

ABSTRACT

It is useful to the telecommunication industry in Malaysia to be able to forecast the growth of mobile phone usage, which is defined as the increase, in percentage, in the number of mobile phone users over a year. Mobile phone features are known to influence users' purchasing preferences and thereby affect the growth in usage. A research was conducted particularly to study how the advancement in science and technology (S&T) features of the mobile phone can influence this growth. The advancement in S&T features represent the technological advancement in the features of the mobile phone, such as the physical attributes, durability, security, entertainment, accessibility and wireless technology. A survey was also carried out on the users' purchasing preferences of the mobile phone. The sample population included university students and selected members of the working group. Information on the advancement in S&T in the telecommunication industry for the past twelve years (1990 to 2001) within Klang Valley was also gathered. Based on the analysis of the survey data, the Mobile Phone Usage Growth Rate Indicator (MPID) was developed to make forecast of the growth rate. The econometric model was used in constructing the forecasting models. MPID was developed as a standalone application using Microsoft Visual Basic integrating Crystal Report and Microsoft Access database. Personnel from telecommunication companies evaluated MPID. Results of the evaluation show that MPID could make forecast of mobile phone usage growth with a high degree of accuracy if not more than past six years' data are used in the forecasting. This is evident when forecast results are compared to the data on the actual growth rate.