



# Lesson 11

## Pilot Projects

### Introduction

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Pilot projects are the initial process improvement efforts selected by the senior leaders and managers of the organization. They are undertaken in the early stages of TQL implementation, and are intended to be used to provide a learning experience for process improvement teams. They demonstrate that TQL is about the business of the organization (mission) and should be conducted as the performance side of the education and training plan. As such, they are a vehicle for demonstrating success, and for garnering support for quality-focused efforts.

### Objectives

Upon completion of this lesson, the student will be able to:

- Describe the role of pilot projects in TQL implementation.
- Explain the relationship between pilot projects and process improvement.
- Describe criteria the ESC should use to select pilot projects.

### Quality Transformation Strategy #2

***“Managers establish a series of carefully selected and guided improvement projects; conducted by cross-divisional teams using the scientific approach, and coached by technical advisors”.***

Scholtes & Hacquebord *A Practical Approach to Quality* Joiner and Associates, 1987

***“Small opportunities are often the beginning of great enterprise “***  
Demosthenes

## Pilot Projects

Pilot projects are the first process improvement projects undertaken in the implementation of TQL. They are selected, conducted, and supported by the ESC as part of their training in the methods and techniques of process improvement. By engaging in pilot projects, the ESC has a chance to apply what they have learned.

Pilot Projects are the “baby steps” that the organization takes to get started with process improvement. Like baby steps, they are awkward at the start, but become better with practice. There have been a lot of mistakes made in trying to undertake process improvement, and there are many more to be made. But these mistakes can be minimized with an understanding of the purpose and techniques of process improvement.

Pilot Projects are used to improve processes, to show that process improvement can work and to demonstrate that the ESC is ready for and willing to accept changes in the way it does business. They are the means to greatly expand an organization’s participation in TQL. As such, they should be undertaken in the early stages of TQL implementation.

### Pilot Projects Are:

- **Process improvement efforts**

They are a means of getting started in the TQL implementation process within the organization, and a method of improving the quality of products and services. Pilot projects help set the course for subsequent process improvement activities. They are called “pilot” projects because they are the first process improvement activities undertaken in the organization. As such, **they are a trial unit**, a developmental technique for understanding how to identify and improve processes. If the organization has already begun process improvement efforts, they have by definition conducted pilot projects.

- **Efforts selected, conducted, and supported by the ESC**

Pilot projects are not chosen by lower-level teams. They are selected by the senior leaders and managers responsible for identifying and improving significant, mission critical processes.

- **Learning experience for top leaders**

Pilot projects are a learning tool for the top leaders. They are conducted as part of the education and training of the ESC, so they may “**learn by doing.**” As new concepts and tools are taught, they are applied. ***By working on improving processes, the ESC shows leadership, and demonstrates commitment.***

They will gain a great deal of knowledge learning how to identify customers, determine their needs, **select significant processes**, select and charter QMBs, and use TQL

tools and methods. By working as a team to optimize organizational functioning, they will begin to see the benefits of focusing on quality, and understand the implications of implementing TQL within their organization.

### **Pilot Projects Are Not:**

- **Tiger teams**

Pilot projects are not “tiger teams” for the Commanding Officer, Executive Officer, department heads, or others. Pilot projects are not set up to **fix** the problems the commanding officer has always had. **They are established to focus on process improvement.**

- **TQL coordinator’s responsibility**

Pilot projects are not the TQL coordinator’s responsibility. These projects are learning opportunities for the senior leaders. They, the individuals with the power and resources to improve the quality of the goods and services produced, must take responsibility.

- **Final goal of TQL**

Pilot projects are not the final goal of TQL. They are the precursor to the senior leaders transforming the organization to a quality focus, **aimed at improving mission performance**, through meeting and exceeding customer expectations. Quality improvement cannot succeed without lasting changes to a command’s business culture. This will eventually require a system’s redesign to concentrate on the quality of a command’s output.

### **Benefits of Pilot Projects:**

- **Demonstrate success**

One of the purposes of pilot projects is to show successes, and garner support within the organization for quality improvement. By conducting initial pilot projects and continuing with process improvement efforts, Commanding Officers can demonstrate measurable improvements and cost reductions in their tour of duty.

- **Build critical mass**

A critical mass is formed when a proportionally small, targeted group of leaders become exposed to an idea or philosophy and learn techniques required to practice it. The critical mass grows as others become involved in the efforts, until gradually, over time, the philosophy and its practice become pervasive throughout the organization. When this happens, the beliefs, attitudes, and actions are altered or transformed to support the new philosophy.

One of the ways the ESC can build a critical mass is by selecting and conducting pilot projects on specific processes. Each QMB chartered is composed of owners of a

significant process whose job it is to improve the processes they own. They, in turn, may charter PATs to help collect the needed data. Thus, a critical mass is built around the significant processes being studied for improvement.

- **Help create the environment**

Pilot projects help create an environment conducive to TQL. As the ESC members become familiar with and see the benefits of using particular tools, they will be more likely to use them, and support others using them as well. As top leaders and managers demonstrate their commitment to quality, they lead the way for others to follow, thus creating an organizational climate which supports quality improvement activities.

- **Identify what training is needed by teams**

Pilot projects help the ESC understand the training requirements for process improvement teams. This includes education in specific content areas, as well as training in tools and methods. The ESC must provide resources, so that a sufficient number of quality advisors may be trained to assist the teams with process improvement activities.

## **Pilot Projects Help Teams Learn:**

- **How to meet customer requirements**

Pilot projects provide an opportunity for managers and workers to work together to determine customer requirements, translate those requirements into quality characteristics, and work on improving significant organizational processes.

- **How to work in teams**

Working in a team may not be a new experience for many of the individuals involved. However, the type and purpose of the team may differ greatly from past experience. The teams which work on pilot projects and process improvement are formed around the process selected, and focus on quality improvement. They make data-based decision, receive training as needed, provide feedback, and request or supply resources via designated communication links.

- **Technical applications of process improvement**

By engaging in pilot projects, teams learn how to apply tools to measure, stabilize, and improve processes. They learn which tools will work in which context. As they gain knowledge and skills, the teams can begin to learn more technical applications to further improve the processes under consideration.

- **How to improve the quality of a product or service**

Through their involvement in pilot projects, command members contribute directly to the improvement of significant processes within their organization. By measuring and streamlining processes, they are able to reduce unnecessary waste and rework. As they gain experience, they will begin to see their job as improving organizational functioning, rather than the maintenance of the status quo.

## Selecting Pilot Projects

***The selection of the first pilot projects needs to be done very carefully.*** Many factors must be considered when making this decision. Various selection criteria should be applied by the ESC as they reach consensus on initial pilot projects.

The TQL coordinator may help the ESC determine which project to select by doing the following. First, have the ESC use the selection criteria to brainstorm potential processes. Then, they might use the nominal group technique or multi-vote technique to narrow down the choices. Finally, a prioritization matrix may be constructed with the selection criteria and the project choices to determine which process to select.

**The ESC and TQL Coordinator should consider the following selection criteria when choosing initial pilot projects:**

- **Mission related**

A project should be selected that is important to the organization and its customers. The processes selected should be chosen on the basis of what will make a significant contribution to the key business objectives and strategies of the organization. By selecting mission related processes, the ESC is committing the organization to improve processes, products, and services that will directly affect external customers.

There are circumstances when the top leader (or the ESC) may choose not to select mission related processes for pilot projects. If the Commanding Officer is near the end of their tour of duty, and does not want to commit to a bigger project, they may choose a smaller, less significant process to improve. If there are conflicts between ESC members, or fighting between departments, a “safe” project might be chosen. If there is lack of support or even hostility toward TQL, a project may be chosen through which success would be clearly visible and the improvements would benefit many, building support for other quality initiatives. Senior leaders should be made aware of the resources, time, and energy involved in conducting initial process improvement efforts. They must carefully consider the pros and cons of initial process improvement efforts being non-mission related, especially during these times of dwindling resources and downsizing.

**Selecting a non-mission related process re-enforces the paradigm that TQL is something done in addition to the “real work”.**

Whatever the choice for the initial improvement efforts, the ESC should work toward moving as rapidly as possible to mission related process improvement efforts.

- **Cross-functional**

Mission related processes are by their very nature cross-functional. The QMB should be composed of a line manager accountable for the product or service, and managers

of support functions who are on the same level as the line manager. In this manner, those with responsibility for the product or service are able to work together to improve it. **It is recommended that the process chosen affect as many functional areas in the organization as possible.** This will enhance the development of the *critical mass*. The publicity resulting from a success that affects many groups in the organization will generate further support for TQL.

- **Of adequate process size**

A project that is too big may be beyond the team's capability to improve. The smaller the process selected, the easier it will be to define what happens with it, and determine an improvement strategy. A simple process can become very complex when analyzing how things really work. A project that is too small, or of little significance may be seen as a waste of time for the ESC and the improvement team.

- **High probability of success**

The TQL coordinator should assist the ESC in selecting pilot projects that have a high probability of success. Avoid areas that by nature of their inherent complexity offer minimal chance for successful results. Early success can be demonstrated by choosing an achievable project and working on the easy things first. Remember, success generates success.

- **Potential for using TQL tools**

It is important that TQL tools and methods be used so organizational members can learn new techniques of measuring and improving processes. By using these tools together with process data, the focus shifts to improving the processes, rather than finding fault with people. Another benefit of using TQL tools is that others in the organization can see that they work, and may want to use them.

- **Boundaries that are clearly known**

The TQL coordinator should assist the ESC in **clearly defining** the boundaries of a process. The boundaries should specify which part of the process will be worked on, identify starting and ending points, and specify where the team has authority to make changes. It is important that team members understand where the organization's part of the process ends. It is helpful if a supplier and a customer can be identified, so that the team can determine customer expectations.

- **Measurable variables**

A measurable process allows the success to be more readily apparent, and generates the data needed to guide decision making. Unless the variables in the process can be measured, no one can know if the process has improved. Some processes are very difficult to measure, but can be analyzed using specific tools to eliminate steps which do not add value.

As is apparent from the above information, the **selection of the pilot project is not always an easy task**; but these criteria will allow the coordinator to assist the ESC as they consider which processes to improve.

## Pilot Project Pitfalls

A project that takes extremely hard work and a very long time to show any improvement may discourage initial efforts. In contrast, a project that is too simplistic belittles a team's efforts. The TQL coordinator should assist the ESC in choosing processes. A brief review of some of the existing common pitfalls follows:

- **Rush to start**

The ESC should not rush to begin pilot projects as soon as they are formed. They must first receive some initial education about TQL. If the ESC starts too soon, it may not realize what is required of it. For example, it may select insignificant processes to improve, or may fail to provide linking pins. Teams require extensive support from the ESC; pilot projects cannot be successful without this support. In summary, the ESC should start out slowly; there is no reward for finishing first. **The quickest way to go is to go slow!**

- **Teams are too large**

The larger the team, the harder it is to get anything done. Try to keep team membership below 10. It is extremely helpful to select team members who know the process, are willing to work on it, and are supportive of improvement efforts. The TQL coordinator should work with the ESC as they charter QMBs based on process ownership, and help the QMBs charter PATs based on process knowledge.

- **Teams are untrained**

The ESC must understand how their actions guide the organization. By having initial process improvement projects be a part of their education, the ESC will begin to understand how they can guide the organization toward a quality focus. To ensure success, members of all teams must be knowledgeable. Team members should receive just -in-time education in quality principles, team dynamics, and tools and methods. **These first pilot projects are critical because they will be watched by the rest of the organization.**

- **Process in transition**

The studying of a process in transition may very likely waste resources. Any process that will be improved must be stable, capable, and free from tampering. **Processes in transition are not normally stable.**

- **Process studied by another group**

The ESC should not charter more than one team to work on the same aspects of the process. **Process improvement is not a contest**, and teams should not be pitted against each other to see who comes up with the "right" answer the fastest. The most highly-qualified individuals should work together, not against each other.

## A Pilot Project Checklist

**Instructions:** Enter the name of the process below. Check the selection criteria that applies to this process. If you have selected and defined an appropriate process for an initial improvement effort, **you should be able to check most, if not all of the items listed** below.

PROCESS NAME/DESCRIPTION: \_\_\_\_\_

### SELECTION CRITERIA:

- The process is mission related. It is a key business process of the organization.
- The process has direct impact on external customers.
- The process is cross-functional.
- Enough managers, supervisors, and employees concerned with the process will cooperate to make this improvement effort a success.
- The process is of an adequate size.
- The project has a high probability of success.
- The process has a lot of visibility in the organization.
- TQL tools and methods can be used.
- The process can be defined, and has easily identified starting and ending points.
- The process has variables which can be measured.
- The process is not in transition.
- The process is not being studied by any other group.

### The ESC uses knowledge gained from pilot projects to:

- **Improve organizational functioning**

Pilot projects are a method of improving organizational functioning. By starting small, the ESC will learn how to utilize TQL methods, principles, and tools. In so doing, they will be able to identify significant processes, stabilize the processes, and improve them. They will build credibility for the quality focus they advocate, and gain support through a small, but committed, critical mass. The ESC should continue to use this knowledge to transform the organization to a customer-oriented, quality-focused organization.

- **Continue process improvement**

***Pilot Projects are the precursors of continuous process improvement.*** They are the developmental technique for understanding the methodology of process improvement. Lessons learned from initial pilot projects on team structure, training requirements for teams, the resources and support needed by the teams, etc., will be utilized in follow-on process improvement efforts. Continuing to improve existing processes, and choosing additional processes to improve, the organization can continue to eliminate waste, streamline processes, and reduce costs.

## Role of the TQL Coordinator in Pilot Projects

- **Educates ESC in purpose of pilot projects**

The TQL coordinator has the responsibility for educating the ESC in pilot projects. The ESC should learn that initial process improvement efforts can result in enormous benefits to the organization.

- **Helps ESC select, conduct, and support pilot projects**

The TQL coordinator should assist the ESC in selecting, conducting, and supporting pilot projects. The TQL coordinator should provide training to the ESC during each stage of a pilot project, providing the ESC members with the necessary skills to work with and support the selected projects.

- **Acts as quality advisor to teams**

In large organizations, the TQL coordinator may be the quality advisor for the initial teams, until quality advisors can be identified and trained. In small organizations, the TQL coordinator may be the one and only quality advisor for the organization.

- **Documents lessons learned**

Since one of the primary values of pilot projects is to learn about process improvement, the TQL coordinator should be sure to document what worked, and describe the barriers, approaches used, application of tools, techniques, etc. Lessons learned are only valuable if something is “learned” from them so business methods and characteristics can be changed as a result.

# Lesson 11

## Pilot Projects

### Summary

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- Pilot projects are the first process improvement efforts undertaken in the organization.
- They demonstrate success, build the critical mass, and help create the environment.
- Pilot projects provide leaders with TQL knowledge and experience they may use to begin and sustain Process Management efforts.
- Pilot Projects provide leaders with the information that strengthens their long-term planning efforts.

### Readings

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Houston, A. and Dockstader, S. *A Total Quality Leadership Process Improvement Model* TQLO Publication No. 93-02

Scholtes, P.R. and Hacquebord, H. *Beginning the Quality Transformation Parts I and II* Quality Progress July 1988

Scholtes, P., Weiss, L., and Reynard, S. *Quality Improvement in the Office*. Madison, WI: Joiner Associates, pp. 1 -11. (1988).