

## Abstract

The main purpose of this study is to investigate the impact of information technology, strategic leadership and knowledge management on competitive advantage (case study of Iraqi petrochemical industry). This research has 3 hypotheses. The statistical population of the present study is all senior managers of the Iraqi National Petrochemical Company under the Ministry of Energy, which according to the Central Statistics Agency in 2020, the number of chemical industries in Iraq was 71 companies. Purposeful sampling method was used and to determine the sample size using Slovene formula, the researcher distributed the questionnaires to 65 companies and 59 questionnaires were collected. The data collection tool in this study was a questionnaire that had 31 items. To measure the validity (validity) of the variables to the validity of the content and structure has been done and approved. Cronbach's alpha coefficient was also used to ensure the reliability of the research variables. Structural equation modeling method and smart pls software were used to test the research hypotheses. Finally, the results showed that from the perspective of Iraqi petrochemical industry managers, information technology has a positive and significant effect on the competitive advantage of petrochemical industries in Iraq. Strategic leadership has a positive and significant effect on the competitive advantage of petrochemical industries in Iraq. Knowledge management on industrial competitive advantage Petrochemicals have a positive and significant impact on Iraq.

Keywords: Information technology, strategic leadership, knowledge management, competitive advantage, Petrochemical Industries, Iraq