

## A STUDY ON "WIRELESS LAN" : THE USER PERCEPTION AND REACTION

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#### **Chapter 1: Introduction**

#### 1.0 Background of Study

Pustaka Negeri Sarawak is conceived as a major information resource center and as the hub of information services for the public and private sectors. It will link with libraries, archives and information centers elsewhere in Sarawak and throughout Malaysia. It will also provide a gateway into and from publicly accessible international information center. Its complex will serve as a community center of knowledge and cultural enlightenment, where Malaysians in Sarawak can not only access a vast store of information, in the form of both printed and electronic media, but also gather for educational and cultural exchanges, programs and participate in many other regularly conducted activities. Set within a park that covers the State Mosque and the Minaret Gardens on the western side, Pustaka Negeri Sarawak is truly a place conducive for learning and reflection. While the interiors of the Pustaka complex are a modern structure that fit right into the 21st century, its exteriors are as close to nature as possible. The park includes a lake, areas for public performances and art exhibitions, a playground, picnic areas, a scenic drive, pedestrian walkways and bicycle lanes strewn with trees, shrubs and flower gardens. The interiors of Pustaka Sarawak are truly an architectural and information technology marvel, a perfect marriage of the two. It provides a mentally stimulating ambience for the seekers of information and knowledge. Different facilities are available for its patrons at the ground floor and first floor levels. The roles of Pustaka Negeri Sarawak were consisted of the roles related to information service. First role of Pustaka is to provide timely, accurate, relevant and accessible information in different formats - the essential ingredients for the healthy economic and social development of a State and its citizens. Second is to develop and contribute to relevant bibliographic databases, with particular reference to materials published within Sarawak. Next is to develop itself as the hub of information services within Sarawak and to participate in National and International networks of libraries and information services. Other than that, is to provide an educational environment through programs and exhibitions organized,

## **Chapter 2: Literature Review**

#### 2.1 What is Wireless LAN

A wireless LAN (WLAN) is a data transmission system designed to provide locationindependent network access between computing devices by using radio waves rather than a cable infrastructure. The users do not have to unplug a network cable from one jack and plug it into another jack without breaking the connection to that resource because WLANS permit the users roam (move from one point to another) (Mounir A. Khalil, 2004). To use the wireless network, any laptop should have a wireless network cards. In the corporate enterprise, wireless LANs are usually implemented as the final link between the existing wired network and a group of client computers, giving these users wireless access to the full resources and services of the corporate network across a building or campus setting.

#### 2.2 Wireless LAN in libraries

Wireless network (WLANs) is an added technology to digital libraries which are included on the network. Combine the ongoing deployment and upgrade of technology in libraries with the growing demand for access and it should come as no surprise that wireless networking becoming more common. Wireless connection networks can be served as an extension to library electronic information resources and services (Mounir A. Khalil, 2004). They should allow users to be more willing to adopting the technology because it is one of the popular methods in gaining more information.

In reality, libraries frequently face periods of peak use that exceed the number of available desktops. Increasing public workstation usually means ordering computers, more furniture and installation of power outlets, jacks and network cabling (Mounir A. Khalil, 2004). While the laptop is easy to connect and requires little time, it also can be loaned, allowing users to use them as needed. In addition, library staff can use wireless networks for a remote circulation and inventory task. Wired networks will always have significantly faster capabilities, making wireless appropriate for those situations where moderate transmission speeds are enough. Wireless networks grow for mobile computer uses. There were not enough desktop

#### **Chapter Three: Methodology**

#### 3.0 Research Design

The method used to conduct this study is by using quantitative approach. The data was gathered through the distribution of questionnaire. The data survey consisting of a 23-item with the intention to see the reaction and perception of the users towards the use of wireless LANs (Local Area Networks) in the area of study (Pustaka Negeri Sarawak library).

The questionnaire contained the questions on demographic characteristics which it is to determine whether the demographic differences determine the reaction and perception of the users towards the topic. The questionnaire is the most appropriate way to collect data from the sample size of population which the sample size of population represent the users of the library whether there are member or nonmember. The questionnaire was distributed to 200 users at the Pustaka Negeri Sarawak.

#### 3.1 Population and Sample

There are several methods of sampling that can be used to draw samples from a population. In this study, the sampling method used is random sampling which it considered the best way to choose sample that is unbiased (Shcumacher & McMillan,1993). All members in the population have the same probability of being selected by using this sampling method. The area of the study was limited to all users of Pustaka Negeri Sarawak. The monthly average of people comes to Pustaka Negeri Sarawak is about 27164 people. In this study, the users were randomly selected whether they are member or nonmember of Pustaka Negeri as long as they have used the wireless LAN service. Secondary sources were first explored to obtain insights into the literature on wireless service use. The next stage involved gathering information directly from various levels of age, gender and education respondents. They are categorized as members or nonmembers. Member is the user who was registered and pays a fee to use all the services provided by the libraries. Non-