The Great KPI Misunderstanding

By David Parmenter

Many companies are working with the wrong measures, many of which are incorrectly termed key performance indicators (KPIs). I believe it a myth to consider all performance measures to be KPIs. From my research over the last twenty five years I have come to the conclusion that there are four types of performance measures:

1. Key result indicators (KRIs) give the Board an overall summary of how the organization is performing.
2. Result indicators (RIs) tell management how teams are combining to produce results.
3. Performance indicators (PIs) tell management what teams are delivering.
4. KPIs tell management how the organization is performing in their critical success factors, and by monitoring them, management are able to increase performance dramatically.

Many performance measures used by organizations are, therefore, an inappropriate mix of these four types. First I will describe each type of measure.

The four measures are in two groups. Result indicators and performance indicators. I use the term result indicators to reflect the fact that many measures are a summation of more than one team’s input. These measures are useful in looking at the combined teamwork but, unfortunately, do not help management fix a problem as it is difficult to pin point which teams were responsible for the performance or non performance. Performance indicators, on the other hand, are measures that can be tied to a team or a cluster of teams working closely together for a common purpose. Good or bad performance is now the responsibility of one team. These measures thus give clarity and ownership.

With both these measures some are more important so we use the extra word “key”. Thus we now have twp measures for each measure type.

Key Result Indicators

What are Key Result Indicators (KRIs)? KRIs are measures that often have been mistaken for KPIs. The common characteristic of these measures is that they are the result of many actions carried out by many teams. Hence use of the term “result” and they are good summary measures hence the term “key”. They give a clear picture of whether your organization is traveling in the right direction at the right speed. They provide the Board or Governing body with a good overview as to progress with regards the organization’s strategy. These measures are easy to ascertain and are frequently reported already to the Board or Governing body.

The fact that key result indicators are called KPIs creates a problem that many organizations do not appreciate. They cannot understand why performance ebbs and flows and appears outside the control of the senior management team. These key result indicators that are reviewed typically on a monthly/quarterly cycles will only tell you whether the horse has bolted or not. Key result indicators are thus of little use to management as they are reported too late to change direction nor do they tell you what you need to do to improve these results.

Consequently, KRIs are ideal for the board or the governing body (i.e., those people who are not involved in day to- day management). You know you have a KRI when the CEO, is in reality, the person ultimately responsible for the measure.

For the private sector, key result indicators would include:

- Net profit before tax.
- Customer satisfaction (by customer group, showing the trend over an 18-month period).
- Profitability of key customer groups.
- Return on capital employed.
- Employee satisfaction (by groups showing the trend over an 18-month period).

For government and non profit agencies these measures would also include:

- Availability of the major services we offer—average waiting time for service.
Separating KRI s from other measures has a profound impact on reporting, resulting in a separation of performance measures into those impacting governance and those impacting management. Accordingly, an organization should have a governance report (ideally in a dashboard format), consisting of up to 10 KRI s for the board, and a series of management reports reporting progress in various intervals during the month depending on the significance of the measure.

**Result Indicators**

The Result Indicators summarize the activity of more than one team. They are good to review as an overview of how teams are working together. The difference between a key result indicator and a result indicator is simply that the Key Result Indicator is a more overall and more important summary of activities that have taken place.

When you look at a financial measure you will note that you have put a value to various activities that have taken place. In other words financial indicators are a result of activities. I thus believe all financial performance measures are RIs. Daily or weekly sales analysis is a very useful summary, but it is a result of the effort of a number of team teams. From the sales team to the teams involved in manufacture, quality assurance and dispatch. Financial indicators are useful but mask the real drivers of the performance. To fully understand what to increase or decrease, we need to look at the activities that created the financial indicator.

*Result Indicators* look at activity over a shorter time frame than *key result indicators* (e.g., sales made yesterday).

For the private sector, *Result Indicators* that lie beneath KRI s could include:
- Net profit on key product lines.
- Sales made yesterday.
- Customer complaints from key customers.
- Number of initiatives completed from the recent customer-satisfaction survey
- Number of employees’ suggestions implemented in past 30 days.
- In-house courses scheduled to be held within three weeks where attendee numbers are below break even.
- Number of managers who have attended leadership training (reported quarterly, by manager level).
- Staff trained to use specified systems.
- Number of initiatives implemented to improve customer satisfaction.

For government and non profit agencies, *Result Indicators* would also include:
- Weekly hospital bed utilization.
- % coverage of [Enterprise Name]’s supported products
- Number of people on treatment/tested for [Disease Name 1], [Disease Name 2] and for [Disease Name 3].
- Grants achieving their public health targets as per grant agreements.
- Percentage of investments covering low income, high disease burdened countries

**Performance Indicators**

*Performance Indicators* are those indicators that are non financial (otherwise they would be *result Indicators*) that can be traced back to a team. The difference between *Performance Indicators* and KPI s is that the latter are deemed fundamental to the organization’s well being. *Performance Indicators* although important, are thus not crucial to the business. The *Performance Indicators* help teams to align themselves with their organization’s strategy. *Performance Indicators* complement the KPI s; they are shown on the organization, division, department, and team scorecards.

For the private sector, *Performance Indicators* that lie beneath KRI s could include:

- On-time implementation of infrastructure projects.
- Membership numbers (for professional organizations).
• Abandon or abandonment rate at call centre—caller gives up.
• Number of initiatives implemented from the staff survey.
• Percentage increase in sales with the top 10 percent of customers.
• Customer complaints from key customers.
• Late deliveries
• Sales calls organized for the next week, two weeks. and so forth.
• Number of training hours-booked for next month, months 2 and 3, and months 4 to 6—in both external/internal courses.

For government and non profit agencies, Performance Indicators would also include
• Number of media coverage events planned for next month, months 2 to 3, and months 4 to 6.
• Date of next customer focus group.
• Date of next research project into customer needs and ideas.

Key Performance Indicators

What are KPIs? KPIs represent a set of measures focusing on those aspects of organizational performance that are the most critical for the current and future success of the organization. KPIs are rarely new to the organization. Either they have not been recognized or they were gathering dust somewhere unknown to the current management team. KPIs can be illustrated by two examples.

Example: An Airline KPI

My favourite KPI story is about Senior BA Official who set about turning British Airways (BA) around in the 1980s by reportedly concentrating on one KPI.

Senior BA Official employed some consultants to investigate and report on the key measures he should concentrate on to turnaround the ailing airline. They came back and told Senior BA Official that he needed to focus on one operational critical success factor (CSF), the timely arrival and departure of aeroplanes, see Exhibit 1 Finding the CSFs and narrowing them down to no more than five to eight is a vital step in any KPI exercise, and one seldom performed.

The hierarchy of success factors

EXHIBIT 1 The Importance of Knowing Your Operational Critical Success Factors

The Senior BA Official was however not impressed as everybody in the industry knows the importance of timely planes. However, the consultants then pointed out that this is where the KPIs lay and they proposed that he focused on a late plane KPI.

He was notified, wherever he was in the world, if a BA plane was delayed over a certain time. The BA airport manager at the relevant airport knew that if a plane was delayed beyond a certain ‘threshold’, they would
receive a personal call from the senior BA Official (let’s call him Sam). I imagine the conversation going like this.

“Pat, It’s Sam on the phone, I am ring up about BA135 that left Kennedy airport over two and a quarter hours late, what happened?”

am replies , “The system will tell you that the plane was late leaving Hawaii. In fact it was one and three quarters hours late and everything was in order at our end except we lost an elderly passenger in duty free shopping. We had to offload their bags and, as you can see, we did it in record time, only half an hour!”

“Pat, how long have you worked for British Airways?”

Pat, realising this conversation was not going well responded, “About thirty years, Sam.”

“In fact, Pat it is thirty two. In thirty two years of experience with us you are telling me that with six hours of advance notice that the plane was already late you, and your team, could do nothing to bring it forward, instead you added half an hour. Quite frankly Pat, I am disappointed as you and your team are better than this!”

For Pat and many others around the airline had the “not invented by us” syndrome. A late plane created by another BA team was their problem not ours. Now Pat, gathered the troops the next day and undertook many proactive steps to ensure they recaptured the lost time, no matter who had created the problem. Actions such as

- Doubling up the cleaning crew, even though there was an additional external cost to this
- Communicating to the refuelling team which planes were a priority
- Better communication to the external caterers so they could better manage re-equipping the late plane
- Staff on the check-in counters asked to watch out for at risk customers and chaperone them to the gate.
- Not allowing the business class passenger to check-in late, yet again. This time saying”Sorry Mr Carruthers we will need to reschedule you as you are too late to risk your bags missing this plane. It is on a tight schedule. I am sure you are aware that the deadline for boarding passed over 30 minutes ago.”
- Possibly asking traffic control for a favour or two

The BA manager at the relevant airport knew that if a plane was delayed beyond a certain threshold, they would receive a personal call from Sam. It was not long before BA planes had a reputation for leaving on time.

The late planes KPI worked as it was linked to most of the critical success factors for the airline. It linked to the ‘delivery in full and on time’ critical success factor namely the ‘timely arrival and departure of aeroplanes’; it linked to the ‘increase repeat business from key customers’ critical success factor etc.

It is interesting that Ryanair has a sole focus on timeliness of planes. They know that is where they make money, often getting an extra European flight each day out of a plane due to their swift turnaround and their uncompromising stand against late check-in. They simply do not allow customers to get in the way of their tight schedules.

The late planes in the air KPI affected many aspects of the business. Late planes:

1. Increased cost in many ways, including additional airport surcharges and the cost of accommodating passengers overnight as a result of planes being curfewed due to noise restrictions late at night.
2. Increased customer dissatisfaction and alienation of people meeting passengers at their destination (possible future customers).
3. Increased contribution to ozone depletion (environmental impact) because additional fuel was used in order to make up time during the flight.
4. Had a negative impact on staff development as they learned to replicate the bad habits that created late planes.
5. Adversely affected supplier relationships and servicing schedules, resulting in poor service quality.
6. Increased employee dissatisfaction, as they were constantly firefighting and dealing with frustrated customers.

**Example: A Distribution Company**

A distribution company’s chief executive officer (CEO) realized that a critical success factor for the business was for trucks to leave as close to capacity as possible. A large truck, capable of carrying more than 40 tons, was being sent out with small loads because dispatch managers were focusing on delivering every item on time to customers. Each day by 9 A.M., the CEO received a report of those trucks that had been sent out with an inadequate load the previous day. The CEO called the dispatch manager and asked whether any action had taken place to see if the customer could have accepted the delivery on a different date that would have enabled better utilization of the trucks. In most cases, the customer could have received it earlier or later, fitting in with a past or future truck going in that direction. The impact on profitability was significant. In a scenario similar to the airline example, staff members did their utmost to avoid a career-limiting phone call from the CEO.

(Both these examples are provided in greater detail in my webcast, “Introduction to Winning KPIs,” which can be accessed via www.davidparmenter.com.

### Seven Characteristics of KPIs

From extensive analysis and from discussions with over 3,000 participants in my KPI workshops, covering most organization types in the public and private sectors, I have been able to define what the seven characteristics of KPIs are as set out in Exhibit 2 below.

<table>
<thead>
<tr>
<th>Characteristics of KPIs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non Financial</strong> 1. Non financial measures (not expressed in $s, Yen, Pounds Euro etc)</td>
</tr>
<tr>
<td><strong>Timely</strong> 2. Measured frequently e.g. 24 by 7, daily or weekly</td>
</tr>
<tr>
<td><strong>CEO focus</strong> 3. Acted upon by the CEO and senior management team</td>
</tr>
<tr>
<td><strong>Simple</strong> 4. All staff understand the measure and what corrective action is required</td>
</tr>
<tr>
<td><strong>Team based</strong> 5. Responsibility can be tied down to a team or a cluster of teams who work closely together</td>
</tr>
<tr>
<td><strong>Significant impact</strong> 6. Significant impact e.g. it impacts on more than one of top CSFs and more than one balanced scorecard perspective</td>
</tr>
<tr>
<td><strong>Limited dark side</strong> 7. They encourage appropriate action (e.g., have been tested to ensure they have a positive impact on performance, whereas poorly thought through measures can lead to dysfunctional behavior)</td>
</tr>
</tbody>
</table>

When you put a dollar sign on a measure, you have already converted it into a result indicator (e.g., daily sales are a result of activities that have taken place to create the sales). The KPI lies deeper down. It may be the number of visits to contacts with the key customers who make up most of the profitable business. It is a myth of performance measurement that KPIs can be financial and non financial indicators. I am adamant that all KPIs are non financial.

KPIs should be monitored 24/7, daily, or perhaps weekly for some. It is a myth that monitoring monthly performance measures will improve performance. A monthly, quarterly, or annual measure cannot be a KPI, as it cannot be key to your business if you are monitoring it well after the horse has bolted. All KPIs make a difference; they have the CEO’s constant attention due to daily calls to the relevant staff. Having a career-limiting discussion with the CEO is not something staff members want to repeat, and in the airline example, innovative and productive processes were put in place to prevent a recurrence.

A KPI should tell you what action needs to be taken. The British Airways late-plane KPI communicated immediately to everyone that there needed to be a focus on recovering the lost time. Cleaners, caterers, ground
crew, flight attendants, liaison officers, and air traffic controllers would all work some magic to save a minute here and a minute there while maintaining or improving service standards.

A KPI is deep enough in the organization that it can be tied to a team. In other words, the CEO can call someone and ask, “Why?” Return on capital employed has never been a KPI, because it cannot be tied to a manager—it is a result of many activities under different managers.

A KPI will affect one or more of the operational critical success factors and more than one balanced-scorecard perspectives. In other words, when the CEO, management, and staff focus on the KPI, the organization scores goals in all directions. In the airline example, the late-plane KPI affected all six balanced-scorecard perspectives. It is a myth to believe that that a measure fits neatly into one balanced-scorecard perspective.

Before becoming a KPI, a performance measure needs to be tested to ensure, it creates the desired behavioral outcome (e.g., helping teams to align their behavior in a coherent way to the benefit of the organization).

For the private sector, key performance indicators, that fit the characteristics I have proposed, could include:

- Number of CEO recognitions planned for next week or two weeks.
- Staff in vital positions who have handed in their notice on a given day. (The CEO has the opportunity to try to persuade the staff member to stay).
- Late deliveries to key customers.
- Key position job offers issued to candidates that are more than 48 hours outstanding (The CEO has the opportunity to try to persuade acceptance of offer).
- List of late projects, by manager, reported weekly to the senior management team.
- Number of vacant leadership positions at in-house course (reported daily to the CEO in the last three weeks before the course is due to run).
- Number of initiatives implemented after the staff-satisfaction survey (monitored weekly for up to three months after survey).
- List of level 1 & 2 managers who do not have mentors, reported weekly to the CEO. This measure would only need to be operational for a short time on a weekly basis.
- Number of innovations planned for implementation in next (30,60,90 days). Reported weekly to the CEO
- Number of abandonments to be actioned in next (30,60,90 days). Reported weekly to the CEO
- Major projects awaiting decisions that are now running behind schedule (report weekly to CEO)
- Complaints from our key customers that have not been resolved within 2 hours (report 24/7 to CEO and GMs)
- Key customer enquiries that have not been responded to by the sales team for over 24 hours (report daily to the GM)
- Date of next visit to major customers by customer name (report weekly to CEO and GMs)

For government and non profit agencies, key performance indicators could also include:

- Emergency response time over a given duration (reported immediately to the CEO).
- Number of confirmed volunteers to be street collectors for the annual street appeal (monitored daily in the four to six weeks before the appeal day).
- Date of next new service initiative

**Lead and Lag Confusion**

Many management books that cover KPIs talk about lead and lag indicators; this merely clouds the KPI debate. Using the new way of looking at performance measures, we dispense with the terms lag (outcome) and lead (performance driver) indicators. At my seminars, when the audience is asked “Is the late-planes-in-the-air KPI, a lead indicator or a lag indicator?” the vote count is always evenly split. The late plane in the sky is certainly both a lead and lag indicator. It talks about the past and it is about to create a future problem when it lands. Surely this is enough proof that lead and lag labels are not a useful way of defining KPIs and should be counted among the myths of performance measurement.

Key result indicators replace outcome measures, which typically look at past activity over months or quarters. PIs and KPIs are now characterised as either past, current or future measures.
Past measures are those that look at historic events; activity that took place last week, last month, last quarter etc. PIs and KPIs are now characterized as past-, current-, or future-focused measures. Current measures refer to those monitored 24/7 or daily (e.g., late/incomplete deliveries to key customers made yesterday). Future measures are the record of a future commitment when an action is to take place (e.g., date of next meeting with key customer, date of next product launch, date of next social interaction with key customers). In your organization, you will find that your KPIs are either current- or future-oriented measures.

KPIs are current- or future-oriented measures as opposed to past measures (e.g., number of key customer visits planned in the next month or a list by key customer of the dates of the next planned visits). Most organizational measures are very much past indicators measuring events of the last month or quarter. These indicators cannot be and never were KPIs.

In workshops, I ask participants to write a couple of their major past measures in the worksheet shown in Exhibit 3 and then restate the measures as current and future measures. Take time out now and restate three measures.

EXHIBIT 3 Past/Current/Future Performance Measures Analysis Worksheet Causing Late Planes

<table>
<thead>
<tr>
<th>Past measures</th>
<th>Current measures</th>
<th>Future measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>(last week / 2 weeks / month / quarter)</td>
<td>(real-time/ today/ yesterday)</td>
<td>(next week / month / quarter)</td>
</tr>
<tr>
<td>Number of late planes last week/ last month.</td>
<td>Planes over 2 hours late (updated continuously)</td>
<td>Number of initiatives to be commenced in the next month, 2 months to target areas that are causing late planes.</td>
</tr>
<tr>
<td>Date of last visit by key customer</td>
<td>Cancellation of order by key customer (today)</td>
<td>Date of next visit to key customer</td>
</tr>
<tr>
<td>Sales last month in new products</td>
<td>Quality defects found today in new products</td>
<td>Number of improvements to new products to be implemented in next month, months two and three.</td>
</tr>
</tbody>
</table>

The lead/lag division did not focus adequately enough on current or future-oriented measures. Most organizations that want to create alignment and change behavior need to be monitoring what corrective action is to take place in the future.

Measuring the future will help make it happen. Here, in Exhibit 4, are some common future measures that will work in most organizations.

EXHIBIT 4: Examples of More Future Measures

| Future innovations | To be an innovative organization we need to measure the number of initiatives which are about to come online in the next week, fortnight, and month. |
| Future sales meetings | To increase sales we need to know the number of sales meetings which have already been organized/scheduled with our key customers in the next week, fortnight, and month. |
| Future key customer events | To maintain a close relationship with our key customers a list should be prepared with the next agreed social interaction e.g., date agreed to attend a sports event, a meal, the opera etc. |
| Future PR events | To maintain the profile of our CEO we need to monitor the public relation events that have been organized in next 1-3,4-6,7-9 months. |
| Future recognitions | To maintain staff recognition the CEO needs to monitor the |
formal recognitions planned next week / next fortnight by the CEO and SMT.

| Key dates | Date of next product launch, date for signing key agreements. |

All these future measures would be reported in a weekly update given to the CEO. Although CEOs may let a couple of weeks pass with gaps appearing on these updates, they will soon start asking questions. Management would take action, prior to the next meeting, to start filling in the gaps to ensure they avoided further uncomfortable questioning.

### Unintended Behaviour – The Dark Side of Measures

Measurement initiatives are often cobbled together without the knowledge of the organization's critical success factors and without an understanding of the behavioural consequences of a measure.

Every performance measure has a dark side, a negative consequence. The key is to understand it. Well over half the measures in an organization will be encouraging unintended behaviour. The importance of understanding this dark side and the careful selection of measures should never be underestimated.

Every performance measure can have a dark side, a negative consequence, an unintended action that leads to inferior performance. In order to make measures work, one needs to anticipate the likely human behaviour that will result from its adoption, and endeavour to minimise the potential negative impact.

Dean Spitzer’s booki “Transforming Performance Measurement”, provides many examples of dysfunctional performance due to poor measurement. I will be discussing the significance of this dark-side in a follow on article.

### Number of Measures Required – The 10/80/10 Rule

How many measures should we have? How many of each measure type? What time frames are they measured in? To answer these questions I devised, over ten years ago, the 10/80/10 rule as illustrated in Exhibit 1.7

I believe an organisation will have about 10 KRIs, up to 80 RIs and PIs, and 10 KPIs and these are reported in different time intervals as shown in Exhibit 5.

<table>
<thead>
<tr>
<th>Types of Performance Measures (PMs)</th>
<th>Characteristics</th>
<th>Frequency of Measurement</th>
<th>Number of measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Key result indicators (KRIs) give an overview on the organization’s past performance and are ideal for the Board as they communicate how management have performed e.g. return on capital employed (%), Employee satisfaction (%), net profit before tax</td>
<td>These measures can be financial or non financial. Does not tell you what you need to do more or less. A</td>
<td>Monthly, quarterly</td>
<td>Up to 10</td>
</tr>
</tbody>
</table>
2. Result indicators (RIs) give a summary of the collective efforts of a number of teams on a specific area e.g., yesterday sales ($), complaints from key customers

<table>
<thead>
<tr>
<th>Summary of the collective efforts of a wide number of teams.</th>
</tr>
</thead>
<tbody>
<tr>
<td>24/7, daily, weekly, fortnightly, Monthly, quarterly</td>
</tr>
<tr>
<td>80 or so. If it gets over 150 you will begin to have serious problems</td>
</tr>
</tbody>
</table>

3. Performance indicators (PIs) are targeted measures that tell staff and management what to do e.g., number of sales visits organized with key customers next week/ next fortnight, number of employees’ suggestions implemented in last 30 days.

<table>
<thead>
<tr>
<th>These measures are only non financial. Staff know what to do to increase performance. Responsibility can be tied down to a team or a cluster of teams who work closely together.</th>
</tr>
</thead>
<tbody>
<tr>
<td>24/7, daily, weekly</td>
</tr>
<tr>
<td>Up to 10 (you may have considerably less)</td>
</tr>
</tbody>
</table>

4. Key performance indicators (KPIs) tell staff and management what to do to increase performance dramatically e.g., planes that are currently over two hours late, late deliveries to key customers.

Reporting up to 10 KRIIs to the board or governing body is entirely logical. We do not want to bury them into too much detail. A Board Dashboard can easily be designed to show these KRIIs along with a summary financials all on one fan fold (A3) page.

For many organizations, 80 RIs and PIs will at first appear totally inadequate. Yet, on investigation, you will find that separate teams are actually working with variations of the same indicator, so it is better to standardize them (e.g., a “number of training days attended in the past month” performance measure should have the same definition and the same graph).

When we look at the characteristics of KPIs one will see that these measures are indeed rare and that, many organizations will operate very successfully with no more than ten of them. Kaplan and Norton recommend no more than 20 KPIs. Hope and Fraser suggest fewer than 10 KPIs. Whilst many KPI project teams may, at first, feel that having only 10 KPIs is too restrictive and thus increase KPIs to 30 or so. With careful analysis, that number will soon be reduced to the 10 suggested, unless the organization is composed of many businesses from very different sectors. If that is the case, the 10/80/10 rule can apply to each diverse business, providing it is large enough to warrant its own KPI rollout.

It is a myth that the more measures there are, the better performance measurement will be. In fact, as has no doubt been witnessed by many readers, the reverse is true. I believe the 10/80/10 rule is a good guide, as it appears to have withstood the test of time. Very seldom are more measures needed, and in many cases, fewer measures will suffice.

**Importance of Timely Measurement**

Before proceeding further, we will look at the importance of timely measurement. It is essential that measurement is timely. Today, a KPI provided to management that is more than a few days old is useless. KPIs are prepared in real time, with even weekly ones available by the next working day. The suggested reporting framework of performance indicators is set out in Exhibit 6. Frequently, staff working for government and non profit agencies tell me that we do not have any measures that we need to monitor frequently. I beg to differ. Some of the KPIs will be updated daily or even 24/7 (as in the British Airways case), whereas the rest of the KPIs will be reported weekly. Performance measures that focus on completion should be included. In organizations where finishing is a problem, a common weekly KPI is the reporting of projects and reports that are running late to the senior management team. Such reporting will revolutionize project and task completion in your organization. The RIs and PIs will be reported in various time frames from daily, weekly, and fortnightly to monthly. The KRIIs, which are best used to report performance to the board, will, therefore, be based around the timing of the board meeting.
EXHIBIT 6 Suggested Reporting Framework

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1. Dean R. Spitzer, *Transforming Performance Measurement: Rethinking the Way We Measure and Drive Organizational Success* (New York: AMACOM, 2007).
