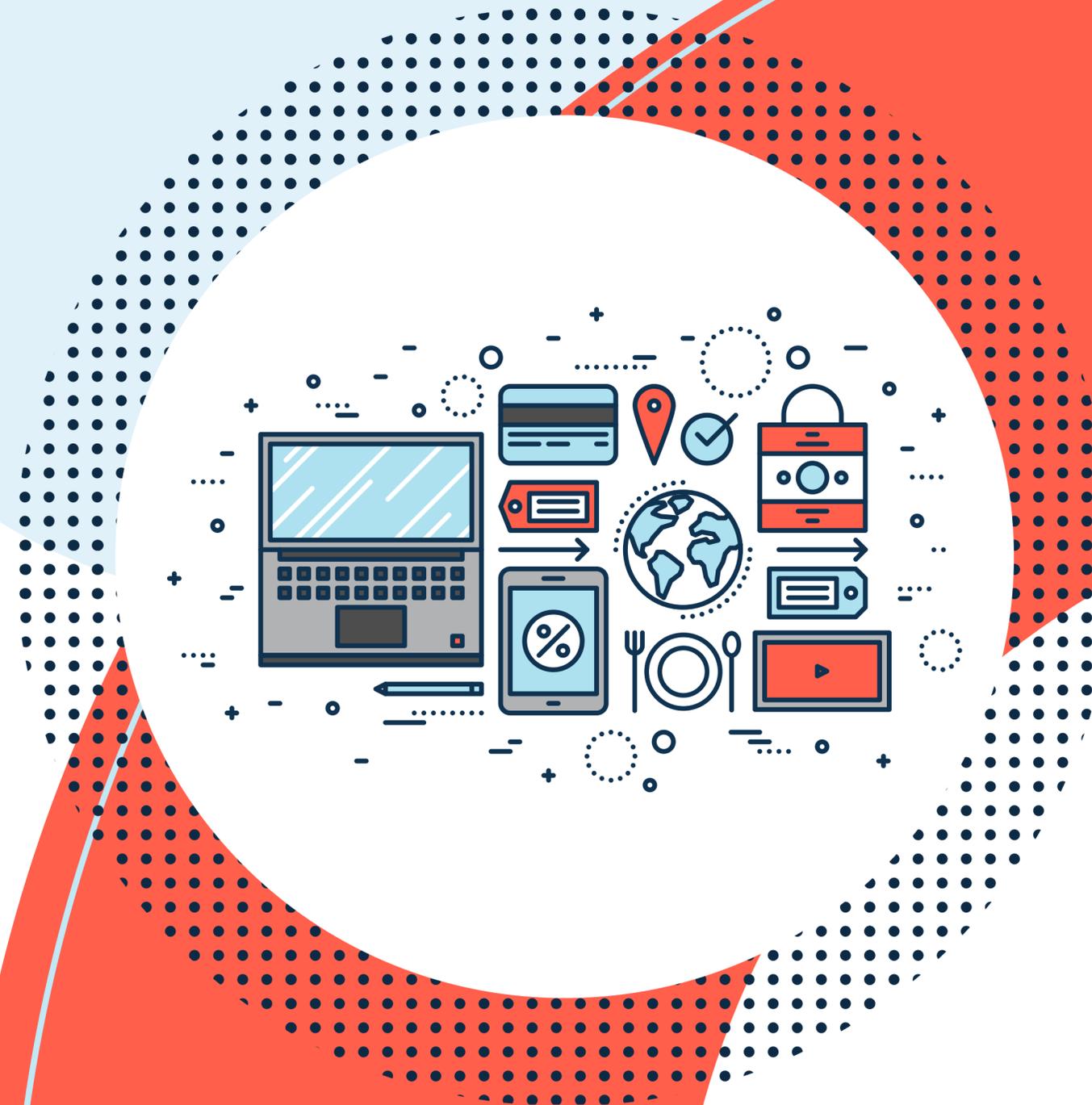aruba

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Serving hospitality at the Edge

Gaining competitive advantage and customer loyalty in a digital-first world

START →

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Executive Summary

With the pandemic now in its second year, almost every sector across the globe is still trying to overcome the challenges left in its long wake. Hospitality in particular has been one of the hardest hit, with many businesses unable to trade for large parts of the 12+ months, if at all. Reports of the hotel landscape were especially sobering, with Statistica revealing that Europe saw the most dramatic effects of the virus, with occupancy rates of just 13.3% in May 2020.

In their quest to continue to trade and serve customers, hospitality businesses did as much as they could to pivot operations online. Many were able to make positive progress, particularly those who were already advanced in their digital transformation pre-pandemic. But while restaurants adopted online ordering and entertainment venues streamed their services, huge swathes of the industry remained largely dormant, leaving many digital advancements relatively untested. The hard work really begins now as consumers are allowed to move freely once more and the sector is able to get a sense of the "new normal."

Undoubtedly, COVID-19 has been a change catalyst for consumer attitudes and behaviours, leaving hospitality businesses to face a whole new set of requirements, such as alleviating safety concerns with social distancing and new hygiene protocols, delivering on digital-first expectations, and providing more financial flexibility than ever before. If hospitality is to bounce back effectively then it must demonstrate that it can respond to these requirements – and quickly. But there are still significant barriers standing in the way of ensuring its digital transformation is built for long-term success.

Featuring industry observations and predictions, alongside pre-pandemic responses from just over 100 IT leaders in the sector, this eBook will examine how hospitality's digital transformation has accelerated over the past year, where it needs to advance to next, and how the sector will have to adapt to get it there.

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Accelerate: Hospitality transformation in a pandemic

The hospitality industry was in a healthy – if not leading – place with its digital transformation pre-pandemic, bringing in new technologies and moving computing power to the Edge.

Our studies showed that 55% of businesses in the sector were running production applications or trials of AI, 70% of IoT, and 57% of machine learning (compared to 68%, 73% and 66% respectively across all sectors).

Meanwhile, 77% of hospitality IT leaders had acknowledged the urgent need to implement integrated systems for handling data at the Edge, and 54% were running select pilots for Edge use cases. A further 16% were already computing at the Edge and successfully delivering new outcomes, such as utilizing facial recognition technology (49%), experimenting with live, real-time, multi-language translation (45%), and creating enhanced augmented and virtual reality experiences (43%) as a result.

The "Edge" is defined as: the place where people, devices, and things connect to the digital world. It's where hospitality organizations build trust and loyalty with their customers, where suppliers provide new innovations, and where managers and supervisors engage with their staff.

Though many such projects were put on hold or cancelled when the pandemic hit, certain parts of the industry experienced exponential acceleration of digital transformation. In March 2020, Deliveroo reported 3,000 new UK restaurants had signed-up to its services in the past month to ensure they could continue generating revenue and serving customers – that was before lockdown had officially begun.

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Accelerate: Hospitality transformation in a pandemic

This was the start of a growing movement towards food and drink delivery, which has boomed throughout the pandemic thanks to mobile technology. A recent article stated that Just Eat saw a partner uplift of 40% in October 2020 YoY, while Uber Eats confirmed a 150% jump in UK deliveries on the 3 months to September 2020.

This level of uptick is expected to maintain pace and Research and Markets recently predicted the European Online Food Delivery Market would be valued at USD 20.27 Billion by 2026, growing with a 5.83% compound annual growth rate (CAGR) from 2020 to 2026.

And we're not just seeing this turn to technology and mobile apps in the delivery market alone. In the eating out sector, the use of QR codes for self-ordering rose by 250% in the last year and was expected to reach an estimated 10.1 million users in Europe by the end of 2020.

Hotels have also made significant digital changes. A report from Sift revealed that COVID has driven hoteliers across the world to adopt contactless payment (43%), digital messaging for guest requests (28%), self-service check-ins (27%), and smartphone-activated room keys (17%).

Meanwhile, event and attraction venues embraced hybrid solutions to ensure they could continue serving customers remotely. The global virtual events market size was valued at $77.98 billion in 2019 and is expected to grow at a CAGR of 23.2% from 2020 to 2027. MEA in particular is earmarked for substantial growth with Saudi Arabia and the UAE regarded as upcoming hubs for virtual event management firms.

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CHAPTER 1

Accelerate: Hospitality transformation in a pandemic

CASE STUDY:

Opening Las Vegas' first downtown hotel and entertainment space in 40 years during a global pandemic is an ambitious goal, but that's exactly what Aruba customer Circa Resort and Casino did. Aruba has been working with Circa to deliver immersive and engaging experiences at its new 35-story, 777-room sports-themed venue, as well as to satellite locations throughout Nevada, Colorado, and other jurisdictions.

Circa is using a combination of Aruba's wired, wireless and security solutions to provide the connectivity and bandwidth required to power the hotel's unique amenities – including its Stadium Swim pool deck, with amphitheater-style lounging terraces facing a 143-foot video display, a three-story Sportsbook, featuring a 78-million-pixel video display divided into 42 screens, and a connected transportation hub called the Garage Mahal. Our end-to-end Aruba ESP-based network also supports Circa's next-generation IoT operational solutions that uphold contactless measures in the age of COVID, including robotic bartenders and connected physical safety systems.

The possibilities of a digital-first world in hospitality are clear. However, although the industry had already started dipping its' toes into the digital waters before the pandemic, not everyone will have progressed beyond that point. While some hospitality businesses were able to dive into transformation headfirst, others found their efforts stifled by government restrictions. Now, it's time to achieve balance across the entire sector. As the handcuffs come off, it will be critical for hospitality to embrace all that digital transformation has to offer.

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CHAPTER 2

Advance: Establishing and responding to the new normal

The last 12+ months have provided an exciting glimpse into our digital future and a wake-up call for businesses still lagging in their digital transformation. While COVID may have been a catalyst, customer expectations will continue to drive digital demand and hospitality can't afford to slow its transformation now.

Leading experts are predicting major digital growth across all areas of hospitality. For example, Pwc predicts that technologies, such as AR and VR, digital ticketing, crowd monitoring and in-seat apps will be fundamental to creating stadiums of the future. Voice search, such as could be enabled for hotel room entertainment, is also on the rise, with global smart speaker shipments set to grow at a CAGR of 21% between 2020-2025. Other industry predictions include more personalized guest experiences; even more smart tech; and the leveraging of mobile technology.

These transformations not only present opportunity but will be central to the sector's recovery and remaining competitive.

According to Lumina's Eating Out report, for example, technology is key to winning the 18-34 age group back on-premise, with 26% of 18-24 year olds and 39% of 25-34 year olds more likely to visit food and drink venues if remote ordering is available.

So far, so positive. But as hospitality businesses transform, the rise of smart technology, IoT sensors, and connected devices will exponentially increase data levels. And while that provides exciting opportunities for enhanced insights, personalization, and customer loyalty, it's also this data, or its lack of control, that presents the biggest threat to the sector's future success.

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CHAPTER 3

Adapt: Harnessing data to deliver safe, differentiated customer experiences

As they look to get back to business, it's more important than ever for hospitality organizations to understand their customers' behaviours, quickly recognise trends, and be able to empathize (and act on) their feelings. According to Pwc's Spring 2021 Consumer Sentiment Survey, consumer sentiment is at its highest since 2008 and net spending intentions for eating out are up to 32%, a level never seen before.

The opportunity is there, but those that want to take advantage of it must be able to respond accordingly before current behaviours and requirements inevitably evolve once again – and that takes a deep understanding of the data coming into the business.

For hospitality's digital transformation to be truly successful businesses need to be able to transform data into actionable insights. Even earlier last year 25% of hospitality IT decision makers said there was simply too much data for their systems to handle, and the same amount confirmed

they could not process the data they collected quickly enough to act. Now, the level of data will be even greater and likely much more overwhelming.

To underpin long-term digital transformation in hospitality, this data needs to be processed efficiently, analyzed intelligently, and above all stored securely. And that requires a step change in the way businesses think about networking; putting the right network infrastructure, systems and tool in place in order to tackle this data overload in three key steps:

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Adapt: Harnessing data to deliver safe, differentiated customer experiences

STEP 1:
PROCESS DATA EFFICIENTLY

In order to process data efficiently, companies must follow it (and their customers) to the Edge of the network, capturing it in real-time at its source versus transferring it back to a centralized hub. Even the sub-millisecond latency of sending data back-and-forth to the cloud can undermine the effectiveness of a system and, ultimately, the desired outcomes that depend on it.

Capacity at the Edge is especially critical in hospitality environments where data-driven insights support hyper-personalization and offers. For example, targeted promotions, which can be implemented through the likes of in-room apps and mobile technology, must be delivered in real time. Meanwhile in smart venues,

where cost and energy savings are a priority, real-time sensors are fundamental to track usage and automatically switch on-and-off – without them, savings would be almost impossible.

Regardless of whether organizations know it yet or not, they are heading to the Edge, and the latency and cost benefits will soon become too important to ignore.

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STEP 2:
ANALYZE DATA INTELLIGENTLY

Of course, capturing data is one thing, but being able to act on it is something else entirely. Enter AI and automation.

Hospitality already had a strong uptake of AI before the pandemic – outside of our research, IDC discovered 62.6% of hospitality and travel brands were focusing on data optimization programmes for business resiliency, using AI-driven solutions to leverage data sets and adapt to the digital nature of guests and employees. As AI becomes more sophisticated and machine learning models get access to more data, its significance in hospitality will continue to grow.

There are already use cases where AI is utilized to enhance customer service, providing personalized guest experiences, and supporting brand management.

For example, AI chatbots are being designed to interact with and learn from people, enabling them to intricately understand customer preferences, respond with hyper-personalized services, and manage complaints.

Closer to home for IT leaders, AI and automation also has a core role to play in keeping on top of network troubleshooting and issues resolution. Rather than spending hours monitoring and responding manually to every problem, AI can act as the network engineer's sixth sense: getting straight to the issue, presenting a solution, and actioning it at the push of a button. This in turn, frees up team time for innovation versus network management, and unlocks the data in the network to support digital transformation.

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STEP 3:
STORE DATA SECURELY

Despite the uptake of digital services in the past year, the industry cannot take for granted that this equates to user confidence. While the ground has been prepared for digital transformation, if hospitality organizations want to continue using customer data to improve services and unlock new revenue streams, then people need to trust that their data is secure.

Against this backdrop, there's a growing need to police increasing levels of app and device usage, and this is causing a headache for hospitality business, with 67% of decision makers believing that connecting IoT devices at the Edge would make their business more vulnerable. This issue has only been compounded by the circumstances of the last year, with the surge in digital services leading to a parallel wave of cyberattacks.

The challenge for hospitality organizations is how to lock down their data enough to reassure customers without freezing out further digital transformation. A Zero Trust approach to security is part of the answer here, but network visibility and device identification also become key – providing a single-pane-of-glass view of increasingly fragmented networks (extending across fixed venues, remote pop-ups, and customers' homes) and giving IT teams the ability to grant differentiated levels of data access according to device or user group.

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CASE STUDY:

Digitization and personalization continue to be paramount to unlocking operational efficiencies and elevating the guest experience at Steigenberger Hotels & Resorts in Germany. The luxury hotel chain is using Aruba architecture to create seamless interactions and services for guests, from the initial online search, to chatbots to help with booking and checking in, to ordering room service via a app. In the COVID-era, if a guest so chooses, they can have an entirely digital interaction. Importantly though they could also do all of this in-person – and the network is able to predict and adapt to whatever pattern of usage is thrown at it.

Aruba's network also uses data capture to allow Steigenberger to segment different user groups, devices or network usages – ultimately supporting differentiated and enhanced customer experiences, whether that customer is a staying guest or day conference visitor.

"The more information about a guest or our services we can put into the hands of our staff, the better the service."

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Conclusion

The pandemic and government restrictions forced hospitality businesses to close their venues and created an industry of two halves. While some were driven to embrace digital tools in order to continue trading, others, such were left with no option than to sit, watch, and wait.

Now, the real test comes as hospitality is able to reopen its doors. It's vital that businesses in the sector maintain and accelerate their transformation to stand a chance of recovery. They must work fast to encourage on-premise interaction and achieve customer delight by rebuilding customer trust.
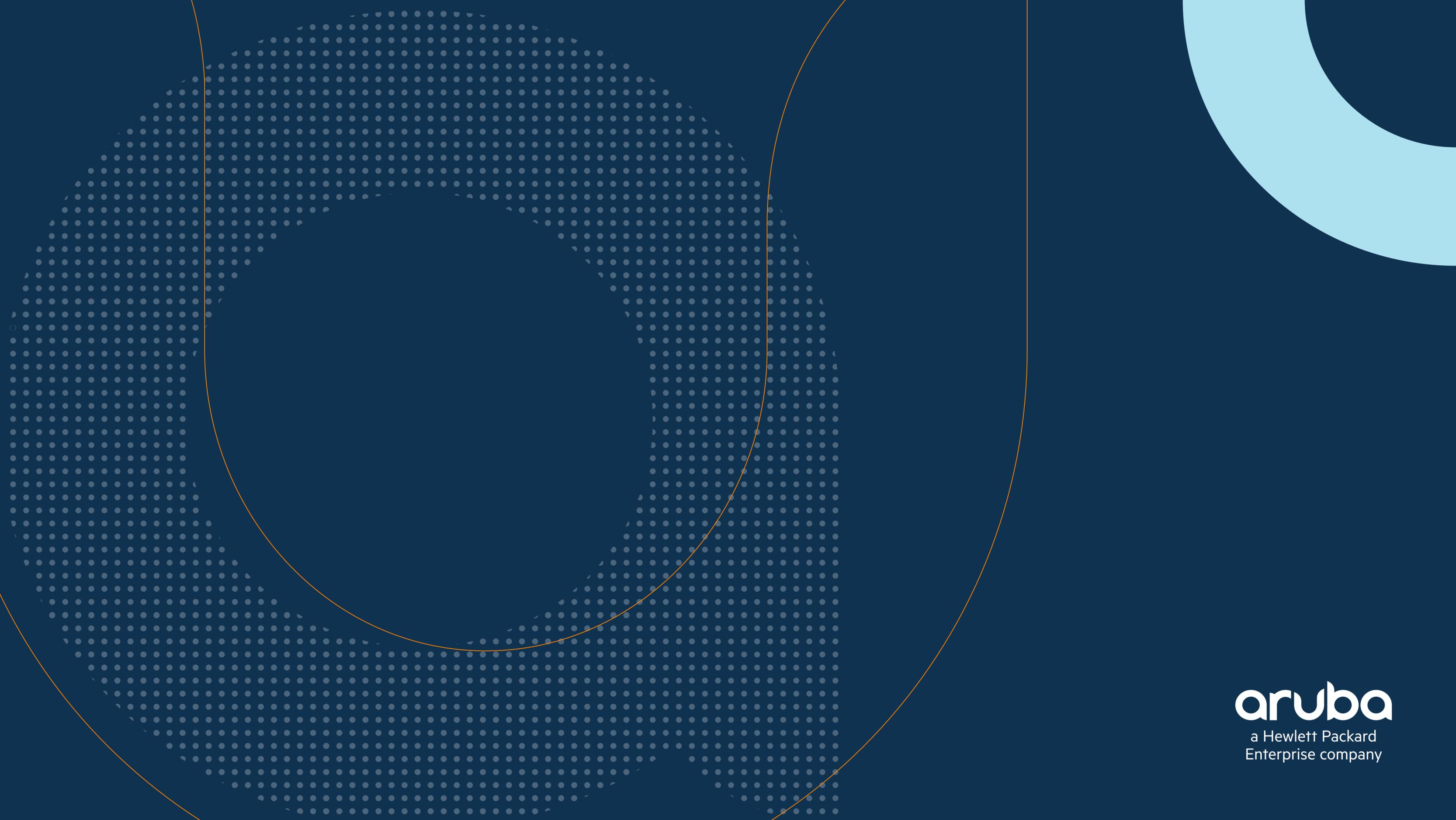
Managing data at the Edge will be a key requirement for continued digital transformation and has the potential to significantly (and positively) change the way hospitality services are delivered. This is why it is now critical that the sector evolves its network capabilities to ensure it has the infrastructure and solutions in place to support the next-generation technologies and experiences that will define their organization's digital transformation in 2021 and beyond.

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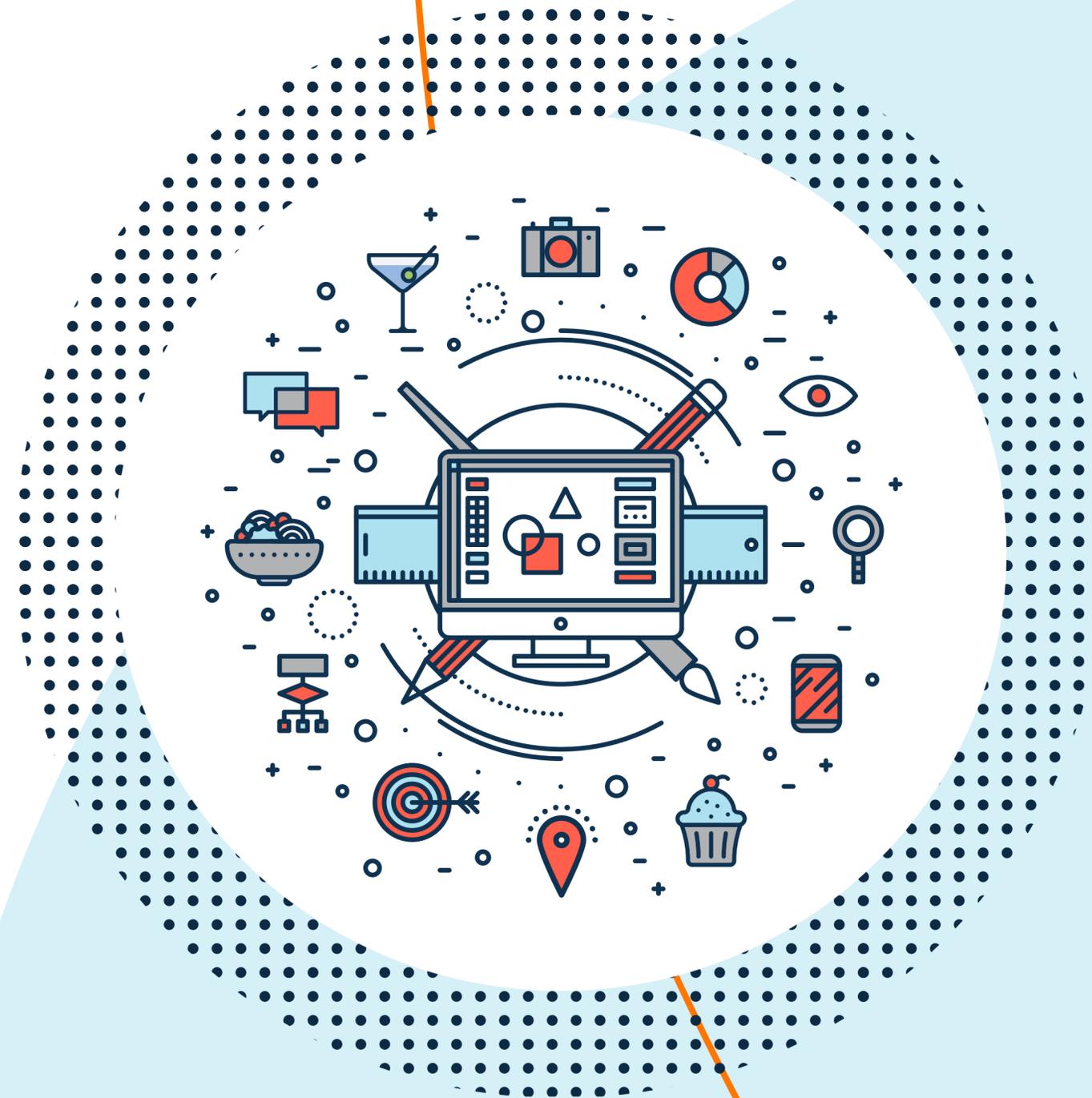
Research Methodology

Aruba commissioned independent market research company Vanson Bourne to conduct a global quantitative study with 107 IT decision makers, from hospitality organizations with at least 500 employees, in May 2020. All interviews were conducted using a rigorous multilevel screening process to ensure that only suitable candidates were given the opportunity to participate. This research formed the baseline to measure progress made in the past year.

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