#### **About Customer**

M1, a subsidiary of Keppel Corporation, is Singapore's most vibrant and dynamic communications company, providing mobile and fixed services to over two million customers. Since the launch of commercial services in 1997, M1 has achieved many firsts. including the first operator to offer nationwide 4G service, as well as ultra high-speed fixed broadband, fixed voice and other services on the Next Generation Nationwide Broadband Network (NGNBN). With a continual focus on network quality, customer service, value and innovation, M1 links anyone and anything; anytime, anywhere.

www.m1.com.sg

## Geo

Singapore

## Industry

Telecommunications

#### Solution Area

Accelerate Core Applications

### **Products in Use**

Pure Storage FlashArray//X, Pure1®

# **Delivering Next-gen Connectivity with FlashArray**™

Flash storage has allowed M1 to improve its operational efficiency and reliability, as well as meet its long-term sustainability targets through a reduced data center footprint. With significant improvements to database performance, the telecommunications company is now able to improve the time-to-market for new services and easily access the mission-critical data it needs to support and understand customers' needs better.

The simplicity of Pure Storage® has also given the IT team peace of mind in administering its storage, ensuring that M1 would be well-supported in its cloud-first, digital transformation strategy to help customers stay connected anytime, anywhere.

"With Pure as our partner, I'm confident that our storage environment will allow us to seamlessly pursue efficiency and innovation improvements, and ensure that our customers stay connected anytime, anywhere."

WALTER CHING, DIRECTOR, DIGITAL OFFICE, M1 LIMITED

## Impact on M1



Gained faster issue response time with 50% improvement in database performance



Achieved operating cost efficiencies of 30%



Minimized operational downtime with non-disruptive upgrades

## Challenges



Database operations constrained by legacy storage



Need to maximize lean IT team's efficiencies



Solution needed to balance reliability and cost-effectiveness with performance

#### Results

5.1

Data reduction ratio of 5:1

2 to 3

Storage rack space reduced from 2 racks to 3 rack units (RU)

1/2

Production database maintenance time cut by half As a major telecommunications service provider, M1 offers a wide range of mobile and fixed services to more than 2 million consumer and corporate customers. Due to exponential data growth with the pace of technology adoption, M1's legacy storage infrastructure was becoming strained, posing a risk to its transformation initiatives and the delivery of reliable, value-added services to customers.

# Roadblock to Innovation: Legacy Disk-based Storage

In 2018, the team started to observe slower response times from its database, which was running on disk-based storage. Knowing that the industry had already begun moving toward all-flash arrays, the IT team began to assess the feasibility of flash, prioritizing simplicity, cost-effectiveness, and reliability.

# **Effortless Management and Immediate Improvements**

Within a month of the hardware delivery, the Pure team deployed two FlashArray™ units at M1's production and disaster-recovery sites.

From deployment to the migration and upgrade, the entire process was seamless and non-disruptive despite taking place during working hours. The team now runs its Oracle batch jobs twice as fast as before. Production database maintenance time has been halved, providing employees with reliable and easy access to mission-critical data on a daily basis. This freed the IT team to refocus its time into new digital transformation initiatives and identify opportunities for business value with 5G and Internet of Things.

In addition to efficiency improvements, the deployment of all-flash storage is helping M1 meet its long-term sustainability targets. With data-storage rack space reduced from two racks to three rack units, this has decreased overhead costs such as data-center power consumption and cooling.

"Working with Pure Storage has been a breeze," commented Terence Lee, Assistant General Manager, M1 Limited. "From a manageability standpoint, Pure1's GUI [graphical user interface] is simple and intuitive. Our storage administrators took no more than three days to get comfortable with the system. Having access to proactive, predictive support has also assured us of the potential of self-driving storage."

## **Connecting Singaporeans Anytime, Anywhere**

No longer held back by a complex, legacy storage system, M1 can focus on identifying opportunities to deliver better services—whether by serving customers more effectively or improving time-to-market for new solutions.

purestorage.com

800.379.PURE











