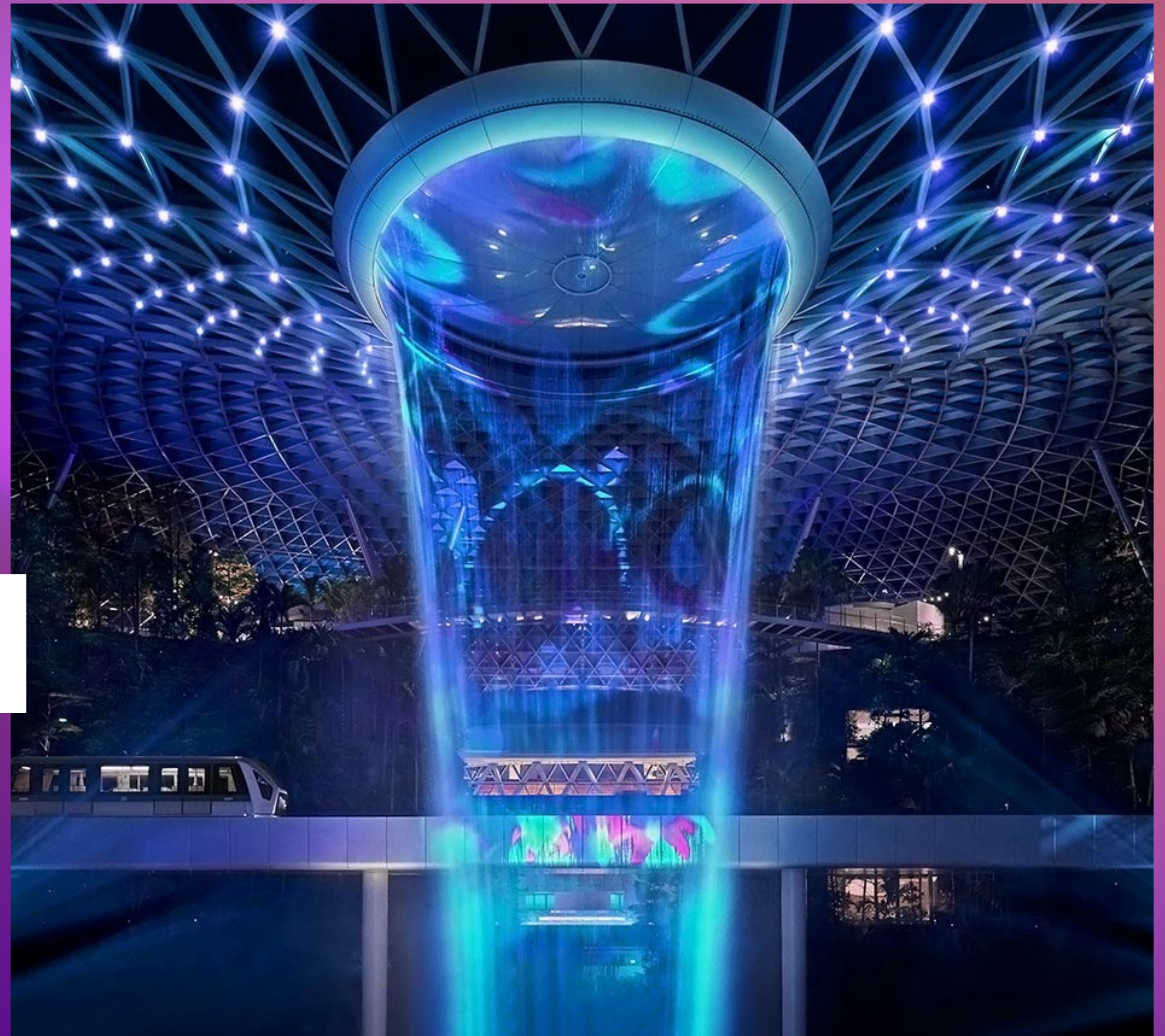


SINGAPORE CHANGI AIRPORT:

# Managing disruption with digital

Transforming the  
passenger experience





Call for change

# Driving greater success

Singapore's Changi Airport, widely recognized by travellers as the world's best airport for many years, is committed to continually raising the bar in customer engagement. This was a significant driver for a digital factory that uses the newest technology to reinvent the airport's passenger experience and its operations. Known as DIVA (digital, innovation, ventures and analytics), the factory is designed to help Changi Airport Group experiment, to develop and launch new digital products and services—from conceptualization to delivery.

When the COVID-19 pandemic hit, DIVA was able to quickly mobilize and work with Changi's management and operational teams to build new digital products starting with improving safety for passengers and employees.





When tech meets human ingenuity

# Rapid prototyping and experimentation

**Located at the airport and staffed with professionals from both Changi Airport and Accenture, DIVA leverages the latest innovative technologies and capabilities—including edge computing, artificial intelligence (AI), software development, digital marketing, and the internet of things (IoT). Managed like a factory, DIVA focuses on delivering business outcomes at scale, with lines of production, predictable delivery schedules and quality control.**

This model, built around established communities of practice, enables new ways of working—with design thinking, agile methodologies, rapid prototyping and experimentation at the core. Requirements included being 100% on the cloud, a decoupled architecture built on APIs and microservices and secure data.

DIVA works closely with all business units across Changi to host multi-disciplinary teams. These teams encompass niche skills and new roles such as product owner, agile coach, cloud architect, IOT architect, UX/UI designers, software engineers and data scientists.

# The first priority was safety

When the COVID-19 pandemic hit the travel and aviation industry worldwide, DIVA's capabilities came to the forefront enabling the speed and scale that was critical. The first priority was safety, so using its AWS cloud platform and AWS landing zones to orchestrate a stable and secure environment, Changi and Accenture created a series of capabilities including the **Safe Travel Concierge** app that was created end-to-end in just four weeks. It's a one-stop portal for passengers that provides a convenient checklist of all entry requirements into the country. The app enables smoother travel for passengers, including booking on-arrival COVID-19 tests and accessing digital immigration forms.

Another app was **ChangiQ**, a queue management digital platform enabling passengers to schedule their check-in and security screening times, drastically reducing queue wait times. And Where2Clean, a sophisticated internal app that uses IoT and real-time architectures to intelligently map out to the cleaning team which areas of the airport to prioritize for cleaning based on real-time flight data and passenger traffic.

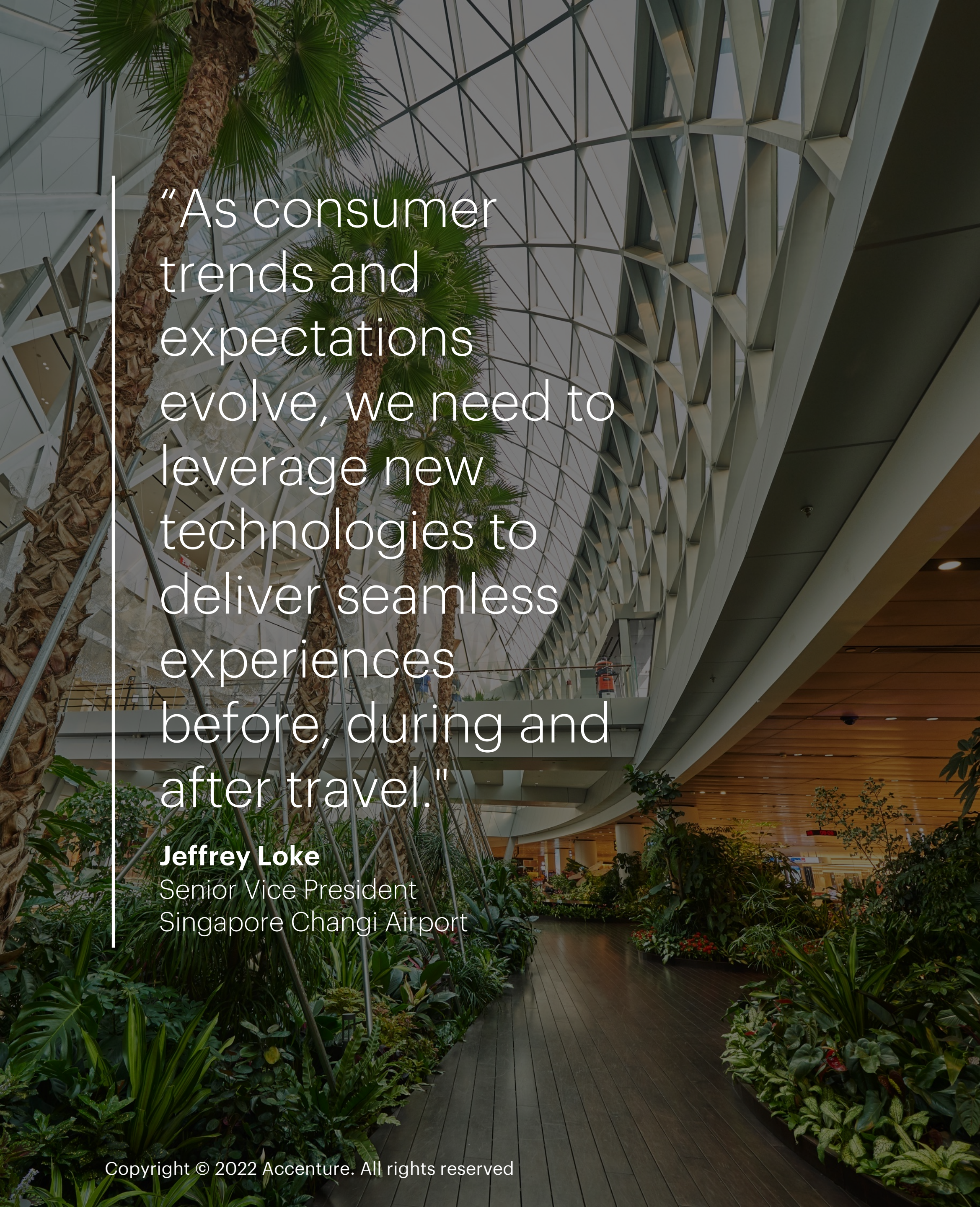
The newest digital products include **PlayPass**, that enables Changi customers to schedule fun events and activities through one single mobile platform, improving the customer experience and reducing wait times at the airport. And **CarPass**, a members-exclusive parking rewards program that provides customers with a seamless digital redemption experience for parking promotions at Changi and Jewel.

“It quickly became apparent that we are operating in a new normal, and we needed to be creative and innovative to meet the rapidly changing needs at Changi Airport.”

**Ewen Plougastel**

Managing Director  
Client Account Lead





“As consumer trends and expectations evolve, we need to leverage new technologies to deliver seamless experiences before, during and after travel.”

**Jeffrey Loke**

Senior Vice President  
Singapore Changi Airport

A valuable difference

# A leader in travel

**Changi Airport’s innovations in the pursuit of safe travel were recognized in IDC’s 2021 Future Enterprise Awards where Reviving Safe Travel, by DIVA was named as winner - Special Award for Digital Resiliency.**

Changi Airport is committed to continually raising the bar for its performance and delivering a real-time customer experience. As the world transitions from a pandemic to an endemic situation, the airport is becoming even more agile and continue to generate new value. With fresh experiences that delight and engage the customer and improve service levels, Changi is driving up retail traffic, loyalty and revenue per customer.

Most importantly, with DIVA, Changi now has the technology, skills and new capabilities in place to power many new applications and continually reinvent the way it engages with customers in real time. This is helping Changi be more responsive to market changes and maintain the mantle of “World’s Best Airport.”



**Disclaimer**

This content is provided for general information purposes and is not intended to be used in place of consultation with our professional advisors. This document refers to marks owned by third parties. All such third-party marks are the property of their respective owners. No sponsorship, endorsement or approval of this content by the owners of such marks is intended, expressed or implied.

Copyright © 2022 Accenture.

All rights reserved. Accenture and its logo are registered trademarks of Accenture