vmware®

Columbia Sportswear Ready for Anything with VMware vCloud Suite and Software-Defined Data Center

Staying Ahead of the Business: IT Never Says No

Columbia
SportswearCompany®

INDUSTRY
Manufacturing and Retail

LOCATION
Portland, Oregon

KEY CHALLENGES
• Being faster to market with design and manufacturing innovations

• Keeping the business running in the face of natural disasters

• Supporting global expansion and international joint ventures

SOLUTION
Columbia implemented a software-defined data center delivering virtual compute, storage and network with automated application provisioning and disaster recovery.

RESULTS
• Faster time to market based on IT as a service

• Faster, more efficient provisioning of applications and services

• Improved performance monitoring and capacity management

• Cost-effective disaster recovery and business continuity

• Lowest TCO compared with industry peers

Customer Profile

With an innovative spirit that emphasizes staying ahead of the curve, Columbia is the flagship brand of Portland, Oregon-based Columbia Sportswear Company. Since 1938, Columbia has been creating breakthrough products for outdoor enthusiasts and has become a worldwide leader in outerwear, sportswear, apparel and accessories. Columbia channels the company's passion for the outdoors into all of its products, keeping people comfortable and protected year-round.

Columbia has long been known for products that keep people warm in cold weather, but with the introduction of Omni-Freeze® ZERO in April 2013, Columbia is transforming into a trusted brand for all seasons. Omni-Freeze ZERO is a new fabric technology incorporated into Columbia apparel, which creates an instant and prolonged cooling sensation when exposed to sweat or any sort of moisture. With Omni-Freeze ZERO, working or playing in hot weather comes with a new level of comfort.

Technology innovations like Omni-Freeze ZERO run deeply within Columbia's corporate culture, and their relentless spirit of "trying stuff" also extends to corporate IT initiatives. To continually move its business forward in a hyper-competitive landscape, Columbia has built one of the most leading-edge IT infrastructures in the world. The company is aligned around a culture of speed and innovation, and Columbia's IT executives have adopted a forward-thinking attitude of "never saying no" to the business, despite the financial constraints of having to do more with less.

"Never saying no" means that Columbia has built a highly functioning organization whose culture mandates that every department, initiative and system operates to support the business, regardless of its demands. Columbia has built an enterprise that is responsive to its customers, retailers and partners, and has been an early adopter of advanced IT solutions that enable the company to compete at a speed faster than its peers. As part of this philosophy, Columbia's IT executives recognized that the only way to stay ahead of the business was to embrace a "software-defined world" or virtual infrastructure—a software-defined data center powered by VMware—that makes Columbia ready for anything, from global expansion and new product introductions, to natural disasters, and enabling employees to work anywhere, on any device.

Just Say Yes: Staying One Step Ahead of the Business

To support its growth over the past few years, Columbia's IT organization took on a series of large infrastructure and business transformation initiatives that could not be supported by traditional physical infrastructure. These included:

• Being faster-to-market with design and manufacturing innovations

• Keeping the business running in the face of natural disasters

• Supporting global expansion and international joint ventures

Even with one of the most advanced IT operations in the world, Columbia's existing infrastructure wasn't enough to meet their current needs and proactively meet the future demands of the business, because a key focus for Columbia is quickly bringing new products to market—moving from being a "winter season" company to a "four season" company.

Starting in 2009, Columbia embarked on a company-wide initiative with VMware to virtualize their entire Tier 1 business-critical SAP production environment to create highly available, fault-tolerant, and disaster-proof business systems that could support faster time to market and reduce operating costs. Providing a world-class, performance-based backend allows the business to seamlessly continue their global business transformation as they upgrade their legacy supply chain to SAP running on top of VMware.

Columbia's Director of Global Technology, Michael Leeper, has been instrumental in leading the company's business and IT transformation. With VMware as a key partner, Leeper has taken Columbia on a journey to delivering IT as a service using virtualization and cloud computing technologies to begin implementing a software-defined data center architecture powered by VMware vCloud® Suite. "I'm not going to be able to add value by designing a new garment, but what I can do is make sure my private cloud can meet the demands of the business today," Leeper said. "So when we have a new product, we now have a platform that we can rapidly deploy and that's how I add value to the business, and private cloud is the heavy lifting that enables that."

IT in Lockstep with the Business: Columbia's Journey to IT as a Service with VMware vCloud Suite

According to Leeper, the mandate for corporate IT at Columbia is pretty simple—"give users what they want, when they want it." With that in mind, the company took a critical look at its infrastructure and determined that it needed to further refine its virtualization strategy. Having already encountered initial success with virtualization technology provided by VMware, Columbia knew that it needed to right-size in order to control costs, as well as to develop a mechanism to deliver IT as a service to its business units, while illustrating the true cost of IT services via a chargeback or showback mechanism. Business continuity and disaster recovery concerns still loomed large, and Columbia needed to automate its private cloud and link its public and private cloud workloads.

So, to deliver its newly rolled-out SAP applications to a global workforce with greater efficiency, agility, control, and to stay ahead of the demands of their business, Columbia proactively chose to virtualize and cloud-enable their Tier 1 business-critical SAP applications by implementing vCloud Suite. Columbia reviewed technologies from several vendors, but selected VMware and vCloud Suite for its overall integration with their existing core infrastructure, as well as the cost efficiencies and practical experience that VMware brought to the table.

Columbia currently operates a hybrid cloud model, wherein the IT team maintains design control of the SAP application architecture, but allows VMware to provision and manage application resources based on demand. All of Columbia's virtual workloads run on top of VMware vSphere®, which dynamically apportions resources to deliver high performance to end users, while VMware vCenter™ Operations Manager™ is used to automatically monitor the dynamic environment and oversee capacity and configuration management.

Using vCloud Suite, Columbia has also built out a private cloud with VMware vCloud Director® to simplify and streamline its provisioning of data center services such as storage, networking, and security. With vCloud Director, resources can be reserved for guaranteed availability, or Columbia can apportion application resources on an as-you-go basis, to achieve maximum efficiency, while still enforcing IT standards and policies. In an ever-changing environment, Columbia can ensure that all of its business teams have adequate resources that enable them to do their jobs effectively. Leveraging vCloud Suite, Columbia IT has been able to provide additional environments on demand to support the company's global business transformation with SAP. Columbia's SAP Basis team is able to place requests for additional systems to scale or test as needed, with IT being able to immediately provide entire application landscapes within hours of the request. With a highly scalable virtual infrastructure, Columbia IT is providing service like never before.

To better protect the company's Tier 1 application infrastructure, Columbia also leverages VMware vCenter™ Site Recovery Manager™, a key component of vCloud Suite, for virtualization-enabling their existing business continuity planning and IT disaster recovery management systems. Site Recovery Manager enables Columbia to disaster-proof its business- critical applications and avoid downtime, should there be an unexpected emergency—like the 2009 tsunami in South East Asia which left many business that operate in the region with outages. Site Recovery Manager provides Columbia with advanced capabilities for replication, disaster recovery management, non-disruptive testing, automated failover and failback, and planned migration. Site Recovery Manager also helps Columbia manage failover from production data centers to disaster recovery sites, as well as failover between two sites with active workloads. This ensures that Columbia is always ready if and when the worst happens, and can provide uninterrupted service to its end users. Site Recovery Manager was initially implemented in Columbia's primary North America data centers; following the tsunami, they virtualized their entire edge remote/branch offices.

Given the ever-increasing scale of its environment, Columbia has had to rethink how they manage and operate their data center. Many existing tools still require people to deeply understand the applications running on their environment and to actively monitor that environment. In order to scale without dramatically growing the IT organization, Columbia is implementing automated operations management capabilities from vCloud Suite that rely on constant analysis of data to scan for deviations from trend.

The bottom line for Columbia is that their IT capacity expands and contracts as needed, and IT is always in lock-step with the requirements of the business. With VMware, Columbia is more responsive to market conditions, and business and IT truly work together.

According to Leeper, Columbia's IT team sees itself as being way ahead of the curve when it comes to flexibility, and vCloud Suite gives them a truly limitless platform. For Columbia, the benefit of VMware is the ability to let the business decide what performance criteria they need, where they need their data hosted, and then to rapidly configure and deploy those resources using vCloud Suite and the software-defined data center architecture. From an IT perspective, Columbia can determine the right fit for its business, and is empowered to make resource decisions based on what the business is asking— without having to go back to its business teams and explain architecture limitations. Columbia's application resources are available as needed, anywhere in the world.

> *"My engineers now spend time doing the things they like to do, which is looking for the next cool thing."*
>
> Michael Leeper, Director of Global Technology
> Columbia Sportswear Company

Impact on the Business: Going Beyond Operational Efficiencies

Through its use of VMware technology, Columbia has seen a number of positive changes in its business. Implementing vCloud Suite has allowed Leeper and his team to adapt their systems to changing business requirements—tailoring their ERP system to support product launches with short lead times as well as to support new manufacturing requirements. Columbia can now manage its large, geographically distributed development, QA and production IT environments, which include a variety of operating systems and hardware platforms. VMware's virtualization platform, vSphere, also enables Columbia to more rapidly provision and deliver its Tier 1 business-critical systems, such as SAP applications, around the world, providing a uniform assurance of service levels regardless of physical infrastructure, or the actual location of the services.

Columbia is also driving toward delivering the SAP GUI to employees and partners around the world, offering virtualized access anywhere, and on any device. The IT team has plans to virtualize most all of its applications in tandem with a scheduled software refresh. They are also evaluating development of some business-critical applications with the strategic categorization of how they sell their products, and changing/streamlining how they manage products within their stores.

In the area of international expansion, Columbia will use virtualized application resources to support more than 70 new Columbia-branded retail locations in seven cities in China, in a joint venture with Swire Resources Ltd. China's rapidly growing outdoor market is benefiting from an expanding economy, increasing consumer discretionary incomes, and greater interest in outdoor leisure activities, and Swire has operated as Columbia Sportswear's exclusive independent distributor of Columbia and Mountain Hardwear (a Columbia-owned brand) products in China since 2004. Swire sells both Columbia and Mountain Hardwear products in approximately 530 Columbia Sportswear retail locations and 45 Mountain Hardwear retail locations in 135 cities across China, with the full support of Columbia's US-based management and IT teams, who have enabled Swire to generate more than $123 million in revenue in 2011 and double-digit growth in 2012.

According to Leeper, "The inherent scalability of the virtual world allows us to accommodate undefined growth and needs for our business." And a related, yet unexpected, benefit of using vCloud Suite across the enterprise has been that Columbia is able to control the amount of one-off IT projects initiated by various business units. Because the company can stay ahead of IT demands and proactively address the needs of the business, it has been able to prevent different groups within the company from specifying and sourcing non-standard technology platforms and applications. Columbia's internal IT team can now build and roll out new, performance-optimized services just as quickly as anyone in the marketplace, so there is little need to look elsewhere. Not only does this control cost, it enables Columbia to enforce business rules and policy across the entire organization with vCloud Suite.

vCloud Suite also helps Columbia deliver on key IT metrics that ultimately show ROI. A recent benchmarking survey completed by the company shows Columbia's organizational leadership in a number of areas, including being 15-20 percent ahead of their industry peers and a majority of apparel retailers in server virtualization, as well as having the lowest overall total cost of ownership when compared to industry benchmarks. With VMware, Columbia's server provisioning time is faster than other apparel companies and retailers, and its capacity for performance and change management also leads its industry. What's more, Columbia leads its competitors in the ability to offer true metrics via chargeback/showback, as well as to provide its end users with a comprehensive IT service catalog. Finally, and perhaps most important, is that Columbia leads its industry in cross-function ability, as well as senior management and line of business support for transformation to cloud-based IT as a strategy.

A Holistic View: Mapping the Needs of the Business

As Columbia's journey towards IT as a service has progressed based on the software-defined data center architecture, they have been able to obtain detailed visibility into their computing environment and pooled resources. The key benefit for the company is the ability to proactively incorporate the data provided by VMware into the management of its infrastructure,

and through the resource metering capabilities of vCloud Suite, Columbia has gained a better understanding of staffing and cost models. For the first time, Columbia has the ability to show its business and technical teams the cost of their requests. This greater understanding of the true cost to run the business, aids IT management in right-sizing Columbia's virtualization approach, and helps them quickly get to decisions on operational changes. The ability to map the needs of the business also facilitates long-range planning—especially in advance of major product launches like Omni-Freeze ZERO.

Visionary IT Leader and Role Model IT Organization

While many IT organizations struggle to keep up with the demands of the business, Columbia's IT executives have embraced virtualization and cloud computing technologies and all of the benefits it brings to their business. Business and IT alignment are a given at Columbia, and Leeper says, "that's just how we work." Unlike most IT shops who have fallen behind, and are struggling to keep up, the Columbia team has always been ahead of the curve, and plans to remain so, as it implements the vision of a software-defined data center.

As a "role model" IT organization, Columbia has also become known as a great workplace for IT professionals. With one of the most advanced infrastructures in the industry, Columbia can fairly say, "Come work for us...we have cool toys!" And employees are empowered to continually deliver the business outcomes that users want. The net result is that Columbia has created a high-profile IT organization that attracts and retains top talent.

According to Leeper, "VMware allows me, as an IT manager, to know that we are the best of the best. We now have a very stable and very flexible platform and I can't imagine why anyone else wouldn't want what we have today.

"The simplicity of managing our environment has allowed us to move our staff from doing physical, mundane infrastructure tasks, to truly doing more value-add propositions for the company," continued Leeper. "My engineers now spend time doing the things they like to do –which is looking for the next cool thing."

Looking Ahead – A Fully Software-Defined World

What started as a gradual journey to virtualizing their data centers has yielded greater returns on the business for Columbia, and at a faster than expected speed. Columbia has already virtualized nearly 100 percent of their data center environment, achieving meaningful savings in capital and operating expenditures, and is firmly focused on the future.

Columbia's long-term IT vision involves journeying to a fully virtualized world—moving beyond just compute and memory to a software-defined datacenter that facilitates the delivery of breakthrough products like Omni-Freeze ZERO to customers. Leveraging the power of vCloud Suite, Columbia will manage all of its resources—including applications, backup, network and storage, in a logical and efficient way that keeps them a step ahead of the business—no matter what changes are in store.

Michael Leeper sums it up this way: "We think that in the next few years, we will be out of the mundane hardware business and will truly end up using our workloads to the best of our ability and to drive the best results for Columbia. VMware really makes us better. It allows Columbia to compete in ways that none of our peers can. Our flexibility and scalability enable us to respond to business demands at an industry-leading speed, and I don't ever have to say no."

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