

What drives IT performance?

October 26 2011

Going online was once a considerable achievement for a business. Now it's a given and what makes for success is how well a business exploits its online capabilities, according to a recent study.

The research examined the role played by [information technology](#) (IT) in [business](#) plans of small- and medium-sized manufacturing enterprises (SMEs). It examined the direct effect on the management and usage of IT, and most importantly, on its performance.

"The value of computer-based advanced applications for manufacturing SMEs depends on how these applications are aligned with the companies' [business strategy](#)," says second author Anne-Marie Croteau, an associate professor in the Department of Decision Sciences and Management Information Systems (DSMIS) at Concordia's John Molson School of Business.

The study, The Strategic Role of IT: An [Empirical Study](#) of its Impact on IT Performance in Manufacturing SMEs, was published as part of the Sixth International Conference on Internet and [Web Applications](#) and Services. It focused on IT performance in 44 manufacturing SMEs in the Midi-Pyrénées region of France, where firms had between 10 and 299 employees.

Louis Raymond, a professor of information systems at the Université du Québec à Trois-Rivières and Canada Research Chair in Business Performance, oversaw the study's data collection. Croteau and François Bergeron, a professor at the Télé-Université de l'Université de Québec à

Montréal (TELUQ), contributed to the research model and discussion of findings.

Internet and the web are key to a business's ability to survive -- much less compete -- in a fragile economy. SMEs exploit their technological applications online to control what they buy and what they produce throughout the manufacturing process. IT allows them to assess the impact of their product on the market and to adapt their manufacturing process when necessary.

"We found that the role given to technological applications in a manufacturing SME's strategic plan positively affects how they perform for the business," continues Croteau. "First, it affects IT performance directly, and second, it affects how IT performs in an indirect way, via its influence on how well the technology is managed but how users exploit the information made available to them through the applications."

Management in manufacturing SMEs -- small businesses, in particular -- often leave IT at the disposal of finance or accounting. This subordination of the creative possibilities of IT curtails technological benefits that might otherwise accrue.

"When a manufacturing SME values technological applications as a necessity for core business processes, management adopts practices that integrate IT at multiple levels of marketing, production, customer relations and e-business," reports lead author Raymond. "With the result that IT reaps noteworthy benefits in all those areas."

One way to recognize whether a [manufacturing](#) SME is on the ball and understands the potential of its technologies is the proportion of IT applications being used at the various decision-making levels. Another way is the position of assigned IT on the power ladder.

An autonomous IT with a designated manager occupying a high level in the hierarchy of an organization is an indication of a sophisticated management.

More information: Cited study: www.thinkmind.org/index.php?view=article&instance=ICIW+2011

Provided by Concordia University

Citation: What drives IT performance? (2011, October 26) retrieved 1 May 2024 from <https://phys.org/news/2011-10-what-drives-it-performance.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.