PREFACE

The emerging technologies, notably the Internet and World Wide Web, have profoundly changed the way we work, live, collaborate and communicate. The World Wide Web (WWW) is revolutionizing the way that people access information, and has opened up new possibilities in different areas. This results in the creation of enormous amount of web information. This amount of publicly available information on the web is increasing rapidly. Thus, to find out the required information from these millions of Web pages, we have different types of search engines and subject directories available on the Web. Millions of people use Web search engines everyday to find information. Web searching is also the second most popular online activity, behind email. Therefore, the performance capabilities and limitations of Web search engines is an important and significant area of investigation. Further large-scale studies, are essential in helping users, Web search companies and researchers understand more about what Web search engines actually accomplish, including the differences between the performance capabilities of search engines. The goal of the present study is to conduct a large-scale study to measure the performance and efficiency of search engines on the first result page across the five most popular search engines, i.e. AOL, ASK, GOOGLE, LIVE, and YAHOO.

During my working experiences in a fully automated library, the Central Library III, Guwahati, I have confronted with different web search services to meet various information needs at various levels. Discussion with different library users regarding the use of search engines and my own personal experiences revealed that the different search engine presents different results for the same query. The present
study also reveals that there is significant difference among the search engines in terms of coverage, relevancy, uniqueness, and stability. This study has produced key findings that are important for all Web search engine users and researchers, and the Web industry. The experiments show a high level of statistically significant result between the search engines in terms of effectiveness and also in terms of selecting the best and worst performing search engines. This study will provide important insight into the effectiveness of five major types of search engines and their support in retrieving relevant internet resources.

With the application of Information Communication Technology (ICT) in the library services, today's libraries are providing various services to their patrons. The library and information professionals need to master a new medium of communication, develop new relationships with patrons, and adapt their resources and service structure to this newly defined technological environment. Today's library professionals have to depend more or less on different Web search services to meet the information needs of its diverse users as well as for the library itself for various in house purposes. Therefore it is very much important for the library professionals to know the various Web search services and their search strategies available in the cyber world.

For this study, the Harvard style, which is based on the author-date system for books, articles and non-books, has been used in preparing the in-text references and the bibliography. It is organized author wise alphabetically and is the evidence of all the sources I have used in the research.