

CASE STUDY



NETHERLANDS



HOSPITALITY

REIMAGINING THE HOSPITALITY SECTOR WITH MULTI-DIMENSIONAL USE OF SPACE

THE STUDENT HOTEL

The Student Hotel wants to rethink the hospitality sector. It aims to create flexible, multi-dimensional spaces that can cater to a range of customer segments, depending on the location, time of year or time of day. Its partnership with Aruba means the business can be agile, consistent and data-driven in the ways it addresses each location.



The Student Hotel bills itself as a new kind of hospitality. Part student accommodation, meetings, co-working and event space, the business is pitched as being more than a hotel. It is a value proposition that has resonated with backers. The Student Hotel (TSH) now has 16 locations across Europe and new openings are planned.

“We’re constantly evolving and we’re more diversified than most operators,” says Henk Jan Boer, the company’s Director of IT Infrastructure and Support. “It’s in our DNA to trial new things.”

CREATING A MULTI-DIMENSIONAL HOSPITALITY EXPERIENCE

The challenge for TSH is to be flexible yet standardised. The business needs to run efficiently but wants to be able to adapt to local opportunities. While it does not want to be seen as ‘cookie cutter’, it recognises that some common features and functionalities are expected. High-quality connectivity for guests is a given.

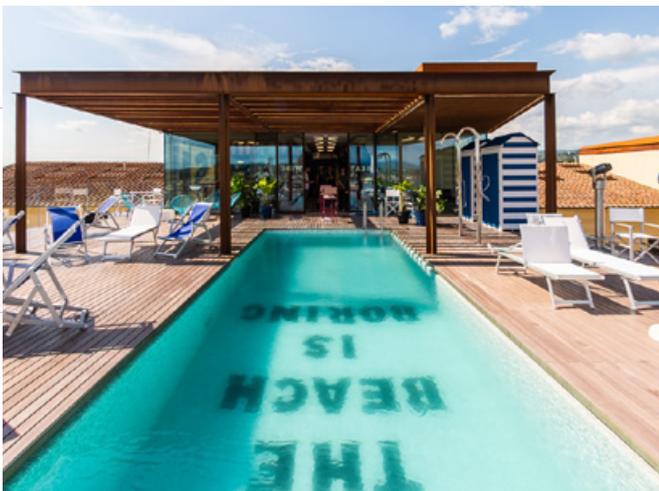
“Our aim is to be far more fluid in our use of space,” explains Mark Liversidge, Chief Digital & Experience Officer, The Student Hotel. “The challenge for myself and the technology group is to understand the distinctive needs and opportunities of each location. Data is at the core of those decisions.”

Technology, he continues, will allow TSH properties to be multi-dimensional: “Connectivity across every inch of every property is fundamental.”

ACCELERATING SITE OPENINGS

Opening new hotels continues to be a long process. There can be two years between signing for a site and the opening. Having a consistent approach to the network delivers only marginal gains in terms of speed of delivery. But it can significantly simplify matters.

Says Boer: “The beauty of Aruba is that we can preconfigure everything in Central, then just push the button. Hotel openings in Vienna and Delft, and an upgrade in Amsterdam, were unlike anything we’ve ever done. It is much more straightforward.”



REQUIREMENTS

- Enable innovation and technology integration for next-gen hospitality spaces
- Consolidate network management with one vendor and one architecture
- Simplify network deployments to accelerate new hotel openings
- Ensure secure connectivity for a range of users 24/7

SOLUTION

- Wi-Fi 6 Indoor Unified APs
- Wi-Fi 6 Unified In-room Hospitality APs
- Campus Core and Access Switches
- Redundant Headend Branch Controllers & VPN Concentrators (DC)
- Redundant Branch Gateways per location
- ClearPass Policy Manager NAC and Onboarding
- Aruba Central cloud-based network management
- User Experience Insight Sensors (UXI)
- Aruba SD-Branch Architecture

OUTCOMES

- Provides high performance local internet breakout secured via VPN
- Unifies management of LAN, WLAN, WN, VPN and Firewall
- Generates site usage data to inform ongoing service and space improvements
- Ensures network consistency as the business plans for rapid expansion
- Enables the integration of new ‘PropTech’, with open architecture
- Establishes platform on which to add new, digital services for guests and operations
- Reduces costs significantly by eliminating all MPLS contract

This plug-and-play functionality requires fewer resources and helps redirect resources into higher-value tasks. “The last two weeks ahead of opening are always challenging,” says Boer. “At least today we have a cleaner process.”

There are four principal products or services offered by TSH - accommodation, workspace and co-working, lifestyle environment and meeting spaces. Each offers TSH the opportunity to define and deliver new enhanced experiences to its guests. Leverag-



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ing technology to ensure the agility needed to adapt spaces to each offer is at the heart of the transformation occurring at TSH properties.

STREAMLINING GUEST SERVICES THROUGH ADOPTING LATEST ‘PROPTECH’

Unsurprisingly given the target demographic, TSH hotels are already operationally streamlined. Guests can self-serve check-in, there is an app to order room service or book meeting rooms, properties have smart doors and smart lockers.

Liversidge says the goal is to be more like the airline experience, where guests self-serve in advance all the services they need from their mobile and arrive with a digital key. Eventually this may include details of fellow guests, like-minded contacts and nearby events. All will be geared around maximising the customer’s experience, whether hotdesker, student, event organiser or local start-up.

To drive the mobile, digital experience it is important the business stays at the forefront of the dynamic ‘PropTech’ sector. The ability to integrate with external systems is key.

“One of the attractions of the Aruba architecture is its open nature. It means we can integrate new technology as and when appropriate,” Liversidge adds.

UNIFIED INFRASTRUCTURE AND MANAGEMENT FROM A SINGLE PANE OF GLASS

The Aruba Edge Services Platform (ESP) offers TSH the consistency, integration, and yet, the level of scalability and elasticity which it requires to deliver the right network capacity, performance and security to each new location.

The network is comprised of stacks of Aruba 3810M switches in the core and distribution layers, branching out to a unified access layer based on Aruba 2930F switches with POE+ to support the connectivity for wireless access points and other devices such as IP cameras. Full wireless coverage is ensured via a host of Aruba Wi-Fi 5 & 6 access points (AP-535, AP-505 and AP-303P) with varying levels of high-density for public, guest and workspaces.

In-room unified wired and wireless connectivity is delivered by Aruba AP-303H and AP-505H Hospitality access points.

The deployment, configuration and management of the entire infrastructure is made simple via Aruba Central. Based on a cloud-native microservices architecture, Central delivers a unified management from a single pane of glass. It ensures zero-touch provisioning across all locations, orchestrated centrally with little onsite resources needed.

“Fundamentally, Aruba ensures essential connectivity. It is a backbone of the highest quality,” says Liversidge. “The software services of Aruba enable us to monitor, manage and optimise the connectivity performance.”



SOFTWARE-DEFINED AGILITY IN DELIVERING BRANCH SERVICES

While creating higher performance access to internet and work applications in the headquarters was a necessary part of TSH’s IT transformation, interconnectivity and performance between sites and the head office were even more of an imperative. The Aruba SD-Branch architecture was the natural solution for TSH.

Expensive dark fibre, lease lines and MPLS contracts were no longer delivering the levels of flexibility, bandwidth and services the business required. In some cases, certain locations were connected in series and not directly to the headquarters, leading to massive latencies in communications and internet access. It was time to redesign the entire architecture. The team wanted to deliver consistency in the way it provisioned new services and workplace experiences around the globe.

Today, TSH ensures WAN connectivity, centralised via a cluster of Aruba 7030 Headend Controllers and VPN Concentrators in its Moordrecht data centre. Local internet breakout is provided for each remote location via a cluster of two Aruba 9004 Branch Gateways which ensure high availability and optimised performance through load balancing between different service provider connections.



Managed and orchestrated through Aruba Central, TSH's IT team has full visibility and control over LAN, WLAN, WAN, VPN and Firewall operations, significantly reducing overheads and costs. The team can now define group templates and align all firewall policies across all locations through a single Central interface.

UNCOMPROMISING SECURITY AND NETWORK ACCESS CONTROL

Overseeing the security of the network and automating policy enforcement is made into a simple operation for the IT team. It can create new and well-adapted policies based on specific user profiles and apply them automatically to the devices and users that connect to the network. Access to the network, from internet access for all, to access to the business network for staff or dedicated access to private VLANs for business clients, is all managed seamlessly through Aruba ClearPass Policy Manager.

Any new device which attempts to connect to the network can be profiled and authenticated. If it does not comply with any of the existing policies, it will be quarantined until appropriate action is taken. Otherwise, if discovered and authenticated, the device or user will automatically be given access to the network segment or VLAN they have been authenticated for.

The existing architecture will enable the TSH to benefit from Aruba's Dynamic Segmentation platform which completely automates and orchestrates the compartmentalisation of the network and the assignment of users and devices to respective network resources.

ARCHITECTURAL CONSISTENCY AND LONG-TERM CERTAINTY

Engaging with Aruba has helped establish consistency and long-term certainty for TSH. Previously, each property managed its own network and connectivity. This resulted in relations with multiple suppliers and contractors, variable quality of components and higher costs of vendor management and procurement for the group. Today, the Aruba architecture delivers a robust and unified template which can be scaled and adapted to the requirements of each individual location and property.

To date, five TSH properties have been refreshed. TSH plans to grow to 26 properties by 2023 and, ultimately, go global. All new properties will be with based on the Aruba platform and older properties will be retrofitted.

"Our previous approach was understandable for a start-up but not appropriate for a business wanting to scale," explains Boer. "Aruba establishes consistency, quality and a roadmap towards the future."

The Aruba architecture was flexible enough to apply to the new 800-room Vienna property, and the more typical 300-room new location in Delft. "We only have to install once and we have a network capable of supporting functionalities and services in the future," says Boer.

THE DATA TO INFORM BETTER USE OF SPACE

The Aruba Edge Services Platform will also help TSH collect and make sense of data. The business is keen to examine the exact usage of every square metre of every property and has been trialling the use of Lone Rooftop, an Aruba Certified Edge technology partner that leverages Aruba ALE data to show in real-time how many people are in a building, and where and when they're present.

This data is helping TSH understand if it is worthwhile to reconfigure spaces throughout the day – say, a hotdesking space during the day, converted to an event space at night.

"We're better able to assess traffic and usage. This may help inform whether we use the space for a restaurant or a gym or work area. Also, the more data we have, the stronger our position when in discussion with local authorities, universities or other partners," says Boer.

THE FLEXIBILITY TO RESPOND TO UNCERTAINTIES IN THE HOSPITALITY SECTOR

The partnership with Aruba, and the importance of the network as an intelligent medium, is at the heart of TSH's long-term strategy. The business recognises one rigid format may not be the best way to ride out the current challenges facing the hospitality sector. TSH has the ability to change site usage and attract different audiences, quickly and efficiently.

"Our Amsterdam property is geared to students for most of the year but we can switch to leisure travellers when the universities close for the summer," says Liversidge. "Or we can convert more space to cater for increasing hotdeskers looking for a safe, communal working environment. "The Aruba platform helps us be a lot smarter and agile in how we use our spaces."