

## ABSTRACT

Title : **The Usage of Fiber Optic as a Solution to Improve the Network Performance in PT Globalindo Technology**  
Name/ NIM : Sharon Chevalier/ 08320020002  
Major Advisor : Meiliayana, ST, MT  
Co-Advisor : Dipl,-Ing. Liem Lie Wie, MM

Nowadays, network has brought such a great impact in human's life. As we can see, the implementation of network itself in lots of organizations has been widespread. Of course network enables lots of people to do such a resource sharing, and do a paperless data communication, thus it can reduce the lost of the data itself. And as the improvement of the information technology, we do need either the faster data transmission with a great quality of integration and security. Therefore, we need transmission media with a great quality and meet those requirements.

The network performance in PT. Globalindo Technology is quite good so far. The speed of data transmission is quite high with the support of thin coaxial backbone cable. Despite that, thin coaxial still have a few of vulnerabilities. These vulnerabilities can threat the integrity of data by any kind of *eavesdropping*.

In order to overcome those vulnerabilities, the usage of fiber optic is recommended to replace the role of thin coaxial as a backbone cable in this company. There are many benefits that fiber optic offers, especially to give a high guarantee of data integrity and the more faster data transmission. By using fiber optic, the company's network performance can be improved as well.

( iv + 39 pages : 3 tables, 17 pictures)  
References : 9 (2002-2004)