



The Missing Link

Connecting Organizational and
Financial Performance

February 2007
Confidential Working Paper
© Copyright 2007 McKinsey & Company

Aaron De Smet
Rodgers Palmer
William Schaninger

Contents

3	Introduction
3	Strong organizations have better financial results
7	Achieving top-quartile organizational performance
8	Focus on a few practices
8	Target distinctiveness in four to five practices
9	Create your blend for success
11	Structuring an improvement program
12	A word about our data set, methodology, and analysis

“When you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind.”

—William Thompson (Lord Kelvin), 1824-1907

Introduction

Leaders know from experience that having a “good” or “effective” organization is important. Yet many spend only a small fraction of their time and energy attempting to improve their organization’s effectiveness. Executives may talk about managing talent and building a strong culture, but in fact, they are likelier to turn their attention to more tangible matters such as operations and finances.

Many leaders find it difficult to measure the impact of organizational effectiveness relative to “hard” characteristics such as costs, revenues, and margins. Some lack a firm grip on the specific activities required to make an organization more effective, or simply on what a good organization looks like. Others question which aspects of organizational effectiveness actually yield improvements to the bottom line. How do happy, fulfilled employees and cohesive teams translate into value for shareholders?

We now have some answers to these questions. The results of McKinsey’s Organizational Performance Profile (OPP) survey demonstrate not only the

degree to which organizational performance matters but also the particular management practices that companies can pursue to improve financial results.¹ The proprietary survey, involving more than 115,000 individuals in 231 organizations, examined nine attributes, or “outcomes,” of organizational effectiveness, and the behaviors or practices that contribute to these outcomes. Our findings are compelling: A company that measures in the top rather than the bottom quartile of organizational performance is more than twice as likely to attain above-average margins for its industry.

How can a company get to the top quartile? Our research has helped us uncover three important principles. First, at a minimum, companies should get to work on three universally beneficial practices. Second, companies should aim to be distinctive (i.e., in the top quartile) in four or five additional practices: Such out-performance is associated with better financial returns. Third, as they construct a program, the companies should look for complementary practices that, when combined, can often yield stronger results than simply improving one or two in isolation.

Companies can take these principles and use them to shape meaningful programs to improve their organizational performance. Our evidence suggests that those who succeed will not have long to wait before the effects of hard work and creative thinking show up on the bottom line.

Strong organizations have better financial results

What does good organizational performance look like, and what is it worth? That’s what we set out to determine in our extensive (and ongoing) survey, which includes public and private companies, government entities, and nonprofits in a variety of industries, including banking, insurance, petroleum, and telecommunications.

¹ See box on page 12 for a complete explanation of our survey and methodology.

The survey has two parts. The first asks respondents to rank their company’s effectiveness across nine predefined attributes, or outcomes. The second examines the actions, or practices, that can be used to achieve each outcome (*Exhibits 1 and 2, overleaf*). For example, accountability outcomes offer descriptive statements (e.g., “people feel accountable for the results they must deliver”) and ask employees the extent to which they agree or disagree.

For each company we surveyed, the nine outcomes were averaged to create an aggregate organizational performance score. We then compared this score to the company’s rank, relative to industry peers, on relevant financial performance measures, such as earnings (EBITDA) as a percent of total sales. (We used this measure to minimize effects of company size.)

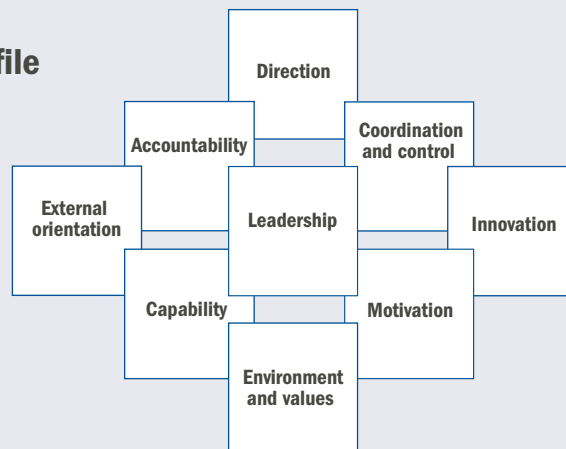
We found strong correlations between organizational performance and financial performance.

Companies in the top quartile of organizational performance, for example, were 2.2 times likelier to have above-average EBITDA margin than companies in the bottom quartile of organizational performance (*Exhibit 3, see p. 6*).

Other financial metrics, including net income growth and enterprise value growth, showed similar if less significant correlations. For example, top-quartile companies were at least 1.5 times as likely as their bottom-quartile peers to attain above-median growth in net income and sales, and 2.0 times as likely to achieve growth in enterprise or book value.

In addition to looking at aggregate performance, we examined each of the nine outcomes individually to determine whether some organizational attributes matter more than others. We found that being in the top quartile in any of the nine attrib-

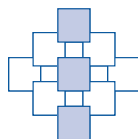
Exhibit 1
The organization performance profile



Performance culture comprises 9 outcomes in 3 clusters

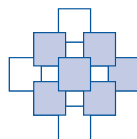
ALIGNMENT

Where is the organization headed, what is its purpose and strategy, and how supportive is its internal environment?



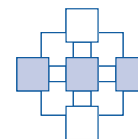
EXECUTION

How does the organization execute its strategy and deliver its services?



RENEWAL

How does the organization understand, interact with, and respond and adapt to its situation and external environment?



Source: McKinsey team analysis

Exhibit 2

Nine outcomes and their component practices

Outcome	What it means	Practice	Brief description
Leadership	Leaders at all levels shape and inspire the actions of employees to drive better performance	<ul style="list-style-type: none"> • Community leader • Command and control • Patriarchal 	<ul style="list-style-type: none"> • Hands off, delegating, empowering • Hands on, concentrated authority • Strong and caring leader
Direction	People understand and are aligned with where the company is heading and how to get there	<ul style="list-style-type: none"> • Visionary • Strategy • Engagement 	<ul style="list-style-type: none"> • Top-down articulation of end state • Top-down specifics to reach end state • Driven by input from below
Environment and values	The quality of employee interactions (e.g., culture, workspace design) fosters a shared understanding of core values	<ul style="list-style-type: none"> • Open and trusting • Competitive • Operational/disciplined • Entrepreneurial/creative 	<ul style="list-style-type: none"> • Collaboration and transparency • High-intensity competition • Process-driven efficiency and consistency • Innovation, initiative, creativity
Accountability	Reporting relationships and performance measurement ensure that people are accountable for business results	<ul style="list-style-type: none"> • Structure/role design • Performance contracts • Consequence system • Personal obligation 	<ul style="list-style-type: none"> • Formal structures specify clear responsibility • Accountability is explicit and agreed on • System of rewards and penalties • Implicit agreement on accountability
Coordination and control	Business performance and risk are measured and reported	<ul style="list-style-type: none"> • People • Operational • Financial • Values/professional standards 	<ul style="list-style-type: none"> • Manage via HR systems • Consistent use of KPIs, targets, metrics • Manage financial performance • Manage actions through ethics, boundaries
Capabilities	Internal skills and talent are sufficient to support the company's strategy and create competitive advantage	<ul style="list-style-type: none"> • Process based • Internally developed • Acquired • Rented/outsourced 	<ul style="list-style-type: none"> • Embedded knowledge, manuals • Organic, training-focused • Skills brought in from outside • Skills "borrowed", e.g., consultants
Motivation	Employees are inspired to perform and encouraged to stay with the company	<ul style="list-style-type: none"> • Values • Leaders • Opportunities • Incentives 	<ul style="list-style-type: none"> • Motivated by company culture • Motivated by leaders' charisma • Motivated by job design, autonomy • Motivated by financial rewards or recognition
External orientation	The firm has constant two-way interactions with customers, suppliers, partners, or other external groups to drive value	<ul style="list-style-type: none"> • Customer/channel • Competitor/market • Business/partner • Government/community 	<ul style="list-style-type: none"> • Cultivating relationships with end users • Focus on rivals and controlling market share • Business collaboration between two parties • Aligned with political/regulatory powers
Innovation	The company generates a flow of ideas and change so that it can sustain itself, survive, and grow over time	<ul style="list-style-type: none"> • External sourcing • Top down • Bottom up • Cross-pollination 	<ul style="list-style-type: none"> • Renewal comes from outside the company • Top management generates ideas and change • BUs and departments generate ideas • Knowledge sharing yields ideas and change

Source: McKinsey team analysis

utes of organizational performance correlates with better financial performance, but that the premium varies, ranging from 2.7x – for top-quartile performance in coordination and control – to 1.8x for top-quartile standing in motivation, external orientation, and environment and values (*Exhibit 4, overleaf*).

We also observed that to secure good financial performance, it is in some cases important to be in the top quartile, while in others it suffices to be above the bottom quartile. Consider, for example, capability (a measure of the quality of the staff and the skills they possess). Being in the top quartile in this category more than doubles the likelihood of achieving above-average EBITDA margins; bottom-quartile performance cuts the likelihood near-

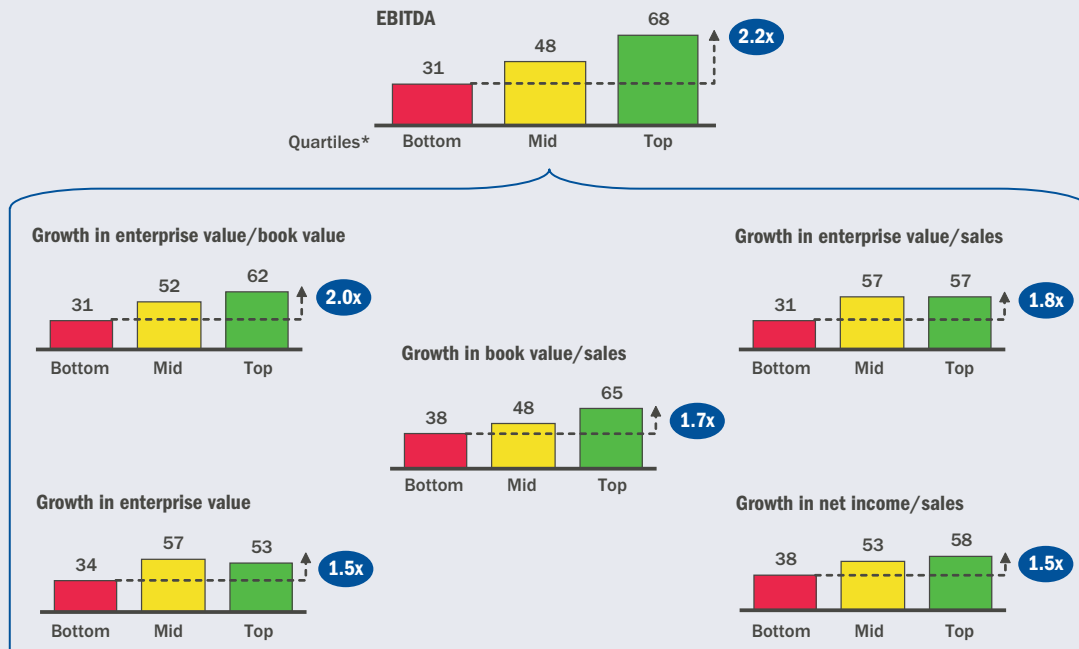
ly in half. The implication is that staff capabilities have an almost linear impact on financial performance: Any upgrade in talent and skills will provide roughly commensurate improvements in financial performance. We saw similarly linear patterns in four other outcomes: direction, accountability, innovation, and coordination and control.

On the other hand, we did not see a linear impact in categories such as motivation (defined as the level and quality of energy, commitment, and dedication of staff). The likelihood that a company in the top quartile for this attribute has above-median EBITDA margins is 73% – indicating that truly distinctive motivation provides real financial upside. But companies show a roughly 42% chance of beating the median regardless of whether they are bottom-quar-

Exhibit 3

The links between financial and organizational performance

Likelihood that organizational performance quartile has above-median financial performance, %



* The two middle quartiles are combined

Note: All data either taken in survey year or averaged over three years

Source: McKinsey team analysis

Exhibit 4

Link between financial and organizational performance, by outcome

Likelihood that quartile also has above-median financial performance, %					Character of the link between organizational and financial performance		
Outcome	Top	Middle	Bottom	Ratio top-to-bottom	Linear	Must be in top quartile	Must be above bottom quartile
Direction	67	48	36	1.9x	✓		
Accountability	65	49	33	1.9x	✓		
Coordination and control	73	49	28	2.7x	✓		
External orientation	59	54	33	1.8x			✓
Leadership	53	60	22	2.4x			✓
Innovation	66	52	31	2.1x	✓		
Capability	67	49	32	2.1x	✓		
Motivation	73	42	41	1.8x		✓	
Environment and values	61	52	33	1.8x			✓

Note: All data taken in survey year
Source: McKinsey team analysis

tile or average performers, which suggests that there is limited benefit to average motivation – most companies need highly motivated employees to see real bottom-line financial benefits.

While this may seem surprising, it echoes much of the academic research on staff motivation and financial performance. We found that only the worst sort of unmotivated workforce affects financial performance. In part, our results are due to a technical issue. Very few people reported to us that they are unmotivated; most give middle or high scores. This “range restriction” problem is a form of selection bias; in today’s highly mobile workplace, dissatisfied, unmotivated managers tend to find other work. As a result, both medium- and low-motivation companies have similar scores. We would expect the problems of low-motivation companies to be revealed in other metrics such as voluntary turnover rates and loss of top talent.

Other outcomes (leadership, external orientation, and environment and values) do not require top performance to have a positive impact on the bottom line; they merely require that a company not be lagging – i.e., not be in the lowest quartile. Take, for instance, leadership outcomes (e.g., “leaders are highly respected” or “leaders are good decision makers”). Poor leadership outcomes have a broad impact on all parts of the organization, hence the need to achieve a level of performance above the bottom quartile.

Achieving top-quartile organizational performance

What is the best combination of organizational attributes? We found one compelling profile of a “healthy” company – one that provides an 83% chance of beating median EBITDA margin. Companies in this profile were in the top quartile in five

outcomes: environment and values, accountability, coordination and control, motivation, and external orientation. No other profile was as likely to provide as large an impact on financial performance – including profiles with more top-quartile outcomes.

Is that the right answer for your organization? Not necessarily. Most companies, because of the peculiarities of their circumstances, will need to invest their energies in improving some highly specific deficits. Broadly speaking, though, we can say that investing time and energy in improving any of the nine outcomes will make a difference. To maximize return on that investment, however, companies must be selective. To achieve top-quartile organizational performance, management should follow three cardinal rules.

1. FOCUS ON A FEW PRACTICES

Getting better at a practice – any practice – will enhance organizational performance. But three practices in particular have a greater impact on overall organizational performance, which we measure as the mean of all nine outcomes. These three universally beneficial practices are a good starting point, and can be an “anchor” for a more comprehensive effort. Achieving top quartile performance on any of these practices more than doubles the chance that an organization’s financial performance will also be top quartile. We have listed them here, along with the outcomes they drive:

- **Vision (direction).** Providing a clear, compelling picture of where the organization should go and having the mechanisms and processes to ensure that all employees, from top to bottom, share that vision and understand how they fit into it
- **Structure/role design (accountability).** Providing clear and concise objectives and performance expectations for all employees and ensuring that these are consistent and appropriate over time. For most companies, what’s needed is not a big book of detailed job descriptions, but for managers to ensure that people understand exactly what is expected of them and how each individual

can best contribute to the success of the organization

- **Open and trusting (environment).** Fostering trust among managers and employees so that they are open to sharing information, providing and receiving honest feedback, and having difficult conversations

It’s worth noting the importance of avoiding bottom-quartile performance in any practice. The chances of achieving distinctive (i.e., top-quartile) organizational performance drop dramatically when *any* of the 34 practices are very low. Bottom-quartile performance on a single practice drags down organizational effectiveness in all areas, limiting all outcomes, even those in seemingly unrelated areas. When direction practices are distinctive, and environment and values practices are average or above, for example, there is a 67% chance of being in the top quartile of direction. However, if those environment and values practices are in the bottom quartile, the chances drop to just 41%.

A company does not need to excel at everything, but it cannot afford to perform very poorly on even one of these important management practices.

2. TARGET DISTINCTIVENESS IN FOUR TO FIVE PRACTICES

With minimum competencies in place, companies can focus on driving a few practices to distinctiveness (i.e., the top quartile). Achieving distinctiveness in even a single practice can have a measurable effect on overall organizational effectiveness, pushing the likelihood of top-quartile organizational performance from 25% to nearly 50%. Driving a second practice to distinctiveness increases this likelihood to more than 50%. Once a company has achieved top-quartile performance in four or five practices, the likelihood that all outcomes are distinctive plateaus at approximately 80%. For most companies, the effort of achieving distinctiveness in a sixth or seventh practice may not be worth it, as a point of diminishing returns is reached. Companies should focus on being truly distinctive in four or five practices, and being good enough (about average) in the remaining practices.

When targeting four or five practices for distinctiveness, the obvious candidates are those listed above. But there are at least two cases in which universally beneficial practices might be the wrong focus: first, where these practices do not fit well with the corporate strategy, and second, where the combination of these practices does not fit well with the practice at which the company already excels.

Indeed, the paramount consideration in choosing practices is how well they complement one another. The best combinations often consist of practices associated with different attributes – for example, driving accountability by improving structure and role design, performance contracts, and consequence management will yield very strong accountability, but it works less well for overall organizational performance. A more potent combination is created from a healthy, balanced diet of practices from different areas that jointly affect all the outcomes.

An exemplar of building a distinctive practice is Southwest Airlines. Over the past 15 years, the airline has excelled at a collaborative, hands-on leadership style that we call “patriarchal,” which is at once hierarchical and top-down and engaging and participative. Southwest leaders seek input and involvement, but don’t use consensus-based decision making. Benevolent, patriarchal leadership is a strong, nurturing practice of people management that is often seen on a far smaller scale in well-run family businesses. This style of leadership, championed in the 1990s by then-CEO Herb Kelleher (now executive chairman) and Colleen Barrett (then COO, now president), focuses on strong but caring leadership from the top and an extremely open culture.

“[Colleen and Herb] communicate with customers and employees on every little issue,” says one pilot in the book *The Southwest Airlines Way* by Jody Hoffer Gittel. “Their philosophy is to take care of the small problems.”²

The leadership style extends well down into the manager ranks. Although Southwest is known as a lean, low-cost airline, it has the highest supervisor-to-employee ratio in the industry. A supervisor’s job goes beyond giving direction, measuring performance, and doling out consequences. Southwest supervisors are “player-coaches,” working side by side with employees, even taking part in highly physical work like baggage handling, where they can work in an intense, hands-on manner to provide real-time feedback, coaching, advice, and problem-solving support to frontline employees. The company emphasizes promoting from within and grooming up-and-coming supervisors to ensure they can maintain strong frontline leadership.

Such leadership spawns intense loyalty and commitment. As one station manager put it in *The Southwest Airlines Way*: “Colleen remembers everyone and everything – if you have a birthday you’ll get a card from her. She’s up there with Jesus Christ, in our eyes.”³

3. CREATE YOUR BLEND FOR SUCCESS

As noted above, the best improvement efforts require more than selecting a random combination of practices. Certain practices complement one another and, when combined, lead to better overall performance. Conversely, certain combinations do not work well and, as a result, fail to lead to the expected performance improvement. Management should be selective when mixing and matching these practices to deliver maximum results.

We were interested to find that practices ranked high on their own for certain outcomes do not always achieve the desired result when deployed together.

For example, a management team that wants to improve its level of innovation might reasonably want to improve the three practices that showed the highest correlation to top-quartile innovation:

² Jody Hoffer Gittel, *The Southwest Airlines Way: Using the Power of Relationships to Achieve High Performance*, New York: McGraw-Hill, 2002, 59.

³ *Ibid.*, 58.

top-down innovation, meaning management spends a significant part of its time driving specific innovation initiatives from the top; values, where managers work with employees to create meaning and shared ideals and objectives; and personal obligation, where people feel accountable because of their desire to make a difference and “do the right thing” (*Exhibit 5*).

Conversely, the team would logically choose to avoid the individual practices with far lower correlations to innovation: incentives (using differentiating financial incentives to drive individual performance) and financial coordination (employing extensive financial systems to monitor and manage corporate performance).

But making these seemingly logical choices at the level of individual practices would be a mistake. The effect of combining the top three practices for driving innovation outcomes is slightly lower than the effect of combining one of them with two of the

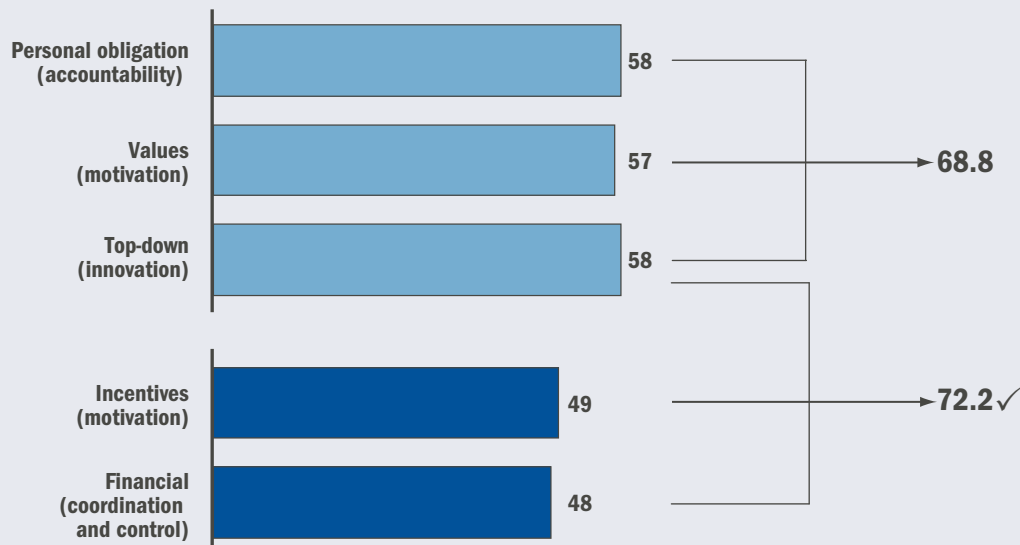
practices with lower correlations (incentives and financial coordination). This may seem counterintuitive, but consider the ingredients: Top-down innovation together with financially motivated people and financially controlled processes results in a company that uses financial leverage to motivate and drive innovation. Goals are set at the top, and targets (and rewards for achieving those targets) cascade throughout the organization. This is a coherent and consistent mix of practices that complement one another, making for an effective style of innovation.

In contrast, companies that try to marry top-down innovation with a much more personally meaningful, values-driven organization run the risk of creating an inconsistent and confusing environment (e.g., should I focus on the initiatives and targets set from the top, or on the things that I think are important?) In this case, the combined effectiveness of “best” practices is not as strong as the individual practices would suggest.

Exhibit 5

Finding a complementary blend of practices

Likelihood that the innovation outcome is top quartile if the indicated practices are top quartile, %



Source: McKinsey team analysis

Consider another example. Creating a powerful sense of direction involves three elements: vision (e.g., “I know where we want to go and the vision is meaningful to me”); motivation-leadership (“I am inspired by my leaders”); and accountability-role/structure (“I see the part I play and know what I have to do”). These are all strong levers that, when combined, create a 76% chance of a distinctive direction outcome.

On the other hand, using incentives is not a good lever to achieve distinctive direction. However, a combination of direction – visionary, incentives, and competitive environment – is just as potent as the combination of strong levers: It, too, has a 76% chance of being distinctive in direction outcomes. This counterintuitive effect can be seen in investment banking or sales, where goals are clear, people are highly competitive, and financial results (including bonus/incentives) are seen as a way of keeping score. Incentives by themselves are not too effective, but as part of a combination are just as good as (and for these organizations probably better than) a set of practices more highly correlated to distinctive direction outcomes.

Structuring an improvement program

Leaders may have questions about how to translate these ideas into actions. Here we answer three of the most frequently asked questions.

Should I make small improvements to several practices or large improvements to a few? The approach varies with an organization’s starting point. In general, for organizations that are underperforming, the priority is to improve the weakest practices and bring them up to an acceptable level, particularly those in which bottom-quartile performance exacts the highest financial toll. Examples include visionary (direction), open and trusting environment (environment and values), operational focus (environment and values), structure and role design (accountability), and values-based commitment (motivation). Eliminating major problems with ineffective practices is equally if not

more important than achieving distinctiveness in a few practices.

Companies in the middle of the pack should focus improvement efforts on universally good practices such as building a meaningful vision, clarifying structure and roles, developing shared values that guide and motivate behavior (see above). Remember that there is much more to gain from driving a few practices to distinctiveness than from incrementally improving several already adequate practices.

For companies that are already approaching top-quartile performance, deciding which practices to home in on depends on the current profile. Certain combinations of practices are much more effective than others; current strengths will determine the best future targets for improvement.

Our organization has an established leadership style. Which practices will complement that style?

Without question, the practice mix should align with the management team’s approach. For example, a leadership team that has worked to create an open and trusting environment should try to be distinctive in a complementary practice such as values and opportunities (part of the motivation outcome). However, if the leadership team has nurtured a highly competitive environment, it should consider a complementary practice such as leaders and incentives (also under motivation). This alignment makes sense intuitively: An open and trusting environment works well with a motivation system that creates opportunities for people to stretch, while a competitive environment requires strong managerial guidance and leadership to be effective.

To some extent, companies also must match the leadership style to the culture. Getting the culture right requires leaders to remove toxicity from the work environment and promote a shared culture, so that the company can avoid bad practices and create an organization where every individual carries the same image about what they’re supposed to do and reacts in similar ways. The value of bending leadership style to the formation of a strong culture is being able to do without cumbersome control mechanisms that slow things down.

Why can't we just copy best practice? Adopting the successful approaches of GE and other leaders in organizational performance is not a straightforward process. Although it may be tempting to try to replicate the people-management strategies, hiring approaches, and incentive plans of extraordinary companies, our research suggests that distinctive practices yield desired business results

only in combination with certain other distinctive practices. Companies must mix their practice combination with care, tailoring its recipe to the unique characteristics of their organization. Selecting and emulating one or two practices from GE's model can result in a mismatched patchwork of practices that actually inhibits performance, rather than improve it.

A WORD ABOUT OUR DATA SET, METHODOLOGY, AND ANALYSIS

In our complete data set, we surveyed more than 115,000 individuals in 231 organizations over the past four years using a standardized performance survey tool (the Organizational Performance Profile, or OPP). The individuals ranged from CEOs to frontline workers. The companies covered all major industries in a ratio similar to that described by a Datastream global index (*Exhibit 6, overleaf*). The respondents answered in multiple languages and represented North and South America, Europe, Asia, and Africa. Our data set included private and public companies, nonprofits, and government organizations.

We cleaned our data set to ensure that we were comparing apples to apples for each question, and we discarded data for which we did not have sufficient question integrity, or for which not every respondent answered every question. For our financial analysis, we also discarded data from private companies, nonprofits, and governments. After these steps, we were left with more than 60,000 respondents and 125 companies.

We ran all standard tests on the integrity and robustness of our data set (e.g., Cronbach's alpha), all of which confirmed the reliability and validity of the survey tool. We did not observe any biases based on language, country, region, or industry.

To establish the practice-outcome linkage, we took the entire 60,000-person data set and selected the individuals for whom combinations of prac-

tices met specific criteria (e.g., top quartile). We then used that selected data set to evaluate the likelihood that another desired criterion was true (e.g., top quartile in all outcomes). For example, our analysis could answer the following question: If you select the people who described their company's direction-visionary practice and accountability-personal obligation practice as top quartile, then what is the likelihood that their company's accountability outcome is also top quartile?

To perform the financial-linkage analysis, we first normalized financial performance by constructing industry benchmarks for each of our survey companies. For every industry (e.g., aerospace and defense, beverage, telecom, etc.) we selected at least 100 publicly traded global companies and created percentile benchmarks for both ratios of numbers (e.g., EBITDA margin, EV/sales) and growth in absolute numbers (e.g., sales growth, EV growth) over a five-year period (2000 to 2004). We then ranked the percentile of each of our surveyed companies for each financial metric based on industry benchmarks for the year closest to the date of the survey. We categorized each company as top or bottom half for each financial measure. For each quartile of performance for every outcome and practice, we then evaluated the frequency of top-half financial performance. This ratio provided us with an estimate of the likelihood of above-average financial performance based on strength of organizational performance.

Exhibit 6
Assessing the industrial mix of the survey

SURVEYED COMPANIES		DATASTREAM'S MARKET INDEX	
Chemical	4%	} 13% ↔ 8%	Basic materials
Iron/steel	2%		
Mining	4%		
Forest products and paper	3%		
Auto manufacturers	1%	} 17% ↔ 13%	Consumer goods
Beverage	6%		
Food	5%		
Retail	5%		
Commercial services	3%	} 5% ↔ 13%	Consumer services
Home building	1%		
Transportation	1%		
Banking and insurance		29% ↔ 24%	Financial
Pharma		2% ↔ 5%	Health care
Aerospace and defense	1%	} 7% ↔ 19%	Industrials
Building materials	1%		
Machinery producing	2%		
Packaging and container	3%		
Petroleum		11% ↔ 5%	Oil and gas
Computer related		4% ↔ 6%	Technology
Telecommunications		8% ↔ 3%	Telecommunications
Electric utility	4%	} 5% ↔ 4%	Utility
Gas utility	1%		
		100%	100%
Sources: McKinsey team analysis; Datastream			

Aaron De Smet is an expert associate principal in the New York office, **Rodgers Palmer** is an alumnus, and **William Schaninger** is an associate principal in the Philadelphia office.

Contact for distribution: William Schaninger

Phone: +1 (215) 594-4431 Email: william_schaninger@mckinsey.com