



LEARNING FROM CROWDSTRIKE – THE IMPORTANCE OF BENCHMARKING IN IMPROVING ICT QUALITY

The 2024 CrowdStrike incident put a spotlight on weaknesses in ICT quality management. That's when a seemingly minor software issue quickly snowballed into a large-scale disruption, impacting businesses across several industries and causing a major financial fallout. While not all quality issues lead to global outages, many result in service issues, increased downtime, and declining customer confidence.

To reduce these risks, ICT companies can use benchmarking to track their performance against industry standards, which helps them proactively compare themselves with competitors, improve quality, and discover new ways to enhance their solutions.

There are, however, a few considerations to keep in mind when participating in performance benchmarking studies:

- **Ensuring apples-to-apples comparisons –** Agreement on specific performance measurements and their definitions is often difficult to achieve among participating organizations. Without alignment on the detailed counting rules, comparisons, and conclusions, benchmarking data can be misleading.
- **Controlling costs –** Benchmarking can get expensive when using outside consulting firms, and the results sometimes only account for a snapshot in time.

- **Maintaining data anonymity and security –** Companies that participate in performance benchmarking studies must remain vigilant that granular, company-specific performance data will not fall into the wrong hands.

Imagine a world where the ICT industry operates with standardized performance metrics, complete with precise counting rules and benchmark statistics. In this world, a robust infrastructure exists to gather data monthly from participating companies, ensuring anonymity and secure data retention. This aggregated benchmark data is then shared with organizations on an annual or even monthly basis, serving as a foundation for ongoing improvement. Consequently, the quality across the entire ICT sector is significantly enhanced. This is the transformative vision that TL 9000 offers to the ICT industry. In this article, we'll explore the important role TL 9000 and benchmarking play in elevating ICT solution quality.

To learn more about the CrowdStrike outage and how TL 9000 quality management standard can help ICT providers mitigate the risks of quality issues, read the full white paper.

WHAT IS TL 9000?

TL 9000 is a quality management system designed for the ICT industry. It was built on ISO 9001 and was developed by QuEST Forum in response to the call for industry improvement using ICT-specific requirements and measurements. The purpose of TL 9000 is to define the ICT quality system requirements for design, development, production, and service. In addition, it provides a measurement and benchmarking framework certified companies can use to drive their quality improvement programs.

BENCHMARKING DRIVES BUSINESS BENEFITS AND INDUSTRY PROGRESS

Benchmarking helps organizations evaluate their performance by comparing it to industry standards or best practices. It highlights areas of strength and pinpoints opportunities for improvement. With these insights, companies can refine their processes, improve quality, and maintain a competitive edge.

Benchmarking gives ICT companies a clear way to assess and improve quality beyond just meeting compliance standards. With TL 9000, submitting performance data on key quality metrics, organizations gain access to anonymized industry benchmarks for their competitive products – allowing them to measure their standing against best-in-class, worst-in-class, and industry-average performance levels. These insights help ICT providers make informed decisions on everything from quality control processes to production workflows, making quality management an ongoing commitment that ultimately leads to better customer satisfaction.

HOW THE TL 9000 BENCHMARKING PROCESS WORKS

- QuEST Forum has divided the ICT industry into over 100 different product categories. This is done to ensure that when data is submitted and reports

are generated, the performance is relevant to an organization's competitive products.

- The organization's certification identifies which product categories their data will be submitted against.
- Certified organizations submit performance data for each of their product categories to TIA QuEST Forum on key metrics in areas such as delivery timeliness, problem reports and responsiveness, downtime, field returns, software problems/fixes, and service quality.
- TIA anonymizes and aggregates the data into industry-wide benchmarks for each product category.
- Certified organizations can compare their results against aggregated industry benchmarks.
- Organizations make quality improvements based on the benchmarking data comparisons and insights.

ADDRESSING COMMON CONCERNS ABOUT BENCHMARKING

Some companies hesitate to participate in benchmarking due to concerns about cost, data security, or competitive exposure. TL 9000's benchmarking system addresses these concerns head-on:

- Confidentiality: Data is securely transmitted, anonymized, and aggregated so no individual organization's performance is exposed. Not even the TIA QuEST Forum knows which company is submitting the data. The QuEST Forum data repository system was the first in the United States to ever be certified to BS7799 (which later evolved to the ISO 27001 Information Management Security System).
- Cost: QuEST Forum members receive monthly benchmarking data for all certifiable products and services – a major advantage compared to standalone benchmarking firms that charge significantly more for a single snapshot of data. TL 9000-certified companies that are not QuEST Forum members also receive annual performance snapshots for their certified product category.

- **Competition:** Rather than fearing that competitors will scrutinize their performance metrics, certified organizations use benchmarking as a tool to improve their competitive position through better quality and higher customer satisfaction.

TANGIBLE BUSINESS BENEFITS OF TL 9000 BENCHMARKING

Companies that participate in TL 9000 benchmarking have reported improvements across several key areas:

- **Better products:** Performance data helps certified companies pinpoint areas where they are not meeting internal objectives or trailing their competition so they can address quality issues and manage the impact on their customers.
- **Reduced failure rates and enhanced service reliability:** Benchmarking reveals patterns in outage frequency, returns, software defects, and system performance, allowing certified companies to address their causes.
- **Simplified compliance tracking and reduced repetitive quality audits:** Benchmarking provides certified organizations with standardized data that improves customer confidence in product quality without costly second-party audits and customized measurement reports.
- **Higher customer satisfaction:** By improving metrics like outage rates, reliability, timeliness, and service quality, organizations reduce disruptions and build long-term trust.
- **Bottom-line impact:** Every aspect of benchmarking – quality improvements, risk reduction, understanding position with competitors, improved customer satisfaction, and efficiency gains – translates into a stronger financial position and competitive advantage for TL-9000 certified companies.

WHY THE ICT INDUSTRY AND COMPANIES CAN'T AFFORD TO IGNORE BENCHMARKING

Whether preventing catastrophic failures or improving everyday performance, organizations that leverage TL 9000's benchmarking tools position themselves ahead

of those that don't. Comparing performance to industry benchmarks helps companies create a culture of quality that helps them catch issues earlier, make informed decisions, and reduce unexpected service disruptions.

According to TL 9000 data, certified organizations have demonstrated consistent gains in quality. Below are a few examples:

- **Fewer Issues:** Certified packet switch providers showed a ~62% reduction in major issues and a ~22% reduction in minor issues according to early Software Problem Reports (eSPRs).
- **Software Fix Improvements:** TL 9000-certified wireline vendors showed a ~90% improvement in software fix quality (SFQ).
- **Better Return Rates:** Certified wireless providers showed a ~92% improvement in one-year return rates (YRR), demonstrating nearly \$1 billion in savings for a large-scale deployment.
- **Improved Delivery:** Certified edge router providers achieved a 130% improvement in delivery performance, while mobile base transceiver providers showed a 50% improvement.

The more companies that certify to TL 9000, the more robust and valuable the benchmark data becomes. That makes benchmarking more than a performance measurement tool – it's a proactive strategy for strengthening ICT service quality and minimizing risks.

Take the Next Step

To explore the role benchmarking plays in driving meaningful improvements in ICT service quality and reliability, read our full **white paper** today. If you're considering TL 9000 certification or are interested in contributing to the future of ICT quality standards, contact us today at membership@tiaonline.org.