

Effective Test Metrics Management

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Abstract

It is often observed in Software Test life cycle that different stages in the whole cycle overlaps. For example, schedule for creation of test cases often overlaps with that of actual testing of the product. In such a scenario, when pressure of meeting deadlines is mammoth, majority of tester's efforts at work should be directed at saving time and doing things productively. Dealing with product and testing related metrics forms an important part of tester's job. Metrics collection, presentation and maintenance can be a tedious job if not handled properly. This article deals with the need of organizing test metrics in an efficient manner.

Significance of Test Metrics Management

If you are a part of Testing group in an organization, then you surely would have encountered the below mentioned queries:

How much time will it take to finish the test cycle?

How stable is the functionality you are testing?

How much of testing is remaining to be done in test areas assigned to you?

What's the status of reviews you are doing?

How much percentage of Build is testable?

The list of these queries can go on. The important thing here is that these queries forms a part of daily routine of tester's job.

More often, answering the Metrics related queries results in an uncomfortable experience for the tester. The reasons for this are:

1. Tester is not prepared to present the asked data.
2. There is an inadequate data available with the tester.
3. Tester was not at all aware that he/she had to be prepared with the asked metrics.

In absence of data, which may be due to one or all of above mentioned reasons, a tester is often prompted to leave the task at hand and go from scratch to collect the data and put the data in presentable form. This activity, which is primarily due to lack of planning and ineffective management, may take long time to finish and causes a precious loss of testing time.

Considering the fact that testing time is often squeezed during the life cycle of a product in order to meet important Product deadlines, there is an utmost need to save time and focus on important tasks at hands. Managing the metrics effectively will help achieve this objective in a definite way.

As Testers are the people who are most exposed to Software before its actual Release or Beta Release, there is always a possibility tester will be asked to present various kinds of data during different stages of Life cycle.

Thus, metrics forms an important part of a tester's job. So, Metrics needs to be managed in an efficient manner and it will in turn help to enhance the productivity of a tester. Both Managers and Testers have a role to play in managing metrics.

Manager's Role in Test Metrics Management

Indeed, Managers have a vital role to play in managing Test metrics effectively.

What Managers can do is- PLAN BETTER

There is always a scope of Improvement in this area. Yes, this is definitely an area of Improvement as often Metrics are missed or not handled with priority at the Planning stage.

Most of the QA Plan or Master Test Plan templates don't say much about the metrics that would be used during the whole life cycle of Product testing. This is where Manager's can act and plan the usage of metrics before hand i.e. details of data that would be expected from tester's during various stages of Product life cycle.

Of course, all the requirements related to metrics are difficult to think of so early but even some meaningful Inputs at planning stage will definitely help testers to be prepared. This will help to make tester's work more focused.

Tester's Role in Test Metrics Management

To start with, the following listed attributes/ skills can help testers in this area-

1. Sense of anticipation
2. Discipline
3. Usage of Tools

Sense of anticipation is a quality that would definitely help tester manage him/her better. Its just thinking in advance, what kind of metrics would be expected in a particular time or a phase of the product. To add to this, sense of anticipation can be gained from one's own experience or somebody else's experiences.

To cite an example- during testing phase, one can always expect to be asked for time required for execution of test cases or about status of component under test. Judging this, a tester can always be prepared with required stuff much before it is asked for. Anticipation can help testers in great deal to escape from phrases such as "You were supposed to be present with this data".

Often metrics collection and management is a tedious activity and it sometimes prompts a tester to do repetitive tasks. Discipline is an attribute that can help tester in this aspect. Tester's motive should be to find a better way of doing things and this should be taken as a challenge.

Usage of appropriate tools can help a great deal in managing things better. Data storage, Data retrieval and Data presentation are the important aspects that need to be considered while selecting a tool. It should be noted that data presentation is an important aspect as effective presentation helps anyone who is reviewing the data save a lot of time and gather and analyze more in a very less time. Already existing small-scale databases such as Microsoft Access, Microsoft Excel can assist a lot.

One more tip in this area is that if there is already existing tool in place then queries for retrieval of data should be planned and made available for use anytime and by anyone.

Acknowledgements

I take this opportunity to thank all my superiors and colleagues at Quark Media House (India) Pvt. Ltd for the comprehensive experience I got in the organization that enabled me pen down a part of my experience in this Article.

About the Author

Anuj Magazine has an experience of more than three and a half years in the field of Software Product testing and Process Improvement. He is a Certified Software Test Engineer (CSTE). He has been involved in testing CRM, ERP, Warehouse, Publishing and Network Security related software applications throughout the life cycle. He is actively involved with Process Improvement Group in the organization.

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