



Business Process Reengineering (BPR) (IBM Credit Approval)



IBM Credit Corporation, a wholly owned subsidiary of IBM, which, if it were independent, would rank among the *Fortune* 100 service companies. IBM Credit is in the business of financing the computers, software, and services that the IBM Corporation sells. It is a business of which IBM is fond, since financing customers' purchases is an extremely profitable business.

In its early years, IBM Credit's operation was positively Dickensian. When an IBM field salesperson called in with a request for financing, he or she reached one of fourteen people sitting around a conference room table in Old Greenwich, Connecticut. The person taking the call logged the request for a deal on a piece of paper. That was step one.

In step two, someone carted that piece of paper upstairs to the credit department, where a specialist entered the information into a computer system and checked the potential borrower's credit-worthiness. The specialist wrote the results of the credit check on the piece of paper and dispatched it to the next link in the chain, which was the business practices department.

The business practices department, step three, was in charge of modifying the standard loan covenant in response to customer request. Business practices had its own computer system. When done, a person in that department would attach the special terms to the request form.

Next, the request went to a pricer, step four, who keyed the data into a personal computer spreadsheet to determine the appropriate interest rate to charge the customer. The pricer wrote the rate on a piece of paper, which, with the other papers, was delivered to a clerical group, step five.

There, an administrator turned all this information into a quote letter that could be delivered to the field sales representative by Federal Express.

The entire process consumed six days on average, although it sometimes took as long as two weeks. From the sales reps' point of view, this turnaround was too long, since it gave the customer six days to find another source of financing, to be seduced by another computer vendor, or simply to call the whole deal off. So the rep would call-and call and call-to ask, "Where is my deal, and when are you going to get it out?" Naturally, no one had a clue, since the request was lost somewhere in the chain.

In their efforts to improve this process, IBM Credit tried several fixes. They decided, for instance, to install a control desk, so they could answer the rep's questions about the status of the deal. That is, instead of each department forwarding the credit request to the next step in the chain, it would return it to the control desk where the calls were originally taken. There, an administrator logged the completion of each step before sending the paper out again. This fix did indeed solve one problem: The control desk knew the location of each request in the labyrinth and could give the rep the information he or she wanted. Unfortunately, this information was purchased at the cost of adding more time to the turnaround.

Eventually, two senior managers at IBM Credit had a brainstorm. They took a financing request and walked it themselves through all five steps, asking personnel in each office to put aside whatever they were doing and to process this request as they normally would, only without the delay of having it sit in a pile on someone's desk. They learned from their experiments that performing the actual work took in total only *ninety minutes*—one and one half hours. The remainder—now more than seven days on the average—was consumed by handing the form off from one department to the next. Management had begun to look at the heart of the issue, which was the overall credit issuance process. Indeed, if by the wave of some magic wand the company were able to double the personal productivity of each individual in the organization, total turnaround time would have been reduced by only forty-five minutes. The problem did not lie in the tasks and the people performing them, but in the structure of the process itself. In other words, it was the process that had to change, not the individual steps.

In the end, IBM Credit replaced its specialists—the credit checkers, pricers, and so on—with generalists. Now, instead of sending an application from office to office, one person called a deal structurer processes the entire application from beginning to end: No handoffs.

How could one generalist replace four specialists? The old process design was, in fact, founded on a deeply held (but deeply hidden) assumption: that every bid request was unique and difficult to process, thereby requiring the intervention of four highly trained specialists. In fact, this assumption was false; most requests were simple and straightforward. The old process had been overdesigned to handle the most difficult applications that management could imagine. When IBM Credit's senior managers closely examined the work the specialists did, they found that most of it was little more than clerical: finding a credit rating in a database, plugging numbers into a standard model, pulling boilerplate clauses from a file. These tasks fall well within the capability of a single individual when he or she is supported by an easy-to-use computer system that provides access to all the data and tools the specialists would use.

IBM Credit also developed a new, sophisticated computer system to support the deal structurers. In most situations, the system provides the deal structurer with the guidance needed to proceed. In really tough situations, he or she can get help from a small pool of real specialists—experts in credit checking, pricing, and so forth. Even here handoffs have disappeared because the deal structurer and the specialists he or she calls in work together as a team.

The performance improvement achieved by the redesign is extraordinary. IBM Credit slashed its seven-day turnaround to four *hours*. It did so *without* an increase in head count—in fact, it has achieved a small head-count reduction. At the same time, the number of deals that it handles has increased a hundredfold. Not 100 percent, but *one hundred times*.

What IBM Credit accomplished—a 90-percent reduction in cycle time and a hundredfold improvement in productivity—easily meets our definition of reengineering. The company achieved a *dramatic* performance breakthrough by making a *radical* change to the *process* as a whole. IBM Credit did not ask, "How do we improve the calculation of a financing quote? How do we enhance credit checking?" It asked instead, "How do we improve the credit issuance process?" Furthermore, in making its radical change, IBM Credit shattered the assumption that it needed specialists to perform specialized steps.