

Located in the heart of Montreal, Canada, Zú is a start-up incubator that helps young businesses drive growth. In partnership with Lenovo, Zú has created a cutting-edge technology hub that allows start-ups to experiment with extended reality, edge computing, 5G, and even 3D holography. Extended reality company OVA is using the Lenovo solutions to promote its innovative StellarX platform, which empowers anyone to rapidly create immersive XR experiences without coding.

Based in Montreal, Canada, Zú is a technology incubation hub that empowers entrepreneurs to accelerate innovation and shape world-class intellectual property. Initiated by Guy Laliberté, creator of Cirque du Soleil and Lune Rouge, Zú is a non-profit that combines state-of-theart tools, studios and business hosting services for research and development for the general public.

## **Accelerating** start-up growth

In 2018, Zú came into the world with a clear mission: to help Canadian start-ups get on the fasttrack to commercial success. Startups typically have very different needs depending on where they are in their growth journey, and the organization tailors its services to each company's specific requirements.

Maude Bédard-Dufour, Director of Strategic Partnerships and Development at Zú, explains: "For the youngest start-ups, the key goal is often to put a concept to the test, fail fast, and iterate. For more established companies, the focus may be on prototyping a product and building the voice and identity of the brand. And for every entrepreneur, forging a network of potential partners and customers is vital to build a sustainable business. At Zú, we support every stage of the start-up journey."

Through a unique creative hub in downtown Montreal. Zú offers a wide range of support services to entrepreneurs. These include startup incubation, open innovation services for corporations, and access to financing expertise—including privileged access to a venture capital fund and a network of over 100 renowned business mentors.



100+ renowned

business mentors

92% survival rate for incubated

enterprises

Unique creative hub in downtown Montreal

**Smarter** technology



Véronique Levert, Technical Advisor, Creative Hub at Zú, elaborates: "In the last decade, we've seen an explosion of technology innovation, and most of today's start-ups have digital services in their DNA. To nurture data-driven businesses, it's essential that we offer a wide range of technology platforms and services, including extended reality [XR], edge computing, 5G, and even 3D holography."

Access to technology was particularly important for OVA, one of Zú's earliest clients and partners. This pioneering start-up aims to enable organizations to embed augmented, mixed and virtual reality into their daily activities—simplifying and streamlining processes and business operations.

"OVA is working in an area with all kinds of exciting practical applications: for example, allowing engineers to perform essential inspections from thousands of miles away," says Maude Bédard-Dufour. "To achieve their goal, there were all sorts of technical challenges for OVA to overcome not least the fact that any kind of latency in an XR can have a disastrous impact on the user experience. To bring its solution to life, OVA needed access to high-performance computing, networking and XR systems: technology that would be prohibitively costly for a young start-up."

# Creating a cutting-edge technology incubator

To empower businesses such as OVA to build next-generation digital solutions, Zú has teamed up with Lenovo to deliver open access to leading-edge technology platforms at its innovation hub.

Maude Bédard-Dufour comments: "Our partnership with Lenovo allows us to create a digital sandbox for entrepreneurs to experiment, build and iterate. Together, Zú and Lenovo have created a digital launchpad that's already helping start-ups in Montreal to unlock their potential and accelerate their growth."

Today, the partnership with Lenovo underpins digital capabilities across Zú. In an XR room at the hub, two Lenovo ThinkStation P920 Tower workstations, one Lenovo Thinkstation Threadripper Pro P620 and three Lenovo ThinkStation P520 workstations connected to Lenovo ThinkVision Creator Extreme 27" 4K displays, enable businesses like OVA to develop immersive experiences and test them on Oculus, HTC and Microsoft HoloLens 2 headsets. Powered by high-performance Intel® Xeon® Gold processors, these Lenovo solutions drive a full suite of demanding visual effects, video game, and 3D animation applications from developers including Adobe, Autodesk and Epic Games.

To empower companies to build content such as 3D animations, models, or simulations, Zú deployed a dedicated environment comprising six Lenovo ThinkStation P520 workstations with Intel® Xeon® Processors. Finally, as a testbed for 5G-enabled services, Zú co-created the 5G TELUS Lab. Combining Lenovo ThinkPad X1 Extreme laptops, Lenovo ThinkSystem SE350 Edge Servers, and Motorola Edge+ phones connected to a 5G 3.5 GHz network, the 5G TELUS Lab offers average speeds of 1.2Gbps down and 142Mbps up with a latency of iust 9 to 13ms, allowing businesses to test how mobile 5G-based services will perform in the real world.

The 5G-ready ThinkSystem SE350 Edge Server is a compact and rugged solution designed to deliver smart connectivity, security and manageability in harsh environments. Capable of operating in temperatures between 0 and 55°C (32 and 122°F) and highly resistant to shocks and vibration, the ThinkSystem SE350 is ideally suited to supporting innovative mobile solutions.

"Our work with Lenovo helped OVA to take their XR concept off the drawing board and into production," confirms Véronique Levert. "OVA developed their core product—named StellarX—on Lenovo hardware, and they've since launched the solution to the world. Today, anyone can

download StellarX from Steam, and rapidly create immersive Alenabled XR experiences through an intuitive drag-and-drop system."

# Letting imagination take flight

By working side-by-side with Lenovo, Zú is helping businesses like OVA to thrive: positioning Montreal at the epicentre of Canada's start-up revolution.

"OVA is already offering StellarX to some of Canada's best-known brands," says Maude Bédard-Dufour. "Leading aviation company Bombardier is using the solution to develop highly interactive and effective training programs for its employees. Even as OVA's growth accelerates, they continue to be an active member of the Zú family, and book out the hub as a demonstration environment for potential clients."

Véronique Levert adds: "During these demos, OVA runs the

StellarX application on a Lenovo ThinkSystem SE350 Edge Server, and a separate instance on a Lenovo ThinkPad X1 Extreme laptop, both connected to one another via 5G. Any latency or lag can ruin an XR experience, and this real-world 5G networking setup helps OVA prove that StellarX allows employees to collaborate seamlessly in VR even if they're thousands of miles apart."

Zú is relentlessly focused on the future. The next phase of the hub's evolution will see the company deepening its partnership with Lenovo, enabling other XR startups to join the space and replicate OVA's successes.

"We're excited to build on what we've achieved so far and make the hub even more valuable to start-ups across Canada," concludes Maude Bédard-Dufour. "For example, we're exploring how we might use 5G-connected Lenovo laptops to allow XR businesses

to access the compute power of the hub from almost anywhere. Our collaboration with Lenovo is helping us make Zú the destination for start-ups in Canada, and revolutionize the cultural, creative, and entertainment industries."



## **The Smarter Solution**



### Open access to incubation

The Zú innovation incubator provides a digital sandbox for entrepreneurs built around workstations, servers and displays from Lenovo. The hub helps start-ups in Montreal to unlock their potential and accelerate their growth.



#### **Immersive experiences**

Backed by powerful Lenovo graphics workstations, Zú is helping companies develop immersive experiences and test them on VR headsets.



### **Innovative connectivity**

As a testbed for 5G-enabled services, Zú co-created the 5G TELUS Lab, with Lenovo ThinkPad X1 Extreme laptops and Lenovo ThinkSystem SE350 Edge Servers connected to a 5G 3.5 GHz network. This platform enables businesses to test how mobile 5G-based services will perform in the real world.



Start-up incubator Zú employs powerful Lenovo Workstations, like this **ThinkStation 920**, along with edge computing hardware and and on-site deployment services from Lenovo to create a cutting-edge technology hub that allows start-ups to experiment with extended reality.