

TESTING INTELLIGENCE: TIMELY AND ACTIONABLE INFORMATION FOR ALL YOUR STAKEHOLDERS

Joel Montvelisky
H.S. PractiTest Ltd.

Abstract:

One of the most important tasks we perform as Testers and Test Managers is to *Provide Timely and Actionable Information to our Stakeholders and our Team*. To do this we generate Summaries, Dashboards, Tables, Graphs and many other Reports in different formats.

But many times the Information we provide goes unread or completely unnoticed, other times it is reviewed only to be asked to present more and different data that we had not provided or even gathered in the first place.

All these are signs that our “Reports” and even our Information Gathering approach are not the right ones.

Correct Information is not only a function of the way you present your report at the end of the process; it is the result of a complex process that starts with the analysis of the needs of your stakeholders, gathering the accurate and timely data from all your multiple project sources, and then presenting it in the correct format, at the right time, and to the proper audience.

This is what we call *Testing Intelligence*.

Is your information providing the necessary value to Project Stakeholders?

- How many times have you felt that Stakeholders in your Organization are not paying attention to your work and your reports?
- How often do you find yourself giving a project update on a meeting, only to be asked to provide different information that you had never thought of gathering in the first place?
- How common is for your project stakeholders to make important decisions about your product without even consulting your testing results?

All the above can be indications that your work is not being used to navigate the decision-making aspects of your project, and you are not fulfilling your task as Project Advisor to the Management Team.

The truth is that with the increasing levels of pressure and constant lack of time in our Industry it is not uncommon for Stakeholders to prioritize the reports they read and review, and to filter out information sources that do not add value to their decision making process.

This is what's happening to many QA Teams worldwide. The information they provide is not helping Project Stakeholders in their tactical and strategic decisions, and so these teams are being filtered out from the group of project members who's task is to provide visibility to the Organization in order to base its decisions. In many cases, this is also driving the same Stakeholders to feel that the value contributed by the QA is not high, placing the Testing Teams in the front row when companies start cutting expenses or downsizing.

The Testing Team as a Service Provider to the Project Stakeholders

After working with a large number of Testing Teams of this type and analyzing them, the conclusion is that the root of the problem does not lay in the way they perform their testing tasks.

The real issues are in the way these Teams fail to take into account the information needs of their stakeholders, and in how they fail to communicate the information at the correct time and in a format that is useful to them.

These teams don't understand that their goal is not the testing itself, but to provide visibility into the application for their Stakeholders. They fail to realize that they need to define themselves as a Service Provider Team, with concrete internal customers: the Project Stakeholders and Management Team.

Testing Intelligence: Redefining the objective of the QA

The non-trivial question is: If testing is not the goal of the QA, then what is the Team's mission?

The objective of the QA is defined as providing ***Testing Intelligence***:

Correct and timely (test-based) visibility into the product and process, in order to help the organization Stakeholders make tactical and strategic decisions, and to do this as close as possible to the defined constraints of schedule, functionality and cost.

To emphasize the main parts of this definition:

1. QA's final purpose is not to run tests or find bugs, these are simply the tools that stand at our disposal – if we could manage to do our jobs without either of them it would still be acceptable.
2. The Test Team works in order to provide the needs of the Organization, and more specifically the Project Stakeholders. The specific need we are required to fulfill is the one for information and visibility in order to make the correct decisions.
3. The QA's work is dictated by the constraints of the project, and they are required to use their experience and imagination in order to accommodate for these ever-changing constraints.

The most important aspect to take from this “formal definition” of the Objective of the QA is that it is far from implying that the main task of the testing team is to provide a signature at the end of the project certifying the product passed such and such tests.

Focusing first on the Internal Customers and only then on the AUT

The first order of business is to switch the focus of the team. Test Managers, Test Leads and even the Test Engineers should focus on their internal customers and their needs, and only then on the Application Under Test.

Before they define what they are going to test, and in parallel to learning and understanding the Application and its requirements; they also need to understand what are the objectives of the Project, who are the Internal Stakeholders, and what type of visibility they need to provide to make their decisions.

To test blindly, solely based on the understanding of the application is like trying to find a hidden treasure on an island based on the topology of the island alone, without consulting the treasure map. Eventually, we may or may not find the treasure, but we

will surely waste a lot of time and efforts searching in areas where there was no need to begin with.

The Team's Tasks and Challenges as Service Providers

Providing a service or working for a customer is seldom easy or straightforward. There are many challenges and tasks that need to be handle with extreme care and tact; and here's a list of the most common ones:

1. It's not always clear or trivial to determine who are the Project Stakeholders.

A project team can be fairly complex.

There are development groups, project managers, support groups, sales representatives, executives, etc. Each of these players with their own set of objectives and sometimes they are not aligned.

One of the first jobs of the Test Manager or Lead is to map her Project Stakeholders. Still she needs to be aware that during the course of the project itself new stakeholders may appear and she will need to recognize them as soon as they pop into view.

2. Work with the Stakeholder to analyze their needs

It's not that (internal) customers are bad or misleading, but usually they don't really know what they want and need up-front at the beginning of the project.

During the planning stages, and also throughout the whole life of the project, the Test Lead needs to be in constant contact with her stakeholders and work with them to understand what information they need, when they need it and how they need it.

3. Information comes from many sources, testing is only one of them

QA Teams need to understand that testing is only ONE of the tools at their disposal, and also that they are in the business of Information more than they are in the business of Testing alone.

Teams need think "outside-the-box", to look for information in additional places and to be in contact with additional teams to have access to information that may help them provide better visibility to their stakeholders.

For example, having a link to the Customer Support Organization to understand what are the areas of the product where users are complaining the most, or talking to pre-salesmen to learn what areas of the product are prospective users interested most and why. If the Test Leads can link this feedback back into the current project

she will be able to provide additional value by helping stakeholders to correlate and understand the whole picture, and not only what's happening on the development side of the house.

4. Needs change, instead of fighting change the team needs to embrace it

There is no perfect-world project where everything goes according to plan. So, instead of being surprised and fighting change, test teams need to look for it and adapt.

They need to work with the stakeholders to understand how this change affects their needs, and be flexible to start providing the newly requested information quickly.

Change should not be seen as an obstacle to the Test Team, but as an opportunity to provide added value to the Organization, and to demonstrate the ability of the QA to adapt to hard and non-trivial conditions.

5. Information needs to be presented on time or it loses its relevance

Stakeholders use information in order to base their decisions, so the Testing Teams need to provide their reports before the decisions are made.

Information delivered after the time will fail to create value to the project and help the stakeholders.

6. The format of the information is as important as the information itself

A classic mistake of many testing teams is thinking that the format is not important and to concentrate only on the content of their reports.

Each stakeholder needs his information in a format that helps him perform his tasks and make his decisions. Some stakeholders need to see specific data, others prefer to see only graphs and trends, and yet others like getting the information in presentations and meetings. As much as it can, and without becoming personal slaves of these managers, the Test Team should try to comply with the needs of its customers.

One thing is certain; the same information will need to be displayed in multiple formats in order to serve the needs of all your project stakeholders.

Summary – value is not an objective measurement

When working as a Service Provider the value is given based on the general feeling of the customers and not by an objective number of measurement.

The best indication that a Testing Team has of performing their tasks right is by being asked to perform them more often.

Each testing team should strive to become the Trusted Advisers to their Project Stakeholders and Management Teams, only when they are being asked to work hard in order to support the complete decision making process will they know that they are achieving their goal of providing good and useful Testing Intelligence.