Chapter 3

3. Motivations and Objectives of this Work

Many businesses have gone online nowadays by the advancements in technologies. World Wide Web (WWW) is the large information service center for various categories of information such as consumer information, financial management, education, e-commerce, news, advertisements and etc. Information is arranged in a proper order as in the form of websites. Web has a rich and dynamic set of hyperlink information. The web pages are accessed by using hyperlinks.

Internet has the main role in providing information to all kinds of users to obtain their needs, with its use on the increase day by day. Websites are highly helpful in providing information of any kind to the different levels of users also. A web server usually registers a weblog entry for every access of webpage. When the user makes interaction for getting some services through the website, the relevant information is automatically recorded in web server as in form of web logs.

The visitors browsing data like analysis of who browsed, what can give important insight, for example, what are the ways of getting the information of existing customers help analysts to predict, are extracted from the Web server. Mining the required data is an important challenge in web data mining. Web data mining refers to the process of mining useful knowledge from a big collection of data. Stream data increases quickly, that is why, there is an augmented need to do pre-processing on stream data.

There are so many collections and repository of information sources in the Web and the rapidly increasing growth of E-commerce, the Internet has turned into a significant requirement that retains or generates data which is employed in the E-businesses.
It is a revolution that the Internet has grown to the upper level of searching that gives enormous data collection. Nowadays, different strategies are used in businesses like E-commerce through the Internet.

Web mining systems are employed for the purpose of understanding customer profiles, and to analyze and know their own strength and weakness of their E-marketing strategies on the web through continuous developments. Internet can be effectively used only by some of the Companies that know the significance of Web mining and employ a different methodology to proceed in their business.

A company or an organization may directly deal with many types of customers through their web site creation and maintenance. The companies can trace the visitors’ actions through web analysis, and capture the interests from their visiting behaviors. This can be done by a process called web analysis. When it has been done by the Web analyst with company data warehouses, gives much benefits for their future businesses.

Users are still facing problems like information overload due to rapid growth in the volume of information and number of users. Web users suffer from many other difficulties in finding their required data from the web due to low precision and recall. So analysis of user’s current interest based on navigational behaviour may help organizations to guide users in their browsing activity and to recommend the web pages to cater to current needs of users. This helps the user to obtain relevant information in a shorter span of time.