I_516 Homework_1

Part 1. See PDF on webpage.

Part 2. See PDF on webpage.

Part 3. Referring to Enterprise_Architecture reading assignment, Closing Case_1, page B4.15, answer Questions 1,3,4,5. (1 point each)

Questions
1. Review the five characteristics of infrastructure architecture and rank them in order of their potential impact on the Tribune Co.’s business.
2. What is the disaster recovery cost curve? Where should the Tribune Co. operate on the curve?
3. Define backups and recovery. What are the risks to the Tribune Co.’s business if it fails to implement an adequate backup plan?
4. Why is a scalable and highly available enterprise architecture critical to current operations and future growth?
5. Identify the need for information security at the Tribune Co.
6. How could the Tribune Co. use a classified ad web service across its different businesses?

1. Performance, Reliability, Availability, Flexibility and Scalability.
2. 
3. A backup is a copy of the current system’s data, while recovery is the ability to access back up information and restart operations. A failure of Tribune Co. to back up its information could lead to delayed deliveries and page cuts similar to the problems it encountered while migrating its applications.
4. Both scalability and availability are important in order for the Tribune Co. to respond to peaks in demand. Furthermore, the movement of news consumption from physical newspapers to online news will lead to greater demand for both scalability and availability in the future.
5. Good information security will lead to timely and safe payment processing as well as ensuring the availability of the Tribune Co.’s website to the public. In addition, it will allow email and internal applications access to staff allowing them to continue to cover the news.

Part 4:

1. Write a brief pro/con assessment of public sector adoption of cloud computing services. (5 points).
   a. Some of the pros of cloud computing include scalability, availability and flexibility of systems. This allows organizations to respond to rapid changes in demand without large amounts capital expenditures and similarly allows them to shed unneeded computing when it is no longer required. An additional pro is the outsourced cost of maintenance.
b. Cons of cloud computing include the need for quality high-speed Internet access. The risk of data intrusions or hacking are increased. Lastly, customization may suffer as organizations must use the platforms of the cloud computing providers.

2. Provide a technical description of IUanyWare as an implementation of virtualization. (3 points)
   a. IUanyWare is a cloud computing service offered by Indiana University. In laymen’s terms, when a user opens the IUanyWare interface, a computer in one of IU’s data centers begins to operate. This operating system and application are then accessible through “virtualization” on the end user’s machine. This allows users to run a variety of operating systems and programs on a variety of machines anywhere with a good Internet connection.

3. What circumstances would be required for machine intelligence to be employed as part of public administration? For example, an information system that issues administrative orders in the field of environmental law, or a system that is responsible for sanctions in relation to speeding or financial fraud. (2 points)
   a. The use of machine intelligence may have profound impact on public administration. The most important consideration for the use of machine intelligence is that the machine must be programmed in such a way that it accomplishes the public policy goals of the agency. For example, in Cedar Rapids, IA, the state supreme court recently ruled that an automated system set up to catch and fine drivers exceeding the speed limit cannot be used. The court argued that the system focused too much on generating revenues and not enough on the public policy goal of reducing accidents.