

Quality Engineering Dashboards and Reporting: Identifying and Capitalizing On The Metrics That Matter



Preface



“On an average, a Small Business collects around 47.81 Terabytes of Data, a large organization manages 162.9 TB of data, and the average enterprise collects a whopping 347.56 TB of data, seven times as much as the average SMB.”

- HubSpot Data Analysis Study

In today's era, irrespective of their sizes, every company ranging from large enterprises to Small Businesses, have humongous volumes of data that manual maintenance is almost close to impossible. Even with every data getting migrated into the more sophisticated cloud platforms, still the data scientists and engineers face a difficult time in decoding and making sense of the existent data.

Now, with the inflow of data being exponential in numbers, deploying a robust quality engineering strategy has become an imperative for business across a spectrum of industries and verticals.

However, most of the IT enterprises and even organizations belonging to different industries have realized the importance of quality engineering and almost every business is joining this bandwagon. That being said, do all the companies that implement QE reap the complete benefits of it?

The straight answer is no! While every organization is rapidly transitioning towards a complete digital transformation by deploying quality engineering, they fail to utilize it to the fullest potential because they do not completely harness their QE dashboards.

Quality Dashboards don't just make quality data easily accessible, but also represent your data in an easily comprehensible and understandable form so the business owners and stakeholders can make informed, data-driven decisions.

Here, our team of experts have carefully curated their insights on

- [What is A Quality Dashboard and Why Is It Essential For Your Organization?](#)
- [How To Put Your Quality Data to Work and Leverage It for Your Organizational Decisions?](#)
- [Using Quality Dashboards to Cut Through Complexities](#)
- [The 3 Quality Engineering Metrics that Every CIO and CTO Must Keep an Eye On](#)

What is A Quality Dashboard and Why Is It Essential For Your Organization?

A Quality Dashboard is a graphical representation of all the essential information that showcase an organization's performance in a range of designated areas of quality. Simply put, a quality dashboard gives a crystal-clear view of your performance data and critical quality parameters on a single computer screen to further simplify quality management, analysis and reporting.

Furthermore, a quality dashboard aids in continuous tracking and evaluation of quality management metrics, issues, trends and risks. In fact, a dashboard can be as simplified as a one-page report that gives the right focus and direction for quality control and assurance actions. You can also access a bunch of smaller reports from this to visualize your data through charts, graphs, tables, spreadsheets, and data grids.

By deploying a quality dashboard, managers can obtain a holistic, 360-degree view of the overall progress occurring in your organization's processes and projects. Additionally, they will also gain access to a detailed report on the quality engineering procedure, and that includes, but is not limited to requirements determination, certification, testing, evaluation, audit and maintenance.

With a wide range of KPIs and metrics, every step can be scrutinized, monitored, and measured against the set quality expectations.



How To Put Your Quality Data To Work and Leverage It For Your Organizational Decisions?

Every industry nowadays collects enormous amounts of information throughout their process lifecycle to measure and protect their quality of products and services. However, the key here is to not just measure the metrics that matter, but also make sure that the information is accessible to decision-makers to benefit the product's overall quality. This is exactly where a quality dashboard plays a crucial role.

Deploying a quality improvement dashboard provides you with a high-level summary of the important metrics, without forcing the users to dig for details. In addition to that, you can also modify and customize your dashboards to suit the demands of different roles.

For instance, in case you're an important stakeholder in a manufacturing business, you can set specific metrics to monitor your floor plant operators' performance and other quality metrics that are pertinent to the specific line. Or, a corporate user might want to delve deeper on the historical or enterprise-wide data to discover newer opportunities to further improve the company's profits.

Once they are built, dashboards and data collection can metamorphose the way right from how your employees work to the entire work ecosystem from a quality standpoint. This way, decision-makers and stakeholders of the company can easily visualize how the organization is performing and how their actions affect their quality.

Equipped with actionable information and insights with utmost transparency, your organization will experience the best of both worlds – while the board can make data-driven, informed decisions, the staff can also work effectively and efficiently towards quality outcomes.



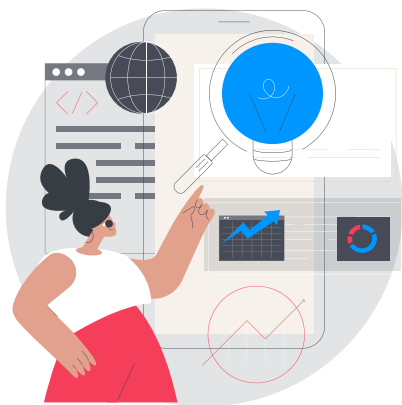
Using Quality Dashboards to Cut Through Complexities

Having a unified repository for quality data aids in gathering all the data and information under a single place. Dashboards simplify the way people look at data and enable a big-picture view of quality across complex processes.

Quality improvement dashboards gather information that has been collected from pooling across a multitude of sources and then synthesize them into simple visual models. They don't just cut through the complexity but also bring the most pressing issues to the forefront through tailored, customized reports and notifications.

Without dashboards, it is highly probable that quality teams could get buried under enormous mountains of incomprehensible data that it could render decision-making to a grinding halt. Furthermore, business leaders could also face a potential risk of not comprehending where their biggest challenges lie, thereby resulting in massively inefficient attempts at improving quality, costing way more than the intended budget.

Here's how you can make use of quality dashboards to seamlessly cut through the complexities and achieve greater productivity:



Dashboards Help Improve Efficiency:

When you have the data that matters represented in a clear, visual format, it paves the way for determining where you need to spend your time and resources, rather than wondering where to begin.



Dashboards Make Room For Seamless Communication Channels

With everyone having equal access to the same quality data pulled from standardized data sets, it becomes easier for not just streamlined communication, but also helps you create best practices, and make sure that everyone is on the same page.



Dashboards Are The Means For Better Collaboration

Visual representations provide easily digestible reports and snapshots of performance across various teams and verticals. This makes it easier to share information and seek feedback from multiple experts at the same time.

The 3 Quality Engineering Metrics that Every CIO and CTO Must Keep an Eye On

Metrics is a very delicate topic at most enterprises, and it is often thought of as a fact-finding or worse, fault-finding exercise by the teams that report data. However, if one really thinks about this, how can you measure something that you don't track, and more importantly, how do you make improvisations to your processes if you don't even know what went right or wrong?

Quality Engineering and Metrics in the Application Engineering Lifecycle are the only way to get everyone involved in the value chain, and assist in steering the course as and when required.

Just like how an athlete or a sportsperson improves their game by understanding the quality of their effort and studying the statistical data, the same applies for enterprises as well to give way for continuous improvement.

It is an undeniable fact that quality is placed at the heart of every brand and business and that is one of the most important factors on which customers view your brand. So, it is highly important that an organization tracks these 3 critical metrics. While these aren't listed in any particular order, when these data are correlated, it would give the IT leadership a holistic view regarding where exactly the organization stands in terms of their performance, efficiency, and productivity.

So, without further ado, let us take a look at the three most critical metrics that must be measured by an organization.

01

Productivity Metrics:

Productivity metrics are crucial in ways more than one. For one, with the help of productivity metrics, you will be able to better understand where you are in terms of your current design/execution cycle. Furthermore, you will also be able to accurately estimate the effort involved for the future cycles.

It is common knowledge that applications and projects are not essentially a one-size-fits-all, rendering one formula at effort estimation ineffective. So, in order for the teams to be more productive, it is imperative that you accurately capture the burn rates, design and execution productivity, and environment parameters. Here are a few productivity metrics that you should measure:

- **Task completed V/s Task Planned**
- **Software development cycle time**
- **Review to Merge Team (RTMT)**
- **Quality of the Code**
- **Deployment Time**

02

Efficiency Metrics:

It is a common misconception that enterprises often equate productivity with efficiency. However, in reality, they need to be measured differently. The simple logic behind this is, efficiency grows as and when a task is performed repeatedly. For example, the more often a test suite gets executed, the faster the team can complete it.

One of the foremost things to be considered when working on improving your overall efficiency is automation, and in order to reveal how efficient your organization is truly performing, it is essential that you measure these metrics:

- **Design and Execution Velocity**
- **Automation efforts V/s Manual efforts reduced**
- **Defect Detection Efficiency**
- **Release and Deployment Efficiency**
- **Downtimes**
- **Planned V/s Actual Metrics**

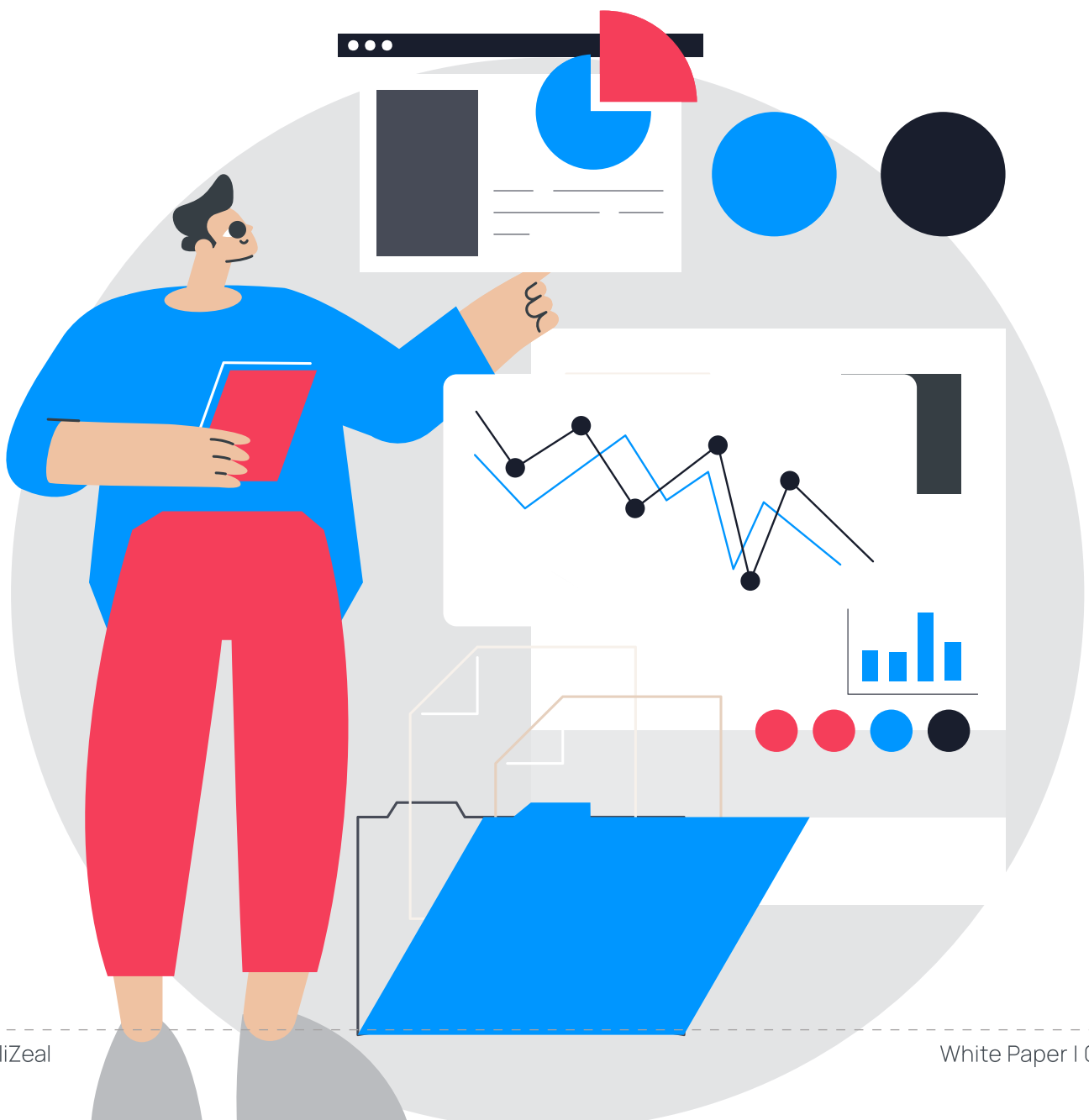
03

Defect Metrics

This is probably the most important of all. However, just capturing the defects might not be sufficient. Rather, classifying the defects based on their detection in the SDLC is profoundly more valuable than just knowing the fact that a defect showed up.

Here is what an efficient defect metric list should look like:

- Defect Analysis
- Defect Severity
- Defect Age
- Origin of Defect
- Defect Rejection Rate (represents the quality of the testing teams)
- Defect RCA Defect distribution by module or similar
- Defect Reported by Automation V/s Manual Test Efforts
- Regression V/s Functional



How Can QualiZeal Help You Leverage Quality Dashboards So Your IT Leaders Are Armed With Metrics That Matter To Make Data-Driven Decisions?

Quality Engineering Dashboards offer executive leaders the flexibility to view the quality processes in their entirety or even at a line-level detail.

Standardization across the enterprise will make it more seamless and faster for executives to evaluate quality metrics by site, product, or processes, and simple visual models pave the way for enabling intelligence analyses.

Quality Dashboards and reports are customizable and reusable, and this also helps leaders chalk out their organization's progress over time while also setting data-driven goals for the future.

By fully leveraging the power of dashboards, executives can seamlessly cut through the clutter and focus quickly on processes that need their attention. This way, your organization can categorize and prioritize the improvements that will have the biggest impacts.

Backed by QualiZeal's team of experts and the plethora of services that we offer, business leaders now have the power to enter, view, and analyze quality data in real-time from anywhere, so they can be in sync with their critical operations.

Ready to begin your journey with Quality Dashboards and Reports and fully leverage the power of metrics for making impactful, data-driven decisions? [Schedule a Meeting with us today!](#)