

RESTORING SUCCESS IN THE WAYS OF WORKING

Backup Validation-as-a-Service
with TECH3 State-of-The-Art
Hybrid Backup Solutions

Introducing TECH3 Backup
Validation-as-a-Service, an innovation and
bespoke solution that addresses all the concerns
related to data backup and recovery process in
the pursuit of digital transformation initiatives.

Case Study

ABOUT THE CLIENT

Founded in 1917 as an auto repair shop in Orchard Road, Singapore. The business then bloomed, making it the go-to-place for repairs. With that success, it soon expanded to procure distributorship for automotive parts under General Motors. By 1927, the rapidly expanding business continued to grow to the point The Client turned into an establishment of today's predecessor. The Client has since grown into a multi-million dollar industrial conglomerate and one of Malaysia's foremost public-listed companies. Their strength in manufacturing, distribution and services helped to expand their horizon into automotive, equipment manufacturing & engineering and aerospace sectors.



State-Owned
Entreprise



Established
in 1917



Total Employees
of 7500



Automotive
Manufacturing &
Engineering Equipment



Room for Improvements

The Client has achieved continuous growth with innovative culture, often spearheading digital transformation initiative to stay ahead of competition, and improving business performances. This allows them to focus on incorporating the latest technological tools and digital advancements into business processes and systems to ensure that The Client remains to be adaptable and innovative to perform at maximum efficiency. Growth and innovation requires a solid IT infrastructure as the backbone to support the century old business. As The Client grows larger, products and services are required to roll out at record speed to stay ahead of competition and exceed customer expectation. Although The Client has invested in new technology to grow over the years, managing a portfolio of different hardware and technology, has started to become challenging.

THE CLIENT'S CHALLENGES



Existing vendor managing The Client's backup operations



Existing documentation mainly comprises of The Client's product brochures



Existing vendor did not leave any process or configuration documentation behind



Driven To Stay Ahead Of The Curve

A solid IT infrastructure is required to ensure The Client is able to deliver their products and services to customers at record speed in order to exceed customers' expectations and stay ahead of the competition. Investment has been made in new technology over the years but having to manage a range of hardwares and technologies have become challenging particularly on The Client's backup solution. Whilst it could be solved by manually restarting the section where it fails, the process itself is causing loss of productivity when the backup is running during working hours.

Conquering & Controlling Weaknesses To Lead Digital Transformation

A backup failure also meant that the RPO that was established in the backup policy could not be fulfilled whenever there's a failure, as the incident will only be discovered the next working day. The Client's existing hardwares and solutions are supplied by various vendors. The situation became more challenging when legacy hardwares are the key part of the backup solution which slowed down the RTO and recovery process should a disaster strike. Some other problems The Client was facing that has grown overtime and consumed more cost and time for The Client's team includes virtual tapes from different generations, hardwares policies that required remote tapes storage with fire proof environment, and unnecessary tapes transportation and retrieval for restoration.

For an instance, throw in 4 campus and 11 branches into the equation, this has the potential to run out of hand for The Client.

THE SOLUTIONS



A Solution For All Concerns

The Client eventually came to an understanding that their Backup and Disaster Recovery strategy required an overhaul. An open tender was called and TECH3 Solutions was one of the providers enlisted. Upon understanding the challenges The Client were facing, our system architect proposed an **innovative** and **bespoke solution that addresses all the concerns**, which was very different from competing bids.

Solutions Overview

SSP vRA vRO AWS Dashboard

HPE Greenlake ITIL-based Documentation

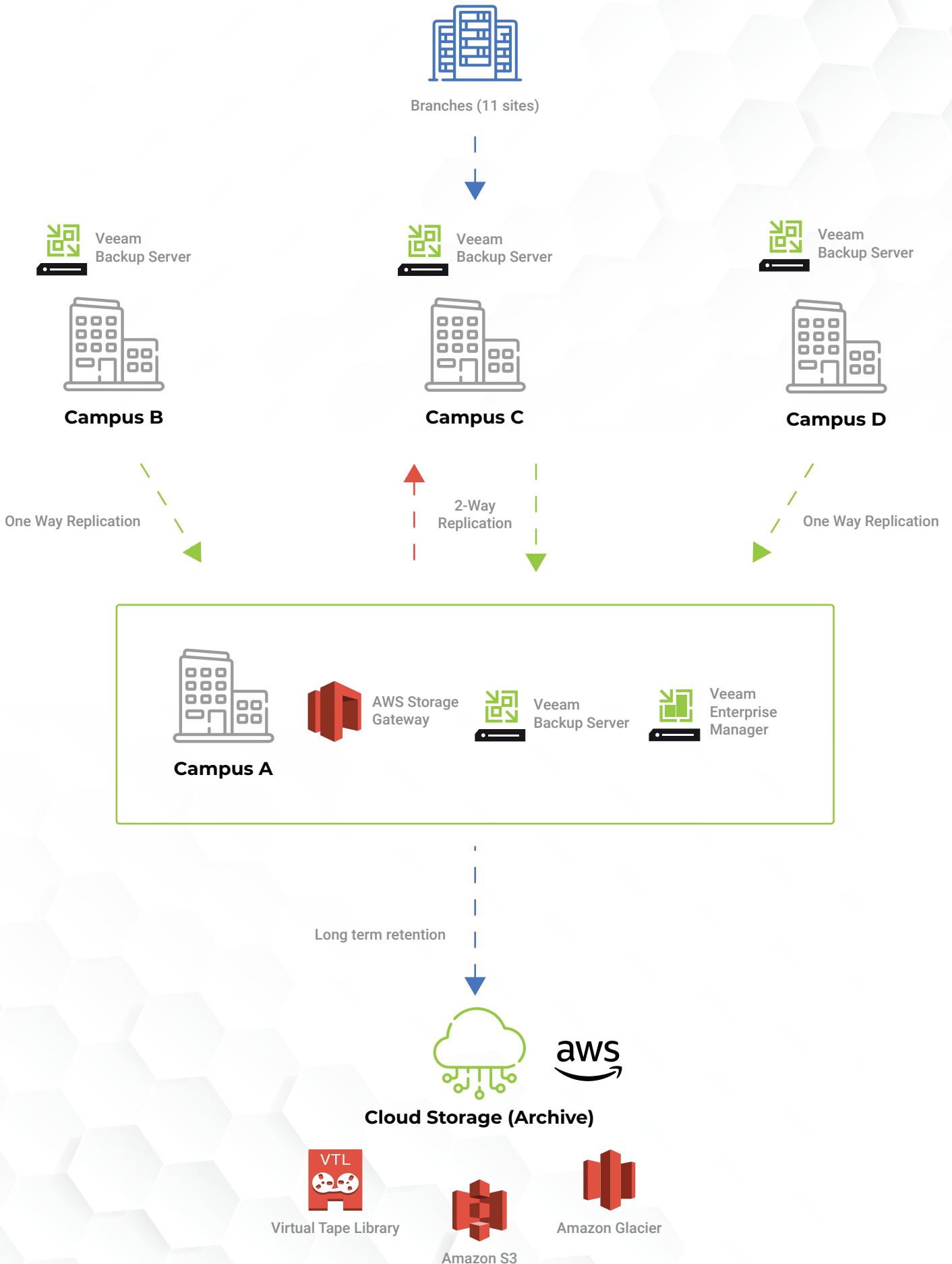
Connecting Technology With People & Process

First of all, the HP DataProtector was replaced by Veeam, providing a virtualized platform to manage all the backups. The new bespoke backup architecture included multi-site replication and mirrored copies to be kept at all interconnected Data Centers. Data of more than 90 days that were backup on tapes were then replaced by Virtual Tape Library over cloud storage on AWS, fulfilling and exceeding all the security compliances and offsite requirements by the audit department, BNM and RMIT.

Recovery and Restoration process was sped up as there wasn't a need for physical retrieval or media. The deployed VTL also helped IT team to get to the required backup data accurately. In addition, a web-based dashboard was also included to monitor all backup status and provide automated report to the management team at a single glance, accessible from anywhere, anytime.

On top of that, we provided a curated ITIL-based documentation for incident management that worked within their compliances system, replacing their vague backup process policy with one that has clear expectation and metrics to measure on the resolution for any backup related issues.

THE COMPLETE ROADMAP



TECH3 CONSULTING FRAMEWORK

TECH3 Consulting approach all customer's challenges and design solutions based on ITIL's People, Process and Technology framework. These 3 critical elements form the basis of an organizational management and transformation strategy, providing guidance to organizations in decision making by prioritizing certain factors, namely, People first, Process second and Technology third especially when designing a new service or making changes to an existing one.



People

"A solution that allows The Client to reduce manpower on maintaining the backup system and operate more efficiently"

With IT team facing challenges and employees having operational delays due to failed backup, TECH3 Consulting put the people of The Client as one of the forefront factors in every decision we make. The new solution allows The Client to reduce manpower while maintaining the backup system. Existing IT specialists can now focus on solving higher value issues for employees, and with less backup failures, business operations is no longer having delays, and could operate more efficiently.

Process

"ITIL-based documentation meet with the required compliances by Bursa and audit was introduced to address the shortfall in incident management"


TECH3 Consulting revisited the backup process documentation and found room for improvements. ITIL-based documentation has met the required compliances by Bursa and audit was introduced to address the shortfall in incident management. With clear process, expectation and metrics, any resolution applied during an incident could be measured, and review accordingly.

Technology


"TECH3 Consulting delivers a web-based dashboard for easy monitoring and alert for management team and the cloud capability that The Client required"

Technology is the primary delivery route for all organization's virtual values as most services are enabled by technology. The right technology is one that could fulfill the People and Process factors above. A web-based dashboard is created for easy monitoring and alert for the management team. By using HPE Greenlake, TECH3 Consulting delivered the cloud capability that The Client required with none of the new hardwares maintenance worries.. This has also converted the existing capital expenses model in IT, into an operational expenses, avoiding costly hardware investment, paying only what is required whilst keeping the innovative culture ahead.


THE RESULTS




A Backup System that is robust, secure and scalable with capability to adapt to changes and growth



A reliable system with monthly test run by TECH3 and automated report monitoring the system 24/7 for any issues



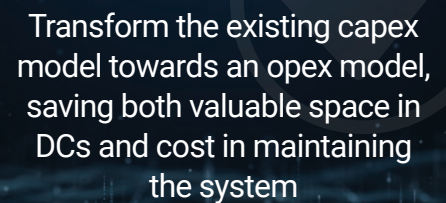
The Client was able to respond to audit enquiries for back-dated reports from their archives quickly



Cloud-based solution with encryption between server software and cloud storage eliminates data loss concerns



Improved faster time to market, allowing The Client to build new capabilities and pursue digital transformation initiatives



Transform the existing capex model towards an opex model, saving both valuable space in DCs and cost in maintaining the system

Business Benefits

The overhaul took 2 weeks to complete for the 4 campuses, without affecting productivity during working hours. The remaining 11 campuses took an additional 2 weeks, amounting to a total of 4 weeks to complete. With the overhaul, The Client now possess a robust, secure and scalable backup system enterprise-wide that is adaptable to change and growth.

Reliability is the key benchmark for The Client to assess the new architecture, as they were facing with unreliable backup. TECH3 Solutions runs a monthly test to ensure the system is functioning as designed, while the automated report monitors the system 24/7 for any issues.

As the backup was replicated between key campuses, restoration or recovery of any data less than 90 days takes only minutes. This allows The Client to bounce back quickly and return to normalcy should any disaster were to happen. In addition, The Client was able to respond to audit enquiries for back-dated reports from their archives quickly. The move to cloud, together with encryption between server software and cloud storage, took away the concerns on offsite storage management, and woes or losing tapes or data. It also allows quick access to any required data via the VTL.

The reliability of the system successfully eliminated ad-hoc downtime or loss of productivity, thus improving faster time to market and allows The Client to build new capabilities and pursue digital transformation initiatives without being held back by the backup system. This also transformed the existing capex model towards an opex model, and saving both valuable space in DCs and cost in maintaining the system, as the new solution no longer uses tapes, and pay-as-you-use cloud storage.

RESTORING SUCCESS IN THE WAYS OF WORKING

Backup Validation as a Service with
TECH3 State-of-The-Art Hybrid System Solutions

Come and talk to us!

TECH3 Consulting
talktous@tech3.my
+603 8060 0088

Case Study