Chapter I

Introduction

Information is a value added asset for people, organizations and countries. This value can be traded off through the output of activities that use this information. Examples are information about customer opinions to increase the marketing share, information about public health that leads to improved health of people. Information is used to support problem solving, decision making, planning, and expanding production and services (Keawlei. 1990). Information needs are increasing in society. In 1992, document volumes increased more than 90 % due to innovative media and tools in the last 14 years (Robex. 1996). Information has been utilized to educate, to enhance public relations, and to increase awareness of products and services through the various media, i.e. magazines, newspapers, radio and television programmes. The world has entered the information era. In other words, many people live in an information society. Social, economic, and manufacturing activities take place through communication media and information processing. Orenstein, R. (1999) estimated that by April 1999, the world would have 302,296,194 Internet users, which represents 5.04 % of the world's population. That number is doubling every year. He also estimated in April 1998 that the Internet had 84,931,309,748 web sites. It contains a lot of information which leads many people into an information overload problem. Rogers, J.D. (1999) found that most of the WWW's users spend 5 to 15 minutes finding the first piece of useful information. Waddington (1999), found that 43% of 1,300 managers in the UK and the USA delayed decision making when analyzing too much information. In this finding, 47% of the managers were distracted from information collection, and 38% of them spent too much time finding out necessary information.

The WWW is a persuasive communication channel. It is a means for users around the world to promote and exchange information (Fielding. 1998). Thus, the WWW should improve effectiveness and reduce problem in finding information. It should incorporate an integrated decision making tool that can assist web users in quickly identifying the correct information.

In this work, we also studied the system architecture as a connection between the system and the WWW. This study can be a model or guideline for information systems developers to solve informational overload problems.

Problem Statement

The trends of the information age are geared towards the Internet. Most informational activities can be presented on the Internet system. Web technology becomes the universal interface for all types of information (Process Software Corporation, 1999). Most web documents on the Internet are unstructured information in HTML format with some additional elements to attract the reader. However, they do not embed a decision-support tool in the web document to assist the user in finding out information in a timely manner. Barriers to finding out information on the WWW can be summarize as follows:

1. The WWW presents information in steps. Some sites provide too many steps to reach the target information.

2. WWW-based information promotions have not provided decision-support tools for users to utilize in finding out target information.

3. These is no sample model (framework) of Decision Supported Web Page Information Systems.

Objectives

1. Evaluate the effectiveness of the WWW information dissemination in finding specific information.

2. Propose a Decision Supported Web Information System (DSWS) model.

3. Present the effectiveness of DSWS in locating and selecting information.

Scope

1. The informational topic is herbal medicine for primary health care.

2. The study of the effectiveness of information access in the WWW is limited to Thai herbal web sites.

3. The research population is web users who are non-expert in herbal knowledge.

Assumption

Information dissemination on the WWW with the DSWS model is more effective than without the model.

Output

1. Effectiveness and weaknesses of information dissemination on the WWW

2. Promote sample models of information dissemination on the WWW with the DSWS

3. Effectiveness and weaknesses of the DSWS