

# The Process Redesign Imperative

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## Executive Summary

The following discussion highlights the dramatic improvements in business performance that are possible when an organization moves to collaborative process models. These models have already enabled organizations in a number of different industries to reduce operating costs by several orders of magnitude, while improving operational quality and customer satisfaction at the same time. Senior executives must take aggressive action *now* to achieve these new levels of performance and productivity.

## Introduction

You probably have no idea how inefficient your current processes are. Attacking the fragmentation that is built in to almost every existing organization, some businesses have reduced their transaction costs by as much as 80% or more, while at the same time providing their customers with significantly higher value. Collaborative operating models, supported by Internet technologies, have clearly raised the bar on process speed and productivity by several orders of magnitude.

However, most applications of IT have been (and continue to be) focused on *automating* existing work – using technology to carry out essentially the same processes faster, more reliably and, sometimes, more cheaply. But we learned in the early 1990's that a far more effective way to improve business performance is to *redesign* the way work is done – to start over, and to rethink almost literally everything about how the organization achieves its goals.

Collaborative process models – processes that cross functional and even organizational boundaries to link operations and eliminate redundancy – enable people in different business units and different locations to work as if they were right next to each other. On the surface, this concept sounds relatively simple and straightforward; but in practice collaborative process designs represent dramatic change in organizational practices, and they produce enormous improvements in cost, speed, and quality.

But these benefits are hard to come by. Even post-merger organizations that made public commitments to achieve major synergies from combining operations have rarely accomplished anywhere near what is theoretically possible. And “normal” organizations are typically riddled with fragmented, redundant processes that are the legacy of earlier generations of technology or obsolescent business models.

The problem is that process redesign means dramatic change, and organizational change is never easy, or inexpensive. The only way to convince senior business executives that the journey is worthwhile is to make certain they understand the economic and operational gains the new process models will produce. Fortunately, in the case of collaborative processes these gains clearly exceed the cost (and the pain) of the journey.

The primary purpose of this note is to describe several specific examples of performance and productivity improvement achieved by organizations that have adopted collaborative process models based on web technologies.

First, however, it is worth reviewing the lessons about process redesign that came out of organizational experiences in the 1990's. Early in the decade executives became infatuated with the concept of Business Process Reengineering, or BPR.

BPR initiatives helped many corporations produce dramatic improvements in customer service and quality, productivity, and profitability. But BPR also suffered from becoming too popular too quickly, and it unfortunately evolved into a management euphemism for downsizing, cost-cutting, and relentless productivity pressure. Too many executives were looking for a "quick fix," and far too many companies tried to get the benefits of BPR without committing to the hard process redesign work or the even-harder organizational change efforts so critical to achieving lasting improvement.

Yet several important, positive lessons emerged from experiences with this radical approach to performance improvement:

- **Dramatic redesign *can* produce dramatic outcomes.** There is plenty of evidence that BPR *does* work. The experiences of Ford Motor Company, IBM, Hallmark, and many others demonstrate, that when the core principles of BPR are followed and executed, the improvements in process performance can be extraordinary.
- **Dramatic performance improvement requires dramatic leadership.** These extraordinary gains have been achieved only with strong, committed, and persistent executive sponsorship. Bob Stark, the President at Hallmark, was very personally involved in his company's reengineering journey. We know of no genuine reengineering initiatives that succeeded without active sponsorship from the very top of the enterprise.
- **IT is central to process redesign.** Every major business process transformation has incorporated the application of new technologies, or at least full use of IT that was already available. In fact, one core principle of BPR was to design work with the capabilities of computers and telecommunications in mind – rather than using technology to replicate process designs dating back to pencil and paper days.
- **Process redesign efforts change the nature of work.** Redesigning business processes means transforming work flows, task assignments, and skill requirements. Even though overall process designs may be streamlined, the work of individuals often requires more skill, judgment, and initiative. Thus, successful implementations must involve those who will be directly affected, and pay explicit attention to reskilling and other change management issues.
- **The nature of management itself also changes.** When processes are redesigned using modern principles and technologies, the role of management typically shifts from commanding, controlling, and monitoring to providing resources, coaching, and enabling process improvement. When work flows generate information about their own performance as a natural byproduct, workers receive feedback as a matter of course, and managers become problem-solvers instead of police.

These principles are well worth remembering today as companies launch new initiatives aimed at taking advantage of the capabilities of the Internet and the worldwide web. Designing and

implementing collaborative process models requires rethinking virtually everything about how work gets done.

### **The Rise of Collaborative Process Models**

We define a *business process* as “an organized group of related activities that together create an outcome of value.” This definition offers a broad, holistic view of work:

- Processes focus attention on *outcomes* – on the value that is created for the customer of the process (whether that customer is internal or external to the corporation).
- Processes require deliberate *design* and intention, so that the outcomes are repeatable and produce important value.
- Processes *link* related activities – otherwise there is not a process but a set of activities that may have a common customer but are not interdependent or coordinated.

A *collaborative process* then is a business process that crosses one or more organizational boundaries. Today those collaborative processes are almost always embedded within, or supported by, Internet and/or wireless technologies. These are the technologies behind the new operating models, and their new capabilities both enable and drive the next generation of process capability:

- *Ubiquity*. The Internet provides global reach, independent of location and even of wired access.
- *Low cost*. Connectivity, access to information, transaction processing, and adding nodes to the network can all be accomplished at unprecedented low cost.
- *Multi-dimensional presentation*. With integrated text, data, graphics, sound, and video, Internet applications can be significantly more user-friendly and complete than earlier generations of information systems.
- *Interactivity*. The Web is highly interactive, enabling two-way real-time communication.
- *Standard interfaces and protocols*. These standards enable platform independence and greatly simplifying interconnectability, user training, and other aspects of information management and use.
- *Mass customization*. Every user can be provided with individualized formats, data, and functionality.
- *Ease of use and access*. Anyone with a web browser – and that means almost anyone in business today – can access the process application. And they generally already know the basics of how to use the Internet (point and click, the page metaphor, URL’s, hypertext, and so on). The need for specialized training is almost nonexistent.

In short, the Internet is the most powerful force in computing since the PC. Internet technologies enable the capture, movement, display, and processing of information in real-time on a global basis, at very low incremental cost, and with virtually infinite scalability. Coupled with fast-emerging wireless technologies, this technology platform makes anytime/anyplace/anyway-the-customer-wants business not only possible, but eventually necessary.

## Collaborative Processes Change the Fundamental Economics of Work

The differences in cost and performance between traditional business processes and collaborative processes is nothing short of astounding. However, early experiences from many companies make it clear that these cost reductions and quality improvements are very real, and very achievable. Just consider these examples:

- Administrative handling expenses (placing orders, receiving and storing, paying invoices, etc.). typically represent 40% - 60% of the cost of procuring raw materials and supplies. In some cases the handling cost of raw materials is as much as *4 to 6 times* the cost of the materials themselves. It generally costs about \$25 to produce a paper invoice, while electronic ones cost less than *five cents*.
- Cisco Systems has implemented three broad web-based collaborative systems. The *Cisco Employee Connection* (CEC) has cut a full week out of the time-to-market cycle by simplifying and short-circuiting internal communication processes; CEC is saving the company over \$58 million annually in administrative costs and has had a major impact on staff productivity as well as management control over travel expenses, payroll, staffing, and other people-related processes.

Cisco's *Manufacturing Connection Online* (MCO) has cut the cost of a purchase order from \$125 to \$5. The time to compile product prototype information for a product release has gone from one day to 15 minutes.

Similarly, *Customer Connection Online* (CCO) is generating approximately 1.5 million hits per month and producing over \$20 million in revenue per day. Error rates have dropped from 20% of orders placed to less than 0.2%. And Cisco claims cost savings and cost avoidance of over \$200 million a year. Not only that, but replacing customer service representatives with self-service access to technical information, order status reports, and other critical information has actually *increased* customer satisfaction.

- When Dennis Jones was CIO of Federal Express, he stated publicly that the cost to FedEx of handling a customer inquiry over the telephone was approximately \$10. Over the web, it cost FedEx less than *10 cents*. That is a cost reduction of *99%*.
- General Electric reported administrative cost and procurement savings of over \$1.4 billion in 2000, stemming largely from conducting over \$14 billion of online supplier auctions.
- Moen Faucet shortened its new product development cycle from 17-plus weeks to 10-13 weeks by using a web-based system to reduce communication time between Moen and its prime suppliers on new design concepts. The use of the web and collaborative design tools enabled Moen to review, revise, and confirm new product designs in a three-day cycle, versus over two weeks per iteration in the old model. The total investment in the new processes cost only \$1.5 million, and the entire effort took less than 8 months to design and implement.
- Over 91% of Union Finosa's customers pay their bills electronically (Union Finosa is a Spanish electrical utility). The Accounts Receivable payment cycle has been shortened

from 35 days to 8 days, significantly reducing working capital requirements and freeing up cash.

- It has been estimated that there is over \$60 billion of “excess” inventory in the automobile industry, including all major manufacturers, their suppliers, and the dealer networks. One industry expert has estimated that a fully electronic supply chain system would cut manufacturers’ costs by over \$1000 per car. Professor Lester Thurow of MIT believes that if automobile manufacturers could completely bypass dealers and sell online only, they would save an additional \$1500 per car (while no one expects that to happen, it does make crystal clear the cost to consumers of buying cars through traditional dealers).
- Moving to online banking can cut average transaction costs by 95% or more. One national bank found that moving to a web platform and developing an online banking offering has reduced the cost of processing a mortgage loan application from \$78 (using a Loan Officer) to *under 13 cents* online.
- The Herman Miller office furniture company formed a subsidiary focused exclusively on producing and delivering furniture in a very short time frame. Dubbed “SQA” (Simple, Quick, Affordable), the business unit was designed from the ground up to accept online orders, produce to spec, and deliver furniture in less than 4 weeks (versus an industry average in excess of 12 weeks). SQA’s inventory turns are above 40 per year, versus Herman Miller’s corporate average of about 27. The order entry process is completed by a salesman using a laptop at the customer site. The SQA business processes and operating model are now being re-assimilated into the parent company, which is currently experiencing revenue growth three times the industry average.

There are many more stories like these. The message is a simple one: *you cannot afford to ignore either the impact or the potential of collaborative processes*. The opportunity for performance and productivity improvement is simply enormous. And remember – if *you* don’t move towards collaborative process models, someone else will – either a direct competitor, a supplier, or someone in a related business. And if someone else does it first they are likely to take your customers right out from under you. Ultimately, the business case for moving to collaborative processes is not just cost reduction and quality improvement – it is, quite literally, survival. When this kind of performance and productivity is so clearly possible, both your customers and your shareholders have a perfect right to ask why you are failing to do something about it.