments. Some properties may consider Wi-Fi 7, the latest generation of Wi-Fi, for a good balance of performance and cost.

Owners should align technology choices with property size, occupancy, and capital planning.

3. Network segmentation and traffic management

Teams should segment guest Wi-Fi, PMS systems, point-of-sale, security cameras, and IoT devices on separate VLANs. Segmentation reduces congestion and improves both performance and network security.

Network administrators can configure Quality of Service settings to prioritize streaming traffic during peak times. Streaming and casting traffic should also be intelligently prioritized over background updates, large downloads, and non-critical staff browsing.

4. Switching, backhaul, and MDF/IDF planning

Access points cannot perform well when switching and backhaul limit throughput. Outdated switches and cabling, as well as undersized uplinks between equipment closets, yield poor performance.

When you work with our WorldVue team, our engineers deploy gigabit or multi-gig switching with proper uplinks. Fiber between MDF and IDF closets supports scalability. Cat6 or Cat6a cabling supports guest room internet connections at the edge.

Teams can also advise on the logical placement of MDF/IDFs and ensure proper power, cooling, and grounding to support long-term reliability.

During new construction or major renovations, developers should plan conduit and pathway capacity early. Proper sizing allows for future growth.

5. Monitoring and proactive support

Real-time monitoring enables faster device-level troubleshooting and early congestion detection. Support teams can often resolve issues remotely before guests complain.

Continuous monitoring reduces front-desk calls and operational disruptions.A centralized support model creates clear accountability across vendors and systems.

SECTION 5

Alignment with Brand Technology Standards

Most AAHOA members operate franchised properties. Brands define bandwidth targets, approved equipment lists, casting requirements, cybersecurity standards, and inspection criteria.

Owners should align infrastructure decisions with those requirements from the start. Misalignment can delay renovations or trigger duplicate spending.

WorldVue works directly with major hospitality brands to support compliance. Teams may:

- ☐ Review brand technology documentation.
- ☐ Confirm approved hardware and streaming platforms.
- ☐ Align bandwidth and performance targets.
- ☐ Support PMS integration requirements.
- ☐ Coordinate during PIPs and renovation cycles.

Early coordination protects both timelines and budgets.

SECTION 6

Monitoring, Validation, Security, and Data Protection

Owners must maintain reliable performance through ongoing oversight.

Managed monitoring gives operators visibility into device health and congestion trends. This approach supports owner-operators who oversee multiple assets.

Teams should implement encryption, VLAN segmentation, and automatic credential clearing for casting environments. These controls protect guest data and reduce risk.

WorldVue maintains SOC 2 Type II Certification to demonstrate its commitment to data security and operational integrity. Achieving this standard serves as industry validation that WorldVue provides enterprise-level security for customers' data secured in our system.

SECTION 7

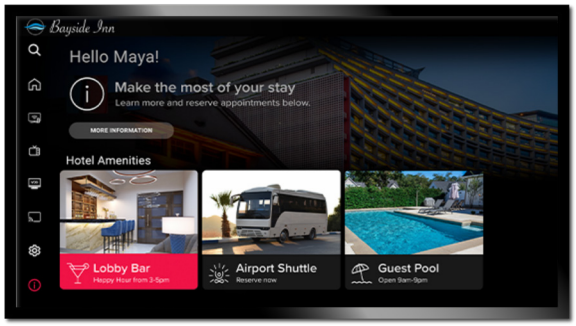
Streaming and Casting Platforms

Once teams confirm network readiness, owners can evaluate entertainment platforms that align with brand and ownership goals. We work with brand-compliant television and streaming hardware across major flags. Both streaming and casting integrate with major commercial hospitality-grade televisions, including LG, Samsung, and Philips.

LG SAMSUNG PHILIPS

OnStream

OnStream delivers live television, streaming apps, and casting within a hospitality-focused system.



Built on Android TV with Google certification and Chromecast built-in, it provides guests with a familiar interface and access to popular streaming apps.

Hotels can customize branded welcome screens, promote on-property amenities, highlight loyalty programs, and even support advertising or promotional messaging directly through the TV experience.

Powered by SMARTBOX2 and EVOLVE, the system can operate across IP, Wi-Fi, or existing coax infrastructure, allowing properties to modernize entertainment without requiring a full rewiring.

WorldVue HUB®

WorldVue HUB® combines streaming, casting, and centralized management in a single hospitality platform. The system supports custom-branded guest interfaces, PMS integration, and portfolio-level visibility. The Entertainment HUB is designed to align with properly engineered networks.

Built for owners who want a fully managed, scalable hospitality experience platform, WorldVue HUB offers revenue and content flexibility to support your property's success.

SECTION 8

Working with a Network Design Team

A professional network audit gives owners a clear starting point. This evaluationis the foundation of any successful streaming rollout.

This process helps both owners and deployment teams understand current performance. It identifies hidden risks and bottlenecks before teams deploy new systems.

An audit also helps teams create a realistic upgrade roadmap, avoid costly surprises after deployment, and phase improvements strategically.

What a comprehensive audit includes:

- ☐ Heat mapping and signal testing.
- ☐ Access point density review.
- ☐ Cabling and switching evaluation.
- ☐ MDF and IDF backhaul assessment.
- ☐ Device density modeling.
- ☐ Performance projections tied to occupancy and streaming demand.

Steps in the Network Design Process

1.	Document layouts, construction type (e.g., concrete vs. drywall), and existing equipment.
2.	Test performance across guest and common areas. Testing includes on-site signal strength measurements, speed testing across multiple occupancy zones, and congestion and interference testing.
3.	Model capacity for peak occupancy and concurrent streaming scenarios to identify stress points.
4.	Develop an engineering plan for AP placement, channel planning, power calibration, and equipment upgrades (if needed).
5.	Create a phased roadmap aligned with budget and brand standards. Identify fixes that need immediate attention.

WorldVue acts as a centralized partner across network, streaming, and cabling initiatives. This approach simplifies communication for ownership groups.

SECTION 9

Choosing the Right Model for Your Property

Every property operates at a different stage of technology readiness. Before selecting a deployment model, owners should first assess where their property stands today.

Assessing readiness

Properties generally fall into one of three readiness categories:

1. **Streaming-Ready –** The network already meets brand bandwidth targets. Access point density supports in-room streaming. Switching and backhaul provide sufficient capacity. These properties can move directly into platform selection and deployment.
2. **Upgrade Required –** The property supports basic Wi-Fi but lacks sufficient AP density, switching capacity, or segmentation for reliable streaming. These hotels require targeted infrastructure improvements before full streaming rollout.
3. **Legacy Infrastructure –** The network relies on outdated access points, limited bandwidth, or aging cabling. These properties benefit from a structured modernization plan aligned with renovation or PIP cycles.

A professional audit clarifies readiness and prevents costly missteps.

Deployment models

Once readiness is clear, owners can choose between two primary operating models.

- **Fully Managed Model –** WorldVue designs, deploys, monitors, and supports both the network and entertainment systems. This model centralizes accountability. It reduces internal IT burden. It works well for owners who prefer a single point of responsibility.
- **Owner-Managed Model –** Ownership maintains day-to-day control of the network and vendor relationships. WorldVue provides engineering design, equipment, brand-compliance guidance, and project support. This model suits owners with internal IT resources who want more direct oversight.

The right choice depends on portfolio size, staffing capacity, brand mandates, and long-term ownership strategy. WorldVue helps AAHOA owners evaluate both options and select the structure that aligns with operational and financial goals.

SECTION 10

Implementation Timeline and Renovation Agreement

AAHOA owners often coordinate technology upgrades alongside renovations, brand PIPs, or ownership transitions. Timing affects cost and disruption.

A structured timeline may include:

- Conducting an initial assessment and reviewing brand requirements.
- Planning budgets and securing capital approval.
- Completing engineering design and selecting equipment.
- Upgrading cabling and infrastructure.
- Deploying the streaming platform.
- Testing performance and documenting compliance.

Teams can reduce disruption and avoid duplicate labor by aligning infrastructure work with renovation phases. Early planning allows proper conduit placement, MDF/IDF optimization, and cable pathway design before walls close.

Owners who cannot complete a full upgrade at once can execute a phased plan. This approach allows teams to prioritize high-impact areas while moving toward long-term standards.

SECTION 11

Financial Impact and Return on Investment

Infrastructure influences guest satisfaction, online reputation, and operational efficiency.

Reactive spending often leads to repeated service calls and emergency fixes. A structured plan supports phased investment and reduces rework during future renovations.

Strong performance reduces front desk troubleshooting and supports franchise compliance.

SECTION 12

Supporting AAHOA Owners

AAHOA owners balance brand standards, staffing limits, and capital discipline. Many manage multiple flags across different markets. Many operate as family businesses with long-term ownership goals.

WorldVue understands the operational realities AAHOA members face. Owners need clear guidance, predictable budgets, and partners who understand franchise systems.

Support may include:

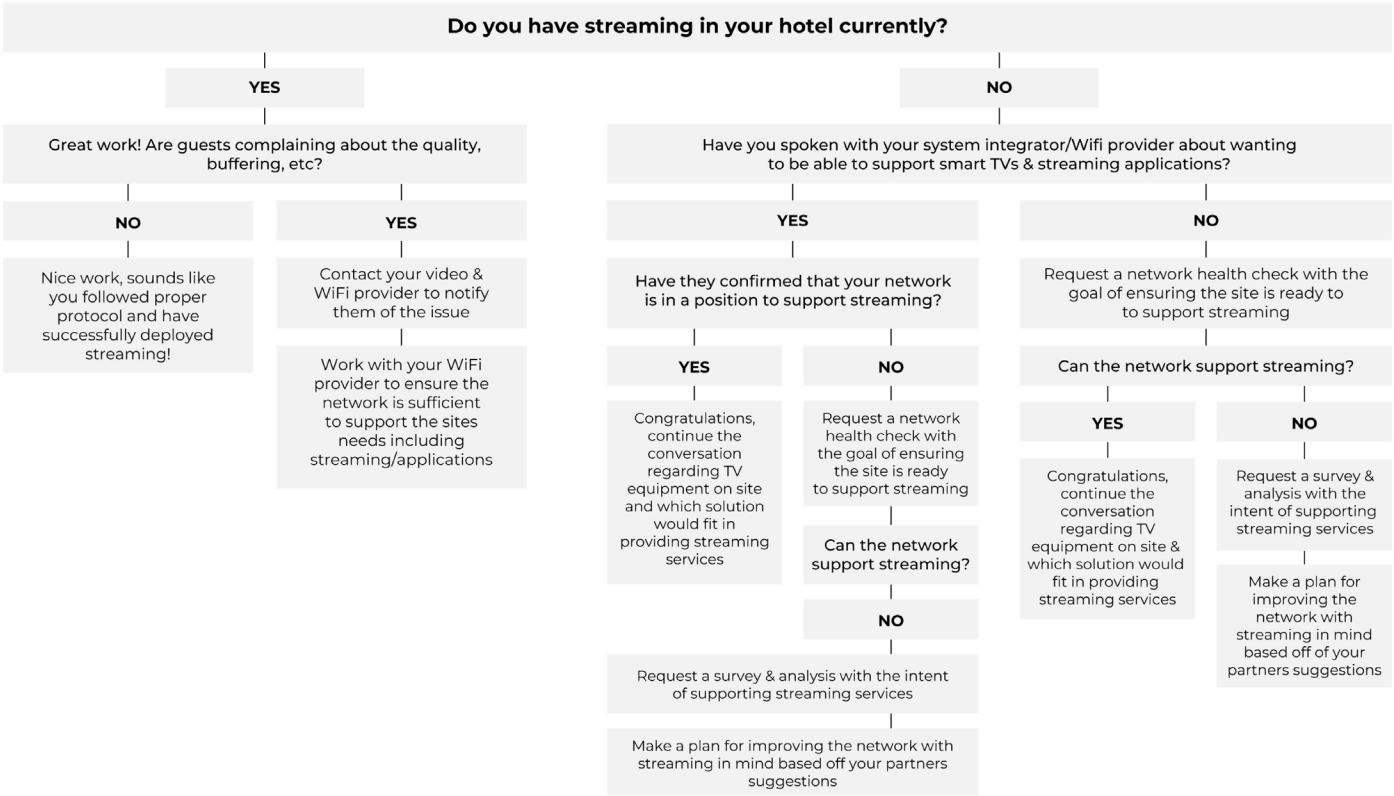
- Standardizing technology across a portfolio.
- Delivering multi-property visibility and centralized monitoring.
- Forecasting budgets for phased upgrades.
- Coordinating with brand IT and inspection teams.
- Supporting documentation during PIPs.
- Developing clear engineering plans customized for each property.
- Guiding properties toward brand compliance for in-room entertainment, Wi-Fi performance, and network standards.

WorldVue serves as an approved technology supplier for many major hospitality brands. Teams work within published brand standards and approved equipment lists. This alignment helps owners efficiently meet entertainment, Wi-Fi, and network compliance requirements.

The AAHOA advantage also includes access to experienced hospitality engineers, scalable solutions for growing portfolios, and a single point of accountability across infrastructure and entertainment systems.

Designs reflect construction type, occupancy patterns, renovation cycles, and long-term ownership strategy.

The objective remains straightforward. Provide clarity. Reduce operational risk. Support reliable performance that meets brand standards.



SECTION 13

Complimentary AAHOA Network Readiness Review

AAHOA owners should not have to guess whether their network can support modern streaming and brand requirements.

Schedule a no-obligation network readiness review to:

- **Assess current Wi-Fi performance and infrastructure health.**
- **Identify streaming and casting readiness gaps.**
- **Evaluate brand compliance risks.**
- **Prioritize upgrades based on budget and renovation timelines.**
- **Build a phased, practical technology roadmap.**

You will receive clear findings, defined next steps, and guidance aligned with your property goals.

Better streaming starts with better infrastructure. Let's make sure your network is ready before guests test it.

SCHEDULE YOUR AAHOA NETWORK READINESS REVIEW TODAY.

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