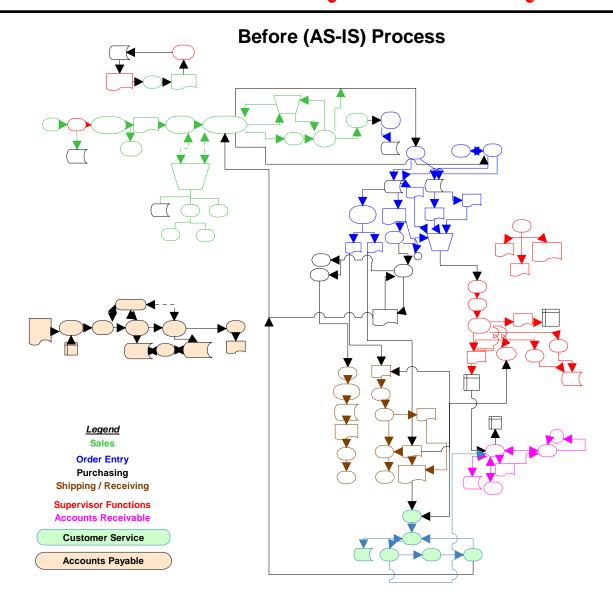# High Impact Projects
A Newsletter About Getting Important Things Done.

How to Reduce Order Processing Time from 5 Days to 1½ Days

Before (AS-IS) Process

Legend
Sales
Order Entry
Purchasing
Shipping / Receiving
Supervisor Functions
Accounts Receivable
Customer Service
Accounts Payable

Suppose that you are a small, profitable specialty retailer, but, despite your best efforts, you can not get your business to grow. How would you approach the problem? Following is a case where

a client and I used Process Thinking to work through the symptoms, understand the root issues and develop substantial improvements.

In this retailer's industry, it takes an average of five days to process an order. The client and I believed that the greatest opportunity for competitive advantage was to reduce the order processing time, which would cut costs and improve service. In addition, the client is in a fragmented industry with no dominant player. It was our belief that a radical reduction in order processing time could be the key factor in allowing my client to become a dominant player in this fragmented industry. Following are some of the highlights of how we used Process Thinking.

Staple Yourself to an Order: The first thing we did was to have me, as the consultant, imagine that I was an order as it flowed through the entire cycle of business. We produced a wall-size flowchart showing the Sales, Order Processing, Purchasing, Receiving, Shipping and Customer Service Processes. The two charts accompanying this case show the "Before (AS-IS)" state when we started and the "After (TO-BE)" state of the redesigned processes.

Before Versus After: When you compare the two drawings you will notice that there are some 10% fewer steps in the After Process. You will also note some dark lines in the After Process that signify a primary order path. Our system design permitted approximately 60% of all orders to follow this simplified path, allowing management to reserve its attention for the exceptional and risky orders.

You will also notice that the After process has a smoother, more self-evident flow with fewer loop-backs. This was a great aid in communicating to the workers how the new processes should work.

Identify The Sales Scenarios: The client and I worked through about 30 different sample orders. We were able to identify 9 different "Sales Scenarios" that would accommodate nearly all the orders. We knew a new computer system or substantial enhancements to the existing system would be required, and our objective was to identify all the different sales scenarios that the computer system would have to accommodate.

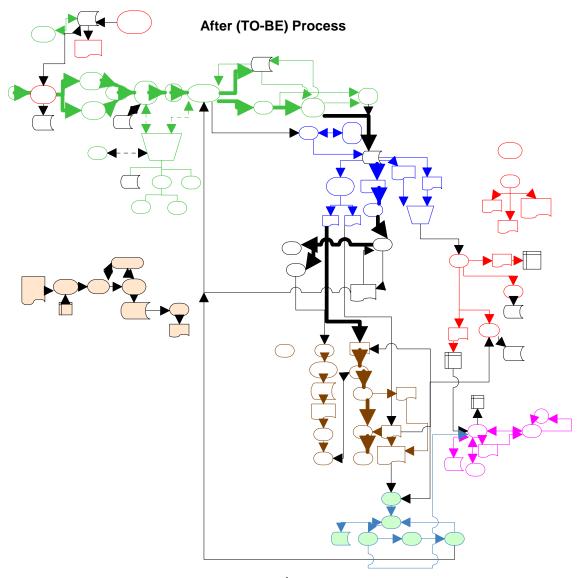The client and I sketched out the computer screens necessary to accommodate each individual sales scenario, and we walked each scenario through the screens multiple times to identify the ramifications. These screens ultimately became the requirements specification for the new computer system. People familiar with Data Processing concepts will recognize this approach as the Screen Flow / Use Case approach.

Quick Hit Benefits: As we completed the "AS-IS" Process drawing, bottlenecks became evident. The client was able to take advantage of two important discoveries immediately, rather than having to wait for a new system to be implemented. The drawing showed that a key supervisor was a bottleneck because every single order had to be processed through her. The client realized how risky it was to be dependant on a single person and gave her a significant raise the same day we discovered the bottleneck. The client also took steps to spread the workload so that this one supervisor was not so overtaxed.

We also discovered that every sales order sat on the sales manager's desk both coming into and leaving the Sales Department. We established a gross profit range for a "routine" order (between 15% and 25%.) Orders within this range were processed without even involving the sales manager. It sped up the process and freed his time for more important work.

Cost Per Order: We did some quick analysis and discovered that it cost approximately $55 to process an order. This was one the most surprising findings to the client and she took immediate action to direct her sales staff away from any order showing less than $55 in gross profit. This also altered her view of the business she was in. It was clear that small customers placing small orders were actually a net loss, and she redirected the firm's strategy to major accounts.

Drop Ship or Inventory? Another result of process thinking was that the client began challenging the long held assumption that it was cheaper to buy in bulk. She began to understand what it really cost to bring an item into inventory and all of the potential mistakes that could cause that inventory to lose its value. She concluded that more that half of her orders could be better filled by drop-shipments direct from suppliers to her customers

After (TO-BE) Process

Organization Issues: As we continued to understand the bottlenecks, we realized that a formal accounting manager position was necessary. We also realized that there was significant overlap between the order processing function and the customer service function. This presented an opportunity to streamline work and reduce the headcount necessary to accomplish various functions. We knew that we would be deploying more technology to the sales people and higher caliber sales people would be needed. We also would be giving the sales people the means to sell more with less effort, and changes to the sales compensation system would be needed.

The client was also having problems with turnover among all employees. We did some analysis into the cost of turnover and concluded that it would be less expensive to pay the employees slightly more and to invest in systems that enabled them to do their jobs better.

Remove Duplicate Computer System: The client was using packaged software which did its functions reasonably well. It could not, however, accommodate the creative arrangements the client wanted to use to improve customer service. As a result, the client purchased a second system and was double entering every order. While the customer service objective was met, and this service was one of the reasons the client was quite profitable, a substantial price was paid. Because of the duplicate systems, the client never really had reliable information on Accounts Receivable or Accounts Payable (about 80% of their business was on credit).

They could not fully reconcile the discrepancies between the two systems. As a result, they paid the vendors that screamed the loudest and had the most compelling evidence. They found themselves at the mercy of their larger customers when it came to getting paid. The lesson learned is to "count the cost." There may be compelling reasons to enter critical data into duplicate systems, but the full ramifications and potential cost need to be completely thought through before such a decision is made.

Understanding the Cost of Errors: We found that a single error would often remove the profitability from an entire order. We knew it would cost money to implement new systems, upgrade the sales staff and invest in training. Reducing the cost of errors was one of the prime targets for recouping that investment.

Make Sales People Responsible for Accurate Order Entry: Looking at the cost / benefit involved, we concluded that we should design a system modification so that sales people could enter orders while they were talking to customers. This supports a long held data processing maxim of moving data entry as close as possible to the point of origin.

Serve Customer First, Then Attend to Management Controls: Peter Drucker notes that "Management controls are the scar tissue of past mistakes." This was certainly the case for my client. As a result of past mistakes, nearly every order went through four management checkpoints before being processed. In our new system design we used the gross margin rules described above to classify approximately 60% of the orders as "routine" enough to be processed without management intervention. Management reports would be printed daily showing that day's order activity and highlighting any exceptions. Orders could flow unimpeded, but the exception reports would keep management informed. Some mistakes on routine orders would be made, but the substantial improvement in customer service was worth some risk. A key is that management has to trust the reports and pay attention to them.

Results: We were able to design a system that we believed would reduce the standard order processing time from 5 days to 1 ½ days. We were able to eliminate approximately 10% of the steps in the overall company wide processes, which would result in better service to customers, reduced labor costs and reduced error costs. We saw the opportunity for a competitive advantage sufficient to allow my client to become a dominant player in a fragmented industry.

I should make you aware that the client decided that the solution was too expensive and, as far as I know, has not implemented the new system design. While we cannot point to the actual results from an implementation, this case is useful in understanding how Process Thinking can be applied to complex problems and yield substantial improvements. Hopefully, the thought process will be useful to you if you should ever face a similar situation..

Need further information?

Call us if you have questions or would like more information. This case is written as a teaching tool and is not intended to fully describe exact details or dialog.

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