

**ADSL TECHNOLOGY IN DELIVERING
BROADBAND SERVICES:
TELEKOM MALAYSIA'S PERSPECTIVE**

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ABSTRACT

The accelerated growth of content and multimedia-based applications that require high bandwidth has changed the nature of information network. High-speed communication is no longer perceived as a 'luxurious' item, in fact it becomes a 'necessity' these days. People crave for higher speed, fast downloading and bigger bandwidth in their daily undertakings; either for business purposes or pleasure. This new change of demand is a challenge to Telekom Malaysia (TM) in fulfilling customers' requirement and meeting their expectations.

This project report will cover on TM's current practice in delivering broadband services to the mass public and on top of that, this project also will study the nature of ADSL performance as ADSL is known as a distance-sensitive technology.

In this project I used data collecting as one of my methodology. The data was collected based on five days' observation in Subang Jaya and USJ areas from TM's main office in Subang Jaya.

I hope this research will give readers the understanding about ADSL and give a better perspective on TM as a major provider of broadband in Malaysia.

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CHAPTER 1

INTRODUCTION

1.1 Background

In ADSL technology, telephone companies that have abundant of copper wires see an opportunity to leverage the explosive growth of the Internet and the resulting customer demand for faster data access. Telekom Malaysia with 32,110 copper kilometers cable pairs laid nationwide has also grabbed this opportunity by introducing broadband service based on DSL technologies, namely Streamyx in April 24, 2001 to the mass [1].

In recent years, ADSL has been the dominant technology in providing a fast and efficient wide-area network access. Its significance in alleviating today's data transmission bottlenecks has been appreciated. Now users can browse the Internet, access remote LAN as well as enjoy streaming multimedia contents at a reasonable speed using ADSL. This technology offers unprecedented data rate that is much faster than the ordinary voice modems that we used to use in the old days. The cost of an ADSL service has now come down to an affordable price that most people would find it too hard to resist. TM Net, for example, in November 2003 has reduced its high-speed Internet service namely Streamyx as low as RM 66 to RM 44 per month [2].

Interest in ADSL regained momentum after fiber-based broadband access technologies proved to be too costly and time-consuming for widespread deployment. British Telecom (BT) for example has around 5500 operational buildings across the UK supporting 28 million working PSTN lines. BT needs to spend around £3 billion capital expenditure every year in upgrading and extending this network in order to be broadband-ready but by turning into copper cables, it will save a lot of capital cost to BT [3].