## World Academy of Science, Engineering and Technology International Journal of Computer and Information Engineering Vol:11, No:06, 2017

## A Decision Support Framework for Introducing Business Intelligence to Midlands Based SMEs

Authors: Amritpal Slaich, Mark Elshaw

**Abstract :** This paper explores the development of a decision support framework for the introduction of business intelligence (BI) through operational research techniques for application by SMEs. Aligned with the goals of the new Midlands Enterprise Initiative of improving the skill levels of the Midlands workforce and addressing high levels of regional unemployment, we have developed a framework to increase the level of business intelligence used by SMEs to improve business decision-making. Many SMEs in the Midlands fail due to the lack of high quality decision making. Our framework outlines how universities can: engage with SMEs in the use of BI through operational research techniques; develop appropriate and easy to use Excel spreadsheet models; and make use of a process to allow SMEs to feedback their findings of the models. Future work will determine how well the framework performs in getting SMEs to apply BI to improve their decision-making performance.

Keywords: SMEs, decision support framework, business intelligence, operational research techniques

Conference Title: ICBIS 2017: International Conference on Business Information Systems

**Conference Location :** Paris, France **Conference Dates :** June 25-26, 2017