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Modernizing IT for better, more sustainable public transportation experiences

State Public Transport Services



Business opportunity

Every year, citizens in one Asia-Pacific region board public buses, ferries, and trains more than 400 million times for work, school, and everyday life events. For the large state government agency in charge of these high-availability transportation services, delivering exceptional citizen experiences in more sustainable ways is a top priority.

Commuters demand consistent, reliable transportation, so any disruptions to the schedule-based operations can impact the customer experience.

Behind the scenes, the transportation agency's business and IT teams were grappling with conflicting operating models and inefficiencies in automation. The aging data center was hard to manage, plus the agency's large IT footprint was costly and inconsistent with the agency's commitment to lower-carbon operations.

Technical challenge

With thousands of workloads managed in the existing government data center, the agency knew that improving citizen experiences and achieving sustainability goals meant modernizing IT.

But it was crucial to execute the project without interrupting the vital services citizens depend on every day.

Agency leaders engaged with Kyndryl to envision a new hybrid cloud environment that consolidated the agency's operating model. The team wanted to automate the estate as much as possible for regular operations, prioritizing tasks that would noticeably improve service delivery to citizens. Moving to virtualized servers in a cloud-first architecture would position the agency to make steady progress towards environmental, social, and governance (ESG) goals.

With comprehensive monitoring of the IT estate, the agency could generate real-time insights to help track and manage transportation logistics, including faster detection of potential issues causing disruptions to transportation.

Standardizing hardware and software, including OS upgrades and automated patching, would help ensure critical, high-availability systems run smoothly and more securely for 24×7 operations.

Our solution

Together, agency leaders and **Kyndryl Consult** designed and delivered a 12-month roadmap to transform the operating model.

We closed the majority of the agency's data centers and migrated 1200 virtual machines (VMs) to VMware Cloud on AWS. Orchestrating 26 waves in just seven months, the outcome was a highly agile hybrid cloud estate. Our efforts uncovered thousands of workloads that could be decommissioned, right-sizing to only the most critical applications. Kyndryl's unconventional approach to the migration ensured zero downtime with no need to rollback, while capacity planning throughout the project helped the agency realize significant cost savings.

Advanced automation, including patching, helped reduce manual infrastructure management tasks, resulting in several IT employees being redirected to more innovative roles.

Ultimately, the entire solution was implemented on time, within budget, and—most importantly—without disruption to public transportation.

The power of partnership

VMware Cloud on AWS provided a consolidated, costeffective solution that quickly migrated native monolithic applications out of the on-premises data center.

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What progress looks like

- Consumption-based multicloud environment that reduces costs and informs critical decision-making on operational and enhancement priorities
- 1200 VMs for the foundational applications and databases that require the highest availability—migrated in 7 months with no disruption to the business
- 35% reduction in storage footprint
- 20% reduction in operational costs by vacating the majority of the agency's data centers
- · 350 metric tons of CO2 emissions reduced
- Self-service digital experience through a modernized infrastructure management platform and integrated service management and catalogue
- 200,000 automated tasks now taking place each week
- Enhanced security posture through standardization, automated patching, and risk avoidance



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