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Antecedents and performance outcomes of global competence: An empirical investigation

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Abstract

We examine the role of commitment to supply chain management (CSCM) and information technology (IT) in the achievement of *global competence* (GC). Through an empirical examination of 667 manufacturing business units in the U.S., we confirm the importance of global competence using two objective measures of firm performance. We investigate the direct effects of CSCM and experience with IT on performance, in addition to their indirect effects through global competence. We show global competence to be linked directly to objective measures of sales, and indirectly to return on assets (ROA). Despite manufacturers' hefty investments in IT, we find that experience with IT does not drive ROA directly, but only indirectly through global competence and sales.

JEL classification: M11; Production management

Keywords: Supply chain management; Technology; Globalization; Empirical models; Manufacturing strategy

1. Introduction

Globalization is changing the way manufacturing businesses operate everywhere. Hardly a day passes without the press highlighting ways that American manufacturers are moving towards more foreign production. ''Offshoring'' (where companies move some or all of their operations abroad) and ''outsourcing'' (where production is contracted out to other business entities) are prime examples. Both have helped push emerging markets like China, India, and Brazil briskly up the technological ladder and have resulted in some unexpected consequences for the U.S., including product recalls and plant closings (Roth et al., 2008a). For example, the Progressive Policy Institute

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in Washington, D.C., estimates that more than 60,000 factories were opened in China by transnationals between 2000 and 2003 (Progressive Policy Institute, 2004). China had $53.5 billion in direct foreign investments in 2003 alone. Yet, "transnationals severely underestimated the domestic competition, and Chinese companies won huge market share at the expense of the transnationals. What they lack in spiffy products they made up for in marketing savvy. The domestics built distribution networks" that fit China's national situation (King, 2004, p. R3; see also Zhao et al., 2007 for a summary of supply chain, logistics, and quality research in China). The drive for low cost production in emerging market countries, particularly, has sometime resulted in 'quality fade,' where opportunistic suppliers sometime cut corners (Midler, 2007; Roth et al., 2008b,c).

These rapid trends towards foreign production and cross-border trade have contributed to the ubiquity of globalization, especially due to advances in information and communications technology and supply chain practices that enable firms to buy and sell across borders more easily. They signal that manufacturers have entered what Ferdows (1997, p. 102) calls "the age of transnational manufacturing, where things made in one country are shipped across national borders for further work, storage, sales, repair, remanufacture, recycle, or disposal." Or, as Jack Welch, General Electric's former chief executive officer, stated in a 2000 speech, "A truly global company will be one that uses the intellect and resources of every corner of the world" (General Electric Corporation, 2000).

How do successful American manufacturers maintain their global primacy in the age of transnational manufacturing? Our paper answers this question in two ways. First, we inform researchers and professional managers of the shortcomings of traditional management practices that view globalization as merely a path to low-cost resources and new markets. Our research specifically pertains to manufacturers that seek foreign expansion of R&D, Marketing/Sales, and/or Manufacturing, such as by offshoring one or more of these functions. We do not consider global outsourcing of these functions to other organizations through contracts, alliances, etc., nor do we consider other non-core business functions. Second, we point readers toward a richer understanding of the business performance consequences of *global competence*—a term used to describe a company's relative competitive strength on four dimensions of internationalization: *global research and development (R&D)*, *global marketing*, *global manufacturing,* and *integration in foreign communities*. Importantly, global competence provides a business case for building multi-functional, global capabilities.

Global competence, then, builds on the Bartlett and Ghoshal (1989) conceptual typology of transnational organizations and their evolutionary path to transnationality; upon the insights on global manufacturing strategies given by Ferdows (1997), Flaherty (1996), Hayes et al. (2005); and upon the stream of prior related empirical work where reliable and valid measures of the global competence dimensions were developed (Cattani et al., 2001; Roth, 1998). We posit that high-performing transnational manufacturers enjoy success because they have developed a more holistic set of global capabilities that go beyond seeking low costs (i.e., global competence). Thus, for American transnational companies, like Johnson & Johnson, Proctor & Gamble, and General Electric, increasing global competence expands their exposure to foreign competition and fosters a culture of cross-border learning and integration. Global competence also draws theoretically upon Cohen and Levinthal's (1990) theory of absorptive capacity, or the firm's ability and willingness to recognize, value, assimilate, and integrate new knowledge into its products and processes. We empirically demonstrate that companies with high global competence have superior business outcomes.

We evaluate the influence of two key antecedents of global competence: (1) commitment to supply chain management practices (CSCM) and (2) relative experience with information