CHAPTER 5:

TEST MANAGEMENT PROCESS
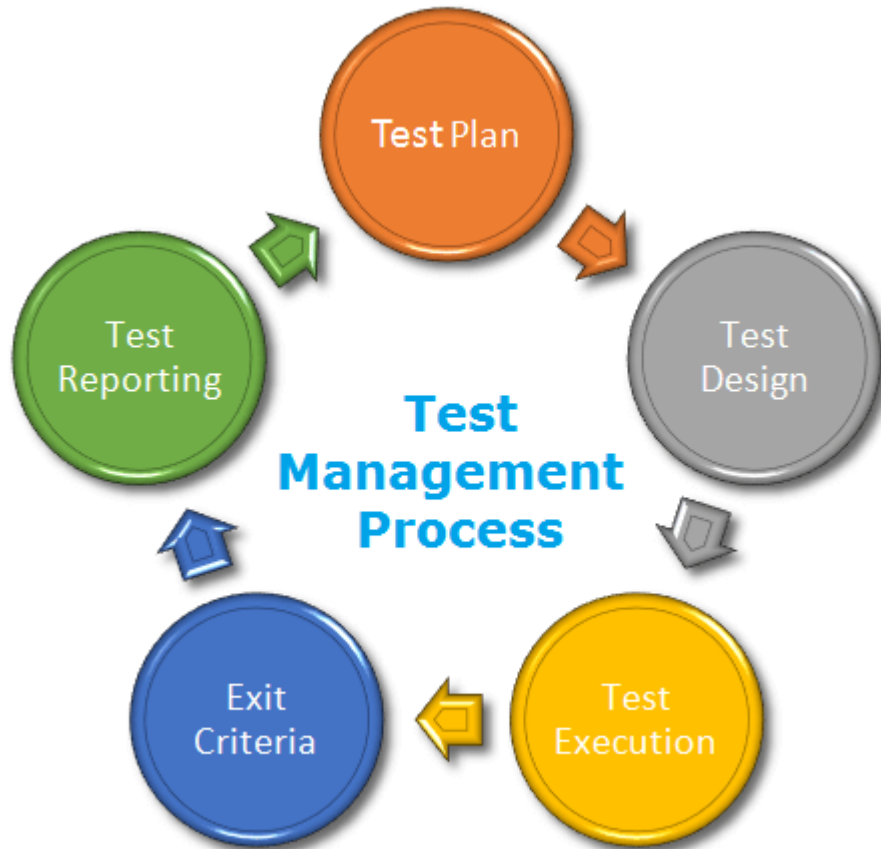
5.1.   TEST MANAGEMENT PROCESS

Figure 5.24 Test Management Process

5.1.1. Test Plan

Test plan served as an initial sketch to carry out the testing. Testing is being tracked and monitored as per the test plan. It gives a prior picture of test challenge and aspect that will be carried out for the software. By maintaining a test plan we can manage the changes in the plan.When starting new projects, based on the lesson learned in the previous tests, test plan needs to be improved to get betterment. Test plan explains the over view of particular requirement

which needs to be tested, scope, functional and non-functional requirement, risk and mitigation, testing approaches, test schedule and other special note for testing.

5.1.2. Test Design

Creating and developing test cases is with inputs and expected output of the system and choosing which test cases are necessary for the execution of the test. Tester should have the clear understanding and appropriate knowledge to set the expected result. By this, coverage of the testing is defined and tester will not miss any scenario. There are two types of test design techniques one is static testing and the other one is dynamic testing. Static testing is used to test without execution mostly to artifacts like document and dynamic testing is testing by executing the system.

5.1.3. Test Execution

Test execution is conducted by referring the document created during test design as step by step process. Tester needs to keep the track while executing the test cases.
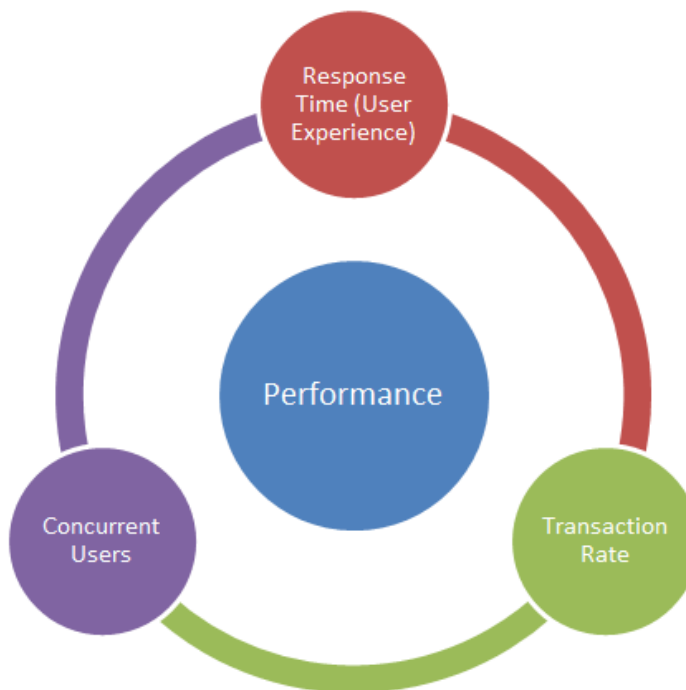
Static testing:

- Test the requirement specification document
- Test the design document
- Test the user guide

Dynamic testing:

- Functional testing

- Performance testing

- Testing Environment: Google Chrome Browser & Postman

1. Exit Criteria

Exit criteria determines when to stop the test execution. Exit criteria is defined during the test plan phase and used in the test execution phase as a milestone. Tester has to set the exit criteria at the beginning, exit criteria may change during the project run as well. There are factors like client need, system stability and filled function that decide the exit criteria. Once the tester reached the exit criteria testing will be stopped.

Cases:

- All critical defects are closed.
- All the reported defects and closed and verified.
- Executed and covered the areas which used by user mostly.
- System catered all the requirements.
- All the important functions are tested and working as expected.

Exit Criteria	All test cases are executed Pass rate: 95% without no high and medium priority test case left High and medium priority bugs recorded must be corrected and retest must be completed

5.1.4. Test Reporting

Test report is prepared and communicated periodically like daily, weekly, month etc. This needs to be sent in different stages and time.In the future project result of test reports needs to be analysed and apply the lesson learns. Test report contain elements such as test execution status, completed percentage, plan vs. executed test cases, test environment, test execution by resources,…

Test coverage report:

- Percentage completed
- Software area
- Tested resource
- Tested date
- Test result

- Risk level

5.2. ROLE AND RESPONSIBILITIES

Roles	Responsibilities
Project Manager	Ensure that testing activities take place and gathers progress information for reporting purposes
Test Manager	- Ensure use of the Test Case Report during all test stage - Provide status to the Project Manager and is involved in all test review meetings
Tester	Create and manage the Test Case Report

5.3. DEFECT PRIORITY

Priority	Description
High	Bug must be fixed before release to customer Make system crash or can't complete its function
Medium	Bug must be fixed before release to customer Make system can do its function but the result is wrong
Low	Bug related with Graphical User Interface