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**Department of Computing Sciences and Mathematics**

**College of Art, Science, and Technology**

**ITEC 205: Cloud Fundamentals**

**Homework Assignment 4: Engaging Cloud Vendors**

**Questions:**

1. What are the Capital and operating expenditures? Give and example on each type of each expenditure.

Capital expenditures are the funds that are used for buying, improving, or maintaining fixed assets such as the hardware like computers and their components. Operating expenditures are ongoing costs for conducting regular business, this could be the utilities such as lights and water or even office supplies like pencils.

1. What the BYOL licensing and how it provides flexibility in the context of cloud services?

BYOL is build your own license which lets companies redeploy licenses as needed which means they may not have to pay for new licenses with each migration and they get a greater flexibility as with cloud services they would not need to buy new licenses.

1. What are the advantages and disadvantages of using open sources versus proprietary services?

The benefits of using open source are the faster updates, better flexibility, and that there is no vendor lock-in. The downsides are that it does not have support from big companies, it has less features, and cannot guarantee levels of performance.

1. What is the SLA and how it is used in cloud computing?

SLA is the service level agreement which is the scope of services that can be provided. It is used with cloud computing by showing what the cloud is capable of and its standards.

1. In the context of cloud computing, what re RFI, RFQ, and RFP? Give an example of each concept.

RFI is the request for information which is used to get information about a CSP’s capabilities such as the project objectives and the timeline. RFQ is the request for quotation which breaks down the services and products with the project timeframe to get the price quota such as needing $25 a month for a running server. RFP is the request for proposal which asks about the project as an entirety instead of pieces like the others to help determine which vendor to use such as pricing of the timeline and information on the vendor.

1. What is Proof of concept? and how it differs from proof of value?

Proof of concept is a smaller project that shows what we expect such as the success rate and how it works. It differs from proof of value as the proof of value will focus more on the money such as the value of the project and any possible savings.

1. In cloud migration, what is the difference between the Lift and Shift approach versus Rip and Replace approaches?

Lift and shift will take the data and applications and move them to the cloud as is without having to make changes like picking up a basket and moving it a foot to the left. The rip and replace approach will do a complete redesign from scratch to take full advantage of the cloud features. The difference is their approach to moving whether it is shifting a basket or cutting up a shirt to make a quilt.

1. What is the difference between hybrid and phased migrations?

Hybrid migrations is a combination of the two approaches so it can be a mixture of the two approaches, or it can be a migration of only part of the infrastructure. The phased migration will happen in stages so it will migrate different pieces at different times instead of looking at moving the entire thing at once.