A review of current trend on data management and quality in data communication

Abstract

Data communication is one of the areas that can be explored by researchers in the current digital world. The aspects of data communication could be divided into several categories such as the acquisition, transmission, processing, storage, etc. This paper reviews some of the previously written papers related to enhancement in data communication technology published between 2007 and 2012 in IEEE Explorer, Science Publications and ACM. However, only 33 of the above papers are considered for this review. In this paper, data communication aspects are divided into three categories namely (a) data processing, (b) data transmission and (c) data monitoring and control. Based on the review, the current data management requires fast and quick processing, transmission and retrieval. This is due the the change of paradigm from centralized to mobile data storage and retrieval and also the volume of data that is always increasing that requires better and fast result for organizations. This paper presents the current trend of data management and quality in data communication. The challenge posed by current data communication advancement through emerging mobile device and application become new research opportunities for researchers to create or to improve current method of data processing and retrieval.

Keyword: Data management; Data communication; Data processing; Data transmission; Data quality