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| **Unit Code:** | ENSN201 |
| **Type of Assessment:** | Formative Assessment |
| Length/Duration: | One page of answer |

**Week 8**

**Case Study: National Kidney Registry Turns to Rackspace for Managed Hosting**

**Summary:**For many organizations like the National Kidney Registry, outsourcing their site hosting and data storage tasks to a cloud provider is a better option than handling it themselves.

**Case:**For small and medium-sized businesses, outsourcing computing-intensive tasks like website hosting has always been an appealing option. Taking this approach allows those businesses to focus on their core competencies while other companies with site hosting and data storage expertise handle those tasks for them. In the past, outsourcing was too expensive for all but the largest companies, but options for site hosting and data management have never been more plentiful, thanks to the growth in, and reduced costs of, cloud computing.

Prices range from a few dollars a month for very basic needs to hundreds of thousands of dollars per month for businesses with greater site traffic or data storage requirements.

The largest cloud computing providers are Amazon, Microsoft, IBM, and Google, all of which have the size and deep pockets to achieve economies of scale with their cloud platforms. These companies offer full arrays of cloud services for businesses, including website hosting. However, there are many smaller companies that specialize in specific areas of cloud computing, such as Rackspace. Founded in 1998 as an Internet service provider, Rackspace has become one of the largest website hosting companies in the U.S., and is competitive even with Amazon in its area of expertise, hosted private clouds or infrastructure as a service (IaaS). Rackspace routinely ranks among the top on lists of best companies to work for and is renowned for its commitment to high-quality customer support, which it calls Fanatical Support.

Private clouds serve individual organizations, as opposed to public clouds, which rent space to large numbers of organizations simultaneously and offer less customizability. Rackspace offers dedicated servers, databases, storage capacity, and networking tools in a singletenant, private environment. The security options for private clouds are also more appealing

to organizations that prefer to have more direct control over their data and to use firewalls and other measures to limit the number of people who can access the organization’s data. The National Kidney Registry (NKR) is an example of a company with unique security concerns who turned to Rackspace for its site hosting and data storage needs. The NKR is the largest paired exchange program for organ donors in the United States, connecting pairs of donors who would otherwise be incompatible because of differences in blood type or antibody. The NKR uses complex algorithms to determine potential matches, which may involve as many as 30 donors and recipients to find a swap that will lead to a successful match for all of the recipients. To date, the NKR has facilitated over 3,000 transplants.

**Answer the following Questions:**

1. Why did the NKR originally decide to pursue outsourcing its data infrastructure and site hosting?
2. What was the first service that the NKR migrated to Rackspace? What services did it migrate to Rackspace after that?
3. Why are the NKR’s security requirements unique?
4. How does Rackspace ease security concerns for donors, recipients, and participating hospitals?

**Total Marks: 20**

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| **Marking Criteria** | **Lecturer Expectation** | **Marks** | **Comments** |
| Analysis | Questions answered and covered in Depth |  |  |
| Concept | Demonstrates good understanding of key concepts |  |  |
| Idea | Original and creative thoughts |  |  |
| Critical Analysis | Critical and evaluative analysis of relative importance of issues |  |  |