

# **THE EFFECTS OF IT UTILIZATION AND INFORMATION SYSTEM INTEGRATION (ISI) ON SUPPLY CHAIN INTEGRATION (SCI)**

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## **ABSTRACT**

IT utilization refers to the way that firms apply computer and information technology to support infrastructural and operational decision making, and to assist in strategic decision planning. With advances in information technology, information systems integration (ISI) and its role in an integrated supply chain have become important to executives and researchers. ISI represents the degree of cooperation on information system practices between business functions within a firm and between a firm and its trading partners. While many firms focus on achieving high levels of IT utilization, if lacking high levels of ISI, supply chain members may not attain full benefits of technology investments within the supply chain. This study proposes three significant contributions to the information technology research. First, this study applies information system perspective to study causes supply chain integration. It proposes, at an organizational level, a theoretical framework, that considers the role of ISI as a mediator between IT utilization and supply chain integration. Second, this study develops reliable and valid research instruments that are beneficial for both practitioners and academicians, using a rigorous research methodology. The concept of ISI can be captured using two main sub-constructs (1) Internal ISI (IISI) and (2) External ISI (EISI). Third, this study also examines relationships among four constructs (1) IT Utilization, (2) IISI, (3) EISI, and (4) Supply Chain Integration.