

CLINISYS - ISAIC CASE STUDY



THE BACKGROUND

ABOUT THE COMPANY, THEIR EXPERIENCE WITH AI/COMPUTE AND HOW LONG THEY'VE BEEN IN BUSINESS.

Clinisys EMR launched in 2012.

The Hub really compliments what we are doing to AI and ML. It is mutually beneficial for us and ISAIC.

The majority of our R&D is happening in analytics, ML and AI. Clinisys has multiple products.

The software products we provide to the market include EMR (electronic medical health record systems) and disease registries.

These are data centric applications and so we have evolved into a data analytics company that specializes in analytics of health data.



WHAT HUMAN RESOURCES ARE NEEDED TO WORK ON THESE KINDS OF PROJECTS?

We need to collaborate with academia continuously.

We have 3 or 4 collabs with UofA profs/students. We support mitacs positions, and are directly working with the departments, we have post docs students that are working part time with our company.

There are many ways we are working with the University of Alberta and academia in our business. Being in AB and Edmonton, UofA is on the top, we have the best resources. Other associations such as Amii, we work with in collaboration.

Projects that are Co-funded by Clinisys, Amii and the government. We continue to find new project streams.

We currently have 6 students & their academic supervisors working on active projects and another 6 about to start. So we are involved with 12 highly qualified personnel (HQP) in the pipeline.

Book a discovery call with us at support@isaic.ca

THE PROBLEM

WHY THE BUSINESS NEEDS AI/COMPUTE SUPPORT, WHY THEY CHOSE TO USE THE AIS HUB TO HELP THEM WITH THEIR COMPUTING DATA, WHAT THE PROCESS WAS LIKE FOR THEM AND WHY THE BUSINESS NEEDS AI/COMPUTE SUPPORT

Health data needs a lot of computing power and infrastructure to be behind it. Companies that are dealing with a lot of data need the infrastructure in place, when dealing with sophisticated domains like AI. *Smaller companies do not always have the capacity to run data.*

We can access Isaic as we grow. ISAIC allows us to move our products to one level to another, and near to the market as we commercialize it, and bring solutions to the health industry.

2-3 years ago our relationship with the University and working on academic relationships was just getting started.

Advanced Technology Centre events helped us increase our awareness of how we can access talent and work with students and the leverage resources at UofA and so we really were just getting our foot in the door at UofA and building stronger relationships with academia.

As a smaller company we did not have the capacity to buy half a million dollars worth of equipment on our own for a project that may or may not go to the market. *Investment was an issue.*

Accessibility was an issue, Resources were an issue. When you had to hire a particular expertise the specialties and subspecialties were getting more and more narrow. It was hard to hire talent for our specific purpose if we were to post a position online.

Especially an applied ML. Whereas now with this collaboration with ongoing projects at the UofA they know what we are doing. They are proactive and we can be proactive in our collaborations on our projects and getting access to talent to work on projects.

We can ask if there are post doctorates, or graduates who have done applied work in ML in health.

They will already have the technical background and we are getting direct references from the professors, or we are working with them as a student and now we know that the talent we are getting is pre-screened.

The student gets to know us and we can hope to retain them after the successful collaboration.

There is a huge benefit to companies, because ISAIC is strengthening the ecosystem and making more collaborations accessible, making talent accessible, and making computer resource affordable and accessible.



WHAT WAS CLINSISY'S USING FOR COMPUTING BEFORE?

We had a small data center that was a lot less powerful. It did the job for the day. 15 people accessed it.



WHAT IS POSSIBLE NOW THAT WAS NOT POSSIBLE BEFORE?

Access to human resources there was none. Now the process is very transparent on who we are getting. We are not scrambling for resources.



HOW WAS THE ONBOARDING EXPERIENCE?

We were early users, one of the first of a handful of companies that were testing the environment. Onboarding was not a challenge for us. We had put the student onsite at UofA, and then with the pandemic, we pivoted and now she is working from home (during the pandemic).

The hub was quick in setting up virtual access. Accounts were all set up quickly as soon as we decided we were going to move out of the physical space and go virtual. We are on and off using it. It is accessible to go in and run processes if needed.

It would be helpful to see ongoing usage via a report. To ensure if we are not using it can be freed up to someone that needs it and the Hub is helping more companies.

THE IMPACT

- WHAT IMPACT DID THE ISAIC SERVICES HAVE ON THEIR BUSINESS?
- WOULD THEY USE THESE SERVICES AGAIN?
- DO THEY HAVE ANY STATS TO SUPPORT THE IMPACT AI/COMPUTE HAS HAD ON THEIR BUSINESS?

All the projects we are undertaking, we would not have dreamt of doing, but the speed of the compute power at ISAIC makes it possible to do various projects and continue new streams of projects because they are going so quickly.

Before we would take one project, we took the project and it took 2 years, we have taken on 9 projects in 2019 and 3 are already completed in October 2020. It gives you an example of where we are as a company in R&D using this compute resource. 6 projects are still ongoing. It saves a lot of time and it benefits the companies as well.

There were so many blank areas (in AI) that we were not familiar with. EMR was the focus. But EMR is a massive amount of data. So, we had the opportunity to leverage this information for more solutions. *Our analytics AI/ML side significantly developed from 0 to 50% of our business/product line. That is proof of what this kind of ecosystem and infrastructure can provide.*

THE PROBLEM

WHAT WOULD YOU SAY TO ANOTHER BUSINESS/COMPANY ABOUT YOUR EXPERIENCE?

Our experience has been fabulous. The fact that we took on ALL 9 projects, shows that there was something that changed drastically on our end as far as Our capacity to process projects, our access to talent at UofA and all of this has increased immensely from ISAIC.

For new technology companies to grow in this region and ecosystem IT is necessary to have this infrastructure, and we are fortunate that we have access to it, and everyone should take advantage of the infrastructure but also the access to the incredible talent pool. We have some of the best minds in the world accessible here in Alberta and we can take advantage of that.

When we invest in R&D we are mindful of what can come out of it.

From the 9 projects, we are hoping that 3 can be rolled out at products. These are all software products. The use of AI/ML is heavy on these projects/products. These products and services, because we are software product, will generate revenue for us and will help our partners/clients in what they are trying to achieve.

One of the best things to happen to our business, and one of the major things for us to grow and take our products to market was the development of the ISAIC because it gave us a boost to our ability to collaborate with the University of Alberta, access to talent and the development of our products at a much faster rate.

WHAT WOULD YOU SAY TO ANOTHER BUSINESS/COMPANY ABOUT YOUR EXPERIENCE?

All 9 projects mentioned were new clients and new business. So, this resource enabled us to expand our clientele. It has increased our opportunity to do business.

These are R&D still so they are not generating revenue yet, but it gets us to the stage where we can find a product for our clients' needs and take it to the market. We are modularizing.

Our suite of AL has multiple modules in it. These are areas that we keep our efficiency of our software, and it will ultimately will increase our clientele, our revenue and will create jobs in the marketplace.



ADDITIONAL QUESTIONS

WHAT DO YOU WISH YOU HAD KNOWN BEFORE YOU STARTED WORKING WITH AI?

Clinical problem, administrative issues, a variety of problems related to their data sets.

We did not know some of the areas that exist as a problem area. Our clients enlighten us. We are still more aligned from the scientific side and the analytics side and ask What can we do, what can we glean out of that is what our people have expertise in?

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IF TIME PERMITS, PRESENT AI ADOPTION FRAMEWORK AND ASK THE INTERVIEWEE TO VERIFY IF IT ALIGNS WITH THEIR ADOPTION JOURNEY.

(Shared the framework ladder with Mehadi)
Can you verify if it is true for yourself, or other AI/ML companies in general?

Mehadi: This is exactly where we went. For example, If I look back on all my 9 projects. We went through pretty much all the steps.



1 STEP ONE

There was jargon going (with the client) around yeah we want to use AI/ML without knowing. The clients knew they had a lot of data, using it in excel sheets, all their sheets were busting, and they brought us in. They had some idea that the issue could be resolved, but they came with an open mind to try AI/ML. Sometimes they don't know. Other times they know what they want and are very clear. Sometimes we have to educate them because this is a new field

2 STEP TWO

Identification of use cases is common across all the projects. Any AI/ML organization who is trying to offer these services comes in and they have to decide if AI/ML is capable and companies have to identify use cases.

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4/5 STEP FOUR/FIVE

Execute AI project & Integrate insights. We integrate it with their businesses processes, and say these are the new insights we have found for you.

6 STEP SIX

Execute AI project & Integrate insights. We don't know about the 7th step, because what happens is by then our clients will have figured out if they are going to have in-house people or they will rely on us to continuously provide a service. We keep it open, because ideally our customers are returning to us. They may still hire some people, and just take the system and run with it.