

Cost of Quality

Our Solution Validation service (iTQP's independent testing offering) has been engineered to offer three major benefit streams to our clients:

- Increase the value of their customer, distributor, and supplier relationships
- Improve the time-to-market and time-to-profitability of their products and services
- Reduce their actual internal technology acquisition costs

Increase Value Of Customer, Distributor, And Supplier Relationships

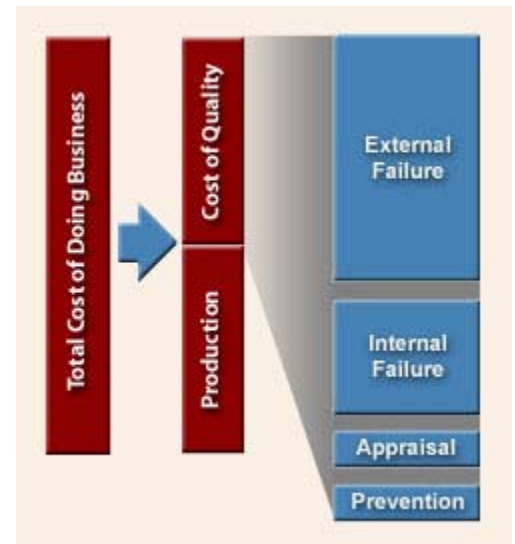
Our experience has shown that failure costs are by far the biggest risk to technology acquisition. And, further, since technology is increasingly being recognized as one of the primary value delivering components in a company's business model (both as it is used to improve the efficiency and effectiveness of the supplier chain, as well as to provide better value-adding buying experiences for its customers), it is clear that the more these failure costs are eliminated or reduced, the greater the overall value to the organization.

In a typical organization, the total cost of doing business can be divided into two major segments:

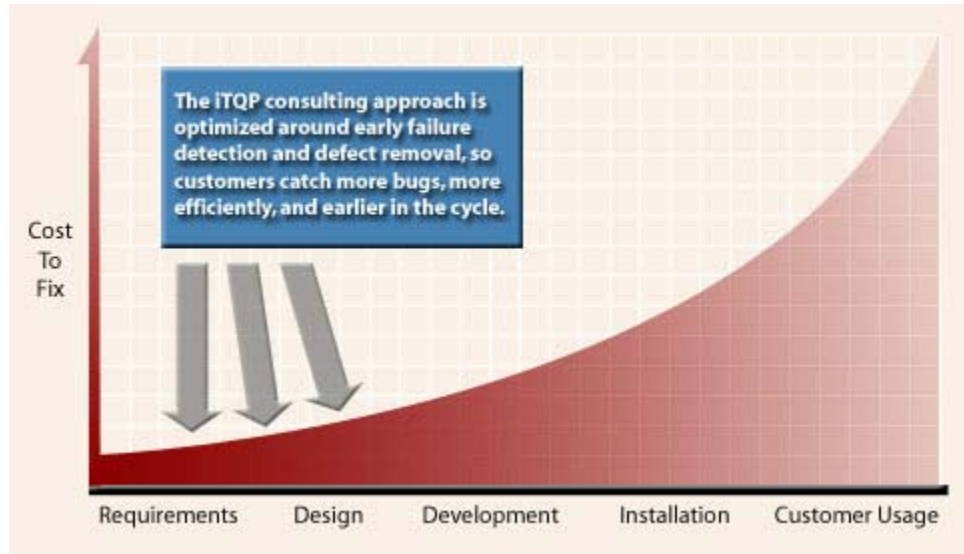
- Production costs, the costs associated with the engineering, manufacturing, distribution, and servicing of a company's goods and services
- Cost of quality, the costs associated with ensuring that these offerings meet the customer's needs and expectations

Examining cost of quality further, it can be seen as composed of four elements:

- **Prevention**, the costs associated with staff training as well as developing and supporting the variety of management disciplines and internal business processes that are focused on producing error-free products and services (e.g., 6-S programs, quality initiatives)
- **Appraisal**, the costs associated with reviews, inspections, testing, and related efforts to identify defects that have crept into work products
- **Internal failure**, the costs that the organization incurs internally as a result of a product failure, such as re-work, waste, recalls, delayed benefits, excessive help and service oriented call center cycle-times, etc.
- **External failure**, the costs that an organization incurs in the marketplace and in the industry as a result of product failures, such as lost business, lost markets, and lost opportunities



When looked at in this way, it can be seen that failure costs—especially external failure costs—because they are essentially unbounded costs, are the largest and least controllable cost that a company faces when attempting to deploy their technology into the marketplace.



Moreover, it has been shown that the longer it takes to actually isolate and identify a problem in any product, the exponentially larger the associated failure costs. This is a particularly powerful force that directly influences the economics of technology project delivery, and is driven by the following factors:

- The earlier in the acquisition life cycle, the numerically fewer objects that, in fact, exist, so defect removal and its associated impacts is limited to substantially fewer work products
- The earlier in the life cycle, the less complex the product and its relationships with other products and components, so that defect identification and removal is far simpler at the beginning than it will be as the effort advances and the structure, architecture, and component interactions become increasingly intertwined
- As work advances, more components exist whose assumptions and design are based on prior work products, consequently, as the technology acquisition effort moves forward it becomes much more likely that defects in one area will also result in waste and re-work in previously completed, and validated, areas
- The longer the technology acquisition effort, the greater its overall visibility to the world in general—both internally within the company, and externally among its suppliers and pilot customers—and the correspondingly greater their expectations and perceptions of its value, thus the more expensive any one failure becomes as its effects ripple through that community
- As customers become involved, which typically occurs with increasing frequency, intensity, and depth as the acquisition cycle advances, the greater the risk of lost business, lost markets, and reduced brand equity due to failures

Consequently, by focusing our quality and validation efforts with our field-proven best practices on uncovering flaws early, iTQP can dramatically reduce a company's overall technology failure costs.

This is the iTQP difference: our goal is to increase the value of our client's customer and supplier relationships by raising the quality of the technology that they increasingly use to create, grow, and manage those relationships.

Improve Time-To-Market And Time-To-Profitability

As was outlined above, in all technology efforts there is a strong non-linear relationship between costs and schedule. As defects are pushed to later stages in the development and acquisition cycle, or, in fact, shipped into the market, there is a significant time penalty that is incurred. Our experience has shown that the use of our proprietary techniques, and in particular, the packaging strategy (i.e., the allocation of business requirements to particular builds or releases), can substantially improve our client's ability to reduce their risk and deploy their technology solutions much more rapidly, thus reducing their time-to-market with technology solutions that meet the needs of their customers.

Reduce Actual Technology Acquisition Costs

The dramatic reduction in failure costs made possible by the iTQP approach translates into a substantially lower internal development and maintenance costs for all their technology and application support efforts. This results in improved capital utilization and ROI for the internal developers and business managers as they contemplate how to best deploy their assets for launching and implementing their technology efforts.

For more information, please contact us at (630) 365-1606, or visit www.itestqp.com.