Part_3 Enterprise Architecture

1. Five Characteristics of Infrastructure Architecture
   a. Availability – This is an essential component to any website, especially a news outlet. In today’s world, the news cycle does not end, which leaves subscribers constantly looking for information.
   b. Reliability – Accurate and functioning systems are a must to ensure customer satisfaction and dependability. Without this characteristic, business growth would not be possible.
   c. Performance – Due to increases in internet speeds and capabilities, customers have high expectations for website and online programs to complete tasks in a fast and efficient manner. This is a necessity to remain competitive in today’s competitive online market for information.
   d. Scalability – Accounts for significant increases in website traffic and views. A business must have a robust backup plan or unused computing power to prepare for unexpected increases in user traffic and site views.
   e. Flexibility – The first three ranked characteristics are necessary components for growth and business expansion. If all three are met, scalability and flexibility allow for a smooth transition to new and larger markets. Having a system equipped to house different languages and currencies is a key part of this process.

2. A disaster recovery cost curve displays the cost to an organization of the unavailability of information and technology and the cost to the organization of recovering from a disaster over time. The Tribune can operate at optimal levels by establishing a recovery plan at the intersection of cost to organization to recover from a disaster and cost to organization of the unavailability of information and technology.

3. A backup is an exact copy of a system’s information and recovery is the ability to get a system up and running in the event of a system crash or failure and includes restoring the information backup. As stated in the closing case study, system failures that result in delivery delays and page loss can result in millions in lost revenue. Given the high risk of revenue, billing information, and advertising information losses, the Tribune should invest in an hourly back-up system. Having an adequate back-up system in place may present higher up implementation costs but can save the company from higher revenue losses in the event of a system failure.

4. In a world with a 24-hour news cycle a newspaper site must be available at all times of the day. High-availability is a must for a media company and can be achieved through a redundant or duplicate system. As demonstrated in the article, a site can be inundated with views with little to no notice beforehand. Drastic increases in site visits can occur unexpectedly and cause a site to crash. Part of a successful business plan or model, includes a forward-looking strategy that accounts for expansion and user base growth.

5. With a user base of over 680,000 readers, the Tribune has extensive digital records of its user’s personal and billing information. With the constant threat of hackers and malware, the Tribune must protect sensitive data through robust network security management. If its servers were
compromised it could result in significant revenue and user subscription losses from loss of consumer confidence.

**Part_4 Cloud Computing**

1. Adoption of Cloud Computing in the public sector would provide a series of advantages for agencies as described in the International Data Corporation (IDC) study. The IDC study found that companies that implemented cloud computing solutions experienced over a 600% return on investment during a 5-year period, over $500,000 in average savings, significant increases in development productivity, IT productivity, savings versus traditional in-house environments, and decreases in downtime. The study presents a strong argument for implementation but also notes that cloud computing services also present increased security concerns. Implementation of cloud computing systems also has its downfalls. The National Association Of State Chief Information Officers (NASCIO) published a report that found “the majority of cloud computing providers surveyed... do not believe their products and services substantially protect and secure the confidential or sensitive information of their customers.” These findings could present serious implications if cloud systems were implemented at governments agencies holding highly sensitive of confidential information. Additionally, cloud computing requires a constant and consistent internet connection to function. Cloud systems do not function well with low internet connectivity.

2. IUanyWare is a client virtualization service that allows users to assess virtual storage and software through an internet browser.

3. For public administration to effectively adopt Machine Intelligence several functions need to be present prior to implementation. To process transactions, machine intelligence needs a set of automated rules or algorithms. Machine intelligence must be programmable and instructed to behave appropriately in specific situations. Given these circumstances machine intelligence can generate transparency, process transactions and communicate effectively with a user.