1. Replies Required :

As per the Chapter 11, the effective data communication will be achieved by the following the below four phases, The below four categories are necessary for every organization to effectively

Communicate the data among other departments by investing less and saves the time for all.

1. Data Visualization and Learning

2. Enterprise Data Mashups

3. Digital Dashboards

4. Geospatial Data and Geographic Information Systems

The IT-related information will be shared with many other departments in an organization through reports and dashboards.

**Data Visualization and Learning:**

In this phase, We use some applications and tools in order to pull all the corporate data and external data by using the data mashup technology which integrates all the source data and builds the dashboards and reports. In Visualization, we basically deliver the data in the form of the dashboards which contains the bar graphs and pie charts where the content was easy to view and it also contains the data in many different colors to highlight the data and also used tags to better understand the frequently used words.

**Enterprise Data Mashups:**

By using the Enterprise Mashups we can integrate the data from the different sources of internal data and the external data from the different applications and also the we can pull the data from using the API's from the SAAS(software as a service) applications, by using the mashups we can combine the data and build the reports and dashboards and communicate the data with other departments .

**Digital Dashboards:**

In dashboards, the data was pulled and analyzed and presented in many ways like KPI's and the metrics which will track each and every single category and groups which will help all the departments

to view all their data in a single place rather than log in to the different applications. Dashboards help the organization in many ways like highlighting the trends, metrics, KPI and tracking all the important information will lead the organization to take the higher decisions and help the time to log in to the different applications and also the investment and duration to build the dashboards are very less.

**Geospatial Data and Geographic Information Systems:**

The GIS basically it will analyze and predict the customer data which help the company to improve the sales and the competitor's places and their movements which will help the business to grow andalso help the tracking. By using the GIS the customers can easily track the geographic information which helps easy to communicate the data to the other departments.

**Replies 2 required :**

Communicating from one department to another is an essential element in the operation of business activities. Through communication, operations in the organization run smoothly because communication brings about coordination in the organization (Bonham-Carter, 2014). As an IT manager, I will efficiently utilize various methods in the ensuring proper coordination and communication from one department to another. Texting is one of the methods I will ensure that its put in place. Every department will have an email address where texting can be done thus promote communication among the departments.

Video conferencing is also another way that I will ensure that communication is enhanced by the department. In the current world where technology has been improved, video conferencing will be possible as the organization has the tight cameras and software where a meeting can be held online (Abbasi, Sarker, & Chiang, 2016). The action will give face to face meeting without requiring the members of the departments to meet in the same location.

The use of social networking sites will also be a way of communicating the information to various departments (Parker, 2014). The organization will have a social site such as Myspace where all the departments can be able to access. The information will, therefore, be always provided on this social site thus other departments can be able to access the information. It also a place where the organization can do the sales marketing and enhance its market for goods and services. The organization, therefore, needs a social site as a place that will enable it to relay information to various departments (Frank &Kornai, 2016). The action will promote the organization operations as communication is essential in monitoring and coordinating activities in an organization.

It is essential for the organizations to ensure that the communication system is well structured. As an IT manager, I will, therefore, ensure that texting, video conferencing and social sites are utilized in maintaining communication in the organization. The action will promote the proper performance of the organization.