

HANDBOOK OF PRINCIPLES OF ORGANIZATIONAL BEHAVIOR

*Indispensable Knowledge for
Evidence-Based Management*

Second Edition



EDITED BY EDWIN A. LOCKE

 WILEY



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ORGANIZATIONAL BEHAVIOR

SECOND EDITION

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INDISPENSABLE KNOWLEDGE FOR
EVIDENCE-BASED MANAGEMENT

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Preface

The handbook, now in its second edition, fulfills a promise made when the first behavioral research in organizations began (Munsterberg, 1913) at the outset of the 20th century. It identifies general principles, validated by science, for managing people, work, and organizations well. Mastering these principles is the essential focus of high-caliber management education and effective workplace practice.

This book helps the reader to close the gap between the mass of scientific knowledge on organizational behavior and the day-to-day decisions made in organizations. Managers typically make decisions using the knowledge they already possess. Few base their professional decisions on systematic knowledge of organizations and human behavior. Even managers with advanced training often possess little knowledge of scientific facts about the work they do. Further, many management educators do not keep up with the ever-accumulating state of knowledge in management research (Rousseau, 2006). By helping to close the research–practice gap, this handbook offers both practitioners and educators the opportunity to bring their own professional practices up to speed, building on the best available scientific evidence.

Scientific evidence is acquired through direct experience, controlled observation, measurement, and experimentation. It is both an epitome of human knowledge and a project involving many thousands of people. The science in this book stands in contrast to the business hype and fads pushed by self-appointed gurus, who offer a good story and one-size-fits-all solutions, but not scientific evidence. Acting on unsubstantiated beliefs and trendy claims ultimately wastes an organization's time and money and the efforts of many well-meaning people. Failed efforts to improve the workplace take a toll on organizational well-being and performance and on the relationship between an organization's leaders and its members.

As Thomas Huxley said, "The deepest sin against the human mind is to believe things without evidence." Managing by evidence and fact means taking action based on core principles and fundamental truths developed through science and systematic observation. Decisions made on this sensible and reliable foundation, in turn, build employee trust that managers are competent and well informed (Colquitt and Salam, Chapter 21). The handbook provides this foundation.

SCIENCE YOU CAN USE

The handbook is chock-full of science-based facts about the human-made world of organizations. Massive amounts of data have been accumulated and integrated to develop the knowledge base on which each chapter is based. Chapter authors are the field's leading

experts, who have pulled together the most important facts regarding each topic in a fashion both educators and practitioners can use. In doing so, the authors present much of the best replicated and most useful knowledge in organizational behavior. For example, did you know:

- ◆ In skilled jobs, top workers produce 15 times as much as the poorest performers. The single best predictor of this difference in productivity is general mental ability (intelligence, Schmidt, Chapter 1).
- ◆ Hiring people who are conscientious and emotionally stable has numerous benefits for organizations (Barrick and Mount, Chapter 2).
- ◆ Job satisfaction is an important predictor of life satisfaction – and mental challenge is a key factor in job satisfaction (Judge and Klinger, Chapter 6).
- ◆ Turnover has several different causes. Each requires a different approach by management (Eberly, Holtom, Lee, and Mitchell, Chapter 7).
- ◆ Setting specific challenging goals for employees is a very effective motivational technique but only if certain procedures are followed (Latham, Chapter 9).
- ◆ Money does motivate people, but pay systems have to be designed very carefully to avoid dysfunctional consequences (Durham and Bartol, Chapter 12).
- ◆ Effective team leadership does not depend on leader charisma but rather on performing certain key leadership functions (Hackman and Wageman, Chapter 15; Ancona and Caldwell, Chapter 16).
- ◆ Groups become skilled in interpersonal and task processes as they develop subconscious knowledge (often called collective intuition) that helps them cope with new situations (Okhuysen and Bechky, Chapter 17).
- ◆ Conflicts within teams can be effectively managed by implementing various coordination mechanisms (Weingart and Jehn, Chapter 18).
- ◆ To do their jobs well, managers need to utilize more types of power (e.g. expert power) than simply the authority that comes with their position (Yukl, Chapter 19).
- ◆ Top managers who set a clear vision for their organization and promote and enforce a rational code of values typically outperform executives who don't (Kirkpatrick, Chapter 20).
- ◆ The optimal organizational structure depends upon a variety of factors including size, strategy, and degree of specialization (Donaldson, Chapter 22).
- ◆ A key to effective decision making is broadening the decision framework. Doing so is enabled by using checklists, logic models, and other heuristics (Larrick, Chapter 25).
- ◆ Negotiation is most effective if specific, research-based procedures are followed (Taylor and Fielbig, Chapter 28).
- ◆ Swift action and experimentation are critical to entrepreneurial success, but one does not have to be the first mover to succeed (Baum, Chapter 30).
- ◆ Work/family balance requires both organizational supports and individual flexibility (Baltes and Clark, Chapter 31).

New scientific knowledge is discovered every day. Such knowledge is the product of many thousands of actively thinking individuals. Just consider what was required just to discover, validate, and apply germ theory in the field of medicine. Though its body of knowledge is much younger than the core fields of the natural sciences, the same is true

in the field of organizational behavior. People are complicated, and the complexity multiplies a million-fold when you put hundreds or thousands of them together in organizations. People think, feel and make choices; genes, particles, atoms, and molecules do not. Nevertheless, through systematic study it is possible to understand both people and the organizations they create and belong to. The chapters in this book summarize much of what's been discovered about behavior in organizations. This provides both the educator and the practitioner a foundation to build on in their own work.

Have you ever heard these complaints?

- ◆ “The collective wisdom from research is being lost.”
- ◆ “Practitioners do not read academic journals.”
- ◆ “Academics, not practitioners, are driving the research agenda.”
- ◆ “The relevance, quality, and applicability of research are questionable.”
- ◆ “Practice is being driven more by fads and fashions than research.”
- ◆ “Many practices are doing more harm than good.”

These statements might remind you of conversations with faculty in schools of business or with practicing managers. From a management perspective, all of the statements basically ring true. Interestingly, however, the above statements were commonly voiced opinions quoted in a nearly two-decade-old *British Journal of Medicine* editorial (Smith, 1991) complaining that the practices of physicians and hospitals were failing to apply evidence from medical research in the ways they cared for patients. Today, evidence-based medicine is becoming the established mode of practice, with participants from over 90 countries. Management at the end of the 21st century's first decade is, on the other hand, in the same position medicine was 20 or more years ago. A tremendous store of useful evidence is available, but it awaits uptake by informed practitioners.

What changed in the field of medicine? A small percentage of physicians recognized that much more was known about good medical practice than they actually used in day-to-day patient care. These early adopters of evidence-based medicine led the way. They changed the health-care environment by creating new practices and routines. Later adopters accepted and employed these new routines once they became the “way it's done.” This pattern of early use of evidence-informed practice by a small percentage of professionals has been observed repeatedly. It has been true throughout the many professions that today base their core practices on evidence, ranging from medicine and nursing to public health and criminology (Proctor, 2004; Rogers, 1995). Turning insights from research-based evidence into standard operating procedures is now a norm in many fields. From giving aspirin after a first heart attack in order to reduce the odds of a second, to criminal justice programs that keep inmates actively involved in their families, these routines all began with practitioners acting on an accumulation of scientific evidence.

This handbook positions you as an educator and/or practitioner to become an early adopter of evidence-based organizational and management practices. As an early adopter, you should experiment with ways of implementing this book's principles, take special efforts to learn from your experiences, and provide such opportunities to others. Doing so will further your understanding of how these principles work and how to use them well. The very fact that you have opened this book suggests a search for more knowledge. You are likely to believe that improving performance is both important and possible. Acting on

evidence requires active thinking and reflection, indicators of a certain hunger for understanding. It is that hunger and the commitment to learning that can make you an effective user of evidence (cf. McAuliff and Kovera, 2008).

Not everyone is motivated to use evidence. Some people fail to learn new things because they don't want to bother exerting the effort. Others are overly optimistic about the quality of their own expertise and performance (Ehrlinger et al., 2008). Ironically, poor performers are the ones most likely to overestimate their expertise, because their very lack of competence makes it difficult for them to recognize how incompetent they are. This book was written for those in the remainder of the spectrum: those who are willing and able to expand their knowledge and expertise. It is intended for those who are prepared to work at deepening their understanding of what makes organizations effective, particularly in terms of managing people.

The most useful products of evidence-based research in management are *principles*, that is, general truths. For example, an important principle discovered in personnel selection is: *unstructured interviews are poor predictors of job performance*. Interviewers using their own idiosyncratic questions have low inter-interviewer agreement on applicants and virtually no reliable capacity to identify the candidate who is best able to do a job. Recruiters and personnel interviewers, and the people who manage them, are quite limited as well as biased in the information they gather about the selection interview's effectiveness (Highhouse, 2008). The other side of this principle in personnel selection is: *structured interviews are good predictors of job performance* (Stevens, Chapter 3). This second principle provides a basis for improving the way personnel decisions are made.

At the same time, there are several reasons why evidence *in itself* is not a solution. First, non-evidence-based practices are the norm – and most people are comfortable with the status quo. In the case of personnel decisions, most interviewers believe they are good judges of an applicant's qualifications. Interviewers do not realize how poor their choices really are because they seldom get systematic feedback on their actual success rates. Second, there are many institutional forces in place that keep invalid and ineffective practices like unstructured interviews from being discarded. Colleges spend a lot of money creating dedicated space for on-campus recruiters to interview students. Thousands of books give advice on the right way to answer interview questions. Abandoning the unstructured interview in favor of structured interviews or any other validated selection tool can generate surprise, resentment, and potential backlash. Finally, it is often not obvious, at least at first, exactly how to act on an evidence-based principle. Actually developing structured interviews requires special effort to learn new techniques; design and format structured, job-related questions; train interviewers in the new processes; and convince managers to support the change. It often takes several attempts to introduce an effective new selection system, requiring the political will to sustain the effort. (The results are worth it.)

In response to these challenges, encouraging the use of evidence-based principles requires that you as an educator or practitioner are aware of, develop, and foster two kinds of knowledge: declarative and procedural (Anderson, 1976). Principles are scientific facts or *declarative knowledge*. Facts include systematic observations (e.g. unstructured interviews are unreliable; structured interviews are reliable; it is important to have inter-rater agreement). Declarative knowledge is very flexible. It reflects general facts about the world and is readily adaptable to new environments. For this reason, all chapters in the book

describe important declarative knowledge with broad applicability to both practitioners and educators.

The second basic kind of knowledge is *procedural knowledge*, how to apply the facts science has discovered. The book offers this type of knowledge too. Procedural knowledge is more grounded in context. It is discovered by learning what works and what doesn't in particular environments and conditions of use. One exemplar of procedural knowledge can be found in justice research. Over the past three decades, justice research has focused largely on strategies for promoting fairness in the workplace. Following the early research on equity theory in the 1960s, a newer generation of research addresses those features of organizational decision making and policies that influence justice beliefs. It offers action guides regarding procedural justice that are adaptable to a variety of settings, including acting consistently, suppressing bias, and providing opportunities for participation (Greenberg, Chapter 14).

The chapters in this book present a mixture of declarative and procedural knowledge. Cases in point include the characteristics and processes that make a performance appraisal system work (Rotundo, Chapter 5), the value and ways of giving workers recognition for good performance (Luthans and Stajkovic, Chapter 13), and the risks associated with stress and ways of managing it (Reuter and Schwarzer, Chapter 27). The actual skills required to apply this knowledge must still be developed through practice. Procedural knowledge is itself further deepened through action. Acting on the knowledge this book provides will involve you in the process of implementing, and sometimes inventing, practices that execute the essence of scientific principles.

We cannot assume others will take even the best evidence on faith. Helping people understand what works and what doesn't, and why, requires deepening your own understanding of the principles themselves. Having a good appreciation of why a principle works is important for developing critical judgment about why and when the principle should be applied and how to do so. This underlying knowledge is important to overcoming objections and resistance, making it easier for you to effectively demonstrate how a principle applies. The handbook provides a rich level of detail to help you carry on critical conversations with those whose support you need. In many cases, people react emotionally to acting on evidence-based principles, often because of their own subconsciously held ideas (Locke, Chapter 8). In the course of your own practice or teaching of evidence-informed management, you are in a position to help others change the assumptions underlying their emotions. By cultivating your passion for evidence, you can become more creative in how you use it (Amabile and Fisher, Chapter 26) and in the ways you model for others what it means to be an effective practitioner or evidence-informed educator.

USING THIS HANDBOOK

A wonderful feature of this book is that you can begin with any chapter of interest and pick and choose as you go. Every chapter contains references to other chapters, so you can follow your interests to related chapters if you want to learn more. Indeed, you may find that, as you come to apply ideas in a chapter, re-reading it can lead you to fresh insights.

Each chapter is intended to be a reliable and useful companion to your progression toward mastering key behavioral and organizational principles.

This handbook's usefulness to you depends on your efforts as a self-improving educator or manager. For readers to be evidence-based practitioners or effective evidence-informed educators, they need to design ways for themselves and others to act on the scientific facts provided here. Evidence-based practice means obtaining and using the best available evidence to inform decisions. It requires "decision awareness," that is, being aware of the many decisions and choices a practitioner might make each day, including those where the choice might be to take no action at all. There is more reflection and judgment to being an evidence-based manager than is the case for a shoot-from-the-hip counterpart.

This is not a cookbook. Evidence doesn't make decisions or solve specific problems. People do. This is done by critical reasoning, reflection on a principle's conditions of use, and learning by doing. Acting on this book's principles requires a mindful approach. In her eminently useful book on mindful learning, Langer (1997) illustrates the principles of mindfulness. Students learning physics (or management, psychology, or medicine) are better able to use principles to solve problems when they learn such principles conditionally. There is a world of difference between learning "X follows Y" and "*X often follows Y but only under specific conditions.*" A mindful approach where practitioners think conditionally creates openness to new information. Let's take a case in point. Latham (Chapter 9) presents a host of evidence-based principles that are predicated on a fundamental fact: challenging goals motivate higher performance than do general goals. If we apply this principle mindfully, we say "higher performance (X) often follows from setting challenging goals (Y)." Actively framing this principle in a mindful way prompts a set of questions. What else is going on in the situation which might make high performance occur (or not)? If high performance didn't occur, what might account for that? Did the individuals involved *accept* the goal? Did they have the *ability or knowledge* to achieve the goal? As you can see, a mindful approach to each principle fosters an implicit awareness of other possibilities and relevant facts in the situation. Avoiding overconfidence in any single answer encourages more attention to all of the possible answers. Entertaining greater possibilities ultimately means that more information relevant to the problem is considered in trying to solve it.

Overthinking or analysis paralysis is a less common dysfunction than some might think. Non-reflective action – acting mindlessly out of habit or impulse – is far more common. Once again, we can learn from the pursuit of evidence-based practice in medicine. Physicians understand the pressure to make a diagnosis quickly. Doctors in training learn to assess a patient's status in a deliberate fashion to avoid committing to a particular judgment prematurely (Groopman, 2007). They learn routines for questioning their own assumptions and re-reviewing information to avoid overlooking possible diagnoses. Using evidence-based practice, the physician strikes a balance between the extremes of overthinking and impulsiveness. In becoming a more mindful practitioner, you will learn to keep your mind open to possibilities as you develop deeper skill in diagnosing situations and applying evidence in flexible ways. As an educator, by emphasizing mindful learning you will help students use principles more effectively to solve problems and appreciate the myriad ways in which they might apply to various situations.

Mindful learning increases with practice over time. The more you apply the handbook's principles, the more effective you will be at knowing how and when to use them

and how they connect to one another. Applying the same principle across different situations will create more flexible categories for interpreting your observations and deepen the base of knowledge on which you can draw. Let's look at how one might mindfully use one of the classic principles in change management: *people characteristically resist change in organizations* (Beer, Chapter 29). The dynamics of resistance are closely tied to the degree of attachment human beings usually have to the status quo. Appreciating this underlying dynamic of change resistance can generate a host of considerations to guide the actions of a would-be change manager. In particular, a mindful change manager, reading Beer's chapter, can discover that he or she typically has an array of alternative interventions that can be used to implement change. Changes undermining the status quo are, other things being equal, more likely to generate resistance than changes keeping the status quo basically intact. Similarly, an add-on to circumstances people already accept is a lot less threatening than wholesale change. Thus, for instance, it typically is easier to add profit sharing on top of a salary system than it is to completely replace salaries with profit sharing.

One important factor in designing a change strategy is to identify how necessary it is to disrupt the status quo. Categorizing change interventions in terms of the degree to which they challenge the status quo can give the change manager a variety of choices. Profit sharing could be installed as an add-on to an existing system, period. Alternatively, there can be a gradual phase-in of profit sharing and a revamping or elimination of the salary system over time. Further, by reflecting on why people might resist or accept change at various times, a practitioner who appreciates *why* a principle works can identify more effective ways of acting on it in light of the circumstances he or she faces. Some people might actually dislike the present status quo or prefer the benefits a change offers. Those people are likely to be early supporters, rather than resisters of change.

GETTING READY FOR THE JOURNEY

Developing your professional evidence-based practice is a life-long journey. Handbook editor Ed Locke makes a compelling case that the principles presented herein give practitioners new ways to think and to organize their world. It is important that you incorporate the essential gist of this handbook's principles into your habits of mind. Doing so means working with these principles on a day-to-day basis. This can be done one principle at a time, as circumstances warrant. In time, you will develop powerful ways of acting effectively and modeling to others what it means to be a competent, trustworthy manager.

Thoughtful use of this book moves you along the path to becoming an informed user of evidence. Beware of any claim you encounter based on a single study (or none at all). Know that evidence comes from a body of research, as assembled in this handbook. The chapters herein reflect findings accumulated from many and varied studies. The critical reader should scrutinize each chapter for information that aids in applying its principles. Two kinds of information are particularly helpful to watch for: *supports* and *counter-indicating factors*. Supports are co-occurring conditions not part of the phenomenon itself that influence its occurrence or consequences. Knowledge about effective workforce training – which involves many critical subprinciples and often modern technology – has made huge strides

in recent years. Training builds self-efficacy (Bandura, Chapter 10). Training and efficacy foster successful empowerment (Conger and Pearce, Chapter 11; Salas and Stagl, Chapter 4). Information technology can support new ways of organizing and learning (Alavi and Yoo, Chapter 32). Participation and quality communication foster indispensable knowledge exchange (Cai and Fink, Chapter 23; Wagner, Chapter 24). Counter-indicating conditions can also exist that make principles inapplicable or difficult to apply (e.g. for participation to work there must be knowledge to exchange). In particular, Erez (Chapter 33) provides a basis for reflecting on how cross-cultural forces can influence the application of principles. She notes that directive leadership produces more positive responses in countries valuing authority than in more egalitarian nations. Although each situation will have differing supports and counter-indicating factors present, the research on which this book's principles are based demonstrates considerable generalizability across circumstances, when mindfully applied.

The environments we participate in can help or hinder learning. Shaping your environment in ways that promote learning begins with sharing your insights from this book and engaging others in the process of learning to act on evidence-based principles. This book's principles offer considerable guidance in learning-to-learn – particularly when you use several principles in combination. Here are some basic combinations of principles that can aid you in learning-to-learn. Seek feedback regarding the outcomes of your decisions, and set goals for improving these outcomes (Latham, Chapter 8; Larrick, Chapter 25). Choose your initial applications of this book's principles for the observability of their results, so you get feedback you can learn from – and so you can demonstrate the benefits from acting on evidence to others (Beer, Chapter 29). Using after-action reviews can help evaluate what works and what needs improvement. Doing so regularly allows you to model effective use of evidence to the people you work with, and makes it easier to recognize them for their contributions to that effort (Luthans and Stajkovic, Chapter 13). Colleagues and employees who are later adopters of evidence will find it easier to apply evidence themselves if evidence-based routines, guidelines, and checklists are developed to help them (see Larrick, Chapter 25, for decision supports to improve decision processes; and Beer, Chapter 29, for ways of promoting organizational and behavioral change).

You – the reflective practitioner or the educator developing that competency in others – can use the principles in this book in a host of ways. Experiment. Seek feedback on the impact of your interventions or teaching. Redesign your management practice or teaching based on this feedback. Update your knowledge as new scientific evidence continues to emerge. In doing so, you are on your way to mastering evidence-based management.

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Editor's Introductionⁱ

This handbook is about management principles, each chapter written by an expert in the field – but why do we need principles?

To quote Ayn Rand (1982, p. 6):

... abstract ideas are conceptual integrations which subsume an incalculable number of concretes – and without abstract ideas you would not be able to deal with concrete, particular, real-life problems. You would be in the position of a newborn infant, to whom every object is a unique, unprecedented phenomenon. The difference between his mental state and yours lies in the number of conceptual integrations your mind has performed.

You have no choice about the necessity to integrate your observations, your experiences, your knowledge into abstract principles.

What, then, is a principle? A “principle” is a general truth on which other truths depend. Every science and every field of thought involves the discovery and application of principles ... a principle may be described as a fundamental reach by induction (Peikoff, 1991, p. 218).

Examples of principles that we use (or should use) in everyday life are:

“Be honest” (a moral principle);
“Eat plenty of fruits and vegetables” (nutrition);
“Exercise regularly” (health);
“Save for the future” (personal finance);
“Do a conscientious job” (work and career); and
“Do not drive under the influence of alcohol” (personal safety).

It would be literally impossible to survive for long if one did not think in terms of principles, at least implicitly. In terms of concrete details, every situation is different from every other. Suppose, for example, that a child were told, “Do not run across that part of this street today.” What is the child to do on other days? On other streets? On other parts of the same street? Such a dictum would be useless to the child after the day had passed or if he were in another location. Properly, the child would be taught a principle such as

ⁱThis introduction is adapted from Locke (2002). I thank Jean Binswanger, Paul Tesluk, Cathy Durham, and James Bailey for their helpful comments on the original article.

"Never cross any street without first looking twice in each direction." This could guide the child's actions for life and in every location in the world.

How are principles formulated? By integrating conceptual knowledge (for more on concept formation see Locke, 2002, and Peikoff, 1991). Principles, in turn, are integrated into theories, again by induction (Locke, 2007).

TEACHING

The use of principles is critical to both the teaching and practice of management. Let's begin with teaching. Most instructors would agree that management is a difficult subject to teach. First, it is very broad in scope. It entails scores if not hundreds of different aspects. The more one studies the field, the more complex and bewildering it seems to become. Second, there are no concrete rules or formulas to teach as in the case of accounting, finance, or management science. Management is as much an art as a science. Third, although there are theories pertaining to different aspects of management (e.g. leadership), many find these theories to be less than satisfactory (to put it tactfully), because they are too narrow, trivial, or esoteric and/or lack firm evidential support. Often they are based on deduction rather than induction (Locke, 2007). The potentially useful theories are mixed in with those that are not.

Traditionally, teaching has been done with either textbooks and/or the case method. Both methods contain the same epistemological limitation. Textbooks, because they try to be comprehensive, pile up detail after detail, but the details, even of subtopics, are very difficult to integrate. As noted above, any theories that are presented often have severe limitations. The result is that students routinely suffer from massive cognitive overload and a sense of mental chaos; thus little of the material is retained (once the final exam is over). This makes it unlikely that what was memorized will be applied to the students' jobs and career.

With regard to case studies, these allow for the possibility of induction but shockingly, it has been reported that some business schools openly *prohibit* connecting the cases to each other. This is very unfortunate. Each case is a unique, concrete instance. Suppose, for example, a business student concluded from analysis of a particular case study that a certain high technology firm in New Hampshire should replace the CEO, develop a top management team, and change to a matrix structure. What could the student take away from such an analysis that would help him be a better manager? Nothing at all, if the analysis were left in the above form. The case would only be useful if the student could formulate some general principles from studying a variety of cases. The best way to do this is by induction from a series of cases (see Locke, 2002, for a detailed example), though even this could be limited depending on the choice of cases. Faculty whom I knew who used cases have admitted to me that they have to use theoretical materials (e.g. principles) for the students to be able to even analyze the cases in the first place.

The value of this book for teaching, therefore, is two-fold. First, it is an alternative to a traditional textbook. The material in this book is *essentialized*. Only what the expert chapter writers consider important is included; thus there is far less to remember than in a text. This means the material can be more easily retained and more readily applied to the real world of work. Further, the principles are evidence based and thus tied firmly to reality.

Second, this book can be used as an adjunct to a course which uses cases. Here both deduction and induction can be used. The book's principles can help students to analyze the cases, yet new principles (or qualifications to principles) could be developed through induction from the cases used.

(There are other problems with the case method that I can only note briefly here, for example the emphasis on verbal glibness; the fact that all the information needed is already in the case; the fact that the case is taken out of a wider organizational context; the fact that real action is not possible; and the lack of face-to-face contact with actual employees. Primarily, these problems are inherent in the attempt to teach a practical skill in a classroom and so have no perfect solution, though student mini-projects within real businesses help.)

MANAGEMENT

This book can also help managers and executives be more effective. However, reading a book of evidence-based principles does not magically turn one into a good manager. Principles cannot be mastered overnight and cannot be applied mechanically. Regardless of the level of abstraction at which they are formulated, they are still abstractions, not concrete rules such as "turn off the lights when you leave the room." Principles, however, are used to guide specific actions in specific contexts.

Consider the principle: "Motivate performance through goal setting" (Chapter 9 of this book). This principle does not tell one what to set goals for (a very critical issue); who is to set them; what the time span will be; what strategy to use to reach them; how performance will be measured; how flexible the goals will be; or how performance will be rewarded. To some extent formulating subprinciples can be a help, because these would give some idea of how to implement the principles. For example, subprinciples for goals (given in Chapter 9) would include (a) make the goals clear and challenging; (b) give feedback showing progress in relation to the goals; (c) get commitment through building confidence; (d) insure that people have the needed knowledge; (e) provide needed resources and so forth. But these subprinciples do not tell one everything. There will always be judgment calls to be made, because one cannot teach every possible context factor that a future manager might face.

Furthermore, principles cannot be applied in a vacuum, or one at a time in some arbitrary order. Many – maybe dozens or possibly hundreds – of principles must be used to run a successful business. (The problem of cognitive overload is mitigated over time by gradually automatizing the principles in the subconscious.) Furthermore, the principles must be orchestrated so that they function in concert rather than working at cross-purposes. It is not known how effectively one can teach such orchestration, although one can make the student aware of the issue and give some examples. For example, the goal system must be integrated with the performance appraisal system and the reward system.

It is worth observing here how principles are used in the real world of management. I will use Jack Welch as an example in that he is considered among the greatest CEOs in history, the creator of \$300–400 billion in stockholder wealth at General Electric (e.g. see Slater, 1999; Tichy and Sherman, 1993). Some principles that Welch used as his personal guides to action are as follows:

- ◆ Reality. Face reality as it really is, not as you want it to be. (I believe that the failure to practice this principle is a major cause of business failures, for example Enron. Such failures may involve flagrant dishonesty, but they also may involve simple evasion – the refusal to look at pertinent facts – or putting emotions ahead of facts.)
- ◆ Control your own destiny or someone else will.
- ◆ Change before you have to.
- ◆ Compete to win.

Welch also helped develop a code of values or guiding principles for GE as a whole:

- ◆ Show integrity.
- ◆ Hate bureaucracy.
- ◆ Be open to new ideas regardless of their source.
- ◆ Pursue high quality, low cost, and speed.
- ◆ Have self-confidence.
- ◆ Have a clear, reality-based vision.
- ◆ Possess energy and energize others.
- ◆ Use stretch goals and (differential) rewards.
- ◆ View change as an opportunity, not as a threat.
- ◆ Have a global focus.

Obviously, Welch was able not only to formulate but also to apply and orchestrate principles in a way that no one else had. It helped that he had ambition and energy, a brilliant business mind, an insatiable curiosity, the capacity to judge talent, and an uncanny ability to figure out what businesses GE should and should not be in.

It is interesting that Jacques Nasser was a great admirer of Welch and tried to emulate his principles at Ford but was unable to do so and ultimately lost his job. It is clear that there is a long road between knowing good principles and being able to implement them successfully in the context of a given organization.

Management principles need to be organized and integrated hierarchically so that the leader will know what to do first, second, and so forth. Except for facing reality as it is (not evading), which should be the primary axiom of every manager, the hierarchy may not be the same from business to business or in the same business at different times. Nor will they all be OB principles. For example, in one context the most critical factor may be to decide, as Welch did, what business or businesses a corporation should be in. This is an aspect of vision and strategic management. There is no point in trying to manage the wrong business or working hard to do the wrong thing. But in another context, the critical issue may be cash flow, for example how to avoid bankruptcy in the next six months (a finance issue). In a different context, the core problem might be getting the right people in the right jobs or revamping the incentive system (HR issues).

What factors would determine the hierarchy? Three are critical: (1) *Context*. What are the most important facts regarding the present situation of this company? Context means seeing the whole and the relationship of the parts to the whole. (2) *Urgency*. What has to be fixed right away if the company is to survive? (3) *Fundamentality*. What is the cause of most of the different problems the organization is faced with or what must be fixed before any other fixes will work (e.g. get good people in key jobs)?