

When IT creates value

Two recent studies show that good management is good business.

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Getting business value from IT investments is never easy—and even more difficult to measure. Technologies are enabling tools: they can't properly enable anything if companies implement them poorly or fail to make the business changes required for such investments to pay off. IT investments can also be disappointing if they are implemented successfully but provide business capabilities that are not, as it turns out, all that important to the top or bottom lines. All three things count—the power of the technology tools, the way IT is managed, and investments that really contribute value. Yet it's not easy to sort out cleanly the relative value of each component, much less to isolate IT's contribution to the improvement of a business from all the other strategic, organizational, and operational factors in play.

But two new McKinsey studies help reinforce the idea that at least one element of this troika—good management—really counts. In the first study, researchers analyzed the impact of IT investments on corporate performance in order to identify clear winners and losers, within and across sectors, by comparing IT spending as a percentage of revenues and total returns to shareholders (TRS) at 192 companies over 11 years (1991–2001).¹ More specifically, the researchers compared the IT spending

and TRS of each company with average IT expenditures and average returns in its sector. The results showed that spending on IT alone didn't drive improvement—a finding supported by academic research that compared IT expenditures with other business metrics, from plant productivity to customer satisfaction.

To put things simply, IT-investment levels don't correlate meaningfully with financial returns. Of 93 companies that spent more than the sector average on IT, 50 were performance winners—but 43 lost value. The clear implication is that companies can't just spend their way to victory. Also, the performance winners had far higher returns on their investments than did the losers, a statistically meaningful finding. Moreover, the winners got far more than the losers from incremental IT investments. This finding suggests that the winners won because they did a better job of choosing and managing their IT investments.

The second study, undertaken with the London School of Economics,² focused on the link between IT-management practices and productivity. When European policy makers discuss how to close the growing productivity gap with North America, one common proposal is to boost spending on IT. Just adding more computing power, the reasoning goes, will surely help. But the study's findings don't support that notion.

An analysis of 100 manufacturing companies in France, Germany, the United Kingdom, and the United States suggests that IT spending has little impact on productivity unless accompanied by first-class management practices. In the study, researchers looked at three key practices at randomly selected companies in the four countries: lean manufacturing,

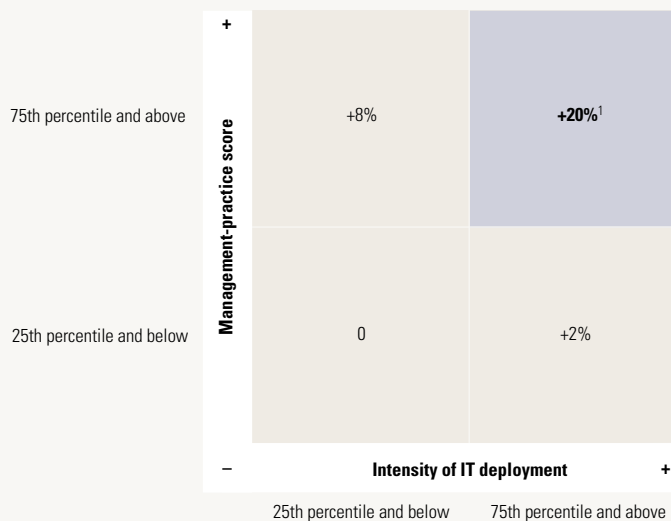
¹Clearly, several factors other than IT spending influence TRS, but we believe that using TRS as a measure of the effectiveness of IT expenditures is valid for several reasons. We adjust for differences among industries (Datastream level-4 classification) by departing from industry averages for IT expenditures (expressed as a percentage of revenue) and for TRS. Even after this adjustment, the model does not represent some important factors—for instance, the strategic alignment of IT, the economic environment, scale, the ability to execute, and available resources. In essence, we treat all such factors as varying in a way that can reasonably be modeled as random noise around trends relating IT expenditures to TRS and test hypotheses to identify the impact of the one on the other. We actually began the study by looking at 422 companies but found that we couldn't get complete data (particularly IT-spending figures) on all of them for the full decade of the study. To arrive at our sample set of 192 companies, we dropped those for which we had no more than three years of data.

²For a full description of this multiyear study of management and productivity, see Stephen J. Dorgan and John Dowdy, "How good management raises productivity," *The McKinsey Quarterly*, 2002 Number 4, pp. 14–6 (www.mckinseyquarterly.com/links/15474); and Stephen J. Dorgan and John Dowdy, "When IT lifts productivity," *The McKinsey Quarterly*, 2004 Number 4, pp. 13–4 (www.mckinseyquarterly.com/links/15475).

EXHIBIT

Management's big role

% increase in total factor productivity

¹For 9 out of 10 companies whose management-practice scores and levels of IT deployment are both in top quartile.

Source: London School of Economics–McKinsey survey and analysis of 100 companies in France, Germany, United Kingdom, and United States

to cut waste in the production process; performance management, to set clear goals and reward employees who reach them; and talent management, to attract and develop high-caliber people. Drawing on interviews at each company, researchers rated its management practices on a scale of 0 to 5.


They then compared each company's score with its financial performance from 1994 through 2002. The comparison was illuminating. Moving a company up the management-assessment scale by one percentage point correlated with a 5 percent increase in its return on capital employed. Since the average ROCE across all companies was 12 percent during the nine-year period, that would translate into a 42 percent increase in financial returns for the sample over the period.³

³The ROCE for 2002 (the most recent year studied) was 6 percent, so the improvement in corporate financial performance could be as high as 85 percent.

In addition, researchers found a link between management practices and a company's estimated productivity. In this analysis, a one-point jump up the scale was equal to a 25 percent increase in a corporation's productivity. To put that into perspective, it is the equivalent of raising capital investment by 70 percent; raising the number of manufacturing plants to 17, from 10; or hiring 25 percent more workers.

Then the researchers turned their attention to IT. They found that added computing power—measured, in this case, as each company's total processing power per employee—also translated into higher productivity, but only modestly. The 25 percent of the companies with the greatest processing power were estimated to be just 4 percent more productive than

the 25 percent of companies with the least IT power. That's just one-sixth of the impact of an equivalent improvement in management practice. Moreover, the top 25 percent of companies showed no improvement in financial performance. That may seem odd, given the rise in productivity, but one likely explanation is that the cost of new computing power balances out the financial gain it generates. These results were the same regardless of a company's location, size, or industry.

Clearly, companies get the biggest benefit by marrying good management practices with IT investment. For corporations ranked at the low end of our five-point scale of management practices, investing to become a high user of IT without improving management practices raised productivity by just 2 percent. Companies that increased their computing power and also improved their management practices by one point on our scale, however, raised their productivity by 20 percent (exhibit). The conclusion to be drawn from these findings is that companies would be wise to improve their management practices first and then to invest in IT. 

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