

# ARIZONA'S OWN QUALITY GURU

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Consultant, author, and engineer Mario Perez-Wilson has accomplished what many consulting companies only talk about. He has developed and implemented proven successful programs for improving the efficiency of processes in manufacturing companies throughout the world. And his methodologies have improved product quality in over 400 companies worldwide. In fact, Mario Perez-Wilson has influenced the quality and manufacturing yields of countless products: from computers, microprocessors, cellular phones, printed circuit boards, pagers and beepers to inkjet printers, pressure sensors, automobile exhaust systems, batteries, medical devices, nuclear tubes and sunglasses - to name a few.

## PHILOSOPHY

Mario firmly believes that to achieve success in production and transactional operations, everyone must speak one standard language and everyone must follow one standard, but flexible, recipe to reduce variation in their critical processes and systems. When asked about this, his philosophy of process efficiency, Mario replies, "in every system there is room for improvement and optimization." He also believes that a standard approach for analyzing and improving the total process, and attention to detail, are of paramount importance. Applying his philosophy, Mario has tested and developed methodologies for characterizing, optimizing and controlling the total manufacturing process. Now he has started using his proven approach on service and transactional operations,

as well.

In the face of demand for improved productivity and quality, Mario Perez-Wilson is a steadfast workhorse for the product and service industries. He believes that, "people recognize quality when they see it," and that, "there is too much talk about defining quality and not enough people really improving it." In a nutshell, Mario believes that too much time is spent talking about whose approach to follow and hit-and-miss experiences are happening because they are not following a standardized approach, a methodology. The result is always the same: inefficient manufacturing (i.e., higher scrap levels, lower yields, longer cycle times, reduced capacity) and transactional processing (i.e., long and useless forms, high error levels, wasteful or incorrect routing, low customer satisfaction), longer time-to-market and poor product and service quality.



As an engineer and principal founder of Advanced Systems Consultants, in Paradise Valley, Arizona, Mario is steadily working on designing methodologies to improve manufacturing and transactional processes and systems. His approach to efficient processes is not a quick-fix, but a proven successful solution for continuous process and system improvements, and long term benefits. Mario has

demonstrated the style of leadership needed, the driving force needed, to implement and sustain real change across a broadening variety of industries.

## STANDARDIZATION

With a Systems and Industrial Engineering degree from the University of Arizona, and a solid background and experience in applied statistics and manufacturing, Mario began working for Motorola - one of the largest semiconductor corporations in the world. During his tenure, he was

successful in institutionalizing statistical methods into the manufacturing and engineering disciplines of the corporation's worldwide operations. And, in 1986, he began advocating the concept of standardization in statistical methods for process improvement.

But, having the entire engineering community speaking the same language when referring to statistical methods is no easy task. Yet, standardization of methods is an indispensable ingredient for the successful implementation of improvement programs in all industries. For example, in order to exchange information we have to choose a common language, otherwise there is no dialogue, there is no communication. Choosing a common language to communicate is selecting a standard. We can imagine that improving a manufacturing or a transactional process requires more than just a common language. It requires standard tools, standard techniques and standard methods or methodologies that are understood and applied by the whole organization. Through standardization of statistical methods, Mario's initials are transparently cast into the organizational cultures of the world.

## **CHARACTERIZATION**

Over ten years of practical engineering experience enabled Mario to understand the problems that manufacturing engineers had to deal with on a daily basis. A turning point in his career came when, realizing that variability still existed after vendors delivered their machines, he pioneered yet another industry ideal. This time, he created a standard methodology for characterizing and determining the capability of a process - and for identifying, reducing or eliminating its major sources of variability. This concern for American product quality and process efficiency lead him to publish his first book, the *Machine/Process Capability Study: A Five-Stage Methodology for Process Characterization* - otherwise known as the M/PCpS book.

In addition to writing books, Mario has conducted training seminars for people all over the

world. Developing and successfully implementing his M/PCpS methodology for process characterization has been a catalyst for international acceptance. His methodology has become the standard approach to achieve Six Sigma Quality and has been successfully implemented in Fortune 500 companies in the electronics, automotive, semiconductor, defense and medical device industries.

Many managers and engineers know the frustration of a good plan gone awry. Hence, the significance of correct implementation - following a tested and orderly sequence of events - cannot be over stated. To ensure that all steps are executed and no shortcuts are taken, his methodology generates detailed process documentation - making people accountable and preserving the knowledge gained. Mario insists that everybody in the company support this "recipe" of implementation.

## **QUALITY**

Mario Perez-Wilson believes the consultant should not only reap the benefits, but also be held accountable. To that end, he knows that his methodologies have been proven to work when implemented properly. His expertise in process improvement has earned him the "Da N To Tsu" award - which in Japanese means 'Best of the Best' - from the Rochester Institute of Technology.

Mario Perez-Wilson is an expert on process and system improvement. Whether studying a single machine or a complete manufacturing or transactional process, he identifies the most efficient way to do it and establishes a systematic approach to keep it that way. For the most part, his work is transparent to the consumer. And though his influence within the manufacturing or service community is not readily apparent, it is quite significant; yet, you'll never see his fingerprints on either the products or services delivered by some of the major corporations around the world. From his unassuming office in Phoenix, Arizona, Mario Perez-Wilson is working hard to make all processes - manufacturing and transactional - around the world a little bit better. •