

# SIMPLIFIED

## PROCESS IMPROVEMENT

The art of process improvement  
decoded into **5** simple steps



Eduardo Pérez

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**EDUARDO PEREZ**

Logical Language Books



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## **CHAPTER 1**

### **CASE STUDY 1: *AUTOMATING THE MOST COMMON TASKS FOR EFFICIENCY GAINS***

This is a case from when I worked as a process engineer with Hotel Super Experts Corp. (HSEC). There were over 1,000 employees in the West Coast Call Center division where I was serving. For the most part, the processes were relatively consistent and functioning well. The operation was a well-oiled machine for a company that had been seeing continuous growth and was beginning to take a strategic leading position in a challenging market. Sales were increasing, the business was profitable, the call center was delivering great customer experience numbers, and the company had a great image in the travel industry.

I thought to myself, “I have essentially just been given a blank slate to work with. There are various types of

projects: 1) In some, you already have a problem identified and you are told to address it; 2) in some, you are told there is an issue in a specific area we want you to focus on but don't know the specific problem; 3) in some, you are given an area with a specific motivation, as in, "We want you to help us with quality," etc.; and 4) in some (as in this case), you are told we don't know what to fix and we don't know the area for you to focus on." This was not a case where the business lacked humility and believed everything was perfect. Rather, it embraced a continuous improvement spirit and knew that even when things appear to be going swimmingly, there is always an opportunity to improve.

### **The Approach**

Given that this was the type of effort where I actually had time to work with and was given liberty on what to focus on, I determined that, provided the West Coast Call Center had 1,000 employees, efficiency would be a good place to focus on, since small tweaks can lead to major efficiency gains. In addition, there were no existing data to work with, so I saw this as a great opportunity to meet with people on the floor and conduct an extensive time study across various sites with people at different skill levels and in different types of roles. I was going to gather my own data, however, literally the old-fashioned way: I was going to sit side-by-side with employees in the call center with a stopwatch and track how long each specific task took. My plan was to avoid making this so obvious that employees would know that I was measuring them, which could influence their behavior, in a phenomenon known as the *Hawthorne Effect*. Therefore, to track the employees' times, I utilized a stopwatch website link hidden behind a spreadsheet I was using.

At this point, I had no data, minimal knowledge of the process itself, and no specific problem to fix. In most



cases, this would be scary to a process engineer. However, I was looking forward to meeting new people, becoming extremely knowledgeable about the process, and traveling to our other site.

*[At the same time, I trusted my ability and was confident the disciplined approach I was taking would reveal something valuable.]*

As simple as this approach is, it is still to this day one of my favorite approaches if you have adequate time to work with. You are guaranteed to learn something valuable to share with business leaders, and if you do it right, you will definitely identify a problem to solve.

When I served in this capacity with Hotel Super Experts Corp., I reported to the process engineering group, though I was assigned to and supported the West Coast Call Center. I put my proposed approach together and stated that I would need about two weeks to gather all the information I needed. In addition, I would also need a junior process engineer to come with me to help me in side-by-sides, and there would be some travel required. At this phase, it was simply data collection. I received approval from my management and my business partners. I also requested key contacts, which consisted of the business leaders of the Sacramento and Reno sites where I would be performing my time studies. I then contacted them and informed them of what I would be doing and that my efforts would have minimal impact on few employees in their call centers. We would simply sit with them and ask them about their process steps and watch (and time) them doing their work. The business leadership was aware of my motives and was very supportive.

### **The Data Collection**

When you have large operations with hundreds of people doing the same thing in a repetitive manner, you can assume a few things:

- a) If a few people are making a mistake or performing a task incorrectly, then there is a high chance the rest are doing the same thing.
- b) On a similar note, people find ways to work around standard procedures if they find their own ways to do things more efficiently (than the standard procedure), and word spreads fast, leading a majority also to perform the task this special way.
- c) A small tweak has a large ripple effect, which can be positive or negative.
- d) There is likely a large gap between top performers and bottom performers; based on my observation, I tend to attribute that gap more to hard work and diligence than to differences in the steps performed.

I gave the instruction to my assisting process engineer that we would be spending the first day at the Reno site simply identifying the process steps (and in sequence) performed by people of similar roles. We both ended up sitting with about 10 people that day and observing each perform about 10 cycles of the same thing. That evening, we reviewed our notes and developed a basic flow of steps that the call center employees performed for each phone call they completed. There were some steps they performed prior to the call, some steps during the call, and then, depending on the outcome of the call, some steps were performed after the call. This cycle was repeated over and over. I then developed a very basic spreadsheet with the 15 or so steps on the left side, then to the right of that some spaces to document how long each step took, and then a way to identify varying paths. I provided my assisting process engineer with

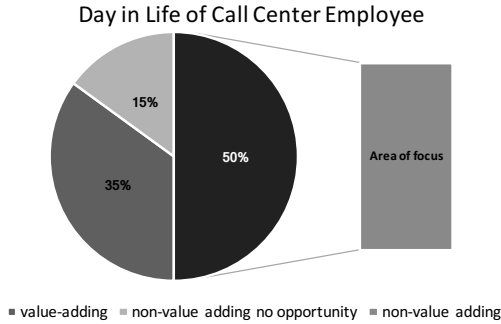
instructions on how to sit with employees without interfering with their work, but with the liberty to ask questions if he didn't understand what was done, and then how to track their times and take appropriate notes.

I informed the business partners of what we would be doing for the following days and asked them to give us a list of names of employees of varying abilities, including their top, middle, and bottom performers. In addition, I asked them to inform the call center employees of what we would be doing with them so they wouldn't be caught off guard.

We went off on our data-gathering journey the following day. We continued with our effort through the end of the week and then did the same at the Sacramento site.

*[At the end of these two weeks, I had in my hands extremely valuable data that kicked off an effort that led to \$5.5 million in savings initially and the continuation of these savings year after year in unspent costs.]*

Now that I have your attention, let me jump into how I analyzed the manually obtained data and turned them into gold. After collecting the data, I divided the primary steps into buckets and turned this into what the typical day of the call center employee looks like in the form of a pie chart that represented the eight hours of paid time. With this information, I was able to communicate to leadership at both sites what our employees were spending their time on (see Day in the Life of a Call Center Employee Diagram). In addition, I created a visual of the length of time of various 'paths/scenarios' (see Various Path Time Flows).



After doing this, what I did was put my own judgement and knowledge into categorizing the process steps into one of three categories: 1) Value-Adding, 2) Non-Value-Adding with opportunity, and 3) Non-Value-Adding with no opportunity.

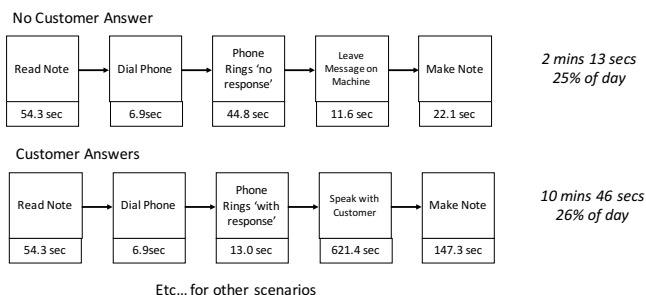
I categorized *value-adding activities* as those items that the business leaders and/or the customers are willing to pay for someone to do. For example, a car salesman's value-adding activity would be the act of actually selling a vehicle to a customer. *Non-value-adding with opportunities* are tasks that the business leaders and/or customers are not willing to pay for someone to do. An example of this using the same job would be paying a car salesman to do research on vehicles or using worktime to take classes to learn about the various paint colors of various carmakers. Finally, a *non-value-adding without opportunity* is an activity that a customer and/or business leader is not really willing to pay for but knows that it cannot be changed or minimized due to legal, compliance, or other inflexible reasons. In our example, this would be the time a car salesman takes to take a licensing test or the time invested to complete legal paperwork. One thing to add here is that there is often debate about what is value-adding versus non-value-adding; I used my own judgement in this project despite some business leaders' not being comfortable hearing what

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percentage of their employees' time is actually adding value to their bottom line.

My analysis revealed that only 35% of the work that the call center employees performed was value-adding; 50% was non-value-adding with opportunities, and 15% non-value-adding without opportunities. Generally, what you want to do once you have this information is work on maximizing value-adding activities and minimizing or eliminating non-value-adding activities. These were hard numbers to swallow, but with the strong foundations of my methodology, full documentation, and transparency in the process, my assessments carried a lot of credibility. In addition, there was a certain path/scenario that revealed that 25% of an average employee's day is spent placing calls that no one answers. What I did next was use the data to identify what areas I would be attacking to work on minimizing non-value-adding activities, leading to efficiency gains in the process.

Examples of Various Path Time Flows



### The Analysis and the Plan to Find Solutions

After assignment of the non-value-adding activities, what I did was observe that one aspect in particular grabbed my attention. I determined that I would go for reducing to eliminating the amount of time that the call center employees spent writing notes or engaged in post-payment

activities to set up payments based on a customer's preferred payment channel. Even though these activities are important and must happen, given my definition, they are still non-value-adding and should be reduced as much as possible—or ideally, employees shouldn't be doing these things at all, letting technology automate them instead. I observed that approximately 20% of an employee's day at the West Coast Call Center was spent typing notes and triggering payment activities. In essence, any reduction of this is an efficiency gain that can be applied to a 1,000-person workforce. Those efficiency gains can be applied to laterally move those employees to other open positions across the business and avoid hiring new people.

To resolve this, there were two elements that I needed to find the solution to: First would be to identify the most common notes, and second would be to solve for how to reduce or eliminate the amount of time those notes took. For this portion, what I did was continue to utilize the talented call center employees within the business to form a frontline-based team. This is one of my favorite approaches for researching and finding solutions, given that frontline personnel know the operations better than anyone else because they repeat their processes thousands of times a month. In addition, it is a way to boost morale by giving them an opportunity to be involved in a project outside of their normal daily routine.

I formed a group whose purpose was to identify the most common outcomes of calls with customers. I called this group the Purple Team. We met three times a week for three weeks. I would assign team members items to research and data to gather to come up with a solution to bring to our team. After the three-week period, we were able to propose solutions that would significantly reduce note-taking time and, in some instances, eliminate it

altogether.

We learned that, approximately 70% of the time, one of three scenarios ended up being the outcome. If we addressed those three, we could significantly reduce note-taking time, and then we could even take the route of aiming to reduce the other 30% of less uniform and less simple outcomes. For the 70% group, we measured the specific steps down to the click to perform those activities and determined that they took 22 seconds on average. To summarize, three scenarios represented 70% of note-taking activities, each of which took 22 seconds to complete, and note-taking activity represented 20% of a call center employee's day across 1,000 people. The other 30% of note-taking activities was spread across 25 less simple scenarios, which on average took about two minutes each to complete.

We took a multi-pronged approach to address the two buckets of note scenarios. First, to address the three most common scenarios, we proposed something we called *Quick Clicks*. In essence, these would be command buttons easily available and strategically placed on the call center employee's main screen. Second, to address the other group of 25 less simple scenarios, what the Purpose Team and I did was propose a five-column set of dropdown boxes. Each of those columns would ask for different sets of information, and when they were filled out, the system would develop and publish a note utilizing the selected fields.

I thanked the Purpose Team for all their contributions and told them I would be using their inputs to develop the proposal I would deliver to leadership to ask for funding. Keep in mind that up to this point, the Hotel Super Experts Corp. had not spent an additional penny on us. I was confident in the proposed solution, given the well-

documented and disciplined approach I took from the beginning. I ensured that I kept all business partners not only informed but also part of the solution-finding process, including people from the frontline all the way up to site leaders.

I did one final piece of assessment prior to delivering my proposal to business leadership of the Sacramento and Reno sites. I developed quick sketches of what the very simple screen modifications and automations would be and met with a tech developer who would be able to give me an estimated cost to implement. He came back and gave me a cost of \$90,000 to implement the changes. With this information, I was able to develop a grounded business case, where I stated a cost of \$100,000 with a conservative efficiency cost savings of \$2,000,000 over the span of the first 12 months, representing a 1,900% ROI.

I scheduled the meeting with the appropriate stakeholders, and I delivered my proposal. We received approval for the tech funding and were assigned a project manager to partner with me in implementing the changes.

### **The Execution and the Results**

Because of the expertise I had gained in the effort and the documentation I had amassed up to this point, the technical delivery was simplified. We held a kickoff meeting that consisted of the project manager, developers, and me. In this meeting, I discussed what the intent of the technical changes would be. I made sure to state my desire to place the three Quick Click buttons in highly prized real-estate space on the main screen. There was pushback, but ultimately I also sold them on the other benefits—that the notes our employees developed would be documented in a consistent manner and would lead to fewer problems downstream for all parties. In addition, developers typically like to have freedom with their design, so I was sure to



communicate that I was open to the look and feel of the changes as long as they satisfied my two requirements: 1) The buttons were easily accessible on the main screen, and 2) They automated the three most common note-taking activities. Regarding the development of the five columns of dropdowns, they suggested a sixth column to account for an issue they were aware of and decided to address with this project. I had no issues with this—it is always a great feeling when you can kill two birds with one stone. Or, as technical people like to state, they may as well solve the other issue since they are already *under the hood*.

When you get to this phase, the solution normally seems relatively simple, but it is never as easy as it seems it should be from a technical perspective. One challenge in particular that we came across was in the automation of certain tasks that I wanted as part of the Quick Clicks effort: Certain permission access rights were required, and only certain frontline personnel had those rights, per the internal HSEC policy. The permission access rights were put there for a reason, but I was able to make a case to get those permission rights granted as part of the automation efforts, given that the frontline people would not actually be making those changes themselves. After receiving this approval, the tech team went forward with getting the development scheduled. The implementation from the technical side from start to finish took approximately three months, due to other conflicting projects (which is a common challenge).

We held a mini-celebration on the launch date of the changes with all the involved parties. In this phase, I am thankful for all the people who helped to make this happen, but I am not ready to fully celebrate until the results come in. Since I'm the one leading the effort, my credibility is on the line, given that I convinced several people along the way to dedicate their time, resources, and

money and to believe me and my assessments. What also adds to the anticipation is that the results often take months, and in some cases, up to a year, to come through, and meanwhile you are pulled into other projects.

We were fortunate that for this effort the results were evident within two months. The Quick Clicks took a 22-second task down to a two-second task, a 91% reduction. The six-column dropdowns reduced our note-taking time from two minutes to 55 seconds, a more than 50% reduction. By the third month, the efficiency gains were apparent in our excess capacity. The end result was larger than I had conservatively forecast, and we ended up with a 9% overall efficiency gain across the entire business, leading to cost savings of \$5.5 million for HSEC after the first year, savings that continue to be avoided costs year after year. Those savings were in the form of avoided new hires, as those in the previous call center roles were laterally hired into other roles. I, along with the team, was recognized for this accomplishment via various awards, and in addition, I was asked to serve as a keynote speaker for a process excellence event to talk about the effort end-to-end from idea through savings.

## **Recap**

This effort, which led to \$5.5 million in savings, started out with the idea of doing an old-fashioned time study via side-by-sides with frontline personnel. When there is time to work with and things seem to be going very well, this is the approach that I recommend. When there isn't low-lying fruit available, a thorough assessment is typically the best approach; the worst case is that you'll learn something to share with everyone in the business. There were various characters that I interacted with along the way, but what was important was to establish a level of trust and good relationships. The people I interacted with held useful information, which, when put into the right hands, is as

valuable as gold.

At a high level, the phases of this effort were

- 1) Permission to explore
- 2) Planning and approval of the approach
- 3) Execution of a time study via side-by-sides
- 4) Compilation of information via sketches, data, and notes
- 5) Analysis of findings
- 6) Identification of a problem or opportunity
- 7) Solution gathering with the front line
- 8) Business case development
- 9) Proposal of a solution to leadership
- 10) Partnership with a tech group
- 11) Delivery of changes
- 12) Waiting for results
- 13) Celebrating the results

One final element to take note of is that the proposal of the solutions to leadership did not come until the ninth phase. Because I had already done all my homework up to this point, I was confident in the problem, I was confident in the solution, I was confident I would get support from the appropriate partners, and I was confident that I could talk about any of the details myself because I was involved in every phase.

*[The upfront work allowed the delivery to go smoothly, and given the unique situation for this case, the results came in relatively quickly.]*

When observed from the final cost-savings perspective, the numbers seem inconceivable, but when broken down into the simple phases, they collectively represent a beautifully simple process improvement for Hotel Super Experts Corp.

With social media at the fingertips of billions, a bad customer experience can be disastrous or a great one can boost you to new levels. With competition so fierce, faster, cheaper and better has never meant so much. *Simplified Process Improvement* provides you with proven tools in layman terms to help you and your business deliver the results its deserves. All of the fancy process improvement lingo has been thrown out the window, so that anyone can pick up this book today and begin making improvements tomorrow. In addition, Perez provides you with 5 real-world case studies so that you can see his approach in action.

### ***Praise for Eduardo Perez the founder of TPM Consulting Group***

*"Eduardo's level of intelligence, experience, drive and innovative approach to problem solving is unequalled in anyone I've worked with. He has a thoughtful approach to issues with not only a keen eye for detail but a broad understanding of the bigger picture which results in a thorough and successful attainment of goals."*

**Tyler Anderson-Lennert, Owner, Compliance Theory**

*"Eduardo is an impressive leader with the ability to identify key leverage points within the business and drive continuous improvement. Eduardo's combination of quick problem solving skills, great people leadership and focus on driving results, enables him to be a very effective leader in any organization."*

**Steve Thibodeau, CEO, Global Lending Services**

*"Eduardo has the most impressive approach to operational excellence, problem resolution, and strategic alignment with teams of anyone I have worked with. His blend of creativity, empathy, and organization is rare indeed. I highly endorse Eduardo's approaches, work and have utilized many of the above in our rapid growth at Rising Tide."*

**Jason Sherman, CEO, Rising Tide Marketing**

*"Eduardo mentored me in process engineering and it permanently changed me professionally and personally for the better. Eduardo is a creative, patient, and dynamic leader who pioneers new ideas to fruition. Eduardo has been one of the most influential mentors I have had in my career."*

**Kathryn Saab, Financial Services Lean Six Sigma Black Belt**

*"Eduardo was consistently recognized by my process engineering team as a trailblazer in financial services when it comes to coming into a new area he is not familiar with and improving the process to new levels. Eduardo was able to reduce turnaround times and errors for payment processing and improve the overall morale of the department which consisted of mostly tenured associates."*

**Lacie Lee, Process Engineer**

