



## Chow Sang Sang Transforms IT Services to Run at the Speed of Business with VMware

周生生 (Chow Sang Sang)

### INDUSTRY

Retail

### LOCATION

Hong Kong

### KEY CHALLENGES

- Ecommerce system slowdowns and outages due to sudden seasonal demands.
- Faster time-to-market was needed to maintain competitiveness.
- Inadequate system support for CRM and the company's future cloud strategy.

### SOLUTION

- Digital transformation with VMware software-defined data center (SDDC), VMware Enterprise PKS solution on Dell EMC VxRail HCI with Intel® Xeon® Gold 6154 Processor – an end-to-end, all-encompassing solution, from software, hardware and storage to consultation.

Based on VMware's software-defined data center (SDDC) architecture and leading-edge VMware Enterprise PKS, Chow Sang Sang has transformed its IT infrastructure to a modern, dynamic and agile powerhouse that supports both its fast-growing ecommerce business and future multi-cloud strategy.

Established in 1934, Chow Sang Sang is known as a premier jewelry retailer in Greater China, and currently has a retail network of over 600 stores across the region. To stay at the forefront of the industry, Chow Sang Sang operates a dynamic ecommerce strategy across multiple channels such as tmall, Jingdong Mall and vipshop.com in addition to its award-winning eshop – chowsangsang.com. In 2018, the company's ecommerce business in Mainland China accounted for more than 15% of its China sales.

### The Challenges

Chow Sang Sang's online business has created a significant new revenue stream, but it also poses complex challenges for the company's IT operation. Taking the last Double 11 Day as an example, when the festival was forecast to achieve sales of over US\$30 billion in just a 24-hour shopping spree, Chow Sang Sang's online store experienced a system outage due to an overload in demand.

"The sudden surge of demand was beyond our expectations. Our old system was unable to meet those persistent, high-volume workloads and finally crashed," said William Poon, Chief Information Officer, Chow Sang Sang. "It was essential that we build a new, highly scalable and available infrastructure to support this kind of seasonal demand and, most importantly, to capitalize on China's blossoming ecommerce market. It is a golden opportunity that we cannot afford to miss."

System slowdowns and outages are not single incidents that only impact Chow Sang Sang's business. They also have a butterfly effect that leads to a gradual loss of customers.

"Unlike traditional brick-and-mortar shops, customers expect non-stop, around-the-clock service on the Internet," continued William Poon. "In a matter of just seconds, impatient customers will redirect themselves to our competitors, not to mention the damage done to our reputation. That's why it's essential that we provide our customers with a seamless shopping experience no matter where they shop – online or offline. In addition to efficiency, scalability and resiliency, our new system must also provide exceptional agility to enable fast deployment of IT services that support omnichannel marketing with unfailing time-to-market."

To support its business growth and stay competitive in the long run, Chow Sang Sang decided to fundamentally transform its IT infrastructure, instead of merely implementing a simple upgrade project. "Our plan is to lay a solid foundation which not only includes future-proof performance, security, flexibility and capacity to meet our rapid growth of ecommerce business, but also supports our CRM operation and future cloud strategy in the long term," he added.

### The Solution

Chow Sang Sang required a massive scale of transformation, from underlying infrastructure and hardware to storage and software. "We want a reliable solution that orchestrates all components from the application layer all the way to the infrastructure layer," said William Poon. "This solution must provide all-encompassing security, but also enable unsurpassed flexibility for resource management, automation, provisioning and utilization. VMware software-defined data center (SDDC) and VMware Enterprise PKS solution on Dell EMC VxRail HCI with Intel® Xeon® Gold 6154 Processor, perfectly suit our IT transformation and development requirements."

## BUSINESS BENEFITS

- Enhances competitiveness to ensure business results. Online stores and channels now run seamlessly and consistently with 24/7 availability, stable performance and automated scalability.
- Significantly enhances business agility and time-to-market with a shortened DevOps cycle.
- Enables a reliable, scalable and secure infrastructure by orchestrating all components from the application layer all the way to the infrastructure layer.
- Simplifies workloads and management with improved efficiency for both DevOps and Operations.
- Eliminates the workloads and time required to deal with multiple vendors and suppliers.
- Establishes a solid foundation for the company's future cloud strategy.

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William Poon,  
Chief Information Officer,  
Chow Sang Sang

## VMWARE FOOTPRINT

VMware software-defined data center (SDDC)

VMware Enterprise PKS solution

Dell EMC VxRail HCI

VMware SDDC is the ideal architecture for private, public, and hybrid clouds while VMware Enterprise PKS can dynamically and securely automate Kubernetes-based containerized applications in multi-cloud environments. With built-in critical production capabilities such as high availability, auto-scaling, health-checks and self-healing, VMware Enterprise PKS optimizes computing resources among applications to maintain their desired state. This assures the high availability of Chow Sang Sang's ecommerce applications under any circumstances.

In terms of security, the built-in VMware NSX-T provides pod-level container networking, load balancing, and security policies. It also provides an integrated private registry to secure container images with vulnerability scanning, image signing and auditing.

Running on the pre-tested and fully integrated Dell EMC VxRail HCI, Chow Sang Sang no longer needs to worry about compatibility, reliability and performance issues. Its new infrastructure is 100% ready for the company's future cloud strategies, including data analytics and machine learning.

## Business Benefits

To successfully operate an online business like Chow Sang Sang, companies need to keep pace with digital transformation. IT is an integral part of business. IT is business, business is IT. Applications and IT services must be delivered at the speed of business. With its new VMware solution in place, Chow Sang Sang can now effortlessly align its IT with business, achieving digital transformation with total peace of mind.

"Our ecommerce system is the lifeblood of our online business," added William Poon. "Downtime or outages are never an option for us. Thanks to VMware solution, our eshop and all online channels can now run seamlessly and consistently with 24/7 availability, stable performance and automated scalability."

To accelerate its time-to-market and stay competitive, Chow Sang Sang adopts agile development practices that increase its efficiency in releasing new applications and features. Its dynamic new infrastructure platform is at the heart of this success, offering all the flexibility needed to support frequent changes and updates. "By combining the best of both worlds of VMware SDDC and Enterprise PKS, the new infrastructure provides the best resources and components to help us improve our DevOps cycle. Our developers now can deliver applications faster and more easily with scalable, reliable and automated IT operations," said Donald Mak, Director of IT-Infrastructure and Operations, Chow Sang Sang.

Chow Sang Sang's comprehensive VMware solution likewise greatly improves the efficiency and quality of works for overall IT and DevOps operations. For example, IT admins now can deploy multiple Kubernetes clusters in just minutes with security policies. Developers and DevOps, on the other hand, have better visibility and flexibility to monitor and manage the performance of applications.

William Poon adds that VMware's end-to-end solution delivery is also a critical factor in the project's success. "VMware provides a complete solution from project planning, equipment acquisition and implementation to support," he said. "This greatly reduces our workload and saves time that would otherwise be spent dealing with multiple vendors and suppliers. With VMware, we have a single point of contact for all technical issues."

## Looking Forward

To fully utilize all the opportunities across private cloud and native public clouds, Chow Sang Sang has already embarked on the next step of its digitalization journey to a multi-cloud state. Its VMware solution builds a solid foundation to automate, orchestrate, manage and control multi-cloud resources and applications, further accelerating the success of Chow Sang Sang's digital transformation.

"VMware solution is well-tested and purpose-built for multi-cloud operation. Following the success of the first phase, we are very confident in the success of our next-gen transformation," concluded Donald Mak.

