**Exercise 3\_2 – 15 mins.**

***PTFL-3.3.1 (K4) Analyze performance risks for a given product across the software lifecycle***

**Scenario:**

A shipping company is working on a major initiative to transform many of their legacy systems to more modern technology. Some of the systems can be modified, others will need to be re-written and some will be replaced by commercial-off-the-shelf software.

Like many companies, this organization does not have a single unified software development lifecycle. Instead, some teams work in a sequential lifecycle that resembles a waterfall approach. There are other teams that use an agile approach. There is also a special “systems integration” team that acquires, installs and integrates commercial software and systems.

For this project, senior management has mandated that each team provide their performance testing approach that reflects an integrated view of performance and the related testing of the system’s performance.

The project manager has asked that each team complete the following templates in accordance with the respective lifecycle approaches they will use for the project.

The company has just acquired a new performance test tool, but no one has been trained in the use of the tool. In fact, no one has been trained in performance testing and only one person in the company has any experience in performance testing.

Current internal user load levels are known, however, it is unknown if or when shipment requests may increase suddenly.

There is no dedicated test environment for any testing. Currently, the testers use a shared environment with development. The environment is not always available for testing.

The company has just completed a project risk assessment using a formal risk assessment approach.

There were over 20 findings and recommendations.

75% of the risks were rated “high”, 25% were rated “moderate, 25% were rated “low”.

It took 3 weeks to complete the assessment. Some people have observed that the risks have already changed.

Management’s concerns are:

* There is no way all the risks can be addressed in a cost-effective way.
* Some of the findings are “trivial”.
* There may be risks yet to be discovered.

A sampling of some of the identified risks are shown below. Your assignment is to assign a magnitude to the risks, along with your rationale, mitigation actions and areas responsible for each risk.

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| **ID** | **Risks** | **Magnitude** | **Rationale** | **Mitigation** | **Responsibility** |
| 1 | Business stakeholders may not able to define their performance expectations in specific terms. |  |  |  |  |
| 2 | The lack of a unified project lifecycle may result in inconsistent system quality, including levels of performance. |  |  |  |  |
| 3 | A new test tool may take longer than expected to implement, learn and use. |  |  |  |  |
| 4 | There is no training on performance tools or practices |  |  |  |  |
| 5 | Only one person has performance test experience |  |  |  |  |
| 6 | Lack of a performance test environment |  |  |  |  |

Which other performance risks do you see in this case study?

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| **ID** | **Risks** | **Magnitude** | **Rationale** | **Mitigation** | **Responsibility** |
| 7 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| 9 |  |  |  |  |  |