

Information Technology Impacts on the Supply Chain Performance: Case Study Approach

Authors : Kajal Zarei

Abstract : Supply chain management is becoming an increasingly important issue in many businesses today. In such circumstances, a number of reasons such as management deficiency in different segments of the supply chain, lack of streamlined processes, resistance to change the current systems and technologies, and lack of advanced information system have paved the ground to ask for innovative research studies. To this end, information technology (IT) is becoming a major driver to overcome the supply chain limitations and deficiencies. The emergence of IT has provided an excellent opportunity for redefining the supply chain to be more effective and competitive. This paper has investigated the IT impact on two-digit industry codes in the International Standard Industrial Classification (ISIC) that are operating in four groups of the supply chains. Firstly, the primary fields of the supply chain were investigated, and then paired comparisons of different industry parts were accomplished. Using experts' ideas and Analytical Hierarchy Process (AHP), the status of industrial activities in Kurdistan Province in Iran was determined. The results revealed that manufacturing and inventory fields have been more important compared to other fields of the supply chain. In addition, IT has had greater impact on food and beverage industry, chemical industry, wood industry, wood products, and production of basic metals. The results indicated the need to IT awareness in supply chain management; in other words, IT applications needed to be developed for the identified industries.

Keywords : supply chain, information technology, analytical hierarchy process, two-digit codes, international standard industrial classification

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020