Mobile database systems

<u>Technology</u>



Due to the increasing utilization of mobile networks and devices, mobile database systems have become a prominent method of data access. Data maintenance becomes a necessity for users who require mobility. Therefore, the usage of mobile database systems provides a convenient way of data creation, collection and management through mobile networks. Wikipedia defines a mobile database system as " a database that can be connected to by a mobile computing device over a mobile network. The client and server have wireless connections.

A cache is maintained to hold frequent data and transactions so that they are not lost due to connectionfailure. A database is a structured way to organize information. This could be a list of contacts, price information or distance travelled" [(Wikipedia: mobile databases)]. Information access and organization becomes the central theme behind mobile database systems. The appeal belongs to the fact that the users are able to access data on-thego. There are several key components to mobile database systems. They include servers, software and devices.

Various software manufacturers offer mobile database systems software for use on mobile devices. The software is a vital part of operating and maintaining mobile database systems. Such software is needed to achieve the desired effect of creation, collection and management of data during a time where quality, productivity and efficiency of work or personal data is needed to maintain so form of normalcy. The standard laptop and/or mobile devices are usually able to connect to servers for information request by the users and then have the information processed for ata retrieval or collection. Mobile database functionality has a two part existence; one, connectivity and two, a mobile device. In order to have a true mobile database system, one component cannot exist without the other. Such factors make the mobile database systems operational for end-users. Wikipedia depicts the functionality of mobile database systems as follows: "Sybase is still a major force in the enterprise market after 25 years of success and improvements to its Adaptive Server Enterprise product.

Although its market share dwindled for a few years, it's returning with powerful positioning in the next-generation transaction processing space. Sybase has also thrown a considerable amount of weight behind the mobile enterprise by delivering partnered solutions to the mobile device market" (Hess, 2010). Server quality is important to mobile database systems and their users due to the retrieval of information anywhere at any given time and that processing units and their users are immobile at the time of data processing.

Sybase has supported the mobile device market in the development of server 3 products. Mobile networks and devices are also necessary components, much like the servers. Connectivity is usually is done through user commands sent to the server for data accessing. Connectivity is significant for the exchange of data from the server to the device; users at this point can do whatever they desire with the data upon connecting to the server.

Mobile database systems have made major strides in the last five years in order to achieve an information management mobile platform; much in part to the new and latesttechnologyin mobile devices and server development. The speeds and rate at which a mobile device connects has increased over time to reflect the progress the mobile technology industry has seen in database system management. With the advent of smartphones and 3G networks, mobile database system management has made its mark into a data driven society.