# ABSTRACT

The development of digital communications technology is curently growing rapidly. One of the advantages of digital communications technology is at its compression technic. By this, large files can be reduced in size, therefore in a telecommunication system does not need too large channel space. The problem is there are too many kind of video compression with various performance from each technic. Because of varying performances so user will be difficult to choice what type of compression and codec they will use. This will affect to the less optimal of using an codec in an application.

In this final project, is done by comparating the performance between H.264 and WMV. The performance of each codec are evaluated in subjective (MOS) and in objective based on: PSNR, MSE, dan compression ratio. In its design is done by coding the original video file first with H.264 and WMV video *codec* using Format Factory 2.15 so it got video input file for performance calculation.

To get the information about the performance and characteristic of each codec, so the quality of video input file are tested according to parameters using functions that has made in MATLAB 7.8.0 (R2009a). The result has shown that in objective WMV is better than H.264 for the quality of video, but in for the compression ratio H.264 is better than WMV. While in objective H.264 is better than WMV. It can happen because the audio componen is ignored when the quality tested of both codec is created in MATLAB so it effected the value of PSNR and MSE. Moreover it can happen because of the delay factor in WMV that affects the respondents ratings.



Key word: codec, wmv, H.264, psnr, performance