A Case for the Cloud: Emcarta
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What was the business problem?

Not all Canadians have equal access to healthcare. Canadians living in remote communities and those from populations at risk, particularly many in First Nations communities, do not have timely, convenient access to health professionals and resources, and are unable to access most services in their native languages. In addition to the lack of access to these resources, First Nations communities have limited exposure to traditional medicines and practitioners, risking the loss of generations of wisdom. The gap was a secure, confidential, virtual platform that allows patients and providers to connect freely, whenever and wherever needed.

Cloud Clip:

87% of small businesses said the cloud provided them with a competitive advantage.[1]

How does your product solve this problem?

Emcarta develops HEART™, an open-source healthcare platform that enables secure, multilingual health communication. HEART™ is the traditional house-call, that provides virtual access to health resources while integrating billing and other clinic services for healthcare professionals. With clear, concise design and the ability to be used on any type of device or browser, HEART™ allows users to "hop on and get help" on a variety of health concerns from anywhere in the country. Users are able to connect to healthcare professionals and resources from

across the country, including traditional, First Nations medicines and best practices.

Our ultimate vision is to realize what we call "Tommy Douglas 2.0": free, accessible healthcare that extends quality access resources to anyone, anywhere – especially those in marginalized populations and/or those who live in remote locations in Canada without access to adequate resources. It's what Canadians expect from their healthcare. This vision guided us to focus on three elements:

1. Clear, concise user interface that is truly intuitive and can be easily used by all populations, at all literacy levels (designed for Grade 2-level literacy)

2. Combining modern care with traditional and indigenous care to fill the gap of traditional medicine in many First Nations communities

3. Ability to fully function on low-tech devices to remove access barriers for populations who may have limited access to technology

What technical resources did you need?

We needed to develop a minimum viable product to attract investors and collaborators and needed our application to work "anytime, on any device." We also needed to have the security that health and research data would remain in Canada. The challenge was to combine health data with data from several enterprise systems.

> " *DAIR provided a fast, stable, secure, scalable, modular, and realistic testbed for us to develop, test and break our services.* "

[1] http://www.dailyinfographic.com/the-cloud-is-your-friend

Why did you choose DAIR?

DAIR was chosen because it met all of our technical requirements and also because CANARIE's advocacy for open access and vision of "Research, Collaboration, Innovation. Anytime" resonated with our own philosophy. We were also inspired by CANARIE's other initiatives, including the research enabled by the Research Software Program and identity management services enabled by the Canadian Access Federation (CAF). Our plans include the integration of identity management to allow for secure sharing of information and user access to health services.

How did DAIR help your business?

DAIR started us on our path toward research and development on cloud technology and allowed us to build and test a product that could easily migrate to a commercial production cloud.

The cloud-based resources we received from DAIR provided a fast, stable, secure, scalable, modular, and realistic testbed for us to develop, test and break our services. That allowed Emcarta Inc. to evolve the research-stage designs for Heart™ and move toward a Platform as a Service (PaaS) architecture built for the commercial cloud.

We were able to replicate our existing workflows to DAIR and then to our Canadian production cloud provider. Financially, it has been a significant help to use free virtual resources to develop our business, instead of tying up funding in costly equipment.

What was the result?

A beta version of HEART™ is available for testing at emcarta.ca. The technical foundation laid with DAIR's support enables us to expand our product's functionality beyond our original specifications, including plans to integrate with the Women's Health Network at womenshealthnetwork.ca. Connections to retailers of natural medicine and the integration of existing health platforms and medical devices are also areas gaining much interest for future releases.

Digital Accelerator for Innovation and Research - DAIR Program

Designed to give Canadian entrepreneurs a competitive edge, DAIR provides free access to high performance cloud resources without hidden costs. DAIR enables small businesses to accelerate product development while reducing cost by leveraging the scale, speed and agility of cloud resources.

Find out more at
canarie.ca/cloud