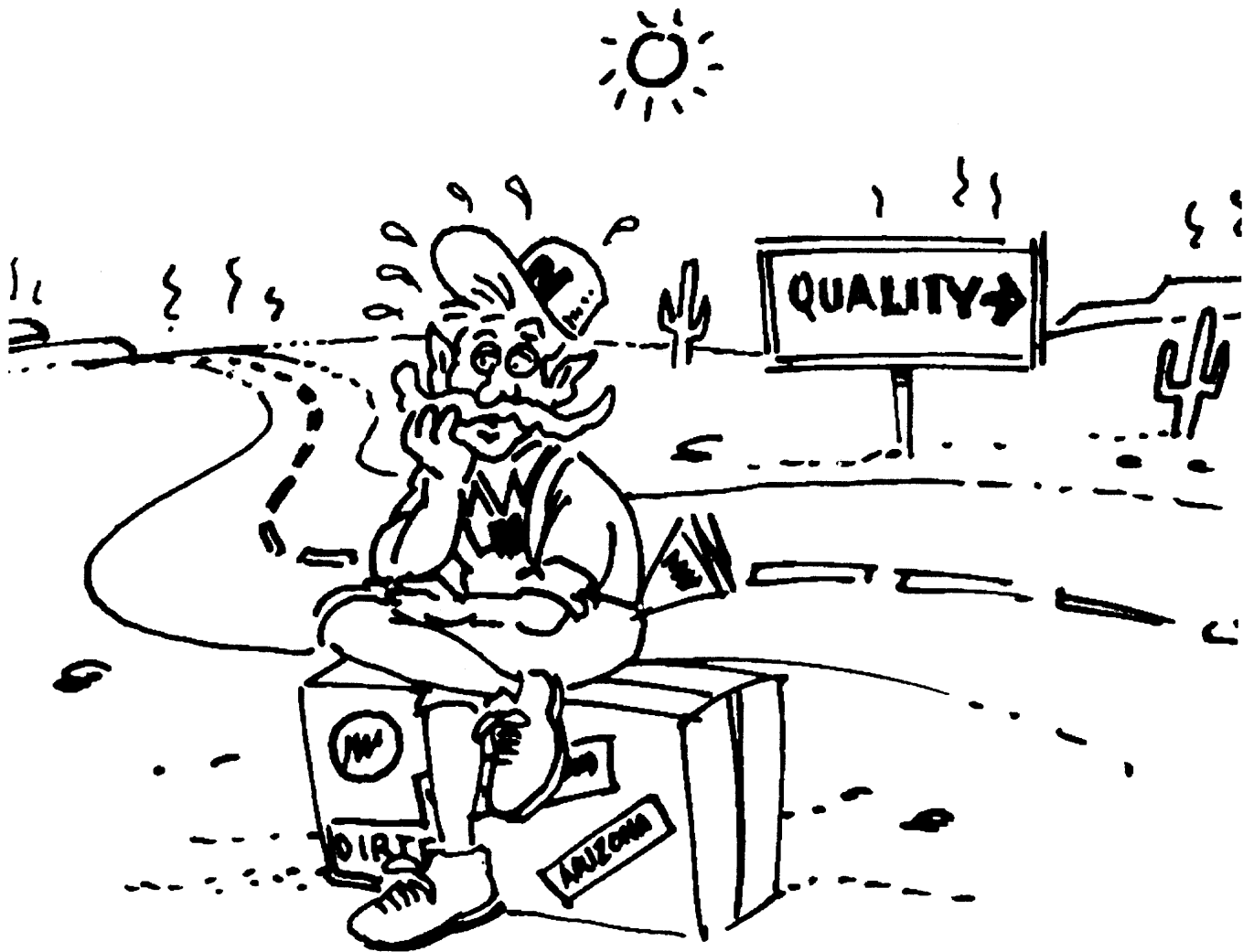


## **TOTAL QUALITY MANAGEMENT (TQM)**

Norfield is committed to providing quality to our customers. Quality just doesn't happen, it must be understood and created. We have selected the program developed by Philip Crosby Associates II, Inc. of Winter Park FL as the basis for our employee education. Our TQM program has achieved reduced costs, more satisfied customers, better employee relationships and more profit.

We are presenting here our company booklet intitled **Quality Improvement: The Journey Begins**. This presents the basics of the Crosby program and will hopefully cause you to seek more information on this subject. Recommended reading would be **Quality is Free** by Philip Crosby. The Crosby organization can be contacted at 800-223-3932.

# Quality Improvement: The Journey Begins



**Quality**  
The Key to our Future

**NORFIELD**  
**INDUSTRIES**

# Introduction

Quality. What exactly is it? When people talk about Quality they tend to use words such as "goodness," "excellence," and "customer satisfaction," but they don't usually attempt to define it. The reason they don't try is because they probably don't know how. This booklet was written to help you understand the meaning of Quality and to begin showing you how to "cause" Quality.

You are about to embark on the Quality Journey. Our journey will be a unique one. Like others, it has a

beginning. In fact, when you began reading this you took your first step. But, unlike most other journeys, it has no end.

As we begin, you will be learning about TOTAL QUALITY MANAGEMENT developed by Philip Crosby, one of the country's leading industry experts on Quality. Crosby has helped many corporations implement TQM. The concepts we will learn will allow us to achieve a consistent and effective approach to causing quality throughout our company.

Now, let's "Get on down the road!"

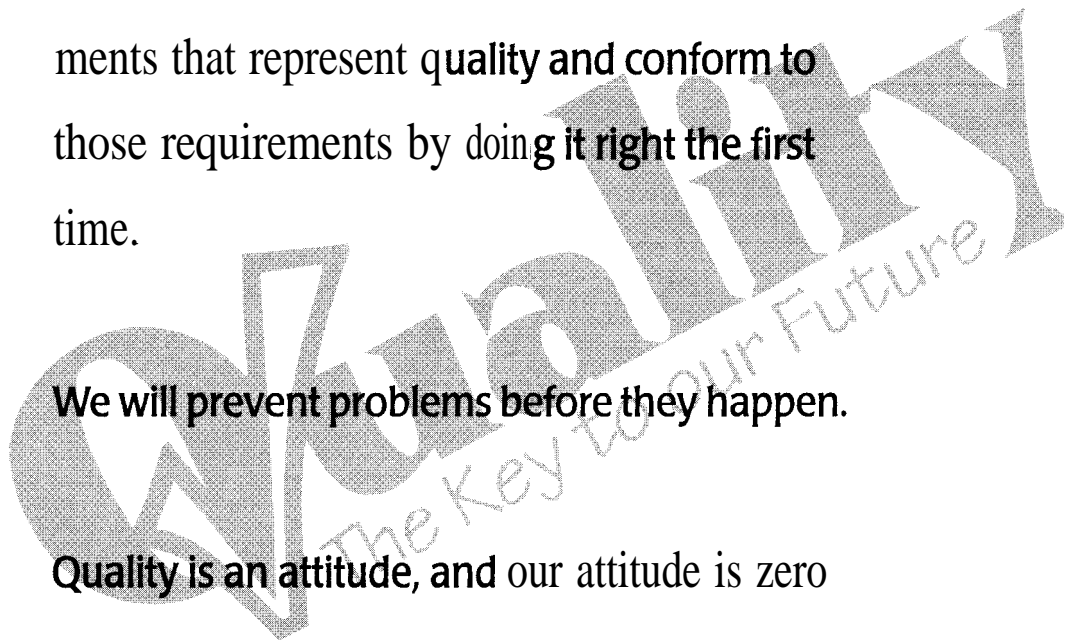
# The Norfield Quality Policy

We will provide defect-free products and services to our customers both internal and external, on time every time.

Working together, we will identify the requirements that represent **quality and conform to** those requirements by doing **it right the first** time.

**We will prevent problems before they happen.**

**Quality is an attitude, and our attitude is zero defects.**



# The Four Absolutes of Quality Management™

Your first lesson as we begin this journey is that Quality is definable, measurable and manageable. This reality is the foundation for what are known as the Four Absolutes of Quality Management™ --four basic concepts of the Quality Improvement Process that we all will become familiar with on our Quality Journey. The Four Absolutes answer the questions:

What is Quality?

What system must be used?

What performance standard is required?

What measurement is essential?

The Four Absolutes are:

1. *Quality is defined as conformance to requirements.*
2. *The system for causing Quality is prevention.*
3. *The performance standard must be zero defects.*
4. *The measurement of Quality is the Price of Nonconformance*

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# What Is Quality?

Sometimes its easier to look at both sides of Quality to understand these concepts. Most of us can relate stories about our experiences with poor quality in either the goods or services we have purchased. For instance, you may have bought yourself a pair of shoes only to have them fall apart. Or perhaps you went for a haircut and, after looking in the mirror, felt like you needed to go into hiding. Why did you consider these goods and services to be of poor quality? The answer is simple: You did not get what you wanted. Your requirements for shoes that would hold up under normal conditions were not met. You wanted only one inch to be cut off your hair, but the stylist took two inches.

In the latter case, while you may think you received a poor quality haircut, someone else may think it a good haircut. When we use subjective words such as "goodness" and "excellence" to describe Quality, we miss the real reason why we are satisfied or dissatisfied with the product or service. The key to defining Quality lies in fulfilling expectations or requirements.

The first absolute of Quality Improvement tells us that we need to redefine Quality in a concrete way--as conforming to customer requirements and giving customers what they need, want and request. This concept is summed up in a phrase you'll be hearing often: Do it right the first time! Or DIRTFT for short.

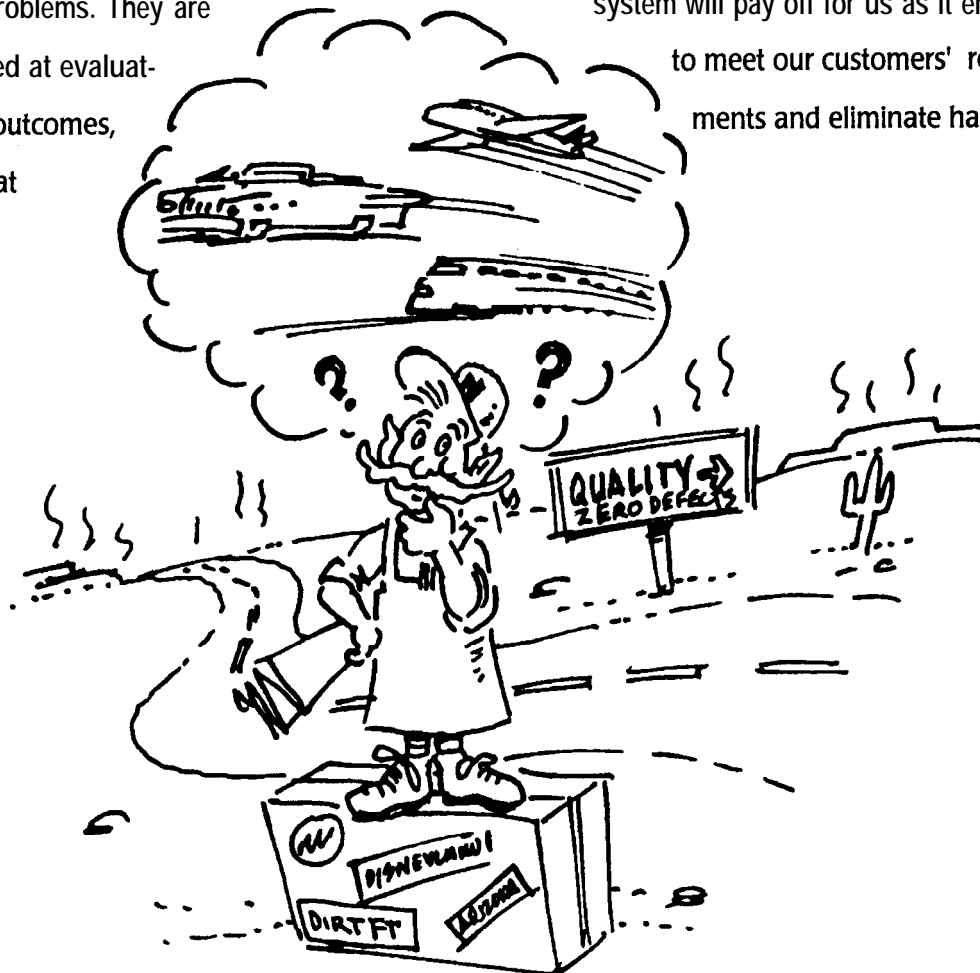
Zero Defects

# What System Must Be Used?

The second absolute deals with the kind of system needed to cause Quality-- one of prevention, not appraisal. The conventional systems used in the pursuit of Quality involve the latter. We are all familiar with examples of these systems-- inspections, tests and audits. The problem with these is that they all take an after-the-fact approach to problem solving and, therefore, do not eliminate the *root causes* of problems. They are aimed at evaluating outcomes, not at

causing Quality by eliminating the potential for error up front.

*The secret of prevention is to carefully look at our work processes and identify those opportunities for error. By preventing problems before they occur; you will find that the need for checks and double checks will diminish. As we implement this new system, each of us will learn to plan prevention by asking ourselves, "What things could go wrong?" This system will pay off for us as it enables us to meet our customers' requirements and eliminate hassles.*



*The System for Causing Quality is Prevention.*

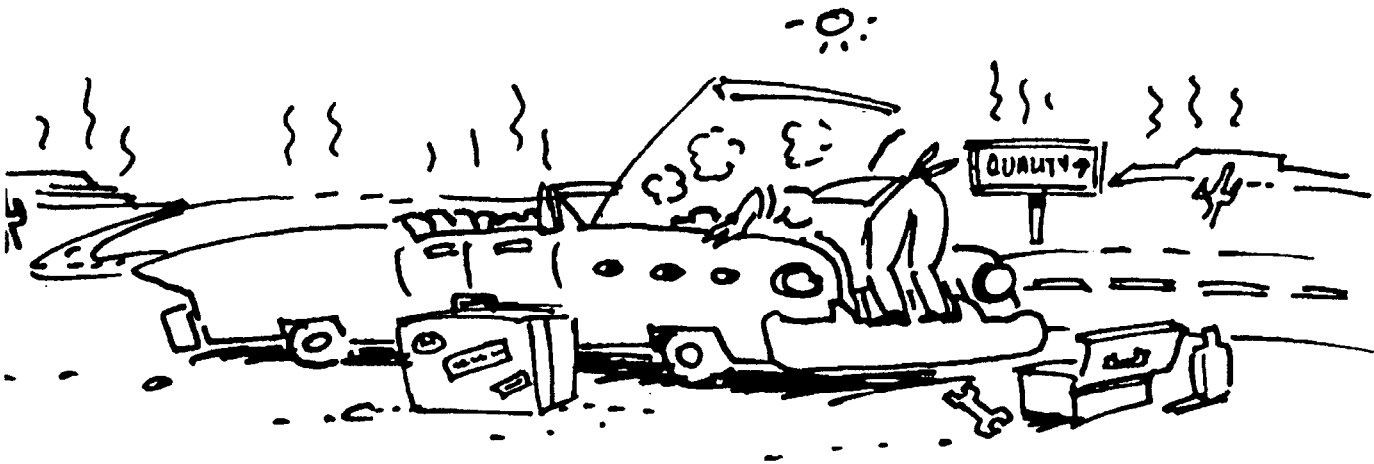
# What Performance Standard Is Required?

A performance standard is the written or unwritten management rule that tells us how often a job needs to be done correctly. Conventional standards generally give us acceptable levels as benchmarks for judging Quality, such as 90 percent correct. Sometimes the standard may not be that concrete, but rather, simply a "that's close enough" attitude.

The Quality Improvement process tells us that this conventional approach is not good enough. This becomes clearer to us if we look at it from a personal standpoint. If the checkout person at the grocery store where you shop overcharges you 10 percent of the time it would be totally unacceptable to you as a customer. The

only acceptable standard as far as you're concerned is a correct total each and every time. We must now apply this same standard to ourselves as we serve *our* customers.

The third absolute, therefore, says that the performance standard used must be zero defects. As we begin implementing the Quality Improvement process, zero defects will become a personal performance standard for each of us. Zero defects does not mean that you have to be perfect. It does require an attitude that we will meet our customer's requirements the first time, every time, and that nonconformance is not acceptable.



*The Performance Standard Must Be Zero Defects.*

# What Measurement Is Essential?

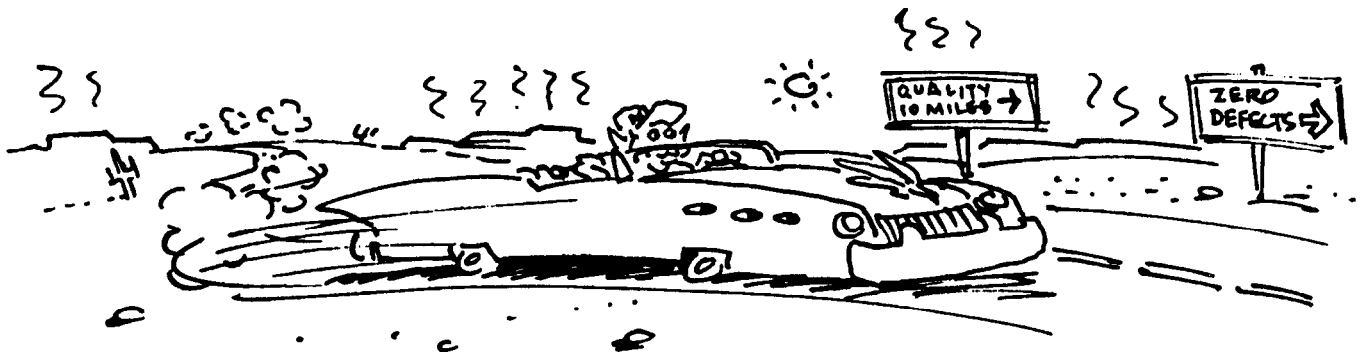
The conventional way of measuring Quality is usually through indexes. Unfortunately, this method does not provide us with clear Information on the significance of nonconformance in our work or whether or not Quality is improving.

The fourth absolute tells us that Quality must be measured by calculating the Cost of Quality. This measurement consists of two parts -the Price of Nonconformance and the Price of Conformance. The first is simply the cost of doing things wrong. It includes all the activities involved in correcting errors, such as rework, field

service, revisions and downtime, and therefore, it gives us a clear understanding of the money being wasted by not doing it right the first time. The price of conformance, on the other hand, is the cost of doing things right, and includes any activities required to conform to requirements.

The Cost of Quality measurement monitors areas of our work that produce the most costly nonconformances. *If is important to note that we will not be judging people with the Cost of Quality measurement!*

The Quality Improvement Process examines and measures work processes, not the employees performing the work.



The Measurement of Quality is the Price of Nonconformance<sup>TM</sup>

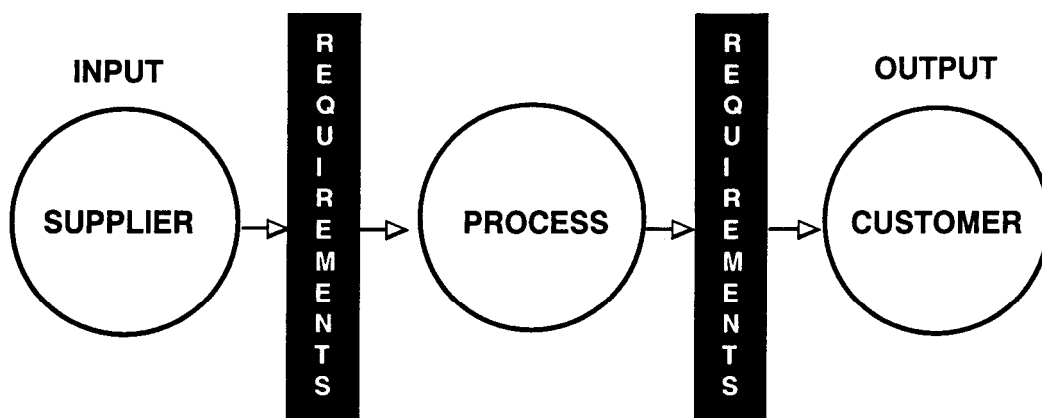
# Quality Improvement Process Model

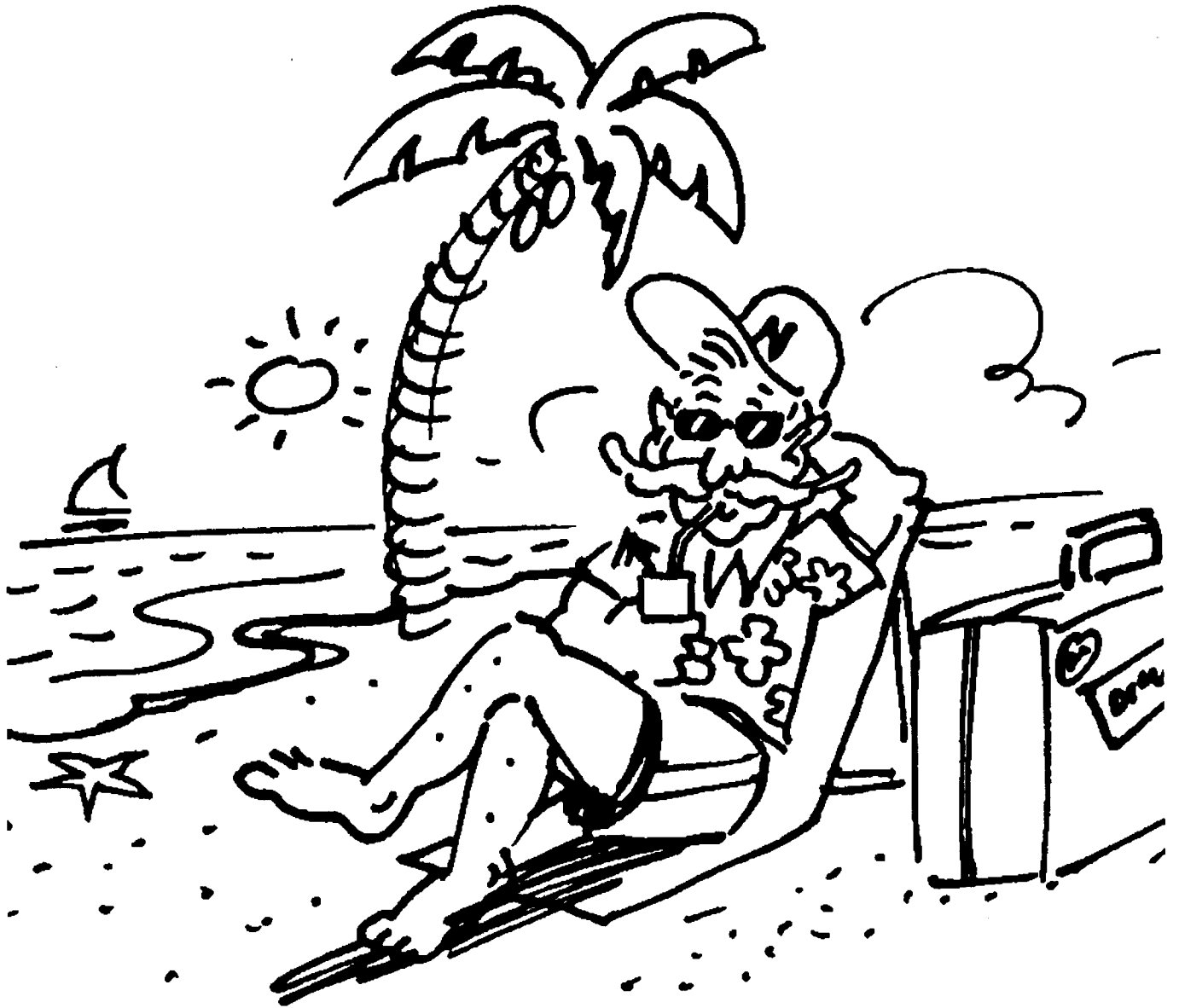
The Quality Improvement Process is based on the premise that all work is a process. As previously stated, to cause Quality we must prevent errors up front, not rework our mistakes. To do so, we first must understand our work processes. The Quality Improvement Process Model, shown below, is a helpful tool for analyzing each of our work processes.

There are five steps involved in using the model.

1. Define the process.
2. Identify the output(s) and customer(s).
3. Determine the requirements for the output(s).
4. Identify the input(s) and supplier(s).
5. Determine the requirements for input(s).

To achieve Quality we must assure that our suppliers meet our input requirements and we, in turn, must conform to client output requirements.





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