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CREATING A PROCESS-CENTRIC ORGANIZATION AT FCC: SOA FROM THE TOP DOWN¹

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Executive Summary

This case study describes how Farm Credit Canada, which provides financial services for Canadian agricultural businesses, is transforming itself into a process-centric organization. To support this transformation, FCC's IT function has restructured from a silo organization, with each silo supporting applications for a particular business function, to a "service-centered" model, where applications are constructed according to service oriented architecture (SOA) principles. The transformation is described in six steps.

In Step 1, the CEO initiated a culture change initiative that underpinned his vision of creating a customer-centric organization. Step 2 focused on what needed to be done to integrate the corporation's processes and systems to enable it to provide a great customer experience. The outcome was two initiatives—one to redesign the corporation's processes, the other to transform the IT function to support enterprise processes and integration.

Step 3 was the transformation of the IT organization. First, the newly appointed CIO assessed the current state of the IT organization (and all current IT projects were halted while this was done). He then designed the new structure, moving away from the old application-centered "silo" approach to an architecture-centric one supported by SOA principles. The move to the new organizational model was accomplished in just 90 days, a timescale that would have been impossible without the full and active support of the CEO.

Proof of concept was undertaken in Step 4 by implementing a carefully chosen business process with SOA. But first, FCC had to make a multimillion dollar investment in the foundational technologies. Once implemented, this redesigned process favorably impressed FCC's senior executives and sent front-line satisfaction with IT soaring. The corporation was then well set to move on to Step 5—the detailed redesign of other processes and working through the governance issues of managing a process-driven IT organization.

The benefits to date of transforming the IT function and its technology were articulated in Step 6. The CIO identified six benefits: (1) Improved and more effective communication between the business and IT; (2) Streamlined business processes; (3) Improved scores for IT staff engagement; (4) Reusable IT assets; (5) Support for the long-term vision; and (6) Proven technical viability of the SOA approach. These last two benefits arose directly from the successful proof of concept (implementing the initial business process).

The transformation of FCC to a process-centric organization is continuing apace and is scheduled for completion by the end of 2011.

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¹ Cynthia Beath is the accepting Senior Editor for this article.

Figure 1: Farm Credit Canada's Cultural Practices

1. We hold ourselves and each other accountable for:
 - Our impact on business results and our impact on people
 - Delivering on commitments, agreements, and promises
 - Building and sustaining committed partnerships
 - Creating a safe environment where people can speak up without fear.
2. We measure our success by how others perceive and respond to our leadership, not by our personal point of view.
3. We talk straight in a responsible manner. We are committed to the success of others—we do not engage in conspiracies against people.
4. We listen for contributions and commitment. We do not listen against people or ideas.
5. We are highly coachable; we actively seek and listen to coaching
6. We clean up and recover quickly.
7. We acknowledge others often and celebrate both small and large successes.

Source: FCC Annual Report 2004-05

A NEW STRATEGY FOR FCC

In 2002, the CEO of Farm Credit Canada (FCC),² John Ryan, set his organization on a new course—to differentiate FCC from its competition on the basis of customer experience. Ryan proposed that FCC could do this in four ways: building superior agricultural knowledge, growing a high-touch sales force, enabling seamless cross-channel interaction, and having consistent, defined standards for customer interaction. No one (including, by his own admission, Ryan) would have guessed at that time that this initiative would result in the complete transformation of FCC. Today, FCC is well on the way to becoming a truly process-centric organization with a service-oriented architecture (SOA) to support it. FCC has adopted an enterprise view of its business processes (both ownership and management), shifted from functional to enterprise management of the IT function, and moved IT from an “application-centric” orientation to a “service-centered” architecture. How this organizational transformation evolved is the focus of

2 Farm Credit Canada, headquartered in Regina, Saskatchewan, in western Canada, is a 48-year-old national lending institution focusing on agriculture. The corporation has several lines of business, with the main focus being lending for primary production (e.g., corn, wheat, hogs) and agribusiness (e.g., food processing). Its loan portfolio is currently \$10 billion (U.S.) and growing significantly each year. Day-to-day customer-facing operations are coordinated from over 100 field offices across Canada by about 1,200 staff. FCC works closely with Canadian producers and agribusiness operators to create financing answers for each stage of their business life cycle. It offers many flexible financial products and services. FCC competes with other financial services organizations (e.g., banks, credit unions) in the agricultural financial services arena.

this paper³. There were six steps in this evolution, as described below.

STEP 1: PAVING THE WAY FOR TRANSFORMATION

It is one thing to roll out a new corporate strategy, but it's quite another to make it work. In FCC's case, Ryan realized that his vision of a customer-centric organization represented an enormous change—a change that would affect every single employee whether front line or back office—as this was the only way to realize all four pillars of his new strategy. To pave the way, Ryan kicked off a new set of cultural practices (see Figure 1) designed to support how the corporation achieves its goals and to create a high-performance culture. For Ryan, this was a key first step toward creating a great customer experience. “We wanted to encourage people to park their egos at the door,” said Ryan. “This culture goes hand-in-hand with innovation. For long-term advantage, you need culture, process, and technology all working together.”

Once the senior management team had created its statement of high-performance culture, it then had to “figure out what to do to make it real,” said Ryan. This is one of the key differentiators of the FCC cultural change initiative from those of other companies. The executives took specialized training for accountability and cultural practices and then demonstrated these

3 The authors conducted multiple onsite, offsite, and telephone interviews with the key executives at FCC during the spring and summer of 2006. In addition, FCC provided full access to all relevant archival information, including planning documents, process maps, presentations, and organization charts.

practices themselves to show their staff that this was *not* “the flavor of the month.” Beginning in mid-2003, this training was rolled out to all managers, and by spring 2006, it had been introduced to all staff. “These practices have had a very significant impact on how we work together and trust others,” said Greg Stewart, executive vice president and chief operating officer. “You see it every day.”

STEP 2: THE ENTERPRISE INTEGRATION PROGRAM (EIP)

Once the cultural transformation initiative had been launched, Ryan began to look at some of the other challenges involved in creating a great customer experience. “Our people and processes were taxed to the hilt as a result of our growth,” he noted. “We couldn’t keep going in the same way or we’d hit a wall.” Ryan admits he’s “not an IT person,” but he recognized that technology had the potential to solve some of his business challenges. “I made a conscious decision *not* to throw more people at the problems.” Where Ryan saw potential, however, everyone else saw problems when it came to IT. Like many businesses, IT systems at FCC were not well integrated and certainly did not foster “seamless cross-channel integration.”

Nevertheless, Ryan decided the logical place to start with the necessary enterprise integration was with FCC’s technology. A business/IT committee was formed to figure out what IT functionality would be needed, which work should be done first, and to ensure that all initiatives under the new corporate strategy integrated appropriately. The person chosen to lead the investigation was Ross Topp, then director of e-business. “It was a huge mandate,” he said. “We didn’t really know where to start; over the years we had made our technical environment so complicated that integrating all these systems seemed to be an impossible task.” When the investigation discovered that FCC had \$40 million worth of projects on the books with no one managing the intersections between them, the committee became convinced that it wasn’t equipped to do the job. It had neither the time nor skills and decided that a dedicated team should be created to tackle the challenges involved.

So in January 2004, Ryan launched the Enterprise Integration Program (EIP). The person chosen to lead the program was Sophie MacDonald, then director, business solutions in the IT organization, who had served in several business positions at FCC. She was given three months to form a team and figure

out the best approach to achieving integration. She took the job on the condition that Ryan would be the sponsoring executive. Due to the complexity of the work, she knew how challenging the job would be and that each business unit would be lobbying for its own technology projects. “It’s rare for the CEO to sponsor initiatives,” she noted. “But I needed someone to keep everyone else at bay for a while as I figured out what would be the best approach to take for the corporation as a whole. John Ryan was crucial to our work. We needed this support from the top.” MacDonald’s appointment signaled to everyone that Ryan meant business. “Sophie is awesome, bright, thorough, and motivational,” said Stewart. Ryan agreed. “Sophie had credibility. I chose this initiative to champion because of its corporate impact. There couldn’t be anything more important.”

MacDonald asked for and got a team of very talented business and IT staff. They worked night and day to understand the issues involved and identify the key inhibitors to future growth. “Initially, everyone thought that if the systems were integrated then life would be rosy,” she recalled. “They were nervous, wondering what the EIP would mean for *their* projects.” To supplement the EIP team, MacDonald hired two consultants—a technology expert and a balanced scorecard guru. They began by interviewing the corporation’s vice presidents, key stakeholders, directors, and managers, asking them three questions:

1. What was their strategy?
2. What was getting in their way?
3. What areas of opportunity did they see?

The inhibitors soon became obvious:

- FCC had a systems-driven approach to process design, which resulted in cumbersome processes that worked around the systems’ functionality.
- There was a lack of enterprise-wide integration, both across the customer value chain and at different levels.
- The cumbersome processes were laden with too much low-value-added work.

However, the EIP team also realized a few hard truths. While every business leader understood what he or she wanted to accomplish individually, as a group, they didn’t understand how it all fit together at the enterprise level. In short, the team discovered that enterprise integration was first and foremost a *business* problem, not an IT one. In fact, they

realized they needed to understand FCC's entire enterprise value chain and related business processes before effective system and data integration could be achieved. Although there were many problems with the corporation's systems and data that inhibited integration, the team recognized these would never be solved until the business understood its own processes and put proper process governance in place. Only *after* this happened would it be possible to implement the technology that would enable those processes.

To reach a common understanding of what the business was trying to accomplish and how its processes worked, MacDonald had to develop her own methodology. She started with expanding and clarifying the key strategic drivers Ryan had identified to the senior management team.⁴ Once these were defined, the team then looked at what processes were in place to enable them and mapped the current-state enterprise value chain and processes. "Our processes had never been written down before," said MacDonald. "Defining our enterprise value chain and putting it up on the wall on paper helped us to crystallize the issues and opportunities and link them with the different processes." Business processes were then reviewed with subject matter experts through numerous workshops. These experts were asked "What issues are preventing FCC from reaching its strategy and what opportunities are we not taking advantage of?" The EIP team also found, through workshops, that:

- Customers had different experiences across delivery channels.
- Different people in different roles were doing the same things.
- Accurate reporting was difficult.

As the EIP team worked through this exercise, it was also learning what the corporation needed to achieve with its processes and technology. As MacDonald explained, "We wanted to make the processes visible so employees would know how to do the work and serve customers well. We also wanted to be consistent in our approach so that offices in Ontario or Saskatchewan would provide the same service. We wanted a portal that would expose the processes in a step-by-step fashion to make it really easy for employees to know how to perform any tasks. We also wanted to make sure that they would have access to the information they needed to do the work, when they

needed it. A portal would provide corporate policy, product information, and sales tips in context so that employees wouldn't waste time searching for them in manuals."

In parallel with this activity, the IT consultant helped document the IT function's current "as is" state, identifying its processes, systems, and platforms. As expected, the IT organization was in trouble. It was siloed, just like the rest of the business. Interestingly, IT staff members were happy to collaborate with the consultant. "They had been saying all along that the silos created a problem, but the IT organization had lost credibility, and so it wasn't listened to. When the consultant asked, however, they were happy to share their story," MacDonald remarked.

When the "as is" IT application architecture was mapped on paper against the "as is" business architecture, the real problems at FCC became all too apparent. "The turning point was one Saturday morning," said MacDonald. "I had booked a meeting with Ryan, and I took the process map with me to show him what our processes looked like on paper. I unrolled the process map on the floor of his office and showed him how many systems people actually had to access in order to do one simple task. From that moment on, Ryan was convinced something major had to be done to fix this mess." While not all the stakeholders understood the finer points of the EIP team's work, the "spaghetti" on the process map helped them realize that there were some bigger issues that needed to be dealt with.

At this point, MacDonald made a radical recommendation to the executive sponsors of the four major IT initiatives that were already underway. Since the corporation still didn't know what the future-state business architecture would look like, she explained it was impossible to tell which IT initiatives were worthwhile. "We needed to get a handle on this so we could judge what was going to work," MacDonald stated. So, after consultation with Ryan, all ongoing IT development projects were halted until the EIP team's recommendations were completed.

The team next identified six principles to guide the future business architecture at FCC:

1. The ability to cross-sell a full portfolio of products and services across channels.
2. A consistent customer experience across channels, incorporating formal and informal customer feedback.

⁴ The seven strategic drivers were continuous growth; expanded customer relationships; more time with the customer; a consistent, yet differentiated, customer experience across all channels; expansion of seven business lines; enablement of cross-selling; and improved channel integration.

3. Enterprise value-chain-based process redesign and transparency to speed learning and increase effectiveness.
4. A single user-centric interface to aggregate functionality from multiple systems.
5. The exposure of process and context-specific knowledge (about products and customers), skills modules, and explicit policy, at the point of need.
6. Automated business rules and workflows designed for audit and reporting.

Finally, a gap analysis was conducted to identify strengths and problem areas, and a preliminary roadmap to the future enterprise was developed. At the end of the EIP's three-month mandate, MacDonald and her team recommended the complete redevelopment of the corporation's business and technology architectures to the senior management team. Following the approval of these recommendations, the EIP split in two: a business initiative to redesign the corporation's processes and an IT initiative to transform the IT function to support enterprise processes and integration. "The EIP had a huge impact on the way FCC thinks about business processes," said MacDonald. "It marked the beginning of our transformation to a process organization."

To no one's surprise, MacDonald was appointed VP of the new initiative called Enterprise Integration and Innovation (EII). Still reporting to Ryan, her new job was to focus on redesigning the enterprise value chain and on implementing the business process model into which new IT projects would be fitted. This was a challenging initiative, which involved defining FCC's value chain (comprising three major components: pre-sale, purchase, and post-sale) and macro-processes, assigning process owners and executive sponsors for each process, and then working through the design of increasingly finer processes until an ideal workflow was agreed on and documented. As this work evolved, the EII team recognized that the corporation's business priorities had to change.

Previously, the corporation's focus had been on initiatives that would drive more top-line growth—i.e., on the pre-sale portion of the enterprise value chain. However, "We saw that we had to fix the plumbing (including IT) before we opened the floodgates," said MacDonald. "Therefore, we started with redesigning our post-sale process." Detailing the post-sale process took most of the time needed to restructure the IT organization, which was proceeding in parallel with the EII initiative (see Step 3, below). The two streams

then came together to work on implementing a single business process as proof of concept, as will be described in Step 4.

STEP 3: TRANSFORMING THE IT ORGANIZATION TO SUPPORT ENTERPRISE INTEGRATION

Over the years leading up to this point, the IT organization at FCC had gradually become less and less effective. As Stewart reflected, "We'd struggled with IT ever since I joined the corporation 18 years ago. We could never get a handle on it. I'd sat on numerous committees, but nothing ever worked." In the business, IT was perceived as a bottomless pit. "Everything cost a million dollars," said Stewart. The department didn't have the leadership or the practices to turn its situation around. "We had some good people, but they weren't always in the right role. IT staff morale was the lowest in the organization."

According to Ryan, "There was a lot of tension between the IT organization and the business." Worse still, because it lacked credibility with the business, when a business unit head wanted to get something done with technology, his or her natural inclination was to "do an end run on IT" and call in an outside vendor to do the work. According to Paul MacDonald, then a senior executive in the business, "The perception was that the IT organization was terribly broken, so no one wanted to give it the ability to solve our problems." In the business, "Everyone was well-intentioned about what they wanted to do with technology, but there was no technology roadmap for the corporation, and no one was taking the long-term view for the corporation's sake." As a result, there was a lack of system and data integration, cumbersome business processes, and long waits to get IT people to make even simple changes.

Clearly any effort to implement a new business architecture and the technology to support it would fail without first addressing these existing IT issues. Ryan determined that he needed a CIO who could drive business transformation with technology and collaborate with the EII team. Paul MacDonald, with a demonstrated passion for technology, volunteered to take on the leadership of the IT organization and completely renovate it in parallel with the work being done in EII. Stewart recalled "Paul wanted to go to IT because he saw a real opportunity to make a difference." When Ryan appointed Paul MacDonald as CIO in March 2004, it was a gamble. As Paul noted,

“John and I both put our personal credibility on the line with this move.”

Assessing the Current State of the IT Organization

The first problem Paul MacDonald had was buying time to figure out what needed to be done in the IT organization. “We needed to get a handle on this so we could judge what was going to work,” he said. So, after consultation with Ryan and Sophie MacDonald, he halted the major IT development projects for a further 45 days and stopped all new development so he could do some clean up in the IT organization. Although this was not a popular decision, it underscored the importance of getting agreement on the key business processes before spending more money on IT solutions. The rollout of the EIP’s findings and the beginning of the EII initiative were beneficial for Paul MacDonald. Absorbing the implications of the EIP and EII kept business leaders’ focus on trying to understand process governance and its implications for their functional units and distracted them from the changes being made in the IT organization. With the business design and policing of business priorities taken away from the IT function, Paul MacDonald was better able to concentrate on the internal IT transformation and the governance issues resulting from it.

When Paul MacDonald took on responsibility for the IT organization, it was in a significant state of disarray. There was no formal enterprise governance and no articulated IT architecture. His first step was a thorough assessment of the current IT function—its operations, roles, responsibilities, and governance. This four-week review found that the IT organization’s involvement in application development ranged from extremely high to none at all. In many cases, systems were developed by others and “thrown over the wall” for IT operations to manage. There was no standard approach to development or application security and no common tools. Every application had its own infrastructure, and application integration was one-to-one and highly data-centric.

Like many organizations, FCC was structured into functional silos; accordingly, the IT function was also organized by vertical application silos. Each business unit owned and governed their IT projects. This resulted in business unit leaders making technology decisions based on their current needs. In essence, they were “mortgaging the future” because they were unable to see the need to fund the foundational work necessary to govern and operate IT at an enterprise level. “IT work was considered a necessary evil,”

said Paul MacDonald. Business people were wary of it and wished it would just go away. As a result, the corporation had outsourced chunks of the IT function “for all the wrong reasons.”

At the beginning of this process, Paul MacDonald found that his IT staff members were highly disengaged from the corporation (scoring 30 per cent on the employee engagement score vs. the corporate 69 per cent). Many staff members were unclear of their roles or were performing multiple roles in the IT organization. There was a significant lack of technical skills in certain domain areas and many staff members were in roles for which they were unqualified. The organization lacked senior IT managers who could be thought leaders, and there were many unfilled vacancies.

Designing the Future State Model

After carrying out the current-state assessment, with the help of expert consultants, Paul MacDonald and his team designed the future-state model for the IT organization’s new structure, governance, and resourcing. A key principle of the new model was moving from an application-centric to an architecture-centric approach for developing new capabilities (e.g., technology service offerings or new staff competencies). In the new model, integration moved upwards from a data orientation to an application service orientation, supported by an SOA.⁵

Brad Strom, now VP enterprise architecture with FCC, was a key player in the decision to move to an SOA. He told us, “We chose to go SOA not because we wanted new challenges, but because we wanted solutions to our existing challenges. SOA offers the ability to integrate different technologies and platforms, and we needed to knit our systems together ... it’s an approach and principles for technology design that are technology-neutral. And Web services is a language that works across all technologies ... But SOA soon became a metaphor for all the changes we were making.”

The IT organization’s technology architecture (its future-state plan) required the existing siloed applications to be deconstructed into collections

⁵ SOA is viewed as a set of architecture principles for combining loosely linked and interoperable services (e.g., add customer billing address, perform credit check) that can be reused in different combinations to provide functionality to users in a highly flexible manner. Service-oriented architectures are typically implemented using Web technology (e.g., portals). It is argued that SOA can help businesses respond more quickly and cost-effectively to changing market conditions.

of services. Foundational services (e.g., identity management, forms management), which are shared across multiple processes, would be developed first. Next, would be services specific to a single process. These services would then be assembled into a common user interface (i.e., a portal) to support a redesigned business process. Whereas traditionally FCC had purchased and customized software packages that were integrated at the back end, now it planned to buy components (e.g., a risk scoring module) and deploy them as services. IT staff would then assemble these components/services with integration occurring at the front end to match the redesigned business process (see Figure 2).

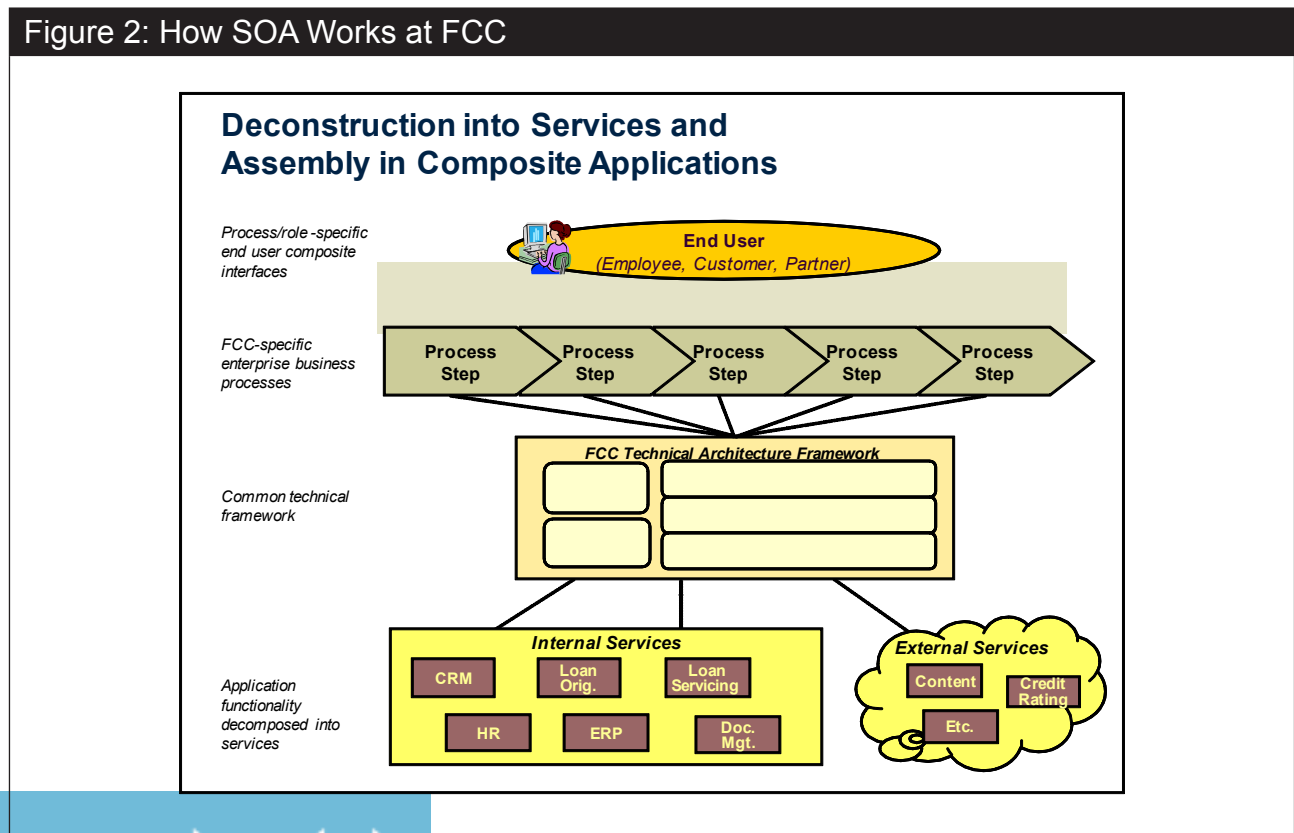
Features of the New IT Organization Model

Using hindsight, Paul MacDonald identified the following four distinguishing features of the IT organization’s successful new model.

1. **Making staff development and resourcing a priority.** The future-state staffing model called for a focus on developing permanent staff for senior, high-leverage, and strategic positions. Less strategic, commodity skills would be obtained in the marketplace through contractors and consultants. One of the challenges Paul

MacDonald faced was increasing the salaries for the senior staff he needed. “This was hard for some business people to swallow,” he said. “I had to be extremely clear about my reasons for doing this.”

2. **An enterprise IT funding model.** Fortuitously, FCC had made some important changes to its IT funding model in the year prior to the transformation initiative. Under the old model, each of the business units had access to a pot of money to spend on technology, and they used it to further their own functional interests. Under the new model, the discretionary IT budget is owned by the enterprise, and every project competes at this level for funding. A scoring system, based on several criteria (such as ROI, risk, and cost), is used by the IT Steering Committee to assess every IT project in the same way. “While not part of the transformation initiative, this new model was a critical success factor,” said Paul MacDonald. “Because the best scores are for projects that benefit the corporation horizontally, people began aligning with the new model since that’s how they get funding.”
3. **A platform-centric IT organization structure.** The new FCC process-centric governance framework overlaid business processes on



functional departments. In the business, each of the three macro business processes (pre-sale, purchase, and post-sale) had an executive process owner. Individual subprocess owners were appointed as the new business architecture took shape. IT applications were then mapped to these business processes and three IT platforms were created—a customer management platform, a partner and channel platform, and a loan management platform—completely eliminating functional alignment for the IT organization. Each platform has a director who leads a business-facing IT group that includes both technology managers and relationship managers. These groups work with the business process owners and functional managers to make decisions that are best for the processes involved, not for an individual system or business function. Platform directors report to Darren Howden, senior director of platform management.⁶

Other important components of the new IT structure included:

- *Solution design*—this group contains solution analysts and architects who determine the best technical solution to meet a business problem.
- *Solution delivery*—this group includes project managers, developers, assemblers, and usability experts.
- *Enterprise architecture*—this group of architects works on the longer-term technology roadmap and in conjunction with the EII group.

4. Clearly defined business and IT accountabilities. As part of the transition process, Paul MacDonald's team created numerous accountability charters, which detailed who is responsible for every element of IT work. "It's *all* about clarity of roles and responsibilities," he said. This was a very difficult and complex job—especially for cross-functional processes. Clear responsibilities and accountabilities are defined for each stage of IT development and operations. These

make it clear that the business process owner is responsible for requirements, participates in the rest of project development, and signs off on the end product. The IT organization is responsible for designing and developing the technology solution that delivers the necessary business functionality. EII team members are required to participate in (and sign off on) business requirements, ensuring horizontal process integration.

Moving to the New Model

After 90 days of planning, Paul MacDonald was ready to move toward the new IT organization model. And he wanted to do it within another 90 days. "This really took a lot of work," he explained. "We managed the transition like a project and went at it aggressively." He established a transition office and transition teams, and developed detailed transition plans, roles, and responsibilities. Six months later, each IT staff member had a set of personal objectives and a long-term training plan, and key transition activities had been completed.

"Making these changes was not rocket science, but it did take guts," admitted Paul MacDonald. "We were in serious turmoil in IT for about two to three months." At times, it felt like some were expecting us to fail. Fortunately, FCC people are very good at collaborating, and we were able to achieve a positive outcome together." He also stressed the importance of having the CEO's buy-in and mandate for IT transformation. Without Ryan's support for his plans, they would have failed. "To get people to really understand process-centric governance is a long road," he said. "It takes at least 12 to 18 months. Without the CEO's unwavering commitment, this transformation wouldn't have happened." Ryan said, "If I left [Paul] to the wolves, I knew it wouldn't be good ... I've found when people feel there's only quasi-support from the top, they'll sit on the fence and wait for a project to fail. Therefore I wouldn't show a crack."

The most important element of Ryan's support was to proactively remind others what the EII and the IT organization were trying to accomplish. "A champion draws the line in the sand, restates why, and stresses the role and value of the work being done," he said. "People need continual reminders, or they'll slip back into their old ways."

The new service-oriented approach to application development was clearly communicated to the senior management team and the board of directors so they would understand *why* they were spending money on

⁶ According to Howden, "platform managers have a unique skill set. They must be analytical, good negotiators, think strategically, and be able to move from blue sky to reality. They must understand business processes and their problems, be able to identify potential issues, and be personable. The key is building a relationship with the business and then acting as a translator for the rest of IT. About 70 to 80 per cent of the job is business."

IT infrastructure and *how* the SOA approach differs from the way applications had previously been developed by FCC. This vision was also driven all the way down through the different levels in the IT organization to ensure that even developers understood what management was trying to accomplish.

In addition, the proposed new IT organization structure was validated and refined through sessions with key business stakeholders. “These sessions were important to demonstrate that we weren’t just shuffling the boxes around in IT,” Paul MacDonald said. The new structure supported streamlined IT processes. He made sure that the new IT organization actually worked the way it was supposed to. “As we got into it, there were cases where it didn’t,” he stated, “and with these, we made changes in our processes. Our first critical success factor was not about systems but about how to position our IT function to be successful.”

STEP 4: IMPLEMENTING A BUSINESS PROCESS USING SOA—THE PROOF OF CONCEPT

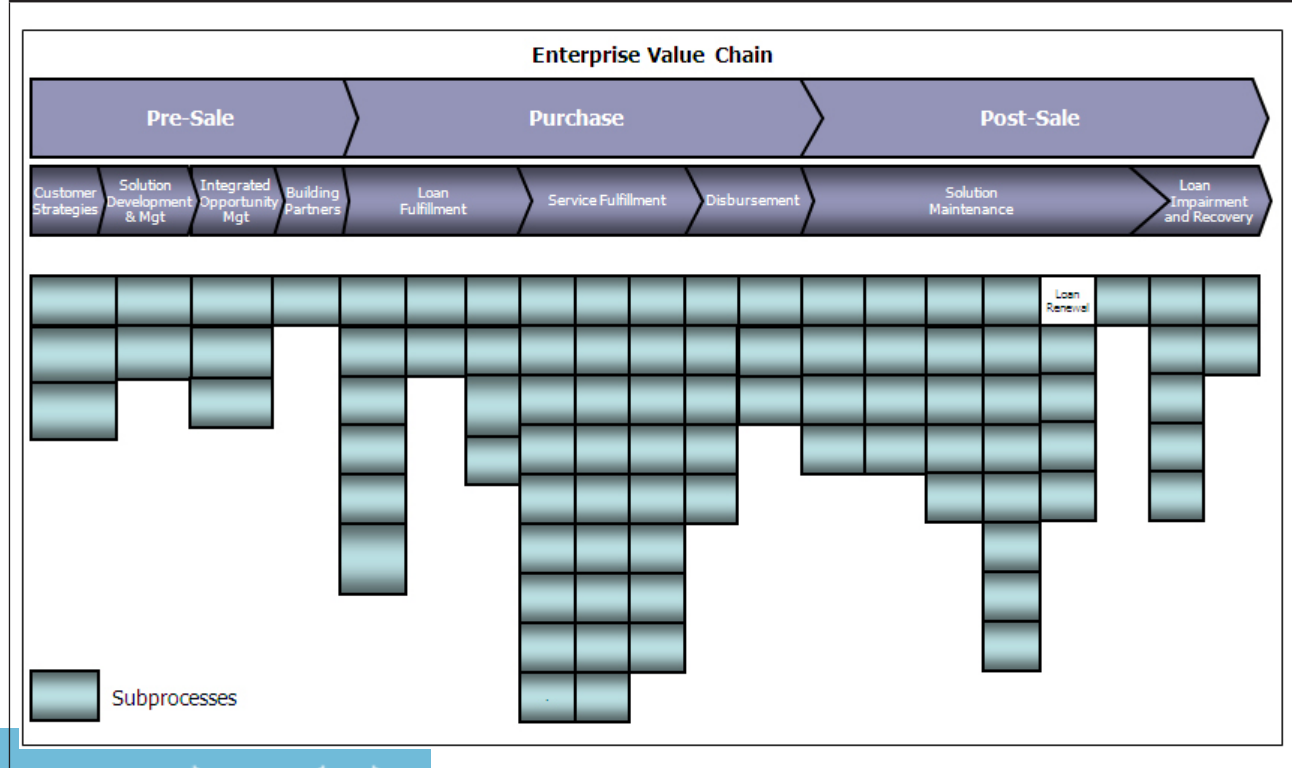
While SOA was theoretically compelling, proving it worked was critical. “We needed to provide assurances that IT knew what it was doing and how to get there,”

said Paul MacDonald. By the end of 2004, the EII group and IT organization had agreed to select a single business process—loan renewal—and use it as a proof of concept. It was chosen for two reasons. First, loan renewal was a small part of the post-sale macro-process, which the EII team had designated its first priority for redevelopment (see Figure 3).

Second, the old loan renewal process wasn’t well defined and was riddled with inconsistencies. Every account manager operated the process differently, which resulted in a different customer experience in every case. As a result, there was a substantial number of errors in this process and a long learning curve for staff. Furthermore, both customers and employees had previously complained about the process. “They weren’t maximizing revenues,” said Howden. “They were just processing paperwork, so the process wasn’t adding value.” Loan renewal was also considered an ideal test case because it relied on numerous existing systems that cut across several business units.

However, before the loan renewal process could be redeveloped using the SOA approach, FCC had to make a large investment in the foundational technologies on which the process would be built. This required an investment of about \$13 million. “There’s no magic bullet for this,” said Paul MacDonald. He

Figure 3: A High-level View of FCC’s Enterprise Value Chain Showing Where the Loan Renewal Process Fits



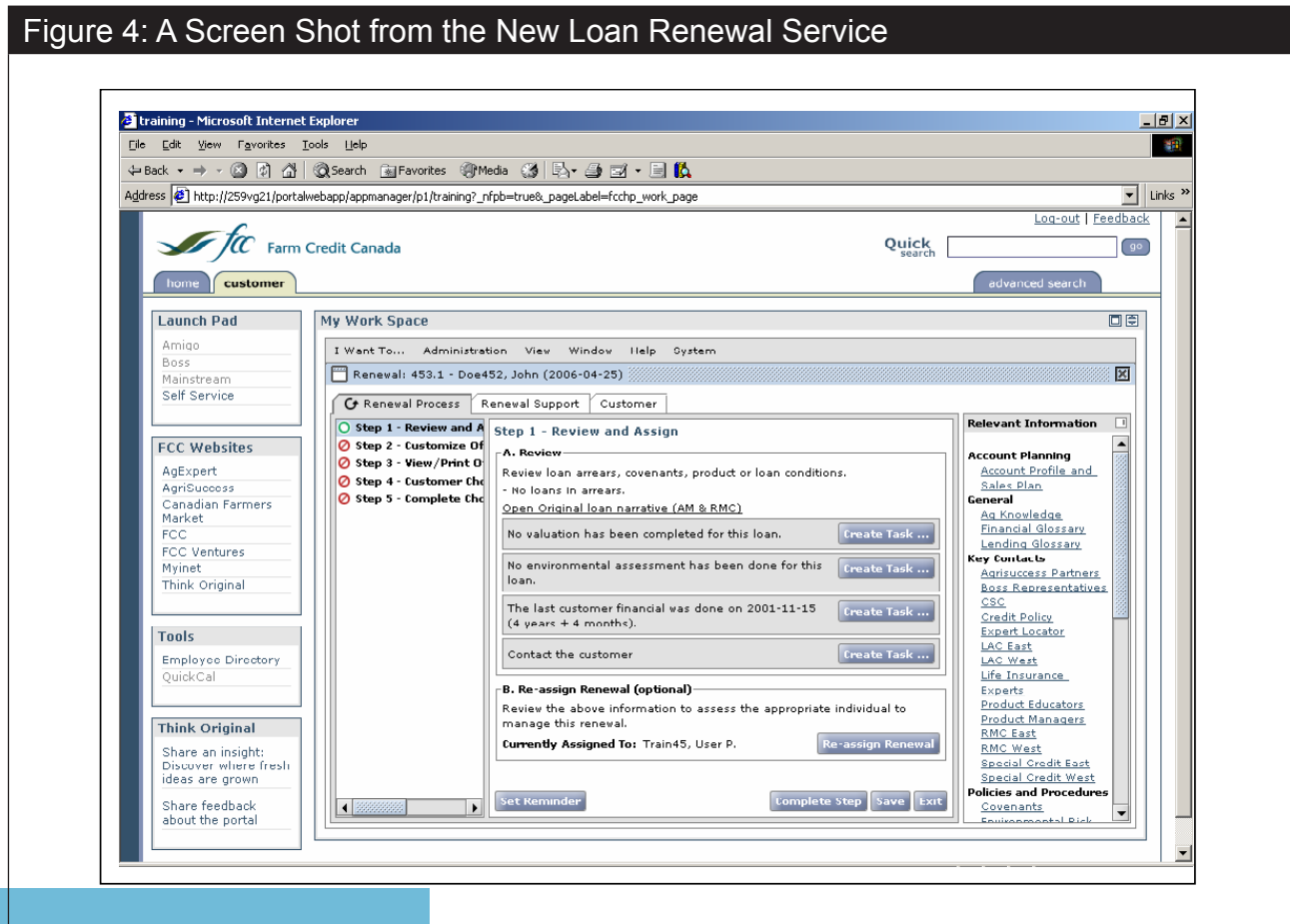
sold his plan to the CEO and the other executives by pointing to the amount of money that had been spent on technology in the past, with unsatisfactory results. He asked for one year to put in place the infrastructure that would be needed before new functionality could be effectively deployed.

Foremost among the foundational work to be done was to resolve the data integration challenge. “Our data was a mess,” admitted Paul MacDonald. “Each one of our four major systems had its own database.” Strom was put in charge of building a corporate data store that would demonstrate that integration was possible. He brought the project in on time and on budget. “This was a \$2 million project to buy assurances that we knew how to get there,” said Paul MacDonald. “It also created a new confidence in the IT function.” Next, IT staff took on the development of key services: the user portal, identity management, forms management, workflow, the user interface, and security. All of these pieces needed to be in place—or at least understood—before loan renewal could be implemented, but each of these could be reused as needed in other, future processes as well.

The new loan renewal process uses a single, individually tailored user interface that intuitively guides users through a set of simplified and streamlined business process steps (see Figure 4). It seamlessly integrates customer interactions with workflow, systems interactions, and the knowledge needed to perform each task. For example, should a customer question the need for an additional credit check, the agent can simply click on “policies and procedures” and learn why it is required and then explain this to the customer. “This has proven to be a great just-in-time learning aid for newer employees,” said Sophie MacDonald. “Interestingly, the revised process actually takes longer now, but employees are engaging customers in higher-value interactions focused on the customer relationship, rather than wasting time jumping in and out of five different systems to get the work done. Loan renewal now provides options and cross-selling opportunities, and enables sales reps to do more and different types of activities.”

“The implementation of the loan renewal service sent front-line satisfaction with IT higher than I could have dreamed,” said Paul MacDonald. When IT staff and the EII team initially demonstrated it, the users

Figure 4: A Screen Shot from the New Loan Renewal Service



gave the team a standing ovation. “We built wrappers around all our applications so the business doesn’t care which system is doing the work. This allows us to provide a lot of front-end customization,” said Howden. “Interestingly, most of the issues we faced weren’t technical but process issues.”

FCC executives were also favorably impressed. “Loan renewal was the big ‘ah-ha,’” said Stewart. “It was a super-duper quality product. It was the first output of the new IT organization, and they did what they said they would do. We love loan renewal and can see its long-term potential. It’s friendlier, and there’s no duplication of effort. It’s having a very real and positive impact on the business.”

Overall the loan renewal project addressed each of the six business architecture principles in some way. It enabled front-line agents to cross-sell several products and services and provided a consistent customer experience across channels and across the organization. It also illustrated how redesigning a process could increase agent effectiveness and provided a single user-centric interface to functionality from different systems. The process involved was clarified and made explicit for the first time, and it now integrates context-specific knowledge and automated business rules and workflows.

STEP 5: MOVING THE TRANSFORMATION FORWARD

Although the successful implementation of the loan renewal service was satisfying for all involved, it was merely another milestone in FCC’s transformation to a process-centric organization. While “the loan renewal guys really ‘get it in spades,’ the IT function is still farther ahead in its thinking in this area than the rest of the corporation,” said Howden. In spite of Ryan’s support and all of the work Paul MacDonald, Sophie MacDonald, and their teams put into this initiative over a three-year period, it was still taking time for people to understand process management and horizontal governance. All three continually re-communicated the goals of this transformation to the business.

Sophie MacDonald has now built two teams—customer experience and project delivery—to do process redesign, change management, and training, and she herself has been very hands-on throughout. Her group is a cross-divisional reflection of the whole corporation, and it brings an enterprise view to process redesign and the delivery of a satisfying customer

experience. While loan renewal was a priority, her group also began to detail the redesign of the purchase process. And more process owners were put in place.

Waiting for the IT function to implement more services can be frustrating for the business, Sophie acknowledges. “It’s quicker to redesign processes than to implement the technology to support them. It’s a challenge to get people to believe in this because it takes time to implement. And we still need a strong business case for any IT improvements.”

In the meantime, Sophie and her team have created a process for continuously improving business processes. “We don’t want people to wait for the ‘big bang,’” she said, “when there are many near-term process improvements that can be put in place.” The corporation now has a Web site where people can make improvement suggestions. The EII team monitors this site and pushes to continually make whatever changes it can.

On the IT side, much of Paul MacDonald’s work, once loan renewal was successfully launched, has been spent working through the governance issues of managing in a process-driven organization. MacDonald identified two challenges.

Challenge 1: Distinguishing Between Services and Applications

Although the IT function has been reorganized to support a process-centric business, the fact remains that the corporation is still running many individual applications that are more aligned with functions than processes. FCC’s current strategy is to minimize maintenance of existing applications while they are being evaluated as potential services for the entire corporation. At the same time, packaged software is being wrapped up as services. As these applications are repurposed, however, another problem remains. As explained by Howden, “For most users, the services provided through the portal will be adequate, but we still need to give our highly knowledgeable ‘super users’ direct access to individual systems.”

Challenge 2: Prioritizing the IT Technology Roadmap

While most basic IT services are now in place, and SOA concepts have been proven, setting priorities for the pieces of the IT roadmap is still a major challenge. Paul MacDonald uses a renovation analogy to illustrate this point. “Initially, you have to rip things out to the bare walls and joists before you can start to rebuild.

We've done that, and we've done the plumbing and the wiring. Now, everything we do is a step forward." The Business Platform Solutions Group is working closely with the EII team to determine which processes will be worked on next. "We are trying to focus on the really important stuff," said Howden. "The difficulty is that the business needs to run while change takes place. This is a delicate balancing act for both the business and IT. While we in IT naturally want to focus on transformation, many in the business must manage with existing processes and systems. Respect for both is critical to current and future effectiveness. But everyone's now thinking about processes and issues and what we're trying to accomplish. This is a huge shift in thinking from the past."

STEP 6: DELIVERING VALUE— THE BENEFITS

Transforming both the IT function and technology at FCC has been challenging, admits Paul MacDonald, but it has also been very rewarding. He articulated six main benefits that have been realized already by FCC—some of them unexpected.

Benefit 1: Improved and More Effective Communication Between the Business and IT

"When I first got to the IT function, I realized that the roles of IT and business were confused," said Paul MacDonald. "In the past, the business would come to IT and say, 'I need a new system.' That's like going to the doctor and saying, 'I have an inner ear infection and need 400 ml of Amoxicillin for two weeks,' instead of 'my ear hurts, and I'm dizzy.'" Most business people had been trained by IT staff to think in terms of existing systems. Today at FCC, business managers focus on processes while IT managers focus on enabling them with technology—and these clearly articulated roles promote effective and productive communication. "We've cleared up accountability," agreed Stewart. "This makes it easier to know who's responsible for what. In the past, we never had a handle on this. Now it's easier. People now know what their job is, and everyone wants to do their job well, and we have the tools to do it with."

Benefit 2: Streamlined Business Processes

Under the leadership of the EII group, business experts are redesigning business processes as they *should* be, unencumbered by the limitations of

current systems. Paul MacDonald has found that if system compromises are introduced too early, the discussion gets sidetracked. "We now do our best to shield users from these compromises. When we must, we will turn the discussion into a business decision by presenting the cost involved with certain options." When users push back, "I always stress that we are not taking anything away from the business but *giving* them the opportunity to focus on business improvement." Now, the IT organization is truly seen as a thought leader helping the business solve its problems with technology. "We really own this piece. Our competencies are acknowledged, and we are empowered to use our skills to truly enable the business," said Strom.

Benefit 3: Improved IT Staff Engagement

FCC's IT function is now seen as being indispensable. IT staff positions have been filled with highly competent people, and existing staff members are flourishing. IT employee engagement has risen to 79 per cent and is climbing. "Even before we saw the first application, you could tell something was different in the department," said Stewart. "People were happy to be doing their jobs, and their attitude toward the business was much more positive." Morale has hit an all-time high and user satisfaction with IT is "higher than it's ever been," according to Paul MacDonald.

Benefit 4: Reusable Assets

All of the horizontal capabilities developed for the loan renewal process are documented and governed by FCC's Enterprise Architecture Committee. The portal and Rich Internet Application (RIA) frameworks, forms infrastructure, and data integration services developed for loan renewal have all been reused in later projects. FCC's Technical Council (reporting to the Enterprise Architecture Committee) ensures that assets are reused appropriately.

Benefit 5: Successful Proof of Concept Has Achieved Support for the Long-term Vision ...

Implementing the loan renewal process achieved multiple objectives. First, the EII group and the IT organization jointly demonstrated the effectiveness of the process-driven concept within the context of an actual customer-facing process. This was critical to achieving stakeholder support for FCC's long-term vision. Second, concepts such as "content at point of need," context-sensitive portal information and the process portal were brought to life through

deployment. Third, the process demonstrated that an enterprise approach to the governance of both technology and processes could deliver results at FCC. Fourth, the new process automated workflow and integrated knowledge as needed to deliver more consistent loan renewal results. Fifth, the process demonstrated the principles of the new business architecture in practice.

Benefit 6: ... and Proved the Technical Viability of SOA

From a technology perspective, many of the horizontal capabilities employed to enable the loan renewal process had never been used before at FCC. These capabilities included a portal, an RIA framework, a new forms engine, FCC's first SOA-based business services, and a data-integration layer to eliminate one-to-one integration between legacy systems. "Before loan renewal," said Paul MacDonald, "these were all only great ideas that existed in a PowerPoint slide."

POSTSCRIPT

As of late 2007, FCC's transformation was continuing. The purchase and post-sale processes had been conceptually redesigned and a technical roadmap for FCC's infrastructure and applications had been created. Paul MacDonald and Sophie MacDonald had presented a business case to the Executive Committee to justify the investment required to realize FCC's business and technical architecture vision. They presented two options, and the committee approved the launch of the Business Process and Technology Transformation Program to renovate *both* the IT infrastructure *and* the business subprocesses involved in the purchase and post-sale processes. This program is being led by Sophie MacDonald, with Greg Stewart and Paul MacDonald as executive sponsors. The redesign of five major purchase and post-sale processes is now underway, taking the corporation's renewal through to the end of 2011. "We believe this program will give us the agility required to evolve with ever-changing customer needs and develop and implement new products and programs in a timely manner to stay ahead of our competition," said Sophie MacDonald.

FINAL WORD

"There are times," Paul MacDonald said, "When CIOs need the courage to force changes on the rest of the business and to resist criticism while foundational elements are being implemented, and no results are

seen. The transition phase *is* the ball game. To some degree, the transition was forced on the organization, but it was done in conjunction with a great deal of communication." He stressed that it is important to review and refine the new model continually. "There were some things that just didn't work. We are still constantly learning about process management and horizontal governance." The struggle continues.

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