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The link between **management** and **productivity**

It's official: a company's economic success rests on the quality of its managers.

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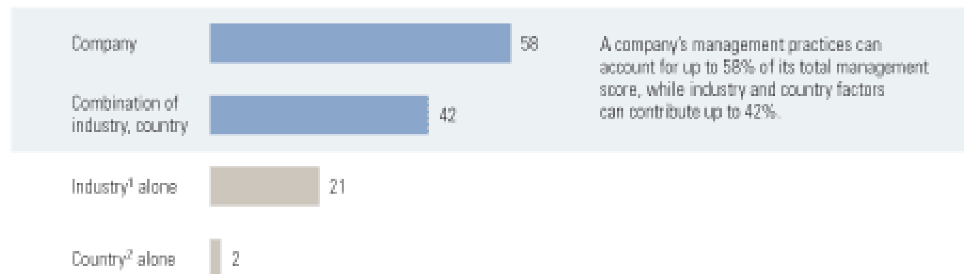
There is a common assumption that if companies perform well, they must have good managers at all levels of the organization. It is, after all, hard to imagine a company surpassing its rivals if its managers are second rate. New research now confirms the notion that management matters to all companies, including the top performers. While this finding is hardly a surprise, what is startling is just how much the decisions of managers matter. Managers are more important than the industry sector in which a company competes, the regulatory environment that constrains it, or the country where it operates. In other words, managers are more important to how a company is managed than business lines, government policy, or geography (Exhibit 1).

EXHIBIT 1

Which factor carries more weight?

Proportion of variance in management practices scores that can be accounted for by given factor, %



[1] By 3-digit SIC (Standard Industrial Classification) code.
[2] Geography as well as regulatory environment.

Source: Interviews; McKinsey–London School of Economics analysis

The research, conducted in 2005 by McKinsey and the Centre for Economic Performance, at the London School of Economics, looked at the relationship between management and performance in more than 700 midsize manufacturing companies in France, Germany, the United Kingdom, and the United States. We studied the relative quality of several key management practices at these companies and compared it with the companies' performance in areas such as total factor productivity (TFP), market share, sales growth, and market valuation (see sidebar, "Giving good management a number").[1]

We found a solid link between how well managers adopt proven best practices—such as lean-production methods on the shop floor and techniques for setting targets and tracking outcomes—and how well a company performs. Of course, the local environment can affect the quality of management; restrictive hiring regulations, for example, constrain the way companies manage people. But even in countries where such rules prevail, we found companies that performed at a high level, indicating that how they operate is more important than where they operate. In addition, employees in better-managed companies are likely to experience a more satisfactory work-life balance, with greater flexibility and autonomy in decision making and problem solving.

The implications for managers are clear: mediocre management goes hand in hand with mediocre corporate results. Globalization, specialization, and technology are heightening competition among manufacturers and intensifying the pressure for better management from the executive suite to the shop floor. Whatever an organization's objective, managers influence a company's future by defining standards and by managing people, assets, and capabilities.

Linking productivity and good management

Companies neither can nor should keep good management practices a secret. In sector after sector, best practices emerge in operations, sales and marketing, service delivery, and elsewhere. Under the pressure of competition, companies pay close attention to the improvements that rivals make and rapidly adopt their ideas. Pioneers of best practices thus gain only a short-term advantage unless their activities are privileged or protected (by patents, for example). Eventually, rivals adopt best practices, so they become routine, lifting a sector's overall productivity.

Lean manufacturing—incorporating techniques such as improved material flows, just-in-time production, and reduced inventories—is a prime example of this process. Introduced decades ago by Honda Motor and Toyota Motor, lean manufacturing has spread across the automotive industry and is making its way into almost every other sector. We analyzed how companies implement selected practices—focusing on proven approaches used by top-performing companies in numerous sectors around the world—and how well they make these practices work. Our interviews covered 18 dimensions of management in three broad categories: shop floor operations (how companies adopt both the letter and the spirit of lean manufacturing), target setting and performance management (how companies set goals and reward employees for achieving them), and talent management (covering practices for attracting, developing, and retaining valuable employees). While some of these techniques originated in Japan and the United States and are often associated with Anglo-Saxon management styles, they have become globally recognized and implemented.

We decided to measure the relative quality of management practices because the thoroughness of companies in adopting them differs so widely. In all 18 practices we studied, implementation varied from poor to good to excellent, as the experience of three companies shows. At the first, a maker of wood products, managers tracked production only when output dipped; they would then request tracking reports for a week to spur action. When output rose again, they stopped asking for reports. Apart from being ad hoc, these measures did not reveal whether the company had met all its business objectives. By comparison, managers at the second company, a manufacturer of high-technology equipment, put a bar code on every product and tracked performance indicators throughout production. These managers did not, however, share this information with the shop floor, depriving workers of the opportunity to instigate improvements themselves.

At the third company, an industrial manufacturer, managers set up display screens in view of every assembly line to show employees whether they were achieving their daily targets and other goals. The managers met shop floor workers every morning to discuss the day's agenda and the previous day's performance. At monthly meetings, they gave an overview of the goals and the strategic direction of the business. They even turned lunch breaks into an opportunity for communication, stamping cafeteria napkins with key achievements—a quick way to inform the entire workforce of the factory's latest accomplishments.

By comparing each company's management techniques with its performance, we found a positive statistical correlation between management practices and TFP. This is an important finding. TFP is an efficiency measure capturing the impact of all the elements that contribute to a company's output growth but are not explicitly stated as factors of production (unlike capital and hours worked, for example). In other words, TFP is a grab bag for the unexplained elements —such as technology, luck, public infrastructure, and, not least, management techniques—that affect productivity. In proving a correlation between well-managed companies and higher levels of TFP, we have explained a significant part of this unaccounted-for dimension and are thus closer to understanding how companies add value.

According to our results, an improvement of one point on a scale of 1 to 5 in the quality of management practices is correlated with an improvement of six percentage points in TFP. Such an increase is equivalent to the output of 11 percent more people or an increase of approximately 35 percent in the book value of capital. This level of improvement in management practices is also correlated with a 30 percent increase in return on capital employed (ROCE), to 11.5 percent, from 8.7.

The best-managed companies in our survey—irrespective of their location, size, manufacturing sector, wage bill, spending on research and development, or profitability—also scored highest on other key business metrics, including sales per employee, rate of revenue and market share growth, and market capitalization (Exhibit 2). These results confirm a smaller, earlier study that found a link between management practices and productivity and between management practices and ROCE.[2]

EXHIBIT 2

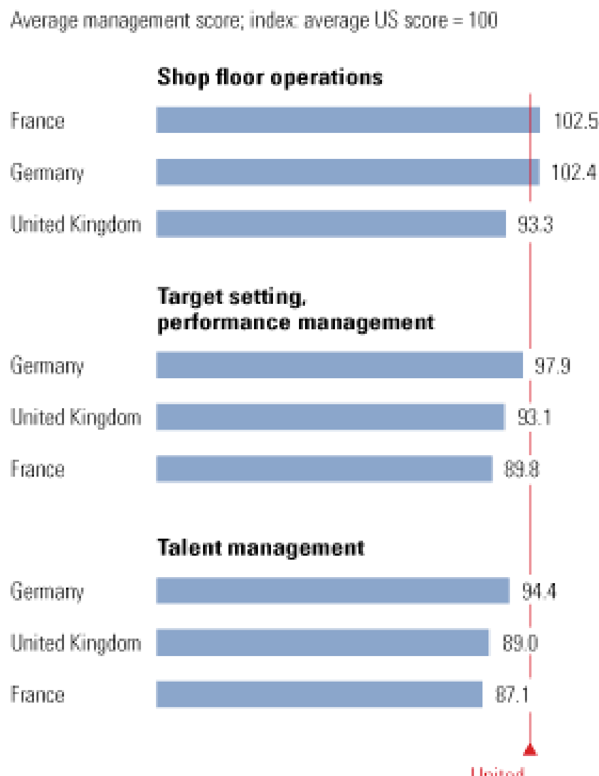
Highly correlated

Although statistical-correlation analyses cannot prove that better management leads to improved performance, it is difficult to see how better performance could magically result in more effective management. We did identify some companies that perform well financially because they have unique technological or structural advantages, even though their management practices tend to be poor. They included small manufacturers with a hit product, a particular niche, or a geographic monopoly—atypical situations. After careful examination, we found that these companies thrive mostly on their unique advantage rather than on their management practices. The proposition that good management drives effective performance, rather than the other way around, is the best explanation of our findings.

Drivers of good management

EXHIBIT 3

National strengths and weaknesses



Good management isn't dictated by geography; indeed, our study highlighted the way superior management techniques transcend language, culture, and regulation. Although location has little influence over the spread of best practices, some countries do excel in certain areas. French and German companies tend to be masters at shop floor operations, while US companies shine at the softer side—setting targets and managing talent (Exhibit 3). Part of this difference is probably the result of the strict French and German labor market regulations and working cultures, which limit management's options for inspiring staff or requiring employees to work more efficiently. Since managers cannot turn to workers for productivity gains, they increasingly have to rely on squeezing more out of the physical plant and equipment.

While there are interesting intercountry differences in the

United States = 100

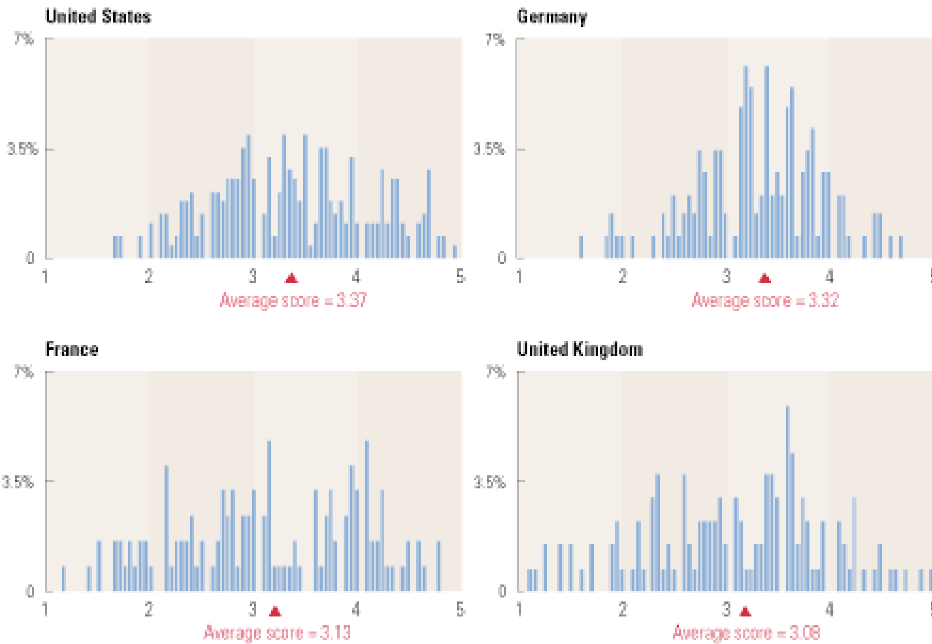
Source: McKinsey–London School of Economics analysis

deployment of management best practices (Exhibit 4), quality varies more within countries than between them. The best UK companies perform as well as the top tier of US companies; if laggards within the United Kingdom improved their management techniques, that would go a long way toward nudging the country closer to the US standard of management.

EXHIBIT 4

All over the map

% of companies by management practices score (on scale of 1 to 5, where 1 is low and 5 is high)



Source: Interviews; McKinsey–London School of Economics analysis

There is, however, a significant management gap between the United Kingdom and its EU partners France and Germany. Continental European companies have been more diligent than UK manufacturers have in using the latest and best operational-management practices on the shop floor. Since managers' actions account for the largest part of the division between the United Kingdom and continental Europe—considerations such as skills, the age of the company, labor regulations, and the number of competitors account for the rest—the gap is more significant than it might at first appear. Continental Europe could surge even further ahead of the United Kingdom by adopting more of the US-style labor market regulations that enable managers to excel in areas beyond the shop floor.

The challenge for companies goes beyond developing and implementing good management techniques; it is imperative that they also apply a critical mass of these practices across all functions with a high degree of consistency. If two companies score an identical average across all 18 management dimensions measured, the company with the more uniform set of scores is likely to perform better.

The mystery of the mismanaged company

If effective management and good performance are tightly linked, how do so many badly managed companies survive? It is a question that has long baffled researchers. Economic theory has it that competition ensures the survival of only the best-managed companies and the elimination of the weak ones. Competition, the theory says, will spur managers to work more effectively and outlast rivals.

Our research sheds new light on the subject. It showed that poorly managed companies hang on because of a lack of competition, combined with restrictive labor laws.[3] In each country, we found some high performers working with varying degrees of regulation, but, overall, we uncovered a clear link between badly managed companies and government regulations that

hobble a company's ability to manage its employees. The connection is even stronger if the freedom to hire and fire is restricted.

We also found that the more protected companies are from competition, the less incentive they have to adopt advanced management tactics. With this kind of protection, some companies can survive for years. In fact, we found that some of the most persistently mismanaged companies are family owned and often do business in uncompetitive markets. Conversely, the study revealed that the more competitive the environment, the more sophisticated a company's management approach became.[4]

Mismanaged companies tend to be older than well-managed ones. In fact, our study showed that young companies and good management go together. The reason might be that younger companies, as new entrants to the market, have a greater incentive to innovate, learn, and put novel management tactics in place. Older, larger companies are less likely to adopt newer, better management approaches, mainly because altering embedded processes, mind-sets, and behavior that might have worked well in the past is an enormous challenge.

Implications for managers

Good management is about methods, style, and skill, not hours clocked on the job; our research found no connection between a sector's competitiveness and how hard managers work. In the better-managed companies we studied, managers worked an average of less than one hour a week more than managers in other companies. The implication is that supervisors in well-managed companies work smarter rather than harder.

But what does "working smarter" mean when it comes to policies that managers have the power to implement? The ability to introduce best practices, and quickly, hinges on the readiness of the workforce to accept change. We found that better-managed companies have fostered adaptability through more flexible working arrangements, greater autonomy over decision making, and better training.

Our study found that well-managed companies provide more flexible working environments in several ways. They are more likely to let nonmanagers telecommute, to offer employees leeway in caring for sick children, and to give managers and nonmanagers the choice of working part- or full-time. Child care subsidies for managers and workers, job sharing for nonmanagers, and telecommuting for managers are closely correlated with higher morale among employees, though we have not been able to prove that these practices are closely connected to good management.

In the United States—the country with the largest number of well-managed companies—female managers and decentralized decision making are more common than they are in France, Germany, and the United Kingdom. In general, our study found that in countries with more female managers, decision making is delegated further down in the ranks and employees have greater autonomy. We think that the relationship between female managers and decentralized decision making in well-managed companies is worthy of further study. Employee empowerment might partly explain why: as our study found, US employees work longer hours (roughly one day more per week) and take fewer sick days and holidays than the French but profess more or less equal satisfaction with their work-life balance.

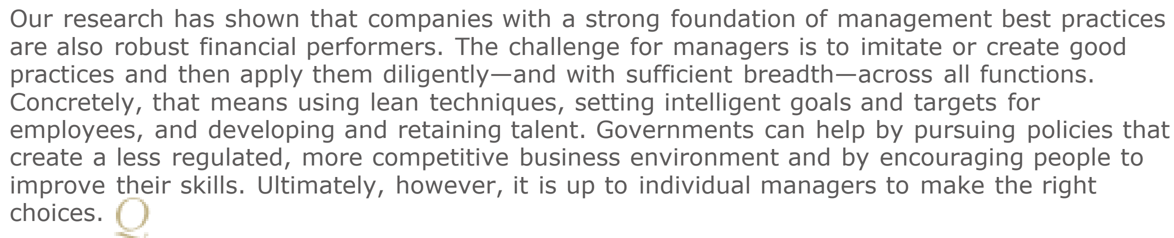
In addition, we found that better-managed companies not only invest more time and money in training their staff and managers but are also more likely to hire employees with undergraduate and advanced degrees. The latter have a particularly strong effect on the quality of management.

Our research turned up neither a positive nor a negative correlation between the work-life balance and corporate performance, but we did find a close association between a good work-life balance and better-managed companies. Companies committed to good management are also concerned with creating a flexible, empowering work environment that advances their employees' education, training, and skills.

Policy implications

Good management is not just a business priority; it is a national priority. Government officials in all four countries we studied have long been concerned with economic productivity, a significant yardstick of national social welfare. Our research found that each country sets policies with the aim of directly influencing management practices, and thus company performance and productivity. By extension, policy makers should remove barriers to foreign ownership and cross-border deals, so that better-managed companies, which tend to be bigger and more multinational, can spread their best practices around the world. Governments can also help by addressing educational standards and fostering training within companies, since basic educational skills are vital to the productivity of employees. Differences in the quality of primary

and secondary education for shop floor workers might explain the gap in the effectiveness of management practices among France, Germany, and the United Kingdom, for example. This subject is an important one for future study.



Our research has shown that companies with a strong foundation of management best practices are also robust financial performers. The challenge for managers is to imitate or create good practices and then apply them diligently—and with sufficient breadth—across all functions. Concretely, that means using lean techniques, setting intelligent goals and targets for employees, and developing and retaining talent. Governments can help by pursuing policies that create a less regulated, more competitive business environment and by encouraging people to improve their skills. Ultimately, however, it is up to individual managers to make the right choices.

Giving good management a number

To measure management practices, researchers interviewed one or two senior plant-level managers from each of more than 700 companies.

Plant managers were selected because they are senior enough to have a well-founded perspective on what happens in a company, but not so senior that they might have lost touch with the shop floor. The interviews covered 18 topics in three broad areas of management practice: shop floor operations, target setting and performance management, and talent management. For each topic, the companies received scores from 1 to 5 (the highest). The average of the 18 separate scores made up the overall management score.

The research team drew on McKinsey's management-consulting experience to define what constitutes poor, good, and excellent practice in each topic. To ensure impartiality, the study included only companies that had no relationship with McKinsey. In fact, the companies were never told that their management practices were being scrutinized, only that they were part of a research project. Similarly, at the time of the discussions, the interviewers scoring the management practices were not aware of the companies' financial performance. Midsize companies, which tend to rely on local management, were selected in preference to large ones whose multinational operations might obscure differences between countries.

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About the Authors

Stephen Dorgan is an associate principal, **John Dowdy** is a director, and **Tom Rippin** is a consultant in McKinsey's London office.

Notes

1 This article summarizes a longer research report, available online. The research was conducted in conjunction with Nick Bloom, program director for productivity and innovation at the Centre for Economic Performance, at the London School of Economics, and with John Van Reenen, director of the Centre for Economic Performance.

2 Stephen J. Dorgan and John J. Dowdy, "When IT lifts productivity," *The McKinsey Quarterly*, 2004 Number 4, pp. 13-5.

3 Researchers at the McKinsey Global Institute are among those who have studied the determinants of a country's productivity. They examine productivity at the industry level and the roles that competition, innovation, and regulatory policy play. See, for example, Diana Farrell, Heino Fassbender, Thomas Kneip, Stephan Kriesel, and Eric Labaye, "Reviving French and German productivity," *The McKinsey Quarterly*, 2003 Number 1, pp. 40-55.

4 To assess competition in any given subsector, the researchers used three widely accepted measures: the Lerner index, based on the average "excess" profits earned by competitors; the degree of import penetration; and the number of rivals companies said they faced.

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