

## mnuvo, a well-oiled machine



*“When we first implemented our products we were ahead of the entire market by at least one or two years,” indicates Frédéric Bastien, CEO and cofounder of mnuvo. “Another key element to mnuvo’s competitive edge is our expertise in mobile networks, the Internet of Things and big data. We have an excellent understanding of the technology and related issues for our clients.”*

### Well connected

mnuvo creates smart data management and analysis software for manufacturers of various types of connected devices. With their advanced real-time analytics, strategic information and enriched applications, mnuvo transforms objects into smart objects. This represents a huge potential for their clients, who range from robot developers to producers of heating devices like Stelpro. mnuvo helps them to improve their products and processes by making use of the data gathered by their own machines.

This pioneer of the Internet of Things offers their service platform by subscription, according to the volume of data transmitted. The number of connected devices therefore has a direct impact on mnuvo’s profitability. With the 120 products that are modeled in their platform, mnuvo is connected to approximately 300 billion data points.

Their main partners are resellers and distributors, like TELUS, Amazon Web Services, Google and Samsung. From their offices in Montreal, Chicago and Tokyo, mnuvo makes their products available to companies around the globe, particularly in Canada, the United States, Italy, Sweden, Switzerland, Japan, India, Hong Kong and Australia.

**mnuvo**  
making objects smart

## The nuts and bolts of a solid company

Frédéric Bastien, CEO and cofounder of mnuvo has been innovating with technology for more than 20 years and his talent has been recognized by the 2014 EY Canada Entrepreneur of the Year Award, as well as PWC's Vision to Reality Prize. He holds a bachelor's degree in telecommunications engineering and has extensive experience in the mobile and data sectors, beginning at Fido. His career took him to Japan during the era of the first 3G networks, then brought him back to Montreal, with Nortel, for whom he worked in Paris for three years. Frédéric also contributed to the LTE network industry while in Dallas.

In 2006, this award-winning entrepreneur took his initial steps in research and development by launching his first company in Montreal, which was bought by an American in 2010.

It was in 2012 that mnuvo saw the light of day. Incidentally, while the 'm' in the name is not pronounced, it links the word machine to the Latin term 'nubes,' meaning clouds in English, which highlights the company's initial aspiration as an instigator of the cloud machine interface.

The adventure began in Frédéric's basement, where he teamed up with three longstanding colleagues. "Two of the three are extremely competent software architects, an excellent place to start for R&D," asserts the cofounder.



"We had worked on databases for mobile operators with our previous company and by developing interesting functionalities for the management of parking terminals, we identified a major niche market," he recounts. "Also, the arrival of innovative devices, like the smart thermostat and Fitbit, made us realize that the boundaries of using everyday objects for data connection were falling. It was imperative that we figure out the kind of data that companies were missing."

After only several months, the company landed a \$14.5M contract, spread over three years, which allowed them to finance their own development, rather than resorting to external investment. Furthermore, in 2015, their growth accelerated thanks to two institutional venture capital investors, White Star Capital and McRock Capital.

For the first version of their platform, Frédéric also highlights the key role tax credits played in mnuvo's R&D, as well as the support of trade commissioners for their international projects, and a grant from the NRCC as part of the Industrial Research Assistance Program (IRAP).

mnuvo also relies on various strategic partners, like the alliances they have with GSI and Roc-Connect, that have been in place since 2016.

## The best parts

mnuvo counts 46 employees in Montreal and plans to expand their team to around 80 members within a year or two.



The greatest pride of mnuvo's cofounder is, in fact, his team. "They are absolutely fantastic... extremely talented and very creative," he says. The company, which opts for a family-type approach that is characterized by openness, represents 19 nationalities with the average age being around 25 years old.

Frédéric does, however, note mnuvo's hiring challenges: "Initially, by effectively leveraging our network of contacts, it was relatively easy to find the right people. But now it's increasingly difficult to find people with the skills that are really in demand, since the number of trained people in this field is limited."

## The future in data

The challenges of mnuvo don't just affect their workforce. Frédéric recounts how his young company had to imagine new solutions for a whole world of information. "We had to find ways to structure all the data that arrives at very high speeds within the machines, and also to be able to make real-time decisions with that information," he recalls. "That had never been done before. With big data, it was constantly being stored, then at the end of the month, analyses were done. We wanted to be able to do calculations in real time. For example, if a decision needs to be made to shut down a wind turbine, it can't wait, because the wind is constantly changing."

Also, with the highs and lows of the Internet of Things, companies were being severely tested. "Two thirds of our clients manufacture industrial equipment and the world of data is totally new to them, so the sales cycle is slower," specifies Frédéric.

mnuvo's technologies have a wide range of applications, as well as impacts on ecology, energy, efficiency, and therefore profitability. "For example, we help agricultural companies reduce the quantity of water they use to irrigate their fields," explains the cofounder. Companies today don't have the option of not taking advantage of big data technologies, so mnuvo offers them advanced tools to better adapt themselves.

In this market of exponential growth, and with only 1% of their clients' products being connected at present, mnuvo wants to develop their new clientele, as well as their intrinsic growth. The company also intends to continue their international expansion, while ensuring optimal management of their extensive network of distributors.

Frédéric Bastien is very proud of mnuvo and its presence as a Montreal company of technical professionals with a global impact: "It's good that people are seeing things start here in Quebec, not just in Silicon Valley."

**Source: Mélanie Pilon, Writer for the ICT Partners Vitrine TI Program and translated by Jenn Mierau**

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