6 - Improve

Now we want to improve our process with the ultimate goal being efficiency, preserving resources, lowering costs, or increasing quality, or a combination of all or some of the above. The goal is not to be perfect – we strive for perfection, but the purpose of the ASI process is to bring out results quickly and instill a culture of continuous improvement.

Consider the Law of Diminishing returns – we can improve a process or product to infinity, but at some point, there is minimal to no added value realized with the changes we introduce. The effort simply becomes a waste of time and resources that could be spent improving other processes or serving our clients. As mentioned earlier, many people think of Six Sigma in process improvement and while it has its place and benefits, for many, if not most, organizations, the time or money spent to learn Six Sigma is not feasible. Remember, trust your instincts, trust your staff, and use common sense.

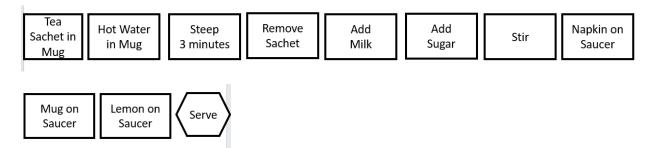
Another key point in regard to improvements – **never** sacrifice or compromise safety or disregard laws or regulations that apply to your industry or activity. Maintain ethical practices and be an example for your employees, your customers, and others in your industry.

Improving a process can and should be a fun experience. This is a time to be logical but also creative in trying new methods and processes. This step in ASI can be a fairly quick evolution or you can take your time and run some pilot tests with your staff or customers to see what gets the best outcome.

Let's return to our tea example and look at the steps again:

Materials: Mug, Saucer, Tea Sachet, Hot water, Spoon, Milk, Sugar, Lemon Slice.

- 1. Put tea sachet in mug
- 2. Pour hot water in mug
- 3. Let steep for three minutes
- 4. Remove tea sachet
- 5. Add milk
- 6. Add sugar
- 7. Stir
- 8. Place white napkin on saucer
- 9. Place mug on saucer
- 10. Place lemon slice on saucer beside the mug
- 11. Serve to guest



There are endless possibilities for improvement here. What are some steps or areas that come to mind?

What temperature of hot water is best? If we use a higher temperature, can we shorten the steeping? How much water are we using? How much milk? How much sugar? What type of tea leaves are we using? If we used or added a different variety of tea, how would the process differ?

Time, money, and practicality permitting – test your process. Use different materials or resources. If your process involves research, is there a better reference available? Is there a better computer program available that is more customizable or at a better cost? Is there better support? What other suppliers are there? Is there cost or quality better?

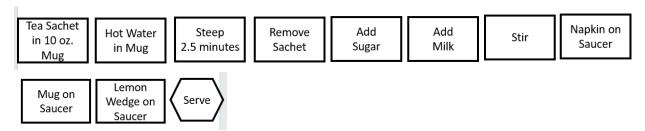
Our goal is that someone with essentially no training would be able to follow our process guide and map and complete the task with little to no assistance. This means we want to get more detailed in our steps. Our guides will provide as many details as necessary, but do not get too extreme with the maps.

Here is an improved version of our cup of tea process and map with more details and guidance added:

Process for Oolong Tea

Materials: White Mug, Saucer, Oolong Tea Sachet, Hot Water at 100 degrees, Spoon, 2 oz (about 59.15 ml) Milk, 1 oz (about 28.35 g) Sugar, one Lemon wedge.

- 1. Put tea sachet in white 10 oz. mug
- 2. Pour 250 ml (about 8.45 oz) of hot water (100 degrees) in mug
- 3. Let steep for two minutes and 30 seconds
- 4. Remove tea sachet
- 5. Add 1 oz (about 29.57 ml) of sugar
- 6. Add 2 oz (about 59.15 ml) of milk
- 7. Stir
- 8. Place white napkin on saucer
- 9. Place mug on saucer
- 10. Place lemon wedge on saucer beside the mug
- 11. Serve to guest



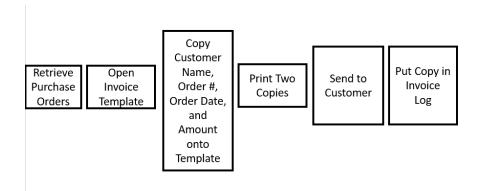
In our improved version of this process, we have identified the variety of tea, the water temperature, steeping time, specific amounts of sugar and milk, etc. More details are added, but we are not inundated with superfluous elements. Critical details (amounts, times, etc.) are included but we are not getting to the point of which way the mug needs to be facing, the number of stirs, etc. Can this be done? Yes, and for some technical processes it will be essential, but use your best judgement as we will see in our next example.

***Should the steps on the process map be numbered? For smaller maps or simpler processes, it is likely unnecessary. For longer and more in-depth processes it may be a good idea. The steps listed in the process guide should correspond to the steps on the map, e.g., step '5' in the guide will also be step '5' on the process map.

If you work in an administrative organization and preparing and serving tea is not an essential task, then let's look at a process that is more relatable like preparing an invoice. Here is our initial process from the Standardize step:

Prepare and Issue Invoices

- 1. Retrieve Purchase Orders for the Previous Month
- 2. Open the Invoice Template
- 3. Input the following data into the invoice
 - a. Customer Name
 - b. Order Number
 - c. Order Date
 - d. Amount Due
- 4. Print two copies
- 5. Send a copy to the customer using their preferred method
- 6. Put a copy in the invoice log

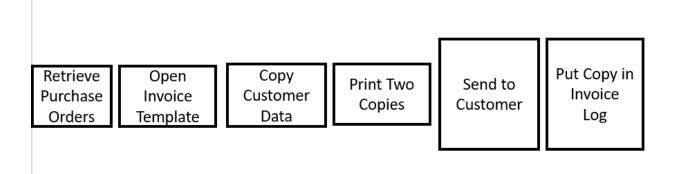


Now let's look at an improved and more detailed version:

Prepare and Issue Invoices

- 1. Retrieve Purchase Orders for the Previous Month
 - a. These will be located in the 'Orders' folder located in the Shared Drive Accounting folder
- 2. Open the Invoice Template
 - a. The Invoice Template can be found in the 'Templates' folder on the Shared Drive
- 3. Input the following data into the invoice template
 - a. Customer Name
 - b. Order Number
 - c. Order Date
 - d. Amount Due

- 4. Print two copies
- 5. Send a copy to the customer using their preferred method
 - a. Customer preference will be found in their customer profile located in the 'Customer Profiles' folder on the Shared Drive
- 6. Put a copy in the invoice log
 - a. The binder for the log is kept in the manager's office and is labeled "Invoice Log"
 - b. Put the copy in the back of the binder



Notice that our process is more descriptive and detailed while our process map has changed very little. We simplified the Customer Data step. Is this right or wrong or better? It comes down to personal preference. Use your best judgment and observe the reactions of the project team and staff – do not spend too much time trying to decide and do not let the team get too wrapped up in what is better. Keep it simple and keep it moving.

For administrative processes especially, consider gaps or delays in the process and how to alleviate or eliminate them. Is any delay internal (within your office) or external (another office, department, or vendor)? If it is internal, how can we accelerate the process? Do we need to assign the task elsewhere or is it even necessary? If it is an external delay, what can be done to help that step go faster? What occurs? If we provide more information or submit the materials in a different format would that make it easier to process?

Can we combine or cut out steps? What about re-ordering steps?

In our Invoice Preparation example, the staff member has to pull information from multiple sources. Is there a way to consolidate these to reduce the steps in the process overall? Think creatively, but also think logically. Many of you are already questioning this process even further and thinking of ways to make it better, right? Do we need to have paper copies of invoices? Can we maintain an electronic log instead? This would save time and money, so what's stopping us?

What about the delivery methods for different customers? This appears to be a very tedious step, especially if we have to prepare tens or hundreds of invoices. How can we make this more efficient?

This brings up a few interesting points and considerations. First, for smaller organizations one may argue that it's only a handful of customers and it's easy to remember who wants what. While this may be true, we want to develop a process that is scalable which means even if we only do ten invoices per month, we could do 300 using the same process with little to no changes in how we do it. We may be able to mentally track 10 or even 20 but beyond that we're going to have some difficulty. We want our process to be stable, efficient, producing the desired result or output. Another consideration is if an alternate or new staff member has to assume the role or perform the process, we want them to be able to do so with a minimal amount of training.

Consider physical changes to the process. In a retail store or manufacturing facility the physical aspects of a process may be readily apparent, but we tend to discount or overlook this in an administrative environment. Do staff members have to walk between desks or departments? Is a document physically sent to another office or can it be sent electronically? Mouse clicks, searches, and mentally processing information takes time. If a staff member has to go to multiple sources or databases to retrieve information, then work as a team to determine if there are ways to consolidate this information.

There may be times when the information is kept separate for good reason, but in other instances it was originally done in a certain way that is no longer practical. Just because we have been doing things for years, or decades, doesn't mean it is the best or only way to do it. There is no harm in asking why and encourage your staff to ask why.

Automation: Advances in technology have brought Automation to the forefront. Automation allows mundane tasks to be essentially delegated to robots or "bots" to allow the human workers to spend more time on higher-level activities. While automation has many benefits, before it can be introduced the processes used by the human staff must be consistent and stable. Even with Artificial Intelligence and Machine Learning, the bots do not determine how to accomplish the work, they are following predefined processes!

Ask questions, listen, and learn.

If it is a new or newer process, improvements are going to occur naturally with familiarity and practice, but you will want to document these improvements. Later on, we will discuss how to monitor and review changes.

Why are outside consultants brought into an organization – to 'improve' processes. Unfortunately, many consultants do not dedicate the time to learn an organization's core processes to truly add value and bring forth practical recommendations. This is not always the case, and there are many great firms and consultants out there but be aware. An objective or outside set of eyes is generally beneficial, so a consultant can see things differently as can a new employee, so take advantage of all your available resources.

Ultimately, we are striving for consistent and predictable outcomes – not perfection.

Run pilots of the improved process – does it work? Does it make the tasks easier or more efficient?

A pilot is essentially a practice run or trial that we're doing as a test to determine how specific changes alter a process. During our pilot processes, metrics may be a useful tool. Quantitative measures such as amounts of materials or resources used, or time to complete the process and each step individually.

****Side box on quantitative vs. qualitative measurements

Realize that an improvement that saves time may have other repercussions – this is why honest and open feedback is important. One step may save a few seconds or minutes but creates issues in a later step of the process or produces an output that is not acceptable to the end-user or client.

Qualitative measures may be considered as well – appearance, utility, color, taste. Yes, there are ways to make these quantitative, but if a form or presentation simply looks bad or needs a better color scheme, then change it or try something else. Solicit feedback from the staff – if a new or improved process is cumbersome it is better to know now rather than after implementation.

Observing your staff completing a new process can provide valuable insight. Watch their body language, their gestures, and posture. Again, consider the physical aspects of the task – are materials too spread out or does a certain step in the process take an unusually long time that can be broken up?

Give sample products to your customers – sample forms or reports or sample goods for them to try. Ask them directly – do NOT assume they will tell you something is obviously wrong – depending on their culture or manners they may be hesitant to tell you, so ask in a polite and objective manner, and make it clear that you want them to be as honest and direct as possible. In other cases, this feedback will be provided without hesitation, so do not take it personally or show emotion or get upset with negative feedback.

Ultimately seek balance between quality, cost, employee satisfaction, and client satisfaction.

There may be a need to train your customers, be it another department that receives your reports or a customer using your product. New options or products may be developed that might not seem as intuitive or obvious to your customers. Consider ways to facilitate teaching them what the new product or output is and how it fits their needs or desires.