



ThinkOn Partners with VMware to Grow Sovereign Cloud Services by 78% in Just 5 Years

COMPANY

Think On, Inc.

INDUSTRY

Information Technology and Services

HEADQUARTERS

Toronto, Ontario

PARTNER CHALLENGES

- Protecting Canada's public sector data with secure cloud services on sovereign soil
- Meeting geo-specific requirements around data sovereignty and jurisdictional control
- Complying with a broad range of regulatory standards including HIPAA, HITRUST, and GDPR, etc.

About ThinkOn

Think On, Inc. is a VMware Cloud Verified solution provider with a global data center footprint. The ThinkOn team works with a trusted ecosystem of top technology partners to provide creative Sovereign, turnkey Infrastructure-as-a-Service (IaaS), Disaster-Recovery-as-a-Service (DRaaS), and Backup-as-a-Service (BaaS) solutions that are fast, flexible, scalable, cost-effective, and highly secure.

With cloud locations across Canada, the U.S., the Bahamas, Australia, and the UK, ThinkOn is proud to be one of the first VMware Sovereign Cloud initiative partners in Canada.

Protecting Canada's Public Sector Data with Secure Cloud Services

In 2017, the Government of Canada issued a Security Policy Implementation Notice (SPIN) allowing for data with a "Protected B" classification to be hosted in the public cloud. The Protected B security level for sensitive government information and assets applies to data that, if compromised, could cause catastrophic damage to a government, organization, or individual. Data at this level of sensitivity must be held on Canadian soil, within its scope of control, and free from foreign authority.

Only seven organizations are legally allowed to sell cloud services to the Government of Canada. Six of these organizations are based in the U.S., including Microsoft and Amazon. The only Canada-based organization in this elite group is ThinkOn, which achieved Protected B status after a round of four rigorous audits in 2018.

"Over the past few years, we've seen a massive pivot as government agencies at every level have started aligning with the Protected B guidelines," says Craig McLellan, Founder and CEO of ThinkOn. "Whether they're an agency, a crown corporation, or even a tribunal, they all have the same requirements because of the sensitive nature of their data. We're seeing an increasing level of awareness among public servants about the importance of keeping their data on sovereign soil. And here at ThinkOn, our team is hyper-focused on making sure that we can deliver Sovereign Cloud services that keep our public sector data as safe as possible."

BENEFITS OF VMWARE SOVEREIGN CLOUD

- Growing Sovereign Cloud services by 78% in 5 years
- Driving unprecedented economies of scale for federal, provincial, and municipal authorities
- Enabling an agile response to COVID-19 with a Digital Mailroom Initiative powered by VMware
- Flexibly moving applications between environments at scale without impacting performance or uptime
- Maintaining a zero-fail track record across all Sovereign Cloud projects

VMWARE FOOTPRINT

- VMware NSX-T
- VMware Tanzu
- VMware HCX

ThinkOn being an approved VMware Sovereign Cloud partner ensures privacy and sovereignty of data, protects against rapidly evolving attack vectors, maintains continuous compliance, improves performance, and unlocks the value of data – fueling innovation.

Becoming One of Canada's First IT Solutions Providers to Achieve VMware Sovereign Cloud Status

Nearly 40% of organizations report that data sovereignty remains a key challenge in managing sensitive information.¹ The VMware Sovereign Cloud initiative helps customers meet this challenge by engaging with trusted national cloud service providers to meet geo-specific requirements around data sovereignty and jurisdictional control, access and integrity, security and compliance, independence and mobility, analytics, and innovation.

In addition to its Sovereign Cloud status, ThinkOn is compliant with a broad range of regulatory standards including HIPAA, HITRUST, ISO 27001, ISO 27017, ISO 27018, SOC 2 Type 2, GDPR, and PCI DSS. The organization has even achieved CSA STAR compliance, a rigorous third-party assessment for cloud security providers. “A lot of people in our industry like to complain about certifications, but the fact is that certifications help us become better at what we do,” notes McLellan. “By meeting these strict regulatory standards, we increase our team’s confidence, deliver better service, and help our customers’ data stay safer.”

Growing Sovereign Cloud Services by 78% While Driving Unprecedented Economies of Scale

In the public sector, 47% of organizations say that data sovereignty will be an essential part of their cloud strategies going forward.² ThinkOn has responded to this demand in the market by executing a series of successful engagements with government entities across Canada, growing its Sovereign Cloud services by 78%.

One provincial entity, for example, had 722 file servers spread across a large area, all running legacy Windows software with no virtualization. The ThinkOn team consolidated that entire footprint — which amounted to more than a petabyte of data — onto its Sovereign Cloud infrastructure in just six months. “That led to a number of other engagements, because we proved that we could deliver secure cloud services within the construct of a Sovereign Cloud requirement,” says McLellan.

On the federal level, the ThinkOn team has helped the Government of Canada achieve economies of scale across the entire country. For example, they identified one application that was running across more than 30 departments within a federal agency. Each of those departments was struggling to deploy its own infrastructure and manage its own software, so ThinkOn helped the agency develop a consistent IaaS offering that is now available to all departments. “Each department used to take 12 to 18 months to achieve ATO (Authority to Operate) status through an extensive audit before deploying any new software,” explains McLellan. “Because of our Sovereign Cloud status, we can help them reduce the ATO review to just seven months — so our customers really reap the benefits.”

Enabling an Agile Response to COVID-19 with a Digital Initiative Powered by VMware

Many Canadian government agencies still conduct much of their business by sending and receiving mail through the postal service. But during the COVID-19 pandemic,

1. IDC, [Implementing Digital Sovereignty in the Journey to the Cloud](#).

2. IDC, [Implementing Digital Sovereignty in the Journey to the Cloud](#).

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CRAIG MCLELLAN
FOUNDER AND CEO, THINKON

most government employees were working from home, so federal agencies needed to find a different way to handle mail. The solution was a Digital Mailroom Initiative.

Now, when someone sends mail to a federal or provincial agency, the mail is opened, scanned, and digitally routed to the appropriate recipient. “The whole thing runs on top of our VMware server and cloud,” says McLellan. “It’s an ingenious, outcome-driven solution that is sovereign by its very nature, because the mail is always processed on sovereign soil. There’s always a digital trail to follow, so mail rarely gets lost or misplaced. And if it weren’t for our server and cloud footprint, we wouldn’t be able to make it work.”

Offering Flexibility in a Fluid Political Climate While Maintaining a Zero-Fail Track Record

In Canada, government contracts for cloud service providers need to be flexible enough to adjust when a new political party takes power. ThinkOn can maintain that level of agility thanks to VMware HCX, an application migration and mobility platform that streamlines business continuity across data centers and clouds. “After an election, the new party might decide to switch vendors,” McLellan explains. “That’s built into every contract. You have to give the government that kind of flexibility. VMware HCX enables us to do that because there’s no lock-in. You can move applications between environments at scale without impacting performance or uptime.”

Perhaps most impressively, ThinkOn has maintained a zero-fail track record across all of its Sovereign Cloud projects. “Every single project has gone to production and has been successful,” notes McLellan. “Larger cloud providers simply can’t say that. Sometimes people tell us that we should take on more projects and tackle them faster, but I disagree. A slow-and-steady approach serves us well — and more importantly, it serves our customers well. ‘Cloud-first, cloud-fast’ is not our mantra. We’d rather be ‘cloud-smart,’ and that approach is leading to a lot of long-term success.”

Envisioning a Zero-Trust Digital Future

ThinkOn believes that the future is full of data-exploitative criminals who can take advantage of the smallest leaks. To create a watertight infrastructure in the North American and Canadian borders, ThinkOn strives for zero-trust measures that maintain a layer between external entities and sensitive data. For instance, the Sovereign Cloud Virtual Attendant has the potential to diagnose and troubleshoot datasets without letting external parties access them. ThinkOn’s permission grant from the Canadian Center for Cybersecurity validates its authenticity for customers and prospects.

Additionally, McLellan believes that their Anomaly Detection Solution is key to proactive ransomware detection and treatment. By detecting anomalies inside data sets without reading the data, this technology holds the key to digital sovereignty and brings new opportunities to the table.

Looking Ahead: Training the Next Generation of Canadian Cybersecurity Experts

ThinkOn is in the process of building its global SOC (Security Operations Center) while helping create an innovative cybersecurity training program. “One of the local colleges has developed a cybersecurity curriculum, and each student will spend time working in our SOC, based in North Bay, Ontario, which happens to be the Canadian home for NORAD,” explains McLellan. “The students will get the bulk of their

training in our cyber range, which is sort of like a flight simulator for cybersecurity people. You can load up the signatures of a publicly known breach or a particular kind of attack sequence, and the cyber range will simulate that attack and force students to defend against it.”

Going forward, ThinkOn will continue to develop its Platform-as-a-Service (PaaS) initiative around VMware Tanzu, a cloud-native application platform that enables DevSecOps outcomes in multi-cloud environments. They have successfully adopted NSX-T across the entire footprint to add a layer of security. The company is also rolling out Storage-as-a-Service (STaaS) with a combination of high-performance data storage, low-cost object storage, and extremely low-cost cold storage services with the highest security standards. “We want to give our customers the ability to store their data with us at any point in its lifecycle at an appropriate cost,” says McLellan. “We’re currently in the process of introducing a data-indexing service where we index all data at the time of ingestion and then store it in an offline format. The index itself is stored in an homomorphically encrypted form, so it can’t be decrypted if it’s lost or stolen — even with quantum computing. And we couldn’t do any of that without VMware.”