ABSTRACT

The objective of this study is to explore the trends of research publications in Information Technology (IT) in Pakistan and to identify sectors where IT has been implemented and applied during last twelve years. The present study has also investigated different research methodologies adopted in IT in our Country.

A review of the literature was conducted, regarding IT usage and implementation in Pakistan in different sectors through science direct, Scopus and other publishers. Help was also taken from documents produced by the Government of Pakistan, which provided an initial background insight into the situation studied. Then data was gathered through a meta-analysis of articles published in international research journals by Pakistani researcher in field of IT during the past twelve years (2000-2012).

The results have shown that from 211 articles published during last twelve years, twenty were published between 2000 to 2005; twenty three between 2006 to 2007; 163 were published between 2008 to 2012. Thus in 5 years period since 2008 to 2012 it appears that IT research showed a steadily increasing trend. Simulation and experiment were found as most popular research methods adopted in IT research in Pakistan. The significant statistical results, suggested that there were differences among the methodologies adopted for research in IT in Pakistan.

The results also designate that IT is implemented more in directly IT related sectors (66.35%), with major involvement of systems engineering (20.37%) in total publications. 26 studies were focused on the networking sector contributed for 12.32 %, while software sector added 9.95% share in publication for directly IT related sectors. While in indirectly IT related sectors the education sector contributed maximum at 12.32%, followed by the government and Business organizations (3.79%) and health sector (2.84%). The contribution of indirectly

related to I.T sector in IT implementation as a whole was 33.64%. The Mann-Whitney test statistics also provide significant evidence of a difference between services in directly IT related sectors and indirectly IT related sectors.

Hence present study has identified the trends of IT publications during past twelve years (2000-2012) in Pakistan. The results obtained, would help reaserchers to identify and use the most adopted and successful research methodology in future. This study has also provided the useful information regarding some focused and some ignored research areas in the IT sector in Pakistan. The information thus obtained would be meaningful for Higher Education Commission (HEC) and Pakistan Council for Science and Technology (PCST) in order to fund those areas in future which have potential or which have remained ignored.