Research collaboration through the use of collaborative technologies has the huge potential to improve research publication performance. In order to ascertain optimal usage of collaborative technologies in Malaysian research universities, the main objective of this study is to investigate significant antecedents or drivers to usage of collaborative technologies. The research objectives addressed by this study include (a) the investigation of the relationships between each of these antecedent factors of personal innovativeness in IT, task-technology fit, perceived management support, subjective norm and perceived peer usage with perceived usefulness and individual usage; and (b) the investigation of the relationship between perceived usefulness and individual usage of collaborative technologies for research collaborations. Renowned technology acceptance theories and models, namely the Technology Acceptance Model (TAM) (Davis, Bagozzi & Warshaw, 1989), the Theory of Planned Behavior (Ajzen, 1985; Ajzen, 1991), the Task-Technology-Fit model (TTF) (Goodhue & Thompson, 1995) and the Technology-Organization-Environment (TOE) model (Tornatzky & Fleischer, 1990; Zhu & Kraemer, 2005) were used to form the broad hybridized research model of this study. The research model assessed the antecedents of collaborative technologies usage by looking at three critical contexts of technological, organizational, and social perspectives. The model also investigates the mediating effect of perceived usefulness on individual usage. The study used questionnaire survey method as its main data assessment instrument. Data analysis was conducted on data collected from 156 academic researchers from the five Malaysia research universities namely; Universiti Kebangsaan Malaysia (UKM), University of Malaya (UM), Universiti Sains Malaysia (USM), Universiti Teknologi Malaysia and Universiti Putra Malaysia (UPM). The study employed the extensive quantitative approach of the structural equation modeling (SEM) method to evaluate the research model and to test the hypotheses. The main findings of this study are that (a) personal innovativeness, task-technology fit and perceived peer usage are significant predictors of individual usage of collaborative technologies; (b) perceived managerial support and subjective norm were found not to be significant predictors to perceived usefulness and individual usage; and (c) perceived usefulness is a significant mediator to individual usage in that perceived usefulness had fully mediated personal innovativeness while partially mediated peer usage. This study is perhaps one of the first to address the collaborative technologies usage in these five research universities in Malaysia using a broad extensive hybrid model to investigate influences of antecedent factors on collaborative technologies usage. The results provide practical insights on how the Malaysian higher education sector and other research organizations of not-for-profit structure could enhance on their collaborative technologies usage.

Measurements of banking efficiency and productivity have received increasing efforts in applied economics in recent years due to the rapid acceleration of changing nature of financial industry. The financial sector, especially the banking system, plays a central role in the process of economic development and growth in a specific country. The efficiency of the banking system is one of the most important issues in the financial market because the efficiency of banks could affect the stability of the banking industry and thus the effectiveness of the whole monetary system in a country. Bank’s efficiency is measured as the difference between the bank’s position and its best production frontier. Generally, there are two main techniques that would be used to evaluate banking efficiency: parametric and non-parametric techniques. This study analyzed the technical efficiency and productivity of the banking sector in Libya during the period from 2004 until 2010. A nonparametric data envelopment analysis (DEA) method is employed to estimate the mutually exhaustive components namely pure technical efficiency (PTE) and scale efficiency (SE) of the 17 banks in Libya. Also, the Total Factor Productivity (TFP) of the Libyan banks is calculated using the Malmquist Productivity Index (MPI). The decomposition of the MPI such as technical change, efficiency change, pure technical efficiency change and scale efficiency change were included in the measurement. Finally, the second stage is used. The Ordinary Least Square (OLS) model to determine the factors that could influence the efficiency score. The findings of the first stage indicated an average efficiency scores in the banking sector in Libya during the periods of study. The results showed that the most efficient banks were the specialized banks, followed by commercial banks and lastly the private banks. In term of productivity, the results showed that Libyan banks productivity declined during the period of study. As for the determining factors that influencing the efficiency scores of the Libyan banks, the results showed that only profitability, size operation, government link, mergers and ownership structure that have significant relationship with the Libyan banks’ efficiency scores.