Test Management/Quality Assurance

Case Study 1

- You are a State project manager, and you are brought onto a State project to manage the Quality Assurance portion of the project.
- The project is large (over $50 million with over 3000 planned end users).
- The system is being developed by a systems integration vendor, and the State is responsible for project management, providing subject matter experts (SME’s), managing the contract, operations, user acceptance testing (UAT), etc.
- The requirements gathering, analysis, and design phases have all already been completed and approved. The vendor is reporting that development is about 75% complete.
- Because specific quality assurance measures were not contracted for early in the project, you realize you are being brought onto a project where you are the first person on the project doing formal QA.
- NOTE: This is not to say that quality was ignored or that the analysts, designers, SME’s, developers, or managers were sloppy—there just weren’t specific QA requirements or processes until this point of the project. Your job—at this late date—is to make QA happen.

(continued)
Case Study 1 (continued)

- The SOW and project schedule do require the vendor to complete unit, functional, integration, and regression testing. They are required to produce documented results of the testing, but they are not required to let the State participate in or observe their testing. The vendor is not required to demonstrate any iterations or rough-draft versions of the system during the development phase, and they are not doing so.

- You are relieved to find out the project does have good risk management, issue management, and change management processes in place. There have been a number of change orders: some because of correctly approved and documented scope changes, but some have been done because of requirements that were not analyzed or documented properly and ended up being quite ambiguous.

Main Question:

- What are some of the steps you would take to implement an effective QA Team and QA processes going forward from here?
Case Study 2

- Using the same project and same situation as described in Case Study 1, assume that an 8-week UAT is scheduled for six months from now. It has been determined that, in addition to three SME’s, there will be four end-users who will participate in the UAT.

Main Question:
- What are some of the preparation tasks that need to be done?
Case Study 3

- Using the same project and same situation as described in Case Study 1 and assume the UAT from Case Study 2 has completed.
- Even though the UAT has completed, there are still 210 open defects of varying severity.
- Pressure from stakeholders to get the system implemented in pilot is mounting.
- The project director discusses with you that waiting until the system is perfect with zero open defects is not feasible or desired.
- She wants you to conduct a “good enough for pilot implementation” analysis and then prepare recommendations for what needs to happen for the system to be good enough.
## Test Management/Quality Assurance

### Case Study 3 (continued)

### Breakdown of Open Defects

<table>
<thead>
<tr>
<th>Severity</th>
<th>Notes</th>
<th>Number of Defects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Showstoppers—major portion of system will not function</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Almost showstoppers. Business in the smaller section of the system where these errors occur will not work.</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>System is workable if vendor documents and will train users about “workarounds”.</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>These defects are about formatting errors and other topics that are inconvenient, but the system is workable.</td>
<td>80</td>
</tr>
<tr>
<td>5</td>
<td>Requests for enhancements.</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>210</strong></td>
</tr>
</tbody>
</table>

### Further analysis of the Severity 2 defects:

<table>
<thead>
<tr>
<th>Severity</th>
<th>Notes</th>
<th>Number of Defects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Almost showstoppers. Business in the smaller section of the system where these errors occur will not work. These Severity 2 defects will affect all counties.</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>Almost showstoppers. Business in the smaller section of the system where these errors occur will not work. These Severity 2 defects will <strong>not</strong> affect the pilot counties.</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>80</strong></td>
</tr>
</tbody>
</table>
Case Study 3 (continued)

Main Questions:
- What would you analyze?
- What might be some recommendations?