

A successful collaboration: Centre for Innovation in Microelectronics of Quebec (CIMEQ) and Micro Thermo



Pushing the Limits of Innovation

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From a refrigerator alarm system to an energy management and monitoring platform for an entire chain of stores, the partnership of Micro Thermo and the Centre for Innovation in Microelectronics of Quebec (CIMEQ) is constantly expanding the limits of innovation.

For the past 18 years, Micro Thermo and **CIMEQ** have been working together to develop electronic, hardware and software systems. Previously, Micro Thermo designed temperature alarms for grocery freezers. To improve its product, the company turned to CIMEQ, who surveyed grocery owners to determine their needs. Working with these findings, designers began devising a software platform that could remotely monitor and manage a business' energy consumption.

The product has been evolving ever since. "We've created around fifteen versions so far," recounts François Verdy Goyette, General Manager of CIMEQ. The platform monitors all electrical components, from lights to refrigerators, including elements like heating, ventilation, and air conditioning. In 2007, a new application was developed to extend the energy saving system to an entire chain of stores.

The most recent version so far, the Micro Thermo Web Energy Logger (MT-WEL), can be used to identify the real-time cost of the



energy consumed by a chain of over one thousand supermarkets. Managers can therefore regulate the consumption of specific electrical appliances and thereby constantly control electricity costs.

The product has quickly become a huge success. Three American chains and one Canadian chain are already using the MT-WEL in approximately 550 stores in all. "We plan to launch it on the Mexican market soon, while a new generation version of the product could eventually be exported to Europe," adds Serge Cloutier, Vice-President, R&D, at Micro Thermo. Available with various options, the system can help users save on average 10-15% off their electricity bill, which is a grocer's third largest expense.

Previously a small business, the company literally expanded because of the project, growing from 3 employees to 60, 20 of whom work in research and development. The partnership was also enriching for CIMEQ, enabling it to take on even bigger technological challenges. Some university students interning at CIMEQ who worked on the project alongside professional technicians are now part of the team of researchers at Micro Thermo. □

