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The Surprising Impact of Fashions in Information Technology

A brief discussion of how companies can reap benefits and value by taking “fashionable” information technology seriously, by Ping Wang.

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[INFORMATION TECHNOLOGY]

The Surprising Impact of Fashions in Information Technology

Large companies that invest in trendy IT innovations may see their reputations — and CEO compensation — increase the next year.

BY PING WANG

Information technology fashions pick up cues from the broader environment into which companies seek to fit.

Enthusiasm for many information technologies (IT) developed for business use often mimics the ebb and flow of fashions. When a research team I led analyzed press coverage of various IT innovations over the period between 1971 and 2002, we found that media coverage of many innovations tended to grow over time to reach sharp peaks in popularity that didn't last long — in a manner reminiscent of the spiky life cycles of fads and fashions in the apparel and entertainment

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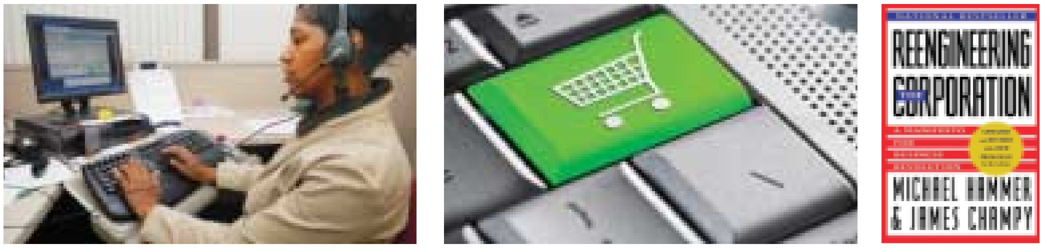

Innovations such as customer relationship management (CRM), e-commerce and business process reengineering (BPR) experienced a period of fashionability — as measured by media coverage.

industries. While fashions in what people wear or how they have fun may seem trivial to a business audience, our research has shown evidence of some not-so-trivial consequences of IT fashions in the business world.

From the *Fortune* 500 lists between 1994 and 2003, we selected 109 companies that both appeared on *Fortune*'s America's Most Admired Companies lists and responded to an annual survey that provided information about their budgeted investments in eight IT or IT-enabled innovations that experienced a period of fashionability. (The eight innovations were: application service provider (ASP), business process reengineering (BPR), customer relationship management (CRM), data warehouse, e-commerce, enterprise resource planning (ERP), groupware, and knowledge management.) The sample of 109 companies was diverse and largely representative of *Fortune* 500 companies in terms of size, performance and industry distribution.

In our study, which was reported in detail in the March 2010 issue of *MIS Quarterly*, we found that the more often a company's name occurred in articles that also mentioned one of the IT innovations that was increasing in popularity at the time, the higher the reputation score the company received in the list of America's Most Admired Companies the following year. Interestingly, this effect held true even if the company did not actually invest in the technology at the time. Specifically, as the name associations increased 1%, the company's reputation score increased 0.52% in the following year. When a company actually invested in fashionable IT innovations, every $1 million investment was associated with a surge of 0.66 points in the following year's reputation score, measured on a scale of 1 to 10.

The engagement with IT fashions had similar effects on CEO compensation, as measured by combined salary and bonus. Each 1% increase in the co-occurrence of a company's name and a fashionable technology was associated with an approximately 0.27% increase in the company's CEO pay the next year. What's more, for every $1 million a company actually invested in fashionable technologies, the CEO would typically reap an approximately $45,000 gain in pay in the next year — regardless of how the company performed.

While these findings suggest positive impacts of IT fashions on businesses' external and internal images (as reflected by corporate reputation and CEO pay, respectively), the fashion impact on company performance was more complicated. We found that companies whose names were just more frequently mentioned in articles that also mentioned a fashionable technology did not have better or worse subsequent performance as measured by the sum of returns on assets, equity and sales. However, companies that actually invested more in fashionable ITs than their peers experienced lower performance in the following year, but better performance by the third year. That finding suggests that implementing a fashionable technology innovation may lead to performance costs in the short term but produce gains in the longer term.

What are the practical implications of this study? First, we find that being associated with fashions in IT — whether through name association or by material investment in adopting the technology — can bring short-term social approval to companies and their chief executives. When the social approval benefits outweigh any short-term negatives for economic performance, engaging in the hottest IT may be a sensible course of action, as long as organizational leaders understand this trade-off.

Second, fashions pick up cues from the broader environment into which companies seek to fit. Therefore, when companies conform to fashions, they improve their fit with the environment. Our additional analysis shows that companies engaging with technologies that had passed their peak popularity in media coverage received no reputational gains. Hence fashion is a useful apparatus for monitoring the environment.

Finally, most of the IT innovations we studied have, after the fanfare of fashionability subsided, become part of the work systems in the adopting companies. Our study suggests that the adopters experienced some initial disruptions in the first year or two but eventually realized performance gains. Such an assimilation process puts fashionable technologies in contrast to some fashionable administrative techniques such as TQM (total quality management). Previous management research has shown that after adopting fashionable administrative innovations such as quality circles or TQM, many companies abandoned those techniques after they went out of fashion, leaving few benefits behind. The comparison between administrative fashion and IT fashion suggests that the latter is not entirely hype and that companies — at least large corporations such as the *Fortune* 500 companies in our sample — can extract benefit and value from fashionable information technology. To do so, a sensible first step is to take IT fashion seriously.

RELATED RESEARCH

- **P. Wang, "Chasing the Hottest IT: Effects of Information Technology Fashion on Organizations," MIS Quarterly 34, no. 1 (March 2010): 63-85. The study was supported in part by the National Science Foundation under grants IIS-0729459 and SBE-0915645.**
- **E. Abrahamson and G. Fairchild, "Management Fashion: Lifecycles, Triggers, and Collective Learning Processes," Administrative Science Quarterly 44 (December 1999): 708-740.**
- **B.M. Staw and L.D. Epstein,"What Bandwagons Bring: Effects of Popular Management Techniques on Corporate Performance, Reputation, and CEO Pay," Administrative Science Quarterly 45 (September 2000): 523-556.**

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