

Prioritizing the TQM Enablers and IT Resources in the ICT Industry: An AHP Approach

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Abstract : Total Quality Management (TQM) is a managerial approach that improves the competitiveness of the industry, meanwhile Information technology (IT) was introduced with TQM for handling the technical issues which is supported by quality experts for fulfilling the customers' requirement. Present paper aims to utilise AHP (Analytic Hierarchy Process) methodology to priorities and rank the hierarchy levels of TQM enablers and IT resource together for its successful implementation in the Information and Communication Technology (ICT) industry. A total of 17 TQM enablers (nine) and IT resources (eight) were identified and partitioned into 3 categories and were prioritised by AHP approach. The finding indicates that the 17 sub-criteria can be grouped into three main categories namely organizing, tools and techniques, and culture and people. Further, out of 17 sub-criteria, three sub-criteria: Top management commitment and support, total employee involvement, and continuous improvement got highest priority whereas three sub-criteria such as structural equation modelling, culture change, and customer satisfaction got lowest priority. The result suggests a hierarchy model for ICT industry to prioritise the enablers and resources as well as to improve the TQM and IT performance in the ICT industry. This paper has some managerial implication which suggests the managers of ICT industry to implement TQM and IT together in their organizations to get maximum benefits and how to utilize available resources. At the end, conclusions, limitation, future scope of the study are presented.

Keywords : analytic hierarchy process, information technology, information and communication technology, prioritization, total quality management

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