



Case Study: Preserving a Competitive Advantage

Modelsoft and Canfisco collaborate for success

Preserving a Competitive Advantage

The challenges of managing an IT infrastructure in a niche market can be daunting. With scarce resources and a perception that the internal IT department is a cost center in most sectors, many companies seem to hobble along with outdated systems and depend on the strengths of internal experience and work-arounds to get the job done.

The Canadian Fishing Company has managed to find a solution to this problem, with the help of Modelsoft Corporation. Here is an example of a strong collaboration where everyone comes out feeling like a winner.

IT in a Niche Market

Like many organizations, the Canadian Fishing Company (Canfisco) has grown to depend more and more on an electronic infrastructure to keep their business running smoothly. While based on Great Plains, a sophisticated ERP product, they require a number of industry-specific components for a complete solution. With only a handful of companies in their niche, it is not particularly cost-effective for a broad-based vendor such as Great Plains to provide these capabilities, so each company is on their own.

Quite often, these industry-specific components are what differentiate one company from the competition. This is the case with the Canfisco, where product grading and order logistics are seen as one of their strengths, and considered a key success factor.

When Unlab, Canfisco's integrated logistics system had its genesis 15 years ago, IT was a different proposition than it is today. The bulk of the effort involved custom programming, and nothing existed with the level of sophistication of today's ERP solutions.

The initial system was relatively small and implemented relatively quickly. Mark Cornall, Canfisco's CFO, recalls that they had a bright co-op student build the system in 6 months using Clipper as an underlying platform.

From that point the solution grew in an ad-hoc manner, with a number of stand-alone applications that didn't necessarily talk well to one another. Over time, integration became more difficult, and the market for strong IT personnel became tighter as well. The old Unlab application gradually outgrew its usefulness, with increased maintenance costs and plenty of corporate risk. The challenges of integrating niche issues around fish processing and marketing capabilities continued to grow.

Imagine the logistical challenges Canfisco faces. Hundreds of pallets of unlabeled fish needs to be coordinated against incoming orders so that the right amount of the right product is appropriately labeled and shipped to the right customer.

The old system didn't manage all of the required information internally, resulting in manual work-arounds, capturing and transcribing the same information in different places. While the big, costly mistakes - pallets of incorrectly labeled fish - were rare, this was more a result of the heroic efforts of the people managing logistics, rather than the support provided by the system.

Time for a Change

As is the case with most implementations, what started out as a small application has grown into a collection of programs with a complex set of dependencies, loosely held together. Several of Canfisco's competitors had tried and failed to develop components for a complete integrated solution over the years.

Despite the failures of their competitors, Canfisco decided the old system needed upgrading, but encountered many of the same challenges that plague the IT sector as a whole. Their small IT group had primarily focused on maintenance of existing applications in the past, and there was a lot of turnover in the group. In addition, as a relatively new IT Manager starting in December of 2006, Rod Foley notes that upgrading an existing system wasn't seen as particularly appealing work.

There were issues with the front-end analysis that was needed to truly understand the problem space. Part of the challenge, looking back, was the relationship between the end users and the original analysts. Jo-Anne Harman has been one of the key users of the application. She notes that at one point, both groups thought the other was wrong, and they couldn't get to a shared understanding. She recalled meetings where IT staff simply presented what they believed should be the correct solution. From her perspective, "if you don't talk to the users, how do you know what to build for them?"

Cornall also sees a number of bad decisions that were made on the project. Outsourcing was never really given a fair shake, as the internal IT staff at the time argued that it was more cost-effective to keep the work in house. With three years of overall effort to build the new system, they continued trying to fix what was already there, while they should have recognized that effort as a sunk cost and moved on. These are all behaviours that are seen in many IT groups today.

As Cornall notes, "if you were building a building, you would never accept that failure rate". Unfortunately, Canfisco is not alone with these results. Industry statistics such as the Standish Group's Extreme Chaos report have shown that the vast majority of IT projects either fail outright, or are challenged from one or more of the dimensions of scope and quality delivered, or cost and timeframes expected.

The Turning Point

As part of the ongoing changes to personnel, Canfisco brought in a developer from Modelsoft in November of 2006, starting a relationship that was to grow and eventually lead to the solution that Canfisco was looking for.

The decision to try to outsource the project was not made lightly. When looking for outsourcers, Canfisco deemed it important that they find a company that fit their culture, and was comfortable to work with. He also liked the fact that Modelsoft fit their size and was a growing company as well.

By March of 2007, the relationship had grown to the point where Canfisco decided to give Modelsoft an opportunity to use their approach to analyze the system. In a couple of focused two-hour sessions, the analyst worked with the domain experts and management to model their needs. While Canfisco was billed for this effort, they certainly found this step to be fair value obtained.

Cornall found the modeling exercise "certainly different", but realized it gave Modelsoft the ability to get up to speed quickly and to pursue an aggressive development schedule. They managed to gather enough solid information from the Canfisco team to allow them to bid for the development of the system at a fixed price. Indeed, the VP of Export Sales had remarked that Modelsoft picked up their needs "faster than even our internal people".

These sessions generated a number of elements. First, an overall understanding of the needs for the system, captured in a Vision and Scope document, formed the basis of a shared understanding of what needed to be built, and what completion would look like. Indeed, this Vision and Scope was used to capture the criteria for signoff.

Secondly, an initial understanding of use cases, screen mockups and data definitions was generated, that allowed that strong understanding of the system to be described at a more detailed level. This provided the information needed for the fixed-price bid, but unlike many organizations, Modelsoft recognized that the model was not cast in stone. Rather

than 'signing off' the spec, they use this as the basis for ongoing discussion and clarification with the client throughout the project, and this ongoing collaboration allows them to closely manage expectations throughout.

From Modelsoft's perspective, the session generated value of a different type. Modelsoft's CEO, Peter Cheung, recognized the need to understand the technology constraints of the system, but more importantly, leveraged the session to get the users involved, to drive buy-in for ongoing participation.

Modelsoft's analysis approach sets them apart in a couple of critical ways. This group has extremely strong analysis skills. They bring to the table a wide variety of different modeling techniques (rather than using one technique and attempting to force it onto all analysis situations), and recognize that these techniques are merely tools for channeling collaboration with the client to gather the appropriate information. They go far more deeply than to merely ask, "what do you want?"

They are also great listeners. They recognize that the client best understands the domain and problem space, and their role is to elicit this information as thoroughly and efficiently as possible. They know better than to suggest, "this is what you need".

While end user participation was critical in these initial modeling sessions, they were also actively involved all the way along. With this greater ongoing involvement, the strong team effort drove stronger ownership across the board. Evolution of the models that were generated initially was perceived as refinements and enhancements discovered in a collaborative fashion, not seen as disappointing bug fixes as they are seen in many projects.

A Strong Finish

Today the system is almost complete. Five years into the overall project from Canfisco's perspective, Modelsoft has completed the system in 6 months, with very little rework – perhaps a couple of weeks rework in those 6 months, compared to typical industry rates of 40% or more. This reduction of rework can be attributed to the strong communication and emphasis on a shared understanding of the product through effective analysis techniques.

While Cornall didn't have high expectations up-front, he gradually became convinced that he was on to something valuable. Early documents convinced him that the Modelsoft team 'gets it', and about halfway through the project, the users started to report tangible positive results.

The fixed pricing model reassured Mark about Modelsoft, despite not having a track record or experience working with them. From his perspective as a CFO, "Fixed price is the easiest thing to walk into an office and ask for."

The model works well for the development organization as well, if they can manage the risk. As Peter Cheung notes, "it allows you to concentrate on the project itself, rather than billing or time issues". That management of risk is critical, and Modelsoft has delivered on expectations.

In most cases, whether software development is being outsourced or developed in-house, there is so much uncertainty in how the project will play out that it is impossible to state up front just how much time it will take to build the application, or how much it will cost. Most teams try to work to constraints and recalibrate as they go. Because of the uncertainty up front, there is just too much risk to bid on projects using the fixed price model, unless billed changes are rigorously managed to drive profit. Either way, someone usually loses in the transaction. Modelsoft has overcome these challenges with their ability to deliver under a fixed-price model.

Mark Cornall clearly recognizes the reduction of risk associated with Modelsoft's analysis-driven approach, and what started as an amicable relationship has become a strong enduring bond. There is no adversarial negotiation of changes

along the way, just delivery of value as expected. Indeed, when asked what the biggest surprise in the engagement has been, it was "that there were no surprises at all".

Jo-Anne had an equally glowing viewpoint. For the first time, she felt that the analysts were actually listening to her, rather than trying to tell her what she needed for her own domain. Unlike previous attempts where even internal IT managers failed to deliver on expectations, she is looking forward to using the system, both for the additional features it provides for her, as well as for all the other stakeholders involved. She has become a true advocate for seeing the system deployed, and fully expects the system to save time when it is in use.

From Canfisco's internal IT perspective, the arrangement was quite effective. Foley notes that there is no animosity with the outside team from Modelsoft. While there can be times that require a bit more discussion because of the learning curve for the domain knowledge necessary, Modelsoft has managed to tackle a challenge that had been lingering for years.

The solution Modelsoft provided is relatively simple in principle, but rarely practiced in the industry. With well-focused customer-centric analysis up front, they provided dramatic value to the client while turning a profit. No reliance on heroes, no death marches, just disciplined, predictable software development, and another relationship based on trust and common understanding that is sure to deliver similar results in the future.

For Canfisco, they have a new system that will sustain them well into the future, and their ability to manage complex logistics is now supported by that system, sustaining their competitive advantage in this niche market.

About Canadian Fishing Company

Based on the Vancouver harbour, Canadian Fishing Company (Canfisco) owns and operates three major processing plants in Vancouver and Prince Rupert, British Columbia. Canfisco also owns and operates the largest fleet of company vessels in British Columbia and buys additional fish from hundreds of independent vessel operators throughout the province. Alaska General Seafoods (AGS), Canfisco's US affiliate, is a major participant in Alaska's wild salmon and herring business, operating two processing plants, one in Ketchikan, Southeast Alaska, and one in Naknek, Western Alaska.

Canfisco is a Jim Pattison Group Company.

For more information, visit <http://www.canfisco.com>.

About Modelsoft Corporation

Modelsoft is a software engineering and consulting firm with leading expertise in requirements management. We collaborate with our clients to deliver sustainable success. We apply our world-renowned expertise and practical problem solving skills to help customers succeed. Our services find applications in critical areas of business and government. With Modelsoft services, companies experience a dramatic reduction in their overall project costs, with a significant reduction of change management and rework activities.

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About Jim Brosseau

Jim has been in the software industry since 1980, in a variety of roles and responsibilities. He has worked in the QA role, and has acted as team lead, project manager, and director. Jim has wide experience project management, software estimation, quality assurance and testing, peer reviews, and requirements management. He has provided training and mentoring in all these areas, both publicly and onsite, with clients on three continents.

He has published numerous technical articles, and has presented at major conferences and local professional associations. His first book, [Software Teamwork: Taking Ownership for Success](#) was published in 2007 by Addison-Wesley Professional. Jim lives with his wife and two children in Vancouver.

Jim wrote this case study as compelling evidence that good business practices can indeed result in project success.

About Clarrus

It is often the same class of challenges that are the root cause of most business inefficiencies. A key aspect of these challenges is that they manifest themselves differently in every organization. That's where we come in.

Clarrus is a down-to-earth, value-driven company with a focus on improving project teams and the projects they work on, across all industries.

Clarrus is unique in that it understands the interplay of human dynamics and project mechanics. Our consulting services and workshops bring a practical and proven approach to increasing the effectiveness and satisfaction of your project teams and delivering results.

Clarrus believes in the principle of teaching people to fish. Our approach nets its richest results in complex environments where multi-disciplinary teams bring diverse perspectives to the table. But, we also help small teams thrive, too. In a nutshell:

- We harness the best of best project practices and apply only what's needed for tangible short- and long-term results.
- We create an environment of trust so our sometimes tough questions can open the doors to peak performance.
- We provide inventive and practical ways for your teams to approach challenges.
- We secure the engagement of your project teams by focusing on issues where the impact is greatest.

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