

## Advanced manufacturing technology adoption in developing countries: the role of buyer-supplier relationships

### ABSTRACT

**Purpose:** Developing countries are heavily dependent on the resources and commitment of foreign providers to ensure successful adoption of advanced manufacturing technology (AMT). The purpose of this paper is to describe the important role of buyer-supplier relationships (BSRs) in the process of technology selection, acquisition and implementation.

**Design/methodology/approach:** A survey of 147 Malaysian manufacturing firms is the main instrument used in the research investigations and data analysis is carried out by the structured equation modelling (SEM) technique. In particular, the authors examine the impact on performance of different patterns of relationship between technology buyers and suppliers.

**Findings:** Although the majority of the firms reported improvements in their performance since the acquisition of AMT, closer investigation reveals that those demonstrating a closer relationship with their suppliers are more likely to achieve higher levels of technology and implementation performance (IP) than those that do not.

**Research limitations/implications:** The paper only assesses the strength of BSR from the buyers' perspective and they may have limited experience of acquisition, whereas suppliers may have more experience of selling AMT. Also, the research is undertaken in Malaysia and the findings may be different in other countries, especially where the technology being acquired is not imported but sourced locally.

**Practical implications:** The findings relating to BSR, technology acquisition and IP have important implications both for customers and supplier firms as well as for industrial policy makers in developing countries.

**Originality/value:** The result of the research provides useful insights that are especially pertinent to an improved understanding of BSRs in the procurement of capital equipment, about which the current research literature is limited.

**Keyword:** Advanced manufacturing technologies; Channel relationships; Developing countries; Supplier relations