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**Brief**

Migration to cloud is not a trivial work. It involves detailed analysis in migrating large set of data, complex software, and sophisticated IT processes from one place to another. In this assignment, learners will be group in 3 to research on the given challenges and provide the best solutions they could garner.

**Challenge 1 - Compatibility Issue**

Scenario: Your superior wants to leverage on serverless technology as it eliminates operational overheads but the software is not serverless ready.

**Challenge 2: Vendor Lock-in**

Scenario: You have picked Cloud X as the destination of your migration only to find out that you'll better with Cloud Y as your technology scale.

**Challenge 3: Processes & Policies**

Scenario: Locally (in data center) configured security policies is not identical to the policies architecture in the Cloud. The deployment process of the current IT Operations Team may not fit well with the Cloud's.

| **Challenge** | **Scenario** | **Assigned Group** | **Proposed Solutions** |
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| **Challenge 1** | **Compatibility Issue** | Group 1 | - Conduct a comprehensive analysis of the existing software architecture and identify serverless incompatibilities. |
|  | Your superior wants to leverage on serverless technology, but the software is not serverless ready. |  | - Investigate potential refactoring or re-architecting strategies to make the software compatible with serverless environments. |
|  |  |  | - Explore third-party tools or services that can act as middleware to bridge the gap between the existing software and serverless platforms. |
| **Challenge 2** | **Vendor Lock-in** | Group 2 | - Evaluate the compatibility and migration ease between Cloud X and Cloud Y. |
|  | You have picked Cloud X as the destination of your migration only to find out that you'll better with Cloud Y as your technology scale. |  | - Consider developing a hybrid or multi-cloud strategy to minimize the impact of vendor lock-in. |
|  |  |  | - Investigate migration tools and services that support a flexible transition between different cloud providers. |
| **Challenge 3** | **Processes & Policies** | Group 3 | - Document the existing security policies configured in the local data center and identify the gaps compared to cloud architecture. |
|  | Locally configured security policies are not identical to the policies architecture in the Cloud. The deployment process of the current IT Operations Team may not fit well with the Cloud's. |  | - Collaborate with the IT Operations Team to adapt and align existing processes with cloud-native practices. |
|  |  |  | - Provide training and resources to the IT Operations Team to ensure a smooth transition and understanding of cloud-centric deployment practices. |