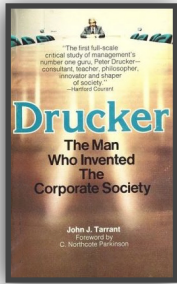


Management, Revised Edition

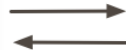
by [Peter Drucker](#)



How is it possible ↓
to work toward horizons ↑ ↓
that aren't on your mental radar –
at the right point in time? ↓



**Navigating
a changing world**



↑ [larger](#)

[Thinking Broad and Thinking Detailed](#) ↑ ↓

[Intelligence, Information, Thinking](#)

▪ “Most of the **mistakes in thinking** are **mistakes in perception**.”

- ❖ Seeing only part of the situation – [broad](#)
- ❖ Jumping to conclusions
- ❖ Misinterpretation caused by feelings” – [Edward de Bono](#)

▪ Awareness without [action](#) is useless

The [MEMO](#) they – the [enemies of the future](#) – don't want you to [SEE](#)

«\$\$\$»

[\[Peter Drucker most important contribution\]](#)

Peter F. Drucker was asked in early 1999. “What do you consider to be your most

important contribution?" His answer:

- 21 ▪ That I early on—almost sixty years ago—realized that management has become the constitutive organ and function of the *Society of Organizations*;
- 22 ▪ That **management** is not "Business Management"—though it first attained attention in business—but the governing organ of *all* institutions of Modern Society;
- 23 ▪ That I established the study of management as a discipline in its own right; and
- 24 ▪ That I focused this discipline on People and Power; on Values, Structure, and Constitution; and above all, on **responsibilities**—that is, focused the Discipline of Management on **management** as a truly liberal art.

25 –Peter F. Drucker,

26 January 18, 1999

27 Source: The Drucker Institute

28 Claremont Graduate University

29 Claremont, California 91711

30 Contents

| | |
|----|--|
| 31 | Peter Drucker's Legacy by Jim Collins |
| 32 | Introduction to the Revised Edition of Management: Tasks, Responsibilities, Practices |
| 33 | Preface |
| 34 | 1 Introduction: Management and Managers Defined |
| 35 | 2 Management as a Social Function and Liberal Art |
| 36 | 3 The Dimensions of Management |
| 37 | Part I Management's New Realities |
| 38 | 4 Knowledge Is All |
| 39 | 5 New Demographics |
| 40 | 6 The Future of the Corporation and the Way Ahead |
| 41 | 7 Management's New Paradigm |
| 42 | Part II Business Performance |
| 43 | 8 The Theory of the Business |
| 44 | 9 The Purpose and Objectives of a Business |
| 45 | 10 Making the Future Today |
| 46 | 11 Strategic Planning: The Entrepreneurial Skill |
| 47 | Part III Performance in Service Institutions |
| 48 | 12 Managing Service Institutions in the Society of Organizations |
| 49 | 13 What Successful and Performing Nonprofits Are Teaching Business |
| 50 | 14 The Accountable School |
| 51 | 15 Rethinking "Reinventing Government" |
| 52 | 16 Entrepreneurship in the Public-Service Institution |
| 53 | Part IV Productive Work and Achieving Worker |
| 54 | 17 Making Work Productive and the Worker Achieving |
| 55 | 18 Managing the Work and Worker in Manual Work |
| 56 | 19 Managing the Work and Worker in Knowledge Work |
| 57 | Part V Social Impacts and Social Responsibilities |
| 58 | 20 Social Impacts and Social Responsibilities |
| 59 | 21 The New Pluralism: How to Balance the Special Purpose of the Institution with the Common Good |
| 60 | Part VI The Manager's Work and Jobs |
| 61 | 22 Why Managers? |
| 62 | 23 Design and Content of Managerial jobs |
| 63 | 24 Developing Management and Managers |
| 64 | 25 Management by Objectives and Self-Control |
| 65 | 26 From Middle Management to Information-Based Organizations |

| | |
|----|--|
| 66 | 27 The Spirit of Performance |
| 67 | Part VII Managerial Skills |
| 68 | 28 The Elements of Effective Decision Making |
| 69 | 29 How to Make People Decisions |
| 70 | 30 Managerial Communications |
| 71 | 31 Controls, Control, and Management |
| 72 | 32 The Manager and the Budget |
| 73 | 33 Information Tools and Concepts |
| 74 | Part VIII Innovation and Entrepreneurship |
| 75 | 34 The Entrepreneurial Business |
| 76 | 35 The New Venture |
| 77 | 36 Entrepreneurial Strategies |
| 78 | 37 Systematic Innovation Using Windows of Opportunity |
| 79 | Part IX Managerial Organization |
| 80 | 38 Strategies and Structures |
| 81 | 39 Work- and Task-Focused Design |
| 82 | 40 Three Kinds of Teams |
| 83 | 41 Result- and Relation-Focused Design |
| 84 | 42 Alliances |
| 85 | 43 The CEO in the New Millennium |
| 86 | 44 The Impact of Pension Funds on Corporate Governance |
| 87 | Part X New Demands on the Individual |
| 88 | 45 Managing Oneself |
| 89 | 46 Managing the Boss |
| 90 | 47 Revitalizing Oneself—Seven Personal Experiences |
| 91 | 48 The Educated Person Conclusion: The Manager of Tomorrow |
| 92 | Author's Note |
| 93 | Bibliography |
| 94 | Drucker Annotated Bibliography |
| 95 | Index |

96 Peter Drucker's Legacy

97 During a discussion in graduate school, a professor challenged my first-year class:
98 managers and leaders—are they different?
99 The conversation unfolded something like this: ¶¶¶
100 “Leaders set the vision; managers just figure out how to get there,” said one student. ¶¶¶
101 “Leaders inspire and motivate, whereas managers keep things organized,” said another.
102 ¶¶¶
102 “Leaders elevate people to the highest values.
103 Managers manage the details.” ¶¶¶
104 The discussion revealed an underlying worship of “leadership” and a disdain for
“management.”
105 Leaders are inspired.
106 Leaders are large.
107 Leaders are the kids with black leather jackets, sunglasses, and sheer unadulterated cool.
108 Managers, well, they’re the somewhat nerdy kids, decidedly less interesting, lacking
charisma.
109 And of course, we all wanted to be leaders, and leave the drudgery of management to
others. ¶¶¶
110 We could not have been more misguided and juvenile in our thinking.
111 As Peter Drucker shows right here, in these pages, the very best leaders are first and
foremost effective managers.
112 Those who seek to lead but fail to manage will become either irrelevant or dangerous,
not only to their organizations, but to society. ¶¶¶
113 Business and social entrepreneur Bob Buford once observed that Drucker contributed as
much to the triumph of free society as any other individual.
114 I agree.
115 For free society to function we must have high-performing, self-governed institutions in
every sector, not just in business, but equally in the social sectors.
116 Without that, as Drucker himself pointed out, the only workable alternative is totalitarian
tyranny.
117 Strong institutions, in turn, depend directly on excellent management, and no individual
had a greater impact on the practice of management and no single book captures its
essence better than his seminal text, *Management*. ¶¶¶
118 My first encounter with Drucker’s impact came at Stanford in the early 1990s, when Jerry
Porras and I researched the great corporations of the twentieth century.
119 The more we dug into the formative stages and inflection points of companies like
General Electric, Johnson & Johnson, Procter & Gamble, Hewlett-Packard, Merck and
Motorola, the more we saw Drucker’s intellectual fingerprints.
120 David Packard’s notes and speeches from the foundation years at HP so mirrored
Drucker’s writings that I conjured an image of Packard giving management sermons with
a classic Drucker text in hand.
121 When we finished our research, Jerry and I struggled to name our book, rejecting more

than 100 titles.

122 Finally in frustration I blurted, Why don't we just name it *Drucker Was Right*, and we're
done!" (We later named the book [Built to Last](#).) ¶¶¶

123 What accounts for Drucker's enormous impact?

124 I believe the answer lies not just in his specific ideas, but in his entire approach to ideas,
composed of four elements:

125 1. He looked out the window, not in the mirror

126 2. He started first—and always—with results

127 3. He asked audacious questions

128 4. He infused all his work with a concern and compassion for the individual.

129 I once had a conversation with a faculty colleague about the thinkers who had influenced
us.

130 I mentioned Drucker.

131 My colleague wrinkled his nose, and said:

132 "Drucker?

133 But he's so practical."

134 Drucker would have loved that moment of disdain, reveling in being criticized for the fact
that his ideas worked.

135 They worked because he derived them by precise observation of empirical facts.

136 He pushed always to look out there, in the world, to derive ideas, challenging himself and
his students to "Look out the window, not in the mirror!"

137 Drucker falls in line with thinkers like Darwin, Freud and Taylor—empiricists all.

138 Darwin wrote copious notebooks, pages and pages about pigeons and turtles.

139 Freud used his therapeutic practice as a laboratory.

140 Taylor conducted empirical experiments, systematically tracking thousands of details.

141 Like them, Drucker immersed himself in empirical acts and then asked, "What underlying
principle explains these facts, and how can we harness that principle?" ¶¶¶

142 Drucker belonged to the church of results.

143 Instead of starting with an almost religious belief in a particular category of answers—a
belief in leadership, or culture, or information, or innovation, or decentralization, or
marketing, or strategy, or any other category—Drucker began first with the question "what
accounts for superior results?" and then derived answers.

144 He started with the outputs—the definitions and markers of success—and worked to
discover the inputs, not the other way around.

145 And then he preached the religion of results to his students and clients, not just to
business corporations but equally to government and the social sectors.

146 The more noble your mission, the more he demanded:

147 what will define superior performance?

148 "Good intentions," he would seemingly yell without ever raising his voice, "are no excuse
for incompetence." ¶¶¶

149 And yet while practical and empirical, Drucker never became technical or trivial, nor did

he succumb to the trend in modern academia to answer (in the words of the late John Gardner) "questions of increasing irrelevance with increasing precision."

150 By remaining a professor of management—not as a science, but as a liberal art he gave himself the freedom to pursue audacious questions.

151 My first reading of Drucker came on vacation in Monterey, California.

152 My wife and I embarked on one of our adventure walks through a used book store, treasure hunting for unexpected gems.

153 I came across a beaten-up, dog-eared copy of *Concept of the Corporation*, expecting a tutorial on how to build a company.

154 But within a few pages, I realized that it asked a much bigger question:

155 what is the proper role of the corporation at this stage of civilization?

156 Drucker had been invited to observe General Motors from the inside, and the more he saw, the more disturbed he became.

157 "General Motors ... can be seen as the triumph and the failure of the technocrat manager," he later wrote.

158 "In terms of sales and profits [GM] has succeeded admirably ... But it has also failed abysmally—in terms of public reputation, of public esteem, of acceptance by the public."

159 Drucker passionately believed in management not as a technocratic exercise, but as a profession with a noble calling, just like the very best of medicine and law. ¶¶¶

160 Drucker could be acerbic and impatient, a curmudgeon.

161 But behind the prickly surface, and behind every page in his works, stands a man with tremendous compassion for the individual.

162 He sought not just to make our economy more productive, but to make all of society more productive and more humane.

163 To view other human beings as merely a means to an end, rather than as ends in themselves, struck Drucker as profoundly immoral.

164 And as much as he wrote about institutions and society, I believe that he cared most deeply about the individual. ¶¶¶

165 I personally experienced Drucker's concern and compassion in 1994, when I found myself at a crossroads, trying to decide whether to jettison a traditional path in favor of carving my own.

166 I mentioned to an editor for *Industry Week* that I admired Peter Drucker.

167 "I recently interviewed Peter," he said, "and I'd be happy to ask if he'd be willing to spend some time with you." ¶¶¶

168 I never expected anything to come of it, but one day I got a message on my answering machine.

169 "This is Peter Drucker"—slow, deliberate, in an Austrian accent—"I would be very pleased to spend a day with you, Mr. Collins.

170 Please give me a call."

171 We set a date for December, and I flew to Claremont, California.

172 Drucker welcomed me into his home, enveloping my extended hand into two of his.

173 "Mr. Collins, so very pleased to meet you.

174 Please come inside."

175 He invested the better part of a day sitting in his favorite wicker chair, asking questions, teaching, guiding, and challenging.

176 I made a pilgrimage to Claremont seeking wisdom from the greatest management thinker, and I came away feeling that I'd met a compassionate and generous human being who—almost as a side benefit—was a prolific genius. ¶¶¶

177 There are two ways to change the world:

178 the pen (the use of ideas) and the sword (the use of power).

179 Drucker chose the pen, and thereby rewired the brains of thousands who carry the sword.

180 Those who choose the pen have an advantage over those who wield the sword:

181 the written word never dies.

182 If you never had the privilege to meet Peter Drucker during his lifetime, you can get to know him in these pages.

183 You can converse with him.

184 You can write notes to him in the margins.

185 You can argue with him, be irritated by him, and inspired.

186 He can mentor you, if you let him, teach you, challenge you, change you—and through you, the world you touch. ¶¶¶

187 Peter Drucker shined a light in a dark and chaotic world, and his words remain as relevant today as when he banged them out on his cranky typewriter decades ago.

188 They deserve to be read by every person of responsibility, now, tomorrow, ten years from now, fifty and a hundred.

189 That free society triumphed in the twentieth century guarantees nothing about its triumph in the twenty-first; centralized tyranny remains a potent rival, and the weight of history is not on our side.

190 When young people ask, "What can I do to make a difference?" one of the best answers lies right here in this book.

191 **Get your hands on an organization aligned with your passion, if not in business, then in the social sectors.**

192 If you can't find one, start one.

193 And then lead it—through the practice of management—to deliver extraordinary results and to make such a distinctive impact that you multiply your own impact by a thousand-fold.

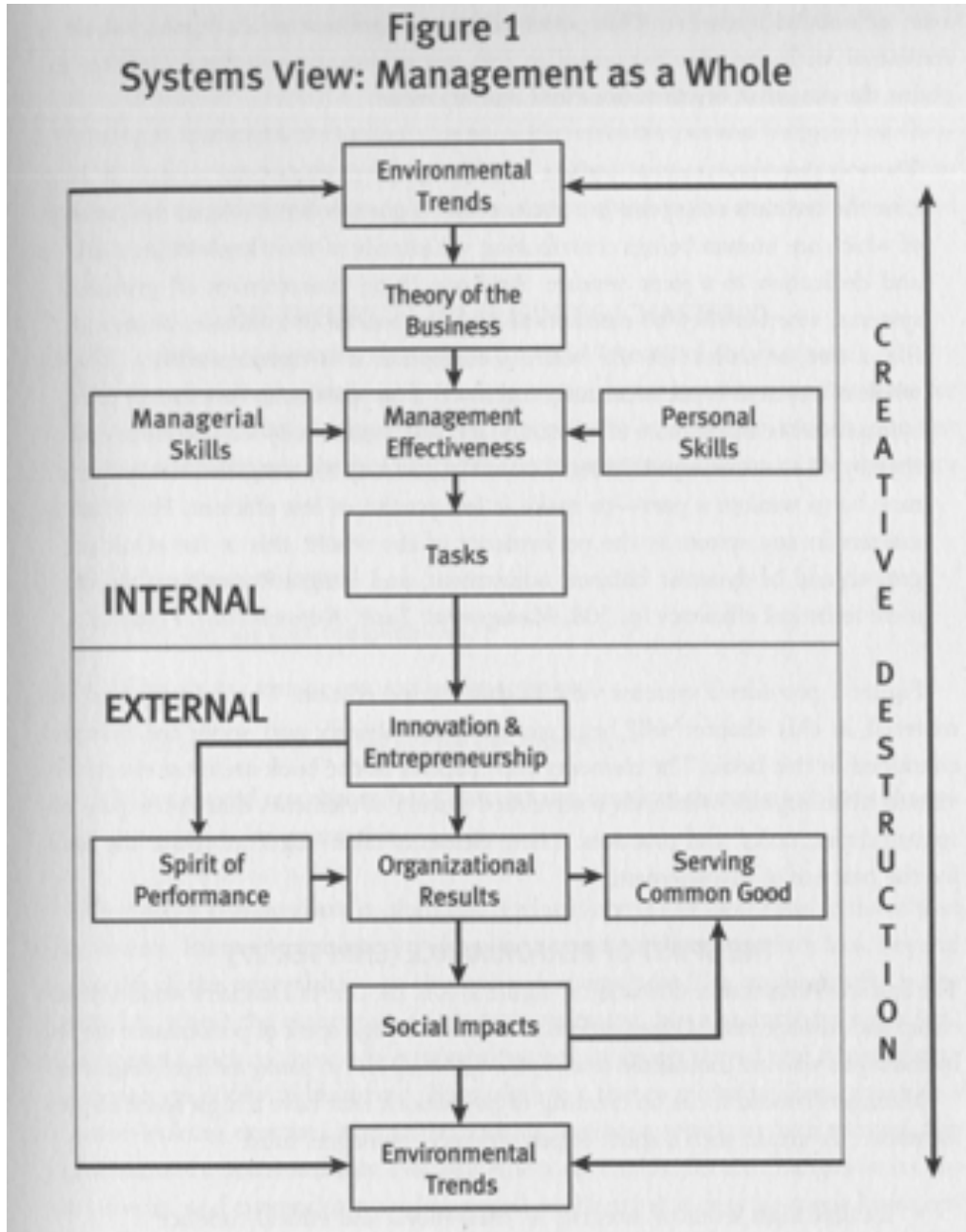
194 Jim Collins

195 Boulder, Colorado

196 December, 2007

197 **Introduction to the Revised Edition of
Management: Tasks, Responsibilities, Practices**

198 [Figure 1](#) presents a systems view of Drucker on management.



199

200 It summarizes Drucker's teachings on management as an organic whole.

201 Managerial skills, personal skills, and managerial tasks must be combined into principles of managerial effectiveness to implement an enterprise's theory of the business.

202 These principles include the discipline of innovation and entrepreneurship.

203 Management principles must be directed toward developing and maintaining a high spirit of performance, achieving organizational results, and managing social impacts to serve the common good. ¶¶¶

204 Each element of [figure 1](#) is described in this book.

205 Unless otherwise indicated, all chapters in this book are adapted from the works of Peter Drucker and are contained in his numerous books and articles.

206 This book draws upon his entire body of knowledge, which is housed at The Drucker Institute (<http://www.thedruckerinstitute.com>).

Preface

208 What will future historians consider the most important event of the twentieth century:

209 The two World Wars?

210 The atomic bomb?

211 The rise of Japan to be the first non-Western great economic power?

212 The information revolution?

213 The demographic revolutions that occurred in the twentieth century—revolutions that have profoundly changed the world's human landscape and that have no precedents.

214 And I mean not only the quantitative change:

215 the explosive growth of population in the twentieth century and the equally explosive extension of life spans resulting in an aging population in all developed and in most emerging countries.

216 Equally important, indeed perhaps more important, was the qualitative change:

217 the unprecedented transformation of the workforce in all developed countries, from one doing largely unskilled, manual work, to one doing knowledge work. ¶¶¶

218 At the beginning of the twentieth century, ninety out of every hundred people in the working population in every country were manual workers, farmers and their hired hands, domestic servants, factory workers, miners, or construction workers.

219 And life expectancies, especially work-life expectancies, were so low that a majority of working people were disabled well before they reached what was then the threshold of old age, that is, age fifty. ¶¶¶

220 But while the life expectancy of the individual and especially the individual knowledge worker has risen beyond anything anybody could have foretold at the beginning of the twentieth century, the life expectancy of the employing institution has been going down, and is likely to keep going down.

221 Or rather, the number of years has been shrinking during which an employing institution—and especially a business enterprise—can expect to stay successful.

222 This period was never very long.

223 Historically, very few businesses were successful for as long as thirty years in a row.

224 To be sure, not all businesses ceased to exist when they ceased to do well.

225 But the ones that survived beyond thirty years usually entered into a long period of stagnation—and only rarely did they turn around again and once more become successful growth businesses. ¶¶¶

226 Thus, while the life expectancies and especially the working-life expectancies of the individual and especially of the knowledge worker have been expanding very rapidly, the life expectancy of the employing organizations has actually been going down.

227 And—in a period of very rapid technological change, of increasing competition because of globalization, of tremendous innovation—the successful life-expectancies of employing institutions are almost certain to continue to go down.

228 More and more people, and especially knowledge workers, can therefore expect to outlive their employing organizations and to have to be prepared to develop new careers, new skills, new social identities, new relationships, for the second half of their lives. ¶¶¶

229 And now the largest single group in the workforce in all developed countries is
knowledge workers rather than manual workers.

230 At the beginning of the twentieth century, knowledge workers in any country, even the
most highly developed ones, were very scarce.

231 I doubt that there was any country in which they exceeded 2 or 3 percent of the working
population.

232 Now, in the United States, they account for around 33 percent of the working population.

233 By the year 2020, they will account for about the same proportion in Japan and in
Western Europe.

234 They are something we have never seen before.

235 These knowledge workers own their means of production, for they own their knowledge.

236 And their knowledge is portable; it is between their ears. ¶¶¶

237 For untold millennia, there were no choices for the overwhelming majority of people in
any country.

238 A farmer's son became a farmer.

239 A craftsman's son became a craftsman, and a craftsman's daughter married a craftsman; a
factory worker's son or daughter went to work in a factory.

240 Whatever mobility there was was downward mobility.

241 In the 250 years of Tokugawa rule in Japan, for instance, very few people advanced from
being commoners to being samurai—that is, privileged warriors.

242 An enormous number of samurai, however, lost their status and became commoners, that
is, moved down.

243 The same was true all over the world.

244 Even in the most mobile of countries, the early twentieth-century United States, upward
mobility was still the exception.

245 We have figures from the early 1900s until 1950 or 1955.

246 They show conclusively that at least nine out of every ten executives and professionals
were themselves the sons of executives and professionals.

247 Only one out of every ten executives or professionals came from the "lower orders" (as
they were then called). ¶¶¶

248 The business enterprise, as it was invented around 1860 or 1870—and it was an invention
that had little precedent in history—was such a radical innovation precisely because there
was upward mobility within it for a few people.

249 This was the reason why the business enterprise ruptured the old communities—the rural
village, the small town, or the craft guild. ¶¶¶

250 But even the business enterprise, as it was first developed, tried to become a traditional
community.

251 It is commonly believed—in Japan as well as in the West—that the large Japanese
company with its lifetime employment is some thing that exists only in Japan and
expresses specific Japanese values.

252 Apart from the fact that this is historical nonsense—lifetime employment in Japan even for
white collar, salaried employees was a twentieth-century invention and did not exist
before the end of Meiji (that is, before the twentieth century)—the large business

enterprise in the West was not very different.

253 Anyone who worked as a salaried employee for a large company in Germany, Great Britain, the United States, Switzerland, and so on had, in effect, lifetime employment.

254 And even a salaried employee above the entry level in such a company considered himself “a company man” and identified himself with the company.

255 He—and of course in those days they were all men—was a “Siemens Man” in Germany or a “General Electric Man” in the United States.

256 Most of the big companies all over the West, just like the Japanese companies, hired people for only the entrance positions, and they expected them to stay until they died or retired.

257 In fact, the Germans, with their passion for codifying everything, even created a category for such people.

258 They were called “private civil servants” (*Privatbeamte*).

259 Socially, they ranked below civil servants.

260 But legally, they had the same job security and, in effect, lifetime employment—with the implicit assumption that they, in turn, would be committed to their employer for their entire working life and career.

261 The Japanese company as it was finally formulated in the 1950s or early 1960s was, in other words, simply the most highly structured and most visible expression of the large business enterprise as it had been first developed in the late nineteenth-century and then reached full maturity in the first half of the twentieth century. ¶¶¶

262 The early nineteenth-century business—and even the mid-nineteenth-century business—**derived success from low costs.**

263 Successfully managing a business meant being able to produce the same commodities everybody else produced but at lower cost.

264 In the twentieth century this then changed to what we now call “**strategy**” or **analysis for the purpose of creating competitive advantage.**

265 I may claim to have been the first one to point this out, in a 1964 book called [Managing for Results](#).

266 But by that time a shift was already underway to another basic foundation: knowledge.

267 [I had realized that in 1959—and the first result of this realization was my book [The Effective Executive](#) (1966).

268 It was in that book that the shift to the knowledge worker was foreshadowed and its implication for the business first analyzed.] ¶¶¶

269 **The knowledge worker, to repeat, differs from any earlier worker in two major aspects.**

270 First, the knowledge worker owns the means of production and they are portable.

271 Second, he or she is likely to outlive any employing organization.

272 Add to this that knowledge work is very different in character from earlier forms of work.

273 It is **effective only if highly specialized.**

274 What makes a brain surgeon effective is that he is a specialist in brain surgery.

275 By the same token, however, he probably could not repair a damaged knee.

276 And he certainly would be helpless if confronted with a tropical parasite in the blood. ¶¶¶

277 This is true for all knowledge work.

278 "Generalists"—and this is what the traditional business enterprise, including the Japanese companies, tried to develop—are of limited use in a knowledge economy.

279 In fact, they are productive only *if they themselves become specialists in managing knowledge and knowledge workers*.

280 This, however, also means that knowledge workers, no matter how much we talk about "loyalty," will increasingly and of necessity see their knowledge area—that is, their specialization rather than the employing organization—as what identifies and characterizes them.

281 Their community will increasingly be people who share the same highly specialized knowledge, no matter where they work or for whom. ¶¶¶

282 In the United States, as late as the 1950s or 1960s, when meeting somebody at a party and asking him what he did, one would get the answer, "I work for General Electric" or "for Citibank" or for some other employing organization.

283 In other words, one would get exactly the same kind of answer in Germany, in Great Britain, in France, and in any other developed country.

284 Today, in the United States, if one asks someone whom one meets at a party, "What do you do?" the answer is likely to be, "I am a metallurgist" or "I am a tax specialist" or "I am a software designer."

285 In other words, in the United States, at least, knowledge workers *no longer identify themselves with an employer*.

286 They *identify themselves with a knowledge area*.

287 The same is increasingly true in Japan, certainly among the younger people. ¶¶¶

288 *This is more likely to change the organization of the future, and especially the business enterprise, than technology, information, or e-commerce.* ¶¶¶

289 Since 1959, when I first realized that this change was about to happen, I consciously worked at *thinking through the meaning of this tremendous change, and especially the meaning for individuals*.

290 For not only is it individuals who will have to convert this change into opportunity for themselves, for their careers, for their achievement, for their identification and fulfillment.

291 It is the individual knowledge worker who, in large measure, will determine what the organization of the future will look like and which kind of organization of the future will be successful. ¶¶¶

292 There is as a consequence only one satisfactory definition of management, whether we talk of a business, a government agency, or a nonprofit organization:

293 *to make human resources productive*.

294 It will increasingly be the only way to gain competitive advantage.

295 Of the traditional resources of the economist—land, labor, and capital—none anymore truly confers a competitive advantage.

296 To be sure, *not to be able to use these resources as well as anyone else is a tremendous competitive disadvantage*.

297 But every business has access to the same raw materials at the same price.

298 Access to money is worldwide.

299 And manual labor, the traditional third resource, has become a relatively unimportant factor in most enterprises.

300 Even in traditional manufacturing industries, labor costs are no more than 12 or 13 percent of total costs, so that even a very substantial advantage in labor costs (say a 5 percent advantage) results in a negligible competitive advantage except in a very small and shrinking number of highly labor-intensive industries (e. g., knitting woolen sweaters).

301 The only meaningful competitive advantage is the productivity of the knowledge worker.

302 And that is very largely in the hands of the knowledge worker rather than in the hands of management.

303 Knowledge workers will increasingly determine the shape of the successful employing organizations. ¶¶¶

304 What this implies is basically the topic of this book.

305 These are very new demands.

306 To satisfy them will increasingly be the key to success and survival for the individual and enterprise alike.

307 To enable its readers to be among the successes—as executives in their organization, in managing themselves and others—is the primary aim of the revised edition of this book. ¶¶¶

308 I suggest you read one chapter at a time—it is a long book. ¶¶¶

309 And then first ask, “What do these issues, these challenges, mean for our organization and for me as a knowledge worker, a professional, an executive?” ¶¶¶

310 Once you have thought this through, ask, ¶¶¶

311 “What action should our organization and I, the individual knowledge worker and/or executive, take to make the challenges of this chapter into opportunities for our organization and me?”

312 Introduction: Management and Managers Defined

313 In the twentieth century our society became a society of organizations.

314 Organizations depend on managers—are built by managers, directed and held together by managers, and made to perform by managers.

315 Once an organization grows beyond a very small size, it needs managers who practice professional management.

316 This means management grounded in a discipline and informed by the objective needs of the organization and of its people, rather than management based on ownership or on political appointment.

317 Every organization needs people managers who do the specific work of management:

318 planning, organizing, integrating, measuring, and developing people.

319 It needs managers who take responsibility for contribution.

320 *Responsibility for contribution*, rather than rank or title or command over people, defines the manager.

321 And integrity rather than genius is the manager's basic requirement.

322 **Management as a Social Function and Liberal Art**

323 Managers have been agents of transformation, converting the workforce in developed countries from one of manual workers to one of highly educated knowledge workers.

324 This has been accomplished by applying knowledge to work.

325 Management brings human effort from all disciplines together in a single organization and therefore has become a new social function.

326 As such the discipline and practice of management is important to the effectiveness of all of society's institutions.

327 In carrying out its function, management relies on knowledge from the humanities, social sciences, and technology.

328 As such, management is a liberal art in the truest sense and a discipline wherein the liberal arts find relevance and usefulness.

329 The Dimensions of Management

- 330 There are three basic tasks—they might be called dimensions—in management.
- 331 There is the first task of thinking through and defining the specific purpose and mission of the organization—whether business enterprise, hospital, school, or government agency.
- 332 There is the second task of making work productive and the worker achieving.
- 333 There is finally the task of managing social impacts and social responsibilities.
- 334 In respect to the second and third tasks, all institutions are alike.
- 335 It is the first task that distinguishes the business from the hospital, school, or government agency.
- 336 And the specific purpose and mission of business enterprise is economic performance.
- 337 To discharge it, managers always have to balance the present against an uncertain and risky future, have to perform for the short run and make their business capable of performance over the long run.
- 338 Managers always have to be stewards of what already exists; they have to be administrators.
- 339 They also have to create what is to be; they have to be entrepreneurs, risk takers, and innovators.
- 340 For a modern business can produce results, both for society and for its own people, only if it can survive beyond the life span of a person and perform in a new and different future.

341 Knowledge Is All

- 342 Knowledge industries, knowledge work, and the knowledge societies have been emerging steadily since the 1950s.
- 343 They are now realities in developed countries.
- 344 And this has a number of implications for managers.
- 345 The expansion of knowledge work corresponds to the decline in manufacturing employment.
- 346 A rapidly growing segment of knowledge work consists of knowledge technicians, a trend that should continue. ¶¶¶
- 347 The long-term trend in manufacturing employment is following the long-term decline in employment in agriculture.
- 348 Participation rates of women in the workforce have been steadily trending up because knowledge work is unisex, unlike most manufacturing employment, which is dominated by men. ¶¶¶
- 349 Knowledge workers tend to identify at least as much with their knowledge discipline as they do with the organization in which they are employed.
- 350 This creates new challenges for managers, because knowledge workers are highly mobile and more difficult to integrate into the mission of the organization.

351 New Demographics

- 352 Demographic trends are having significant political and economic effects in developed countries.
- 353 Low birth rates in these countries are escalating political tensions over immigration policies and favor those countries, such as the United States, that have a culture of easily assimilating immigrants.
- 354 Yet even in the United States, immigration is increasing political tensions among various groups:
- 355 employers who need immigrant workers, unions who fear the impact of new immigrants on wage and employment of their members, and large existing immigrant population, such as the Latino population, which strongly favor lenient policies toward both legal and illegal immigrants. ¶¶¶
- 356 The aging of the population in developed Countries is straining existing social pension systems, leading to pressure to increase the traditional retirement age.
- 357 Knowledge workers are likely to reenter labor markets as part-time employees after retirement in order to supplement their pensions.
- 358 Increased life expectancies, especially among knowledge workers, should make second and parallel careers possible and desirable.
- 359 This should continue to change the structure of the workforce. ¶¶¶
- 360 As the population ages, so will the demand for financial services among the post-fifty-years-old segment of the population.
- 361 This is also the segment that likely to increase its demand for continuing education.
- 362 Continuing education, health care, and financial services are likely to continue to be among the growth markets of the future.

363 The Future of the Corporation and the Way Ahead

- 364 A number of key assumptions on which the corporation was invented are now being reversed.
- 365 Some of these assumptions will be discussed further in chapter 7. Two are especially important to summarize.
- 366 First, the *specialized nature of knowledge*, the *reduction in communications costs*, and the *crisscross of technology* are having a profound impact on reversing the century trend toward integrating the separate activities of the corporation into a hierarchy.
- 367 Second, development and growth of a business is increasingly taking place, not inside the corporation itself, but through partnerships, joint ventures, alliances, minority participation, and know-how agreements with institutions in different industries and with different technologies.
- 368 Thus the process of "integration" is being reversed by the process of "disintegration."
- 369 Attracting and holding these diverse groups will become the central tasks of people management in the new corporation.
- 370 The people in these groups do not have permanent relationships with the business.
- 371 They may not have to be managed, but they have to be made productive.
- 372 They will, therefore, have to be deployed where their specialized knowledge can make the greatest contribution.
- 373 And they will have to be satisfied.

374 Management's New Paradigm

375 Prevailing assumptions about the realities of management determine what scholars,
teachers, and executives assume to be reality.

376 This chapter challenges three assumptions underlying the *discipline* of management:

377 management is *business* management, there is one right organization and there is one
right way to manage people.

378 Also challenged are four assumptions underlying the *practice* of management:

379 technologies and end-users are fixed and given, management's scope is legally defined,
and the inside is management's domain. ¶¶¶¶

380 The new paradigms that supersede the three disciplinary assumptions of management
are:

381 1. Management is the specific and distinguishing organ of any and all
organizations.

382 2. Management must look for the organization that fits the task.

383 3. One does not "manage" people. The task is to lead people and make
productive the specific strengths and knowledge of each individual.

384 The new paradigms that supersede the four practice assumptions of management are:

385 1. Neither technology nor end-use of a product is the correct foundation for
management policy. Management must start with customer values and
customer decisions as the basis for its strategy.

386 2. The scope of management is not legal; it is operational, covering the entire
economic chain.

387 3. The practice of management will have to be defined operationally rather than
by political boundaries.

388 4. Finally, the results of any institution exist only on the outside.

389 The Theory of the Business

390 A theory of the business has three parts:

- 391 1. Assumptions about the environment of the organization. These define what the organization expects it can be paid for.
- 392 2. Assumptions about the specific mission of the organization. These define how the organization intends to make a difference in society and what results are meaningful.
- 393 3. Assumptions about the core competencies needed to accomplish the mission. These define in which areas the organization must excel in order to achieve its mission.

394 These three assumptions must fit one another and reality.

395 The theory of the business must be understood throughout the organization. ¶¶¶

396 When an organization takes its theory for granted, it stops thinking and questioning the very premises of its existence.

397 And every theory eventually becomes obsolete.

398 Without systematic abandonment, an organization will squander its scarce resources on what it should not do and deprive itself of resources it needs to exploit opportunities. ¶¶¶

399 One of the most effective ways to test the validity of a theory is to study the behavior of noncustomers.

400 **The Purpose and Objectives of a Business**

401 Marketing and innovation are the two result areas with which the setting of objectives has to begin.

402 Both are likely to require a range of objectives rather than one target figure.

403 Both also require prior decisions of high risk: on concentration and on market standing.

404 And then there is the need for objectives with respect to all resources—people, capital, and key physical resources—their supply, their utilization, and their productivity.

405 There is the need for objectives with respect to the social dimension of business, its social responsibilities and social impacts.

406 In all these areas, the small business needs clear objectives just as much as the big one.

407 Profit and profitability come at the end; they are survival needs of a business and therefore require objectives.

408 But the needed profitability also establishes limitations on all the other objectives.

409 Objectives have to be balanced—with each other, in terms of the different requirements of the short and the long term, and against available resources.

410 Finally, action priorities have to be set.

411 Making the Future Today

412 In human affairs it is pointless to try to predict the future.

413 But it is possible and fruitful to identify major events that have already happened irrevocably and that will have predictable effects in the next decade or two.

414 It is possible, in other words, to *identify* and *prepare* for the future *that has already happened*.

415 A dominant factor for organizations in the next few decades is going to be *demographics*.

416 The key factor for business will not be *over*-population that we have been warned of for many years but *under*-population of the developed countries—Japan, South Korea, and the nations of Western Europe.

417 **Strategic Planning: The Entrepreneurial Skill**

418 Strategic planning prepares today's business for the future.

419 It asks, What should our business be?

420 It asks, What do we have to do today to deserve the future?

421 Strategic planning requires risk-taking decisions.

422 It requires an organized process of abandoning yesterday.

423 It requires that the work to be done to produce the desired future be clearly defined and clearly assigned.

424 The aim of strategic planning is action now.

425 **Managing Service Institutions in the Society of Organizations**

426 To make service institutions and service staffs perform does not require genius.

427 It requires, first, clear objectives and goals.

428 Next, it demands priorities on which resources can be concentrated.

429 It requires, further, clear measurements of accomplishment.

430 And finally, it demands organized abandonment of the obsolete.

431 And these four requirements are just as important for the **service staff of a business** as for the service institution in society.

432 What Successful and Performing Non profits Are Teaching Business

433 The first lesson business executives can learn from successful nonprofits is to begin with **mission**.

434 Successful nonprofits such as the Salvation Army avoid bland mission statements and focus their mission statement on specific strategies and action:

435 "to turn society's rejects—alcoholics, criminals, derelicts—into citizens."

436 Successful mission statements focus on the outside—the community and the customer.

437 They look outside for what are considered **meaningful results**. ¶¶¶

438 Many nonprofits have what is still rare in business, a **functioning board** with clear duties and responsibilities and measures of both CEO and board effectiveness.

439 Nonprofit boards often serve as volunteers and contributors to the organization and feel commitment toward the mission and active involvement in the actual operations of the organization.

440 As a result, they know more about operations of the organization than their business counterparts. ¶¶¶

441 Finally, successful nonprofits know how to manage volunteers.

442 Managing volunteers requires a clear mission (or score), high demands, accountability, and training.

443 These requirements for effective volunteers are very close to the requirements for leading **knowledge workers** in other sectors of the economy.

444 The Accountable School

- 445 The knowledge society and knowledge workers require high levels of literacy, strengths-based education, and continuous learning.
- 446 The school is one of the primary institutions of society in which basic literacy and development of one's strengths can take place.
- 447 Yet, the public schools in the United States have been handicapped by multiple missions that limit their ability to fulfill the educational needs of a knowledge-based society.
- 448 Numerous alternatives have sprung up both within and outside of the public school system.
- 449 Charter schools and magnet schools are direct competitors of the public school within the public school system.
- 450 Both have singular missions and are results driven.
- 451 Private schools and home schooling are also movements that have proceeded apace outside of the public schools.
- 452 The demand for basic literacy and for strengths-based education requires that primary and secondary schools be held accountable for their results, which, in turn, requires a clear mission and measurable results.

453 Rethinking “Reinventing Government”

454 Rethinking government should start by requiring each agency to immediately define its performance objective, its quality objective, and its cost objective.

455 This should be followed by the adoption of the formal processes of continuous improvement and benchmarking. ¶¶¶

456 Next, every agency, every policy, every program, every activity, should be confronted with these questions:

457 “What is your mission?”

458 “Is it still the right mission?”

459 “Is it still worth doing?”

460 “If we were not already doing this, would we go into it now?”

461 If the answer to the last question is no, then the next question is, “What do we do about it?”

462 Continuing to carry out activities that we would not now start is wasteful and they should be abandoned. ¶¶¶

463 Rethinking activities and programs will result in identifying those that should be strengthened and those that should be abolished.

464 It will also result in activities where alternative pilot projects should be carried out in specific locations where there is the capability and desire to do so. ¶¶¶

465 The objective of this rethinking policy exercise is to rank programs according to their results not according to good intentions.

466 Entrepreneurship in the Public-Service Institution

- 467 For a society to prosper, it must have engines of capital formation.
- 468 Service institutions are paid out of the surplus of wealth-creating institutions.
- 469 A developed society cannot afford to have its service institutions waste capital.
- 470 As a result, public-service institutions must be made to perform and to innovate.
- 471 One way to do this is to privatize whatever activities a service institution can outsource and convert from a nonprofit to a for-profit activity.
- 472 This single step will make service activities more effective so long as their missions are clear. ¶¶¶¶
- 473 The bulk of service activities performed in social-sector and governmental organizations cannot be privatized.
- 474 These institutions must go to work to eliminate the obstacles to innovation.
- 475 There are many successful examples to point the way, including the Girl Scouts of the U.S. A., the American Association for the Advancement of Science, and cities such as Lincoln, Nebraska. ¶¶¶¶
- 476 There are four requirements for successful innovation in the public-service institution:
- 477 1. Provide a clear definition of mission.
- 478 2. Establish goals that are attainable and stated in terms of the optimum rather than the theoretical maximum.
- 479 3. Probe objectives that are not being attained after repeated attempts. Failure to obtain objectives after repeated attempts means either that the objectives should be redefined or that the objectives should be abandoned.
- 480 4. Build into public-service institutions entrepreneurial policies and practices that have been demonstrated to work in other sectors of the economy.

481 **Making Work Productive and the Worker** **Achieving**

- 482 The main challenges to managing work and working are the changed psychological and social position of the manual worker;
- 483 the crisis of the traditional role and function of the union as a result of its success; and
- 484 the emergence of knowledge work as the economic and social center of the postindustrial, knowledge society. ¶¶¶
- 485 Work is changing—but so is the workforce, especially as more and more married women of all classes are working in the developed countries.

486 Managing the Work and Worker in Manual Work

487 The realization that *skill and knowledge are in the working rather than in the work is the key to making work productive.*

488 The generic nature of work implies that work can be studied systematically, if not scientifically.

489 Until recently the study of work has been confined to manual work for the reason that this was the main work around.

490 But the same principles and approaches apply to any other production work, such as most service work.

491 They apply to the processing of information, that is, to most clerical work.

492 They even apply to most knowledge work.

493 Only the applications and the tools vary.

494 Making work productive requires four separate activities, each with its own demands.

495 Because work is objective and impersonal and a “something”—even if it is intangible, like information or knowledge—making work productive has to begin with the end product, the output of work.

496 It cannot start with the input, whether craft skill or formal knowledge.

497 Skills, information, knowledge, are tools; and what tool is to be applied when, and for what purpose, must always be determined by the desired end product.

498 The end product determines what work is needed.

499 It also determines the synthesis into a process, the design of the appropriate controls, and the specifications for the tools needed.

500 Managing the Work and Worker in Knowledge Work

501 For thousands of years no one thought that manual work could be made more
productive.

502 Even the term “productivity” was not known until around World War II.

503 But as soon as Frederick W. Taylor, in 1881, looked critically at how the manual worker did
his job, manual-worker productivity rose dramatically.

504 In the century after 1880, productivity grew steadily at 3 to 4 percent compound per year,
and that meant a fifty-fold growth in a hundred years. ¶¶¶

505 In manual work the task is always a given.

506 The machine or the assembly line program the factory worker.

507 The manual worker’s productivity is thus never a question of what to do.

508 The question is always how to do it.

509 And for the great majority of manual workers the employer owns and controls the means
of production and the workers’ tools.

510 With knowledge work, however, what to do becomes the first and decisive question.

511 For knowledge workers are not programmed by the machine or by the weather.

512 They largely are in control of their own tasks and must be in control of their own tasks.

513 For they, and only they, own and control the most expensive of the means of production-
their education-and their most important tool—their knowledge.

514 This is not just true of the people who apply high and advanced knowledge.

515 It’s just as true of the computer service technician who comes to fix a problem; of the
technician in the hospital lab who makes a bacterial culture; of the trainee who oversees a
market test of a new product in the supermarket.

516 The how in knowledge work comes only after the what has been answered.

517 There are a number of steps to improve knowledge-worker productivity. They include

518 • Define the task

519 • Focus on the task

520 • Define results

521 • Define quality

522 • Grant autonomy to the knowledge worker

523 • Demand accountability

524 • Build into tasks continuous learning and teaching

525 The only true competitive advantage for a company or a nation will increasingly be the
productivity of its knowledge workers.

526 This will have a future impact on the governance of the corporation.

527 Social Impacts and Social Responsibilities

528 Central to the issue of social responsibility are first the negative social impacts that are by-products of the legitimate and necessary conduct of business (or institution) and consequences of the fact that the institution exists in a community and has authority over people.

529 Such impacts should always be eliminated or at least minimized.

530 If their elimination cannot be made into an opportunity, there is need for regulation; and it is the responsibility of business to think through and work for the appropriate regulation before there is a scandal.

531 Then there is the issue of the responsibility of business for the ills of society.

532 And finally there is the leadership function of managers in a society in which executives of institutions have become the leadership group. ¶¶¶

533 The individual manager, even the chief executive of a giant corporation, has become anonymous, unassuming—just another employee.

534 But together the managers of our institutions—businesses, universities, schools, hospitals, and government agencies—are the leadership groups in the modern society of organizations.

535 As such, they need an ethics, a commitment, and a code.

536 The right one is the code developed more than 2,000 years ago for the first professional leadership group, physicians:

537 “Above all, not knowingly to do harm.”

538 The New Pluralism: How to Balance the Special Purpose of the Institution with the Common Good

539 In our society of pluralistic institutions, each institution must focus on its narrow mission if it is to achieve results and meet the minimum test of social responsibility.

540 But then, who looks out for the common good? The answer is no one unless executives of society's institutions take on a second responsibility that looks beyond the borders of their institution to the common good.

541 This can be done

542 ▪ ▪ by making *financial contributions* to social-sector organizations;

543 ▪ ▪ by encouraging employees to *volunteer* their time and effort to community causes; and

544 ▪ ▪ by encouraging the leadership group to volunteer their time and resources to help solve the problems of society.

545 A society of pluralistic organizations must be one that consists of leadership groups who look beyond the walls of the institution and take on *civic responsibility*, without shirking their primary responsibility, which is to their institution's specific and narrowly defined mission.

546 **Why Managers?**

547 Managers are not helpers and their jobs are not delegated.

548 Their jobs are autonomous and grounded in the needs of the enterprise.

549 The only choice is between doing the managerial jobs well or badly—but the jobs exist because there is an enterprise that has to be managed.

550 Design and Content of Managerial Jobs

- 551 A manager's job should always be based on a necessary task.
- 552 It should be a real job that makes a visible (if not a measurable) contribution toward the objectives of the entire enterprise.
- 553 It should have the broadest scope and authority possible.
- 554 Managers should be directed and controlled by the objectives of performance rather than by their superior.
- 555 In designing managerial jobs, six specific mistakes are to be avoided.
- 556 There is a need to design the **span of managerial responsibility**—and there are four ways of defining a managerial job.
- 557 Managers are mutually dependent on superiors and subordinates.
- 558 Their final duty is toward the enterprise.

559 **Developing Management and Managers**

560 Management development is based on the genuine needs of organizations and managers alike.

561 But, it is as yet rarely understood that there is **management** development tied to the needs of the organization, and **manager** development, tied to the needs of the individual—and that the two are different.

562 Manager development is self-development although the superior and the organization can encourage or stifle it.

563 And the aim of manager development is excellence.

564 Management by Objectives and Self-Control

565 Each member of the enterprise contributes something different; but all must contribute toward a common goal, a common performance.

566 Each should strive toward workmanship in his or her work.

567 Yet professional excellence is a means toward a common objective.

568 By its very nature, the organization tends to misdirect away from the common objective.

569 Organizations therefore require management by objectives so as to integrate individual efforts into common performance.

570 Managers objectives need to be set by themselves.

571 And they should be used for self-control.

572 Management by objectives and self-control can truly be called a *philosophy of management for free men and women*.

573 From Middle Management to Information-Based Organizations

574 There have been three distinct phases in the evolution of the structure and information systems in business organizations.

575 The first was the separation of ownership from the day-to-day management of the firm.

576 The second was the development of the command-and-control structure and system.

577 We have now entered the third phase, which may be called the information-based organization.

578 It is an organization of knowledge specialists with many fewer managerial layers. ¶¶¶

579 Using examples from the modern complex hospital and the symphony orchestra, it is possible to determine the requirements for successful operation of an information-based organization.

580 First, there should be agreement on the overall mission (or score) and the mission should be widely shared throughout the organization.

581 Second, for the information-based organization to function properly, every one in it must take responsibility for the information the specialist owes to others and the information the specialist requires from others.

582 Third, alternative compensation and career paths must be developed within the specialties, since the opportunities to move into management are becoming more limited.

583 Finally, there will be the need for an organization to train and develop its top management.

584 Examples of how this might be done are present in hospitals and in consulting and law firms.

585 The Spirit of Performance

586 The purpose of organization is to enable ordinary human beings to do extraordinary things.

587 The test of an organization's leadership is, therefore, the spirit of performance.

588 This requires specific *practices* rather than preachment or charisma.

589 It requires, above all, the realization that integrity is the one absolute requirement of managers and leaders.

590 The Elements of Effective Decision Making

591 Decision making is only one of the tasks of a manager.

592 It usually takes but a small fraction of his or her time.

593 But to make the important decisions is the specific managerial task.

594 Only a manager makes such decisions.

595 An effective manager makes these decisions in a systematic process with clearly defined elements and in a distinct sequence of steps.

596 In summary, the effective decision maker follows seven steps to minimize the risks inherent in every decision.

597 These steps are

598 1. Determine whether a decision is necessary.

599 2. Classify the problem.

600 3. Define the problem.

601 4. Decide on what is right.

602 5. Get others to buy the decision.

603 6. Build action into the decision.

604 7. Test the decision against actual results.

605 Indeed, to be expected (by virtue of position or knowledge) to make decisions that have significant and positive impact on the entire organization, its performance, and its results characterizes the work of an effective manager. ¶¶¶

606 Decision making is not a mechanical job.

607 It is risk taking and a challenge to judgment.

608 The "right answer" (which usually cannot be found anyway) is not central.

609 Central is understanding the problem.

610 Decision making is not an intellectual exercise.

611 It mobilizes the vision, energies, and resources of the organization for effective action.

612 At the end, it is an exercise in courage and responsibility.

613 How to Make People Decisions

614 There are the five steps in making people decisions:

615 Carefully think through the assignment.

616 Look at three to five qualified people.

617 Consider each candidate's strengths.

618 Discuss each candidate with his or her colleagues and bosses.

619 And make sure the appointee understands the job and what it requires, and reports back on it once he or she is in the job. ¶¶¶

620 And there are five ground rules for the decision maker:

621 Accept responsibility for any people decision, such as a placement or a promotion that fails.

622 Accept also that people who do not perform must be removed.

623 This is owed to the organization, to the nonperformer, and to his or her coworkers.

624 This does not mean that such a person must be let go; instead, find the position that fits his or her strengths.

625 It is the manager's responsibility to make the right people decision every time and for every position.

626 Newcomers should preferably be put first into an established position, where expectations are known and where they can be helped if necessary.

627 **Managerial Communications**

628 We know that communication in organizations is perception, is expectations, makes demands, and that communications and information are different, yet interdependent. ¶¶¶

629 We know that downward communications do not work-only upward communications do.

630 And we know that effective communication in organizations requires management by objectives.

631 Communication is not between "me" and "you."

632 It is always from one member of "us" to another.

633 Controls, Control, and Management

634 **Controls** and **Control** are different.

635 Controls are the means; control the needed end.

636 Controls can be neither objective nor neutral in a human organization.

637 They are goal setting and value setting.

638 Controls need to focus on results.

639 Controls are needed for measurable and nonmeasurable events.

640 Controls must satisfy seven specifications for effective control.

641 And people decisions are the ultimate control of an organization.

642 The Manager and the Budget

- 643 The budget enables the manager to allocate resources for results, to balance income and expenditures, and to control events in time to take corrective action.
- 644 The Gantt chart and its various refinements, such as the critical path chart or PERT chart, enable a manager to plan a major project, to allocate resources rationally to the various stages and kinds of work needed to complete the project, and to control progress toward completion of the project, both with respect to the time needed and to the cost incurred.
- 645 Performance planning for units and individuals and performance appraisal, finally, *enable the manager to make productive the people, the knowledge, the vision, and the motivation of the human organization, to focus human energy on performance, and to make organizational performance, in turn, redound to individual development.*

646 Information Tools and Concepts

647 The manager needs three primary types of information, each with its own concepts and tools.

648 First, there is what goes on *inside the enterprise*.

649 Here we use standard accounting information along with the newer and rapidly evolving techniques of activity-based costing, EVA, and benchmarking.

650 Then, there are the links to be made *across organizations* that are required in alliances and partnerships.

651 Economic-chain accounting is the tool that is needed there.

652 Finally, there is *external information*, where major changes usually originate.

653 Business intelligence systems are necessary tools to assist in collecting and organizing this information. ¶¶¶

654 Managers must rely heavily on the information they need for their work, the information they owe to others, and on the methods they use to turn the chaos of data in the universe into organized and focused information for action.

655 The Entrepreneurial Business

- 656 A business that wants to be able to innovate, wants to have a chance to succeed and prosper in a time of rapid change, has to build *entrepreneurial management* into its own system.
- 657 It has to adopt *policies* that create, throughout the entire organization the desire to innovate and the *habits* of entrepreneurship and innovation.
- 658 To be a successful entrepreneur, the existing business, large or small, has to be managed as an entrepreneurial business.

659 The New Venture

660 In so many new ventures, especially high-tech ventures, the techniques discussed in this chapter—a focus on the market, financial planning, the early need for a top-management team, and the future role of the founding entrepreneur—are spurned and even despised.

661 The argument is that they constitute “management” and “we are entrepreneurs.”

662 But this is not informality; it is irresponsibility, it confuses manners and substance, it is old wisdom that there is no freedom except under the law.

663 *Freedom without law is license*, which soon degenerates into anarchy, and shortly thereafter, into tyranny.

664 It is precisely because the new venture has to maintain and strengthen the entrepreneurial spirit that it needs foresight and discipline.

665 It needs to prepare itself for the demands its own success will make of it.

666 Above all, it needs *responsibility*—and this, in the last analysis, is what entrepreneurial management supplies to the new venture.

667 Entrepreneurial Strategies

- 668 The choice of an entrepreneurial strategy that fits a certain innovation is a high-risk decision.
- 669 Some entrepreneurial strategies are better fits in given situations, for example, the strategy of entrepreneurial judo, which is the strategy of choice where the leading businesses in an industry persist year in and year out in the same habits of arrogance and false superiority.
- 670 We can describe the typical advantages and the typical limitations of certain entrepreneurial strategies. ¶¶¶
- 671 Above all, we know that an entrepreneurial strategy has more chance of success the more it starts out with the users—their utilities, their values, their realities.
- 672 An innovation is a change in market or society.
- 673 It produces a greater yield for the user and greater wealth-producing capacity.
- 674 The test of an innovation is always what it does for the user.
- 675 Hence, entrepreneurship always needs to be market focused, indeed, market driven. ¶¶¶
- 676 Still, entrepreneurial strategy remains the decision-making area of entrepreneurship and therefore the risk-taking one.
- 677 It is by no means a hunch or gamble.
- 678 But it also is not precisely science.
- 679 Rather, it is judgment.

680 Systematic Innovation Using Windows of Opportunity

681 A policy of systematic innovation produces the mind-set for innovation in an organization.

682 It makes the entire organization see change as an opportunity.

683 As a rule, these are changes that have already occurred or are under way.

684 The overwhelming majority of successful innovations **exploit change**.

685 To be sure, there are innovations that in themselves constitute a major change; some of the major technical innovations, such as the Wright Brothers airplane, are examples.

686 But these are exceptions, and fairly uncommon ones.

687 Most successful innovations are far more prosaic; they exploit change.

688 And thus the discipline of innovation is a diagnostic discipline: a systematic examination of the areas of change that typically offer entrepreneurial opportunities. ¶¶¶

689 The seven sources require separate analysis, for each has its own distinct characteristic.

690 No area is, however, inherently more important or more productive than the other.

691 Major innovations are as likely to come out of an analysis of symptoms of change (such as the unexpected success of what was considered an insignificant change in product or pricing) as they are to come out of the massive application of new knowledge resulting from a great scientific breakthrough. ¶¶¶

692 Everything new or improved should first be piloted before attempting to introduce the innovation on a large scale.

693 Strategies and Structures

694 Twice in the short history of management did we believe we had the right answer to
organization.

695 Once was during the time of World War I in Henri Fayol's "functions" and, again, a
generation later, in Alfred Sloan's "federal decentralization."

696 If and when they fit, these two designs are still our best answers.

697 But increasingly we have to structure organizations where neither of these two designs fit.

698 Increasingly we have had to develop new and additional design principles:

699 we now have five. ¶¶¶¶

700 We have learned a great deal about organization in the last one hundred years.

701 We know the specifications for effective organization.

702 We know that we have to organize, in one and the same structure, three distinct kinds of
work:

703 operating work, top-management work, and innovating work.

704 We know that structure follows strategy and that structure is therefore not mechanical but
must be developed from the purposes, goals, and objectives of an organization, and on
the foundation of the key activities needed to attain objectives.

705 We have learned that organizing starts with "building blocks" of organization.

706 We know what activities belong together and what activities should be kept apart.

707 We know the symptoms of poor organization And we know that there is no one right
organization (as shown in [chapter 7](#)). ¶¶¶¶

708 Good organization structure does not guarantee performance But poor or inappropriate
structure impedes performance—and *performance is the test of organization structure*.

709 Work- and Task-Focused Design

710 There are available to us now *five different design principles*.

711 Each satisfies some of the design specifications, but none satisfies all of them.

712 Each of the design principles has strengths, limitations, and rigorous requirements for effectiveness.

713 And each expresses different design logic.

714 The first two design principles, "functional organization" and "team organization," are organized around the *logic of work and task*.

715 Though often seen as in conflict, they are largely complementary, especially for knowledge work, which is increasingly being organized in matrix organizations, using both functional and team designs.

716 Three Kinds of Teams

717 Teams are very much in vogue.

718 It is, therefore, important to know not only when the team is the appropriate design principle but what kind of team is appropriate for a given task.

719 There are three kinds of teams.

720 First, in the *baseball team*, each player is a specialist, plays mostly as an *individual*, and *rarely leaves a fixed position*.

721 The surgical team is an example of the first kind of team.

722 The second kind is the *football team*, where each person has a specialty but each performs their specialty *in parallel as directed by the coach*, and teamwork is critical to success.

723 The team of professionals that care for patients in a trauma unit is an example of the second team.

724 Finally, the third kind of team is the *tennis doubles team*, where *team members are trained in a number of positions* and *have considerable flexibility with respect to the contribution* they must make to achieve the goal of the team.

725 **Result- and Relation-Focused Design**

726 Both kinds of decentralization—federal decentralization and simulated decentralization—
are organized around results.

727 The systems structure is organized around relationships.

728 Of all known design principles, federal decentralization comes closest to satisfying
organization specifications.

729 But it is severely limited in its applicability and has stringent requirements that must be
met if it is to function.

730 Otherwise, we have to apply simulated decentralization—complex, unwieldy, difficult, and
far from satisfactory, but the only design principle we know for the organization of
materials businesses, service businesses such as the very big banks, or government
agencies.

731 The systems structure is even more complex and difficult, but necessary to organize such
multicultural enterprises as the American space program under NASA.

732 Alliances

733 Organizations generally enter alliances for one of five reasons:

- 734 1. to obtain access to new, distinct technology
- 735 2. to achieve synergy between the strengths of two independent partners
- 736 3. to gain access to people with specialized knowledge
- 737 4. to outsource noncore activities to specialists
- 738 5. and to extend a company's geographic reach. ¶¶¶

739 Many alliances do well in the early stages.

740 But they fall apart when they become successful.

741 To avoid this fate, before they enter into an alliance the partners must think through and take care of four major questions:

742 What are the different objectives for the partners and their alliance?

743 How will the alliance be managed, and who will manage it?

744 What relationship will each partner have with the alliance and with each other?

745 And how will disagreements be resolved? ¶¶¶

746 Alliances are risky.

747 Alliances are difficult.

748 But they are increasingly necessary for growth.

749 The traditional means of growth either are becoming too expensive, like most grassroots developments, or are not easily available to existing businesses.

750 They may require access to new and often totally different skills; to different people with different values, such as the values, habits, and policies of academia; or access to different geography and different markets. ¶¶¶

751 Alliances should be managed as marketing relationships.

752 **The CEO in the New Millennium**

753 The CEO in the new millennium has six specific tasks.

754 They are

755 1. To define the meaningful outside of the organization

756 2. To think through what information regarding the outside is meaningful and
needed for the organization, and then to work on getting it into usable
form

757 3. To decide what results are meaningful for the institution

758 4. To set priorities for the organization

759 5. To place people into key positions

760 6. To organize top management

761 The concept of the CEO is an American invention and export.

762 The Impact of Pension Funds on Corporate Governance

- 763 Increasingly the modern corporation is owned by employees through their representatives, the pension fund.
- 764 The size of the holdings of the large U.S. pension fund makes it difficult for trustees to sell shares as normal retail investors do when they are displeased with performance.
- 765 Therefore, institutional pension investors have actually encouraged takeovers and buyouts as a way of liquidating their shares.
- 766 The need stems from the lack of corporate performance and from accountability for the needs of the pension fund investor. ¶¶¶
- 767 Three models of corporate accountability have evolved since the separation of ownership from control became a reality for the modern corporation.
- 768 The first, proposed by Ralph Cordiner, was to run the corporation “in the best-balanced interest of shareholders.”
- 769 This model failed to produce results for owners and led to hostile takeovers. ¶¶¶
- 770 The second model that evolved in the U.S. was to run the corporation so as “to maximize shareholder value.”
- 771 This often takes the form of maximizing short-term profits and leads to actions that actually weaken the long-term viability of the corporation.
- 772 This model does not consider that the interests of employee investors in pension funds are long-term interests with a time frame of at least fifteen years. ¶¶¶
- 773 Therefore, a model that maximizes the long-term wealth-producing capacity of the corporation, with strong metrics and an effective board of directors to hold top management accountable, seems advisable for U.S. corporations.
- 774 This model, in force in Japan and Germany, holds promise for enhancing corporate accountability and for serving the best long-term interests of the primary beneficiaries of pension funds, the employees.

775 **Managing Oneself**

- 776 The workforce has changed fundamentally in its life expectancy, but above all in its composition and work.
- 777 It has become a knowledge workforce.
- 778 And therefore to have even a chance of success and achievement, knowledge workers have to do something totally new and totally unprecedented.
- 779 They have to manage themselves, and this creates new demands on the individual.
- 780 First, they must understand what they do well—that is, their strengths.
- 781 Feedback analysis is a tool used by many successful executives to understand their strengths.
- 782 They must also understand the most effective way in which they work.
- 783 Once the knowledge worker understands her strengths and work style, the next demand is that she understand her values.
- 784 One tends to do best when applying one's strengths in areas that one values.
- 785 Then the knowledge worker is able to determine where to try to place himself or herself as opportunities present themselves. ¶¶¶
- 786 Once in an organization, the knowledge worker must ask, "Given my strengths and values, where can I make the greatest contribution to the needs of this organization?"
- 787 Finally, the knowledge worker must take responsibility for the relationships required to make the contribution.
- 788 Relationship responsibility requires asking and answering the same questions about those with whom one works and adapting oneself to the strengths and work styles of associates.

789 **Managing the Boss**

790 Managing the boss is a fairly simple but important process.

791 All it requires is that you follow the seven keys to success:

792 make a boss list to identify who your bosses are,

793 ask for their input,

794 enable each boss to perform,

795 play to each boss's strengths,

796 keep each boss informed,

797 protect each boss from surprises, and

798 never underrate a boss.

799 All managing the boss requires is a little thinking, a little common sense.

800 But it does require some work.

801 Above all, however, it requires accepting that managing the boss is both a major opportunity and a major responsibility.

802 **Revitalizing Oneself—Seven Personal Experiences**

803 The responsibility for development of the individual has to become responsibility for self-development.

804 Responsibility for placing the individual has to become the responsibility for self-placement.

805 Otherwise, it is unlikely that knowledge people can continue to remain effective and productive and capable of growth over the long span of working life we can now expect.

806 The Educated Person

- 807 The knowledge society changes the very idea of what it means to be an educated person.
- 808 In earlier societies, the educated person was an ornament.
- 809 Now the educated person is the knowledge society's chief representative and key resource.
- 810 This brings new responsibilities and new demands on the individual.
- 811 The person educated in the liberal arts must not only know the great traditions of the past but be able to perceive and come to grips with reality so as to gain mastery over it. ¶¶¶
- 812 The educated person will have to be able to understand the world's cultures, religions, and traditions and not limit himself or herself only to knowledge of Western civilization.
- 813 In an age of rapid change and turning points such as the one in which we are now living, the educated person will have to be trained in perception fully as much as in analysis. ¶¶¶
- 814 The educated person will have to become familiar with knowledges in multiple disciplines, because changes in one discipline often originate from innovations in another discipline.
- 815 The integration of knowledges will increasingly be a part of the work of the manager.
- 816 This requires continuous learning and teaching.
- 817 Making one's specialized knowledge accessible to those whose specialty is a different discipline will become increasingly necessary for managing knowledge organizations as knowledge splinters further.

818 Conclusion: The Manager of Tomorrow

819 Today's student in the college course in management will still be active and working
forty-five or fifty years hence—into the third quarter of the twenty-first century. ¶¶¶

820 A century ago, no one could have predicted the world of 1950 or 1960.

821 And no one in the 1960s, when many of today's managers began their college studies or
went to work, could have predicted the world of 2008.

822 *The one thing one can predict about the politics, society, and economy that lie half a
century ahead is that there will be great changes.*

823 Yet one can also predict, with high probability, some important things with respect to the
manager of tomorrow—that is, the management student of today.

824 *There will surely be new skills and, with them, a need for the manager of tomorrow to
organize his or her own self-development and to acquire the habit of continuous
learning.*

825 *Yet the three tasks of the manager will be the same.*

826 Managers of tomorrow will have, as their first responsibility, the performance of the
institution for which they work.

827 They will be responsible for making work productive and the worker achieving.

828 And the task of managing social impact and social responsibilities will hardly become
less important or less demanding.

829 The managers of tomorrow will, in other words, concern themselves with the same tasks
as the managers of today, will worry about the same things, will face similar problems and
similar demands—though **they will be expected to tackle these
tasks with more knowledge, more thought, more
planning, and greater competence in order to operate
in the knowledge society.**

830 *First, managers will have to learn how to manage in situations where they do not have
command authority, where they are neither controlled nor controlling. ¶¶¶*

831 That is a fundamental change.

832 Management textbooks still talk mainly about managing subordinates.

833 But one can no longer evaluate an executive in terms of how many people report to him
or her.

834 That standard doesn't mean as much as the complexity of the job, the information it uses
and generates, the contribution expected, and the different kinds of relationships needed
to do the work. ¶¶¶

835 Similarly, business news still refers to managing subsidiaries.

836 But this is the control approach of the 1950s or 1960s.

837 Businesses used to grow in one of two ways:

838 from grass-roots up or by acquisition.

839 In both cases, the manager had control.

840 Today businesses often grow through alliances, all kinds of dangerous liaisons and joint
ventures, which very few managers understand how to effectively manage.

841 This new type of growth upsets the traditional manager who believes he or she must own or control sources and markets.

842 **Managers will have to make productive people who work for them but are not employees.**

843 It is probable that an enterprise will eventually outsource most work that does not have a career ladder up to senior management.

844 To get productivity, you should consider outsourcing activities that lack their own senior management.

845 The trend toward outsourcing has less to do with economizing and a great deal to do with quality.

846 Managers still talk about the people who “report” to them, but that word should be stricken from management vocabulary.

847 **Information is replacing authority.** ११११

848 A company treasurer with outsourced information technology may have only two assistants and a receptionist, but his or her decisions in foreign exchange can lose-or make-more money in a day than the rest of the company makes all year.

849 A scientist decides which research to do in a big company lab.

850 He doesn’t even have a secretary or a title, but his track record means that he is not apt to be overruled.

851 He may have more effect on results than the CEO.

852 In the military, a lieutenant colonel used to command a battalion, but today he may have only a receptionist and be in charge of liaisons with a major foreign country.

853 One can, however, also anticipate **significant expansion in the application of managerial tasks.**

854 One of them will surely be a major thrust toward systematic management in the public-service institution—whether government agency, hospital, school, or university.

855 Indeed, the frontier of management in this half of the twenty-first century is likely to be in the public-service institution, just as the frontier of management in the last seventy years was in business enterprise.

856 But there are also major priorities with respect to each of the major task areas that will, in all likelihood, demand systematic work on the part of the managers of tomorrow.

857 In the first task area—that of the specific performance of business and of the public-service institution—the biggest immediate problem is to organize for systematic abandonment of the obsolete, the unproductive, the no longer appropriate.

858 We have learned a great deal about innovation as an organized activity.

859 At least we have learned that the making of a different tomorrow is a major responsibility of managers.

860 Now we will have to learn that sloughing off yesterday is also a central managerial task.

861 And this is something that managers in public-service institutions, in particular, have yet to learn.

862 So far, public-service institutions have rarely abandoned the obsolete, and almost never done so systematically.

863 In the area of work and working, the big job ahead is to make the management of human resources within our organizations conform to social reality.

864 Within the last seventy years, the “working class” has changed dramatically in all developed countries.

865 Today’s worker is likely to be a “knowledge worker” rather than a “manual worker.”

866 Indeed, the “blue collar worker” in manufacturing industry is already a distinct minority in all developed countries, and likely to be a very small segment of the working population by the year 2020.

867 But even the manual worker of today, the blue-collar worker in manufacturing industry, is very different in income and above all in education, from the manual worker of yesterday.

868 The traditional line between “worker” and “owner” is fast disappearing; it is already an anachronism, no matter how strong its emotional hold on our rhetoric.

869 For, through the pension fund, employees (especially in the United States) are fast becoming the true owners of commerce.

870 In the United States today, employee pension funds own about one-third of industry, and a good deal more of the truly big companies.

871 By 2020, pension fund ownership of the share capital of American business will have risen to 50 percent or so—again, considerably more with respect to big business.

872 Other developed countries are reaching the same end through different routes and with different mechanisms. ¶¶¶

873 This will not usher in Utopia in the management of human resources.

874 The old tensions, problems, and conflicts of work and working discussed in this book will remain.

875 But the emergence of the worker as a true owner through pension funds—even though the worker does not directly control business—will make both possible and necessary systematic and purposeful work toward what this book has called “the responsible worker,” the worker who, regardless of job, takes a high degree of managerial responsibility for his or her own task, his or her own work group, and for the governance of the work community and its concerns.

876 Not much innovation is required.

877 A good many businesses, for well over a hundred years, have been doing the job.

878 But what has been the isolated exception will have to become general rule.

879 The needed changes will again be greatest in public-service institutions.

880 For in managing work and working, public-service institutions, by and large, are well behind any reasonably well-managed business.

881 The next change in managing work and working is the need to manage one’s own career.

882 Even today, remarkably few Americans are prepared to select jobs for themselves.

883 When you ask, “Do you know what you are good at?

884 Do you know your limitations?” they look at you with a blank stare.

885 Or they often respond in terms of subject knowledge, which is the wrong answer.

886 When they prepare their résumés, they still try to list positions like steps up a ladder.

887 It is time to give up thinking of jobs or career paths as we once did and to think in terms of taking on assignments and acquiring competencies one after the other. ¶¶¶

888 It is a very difficult thing to think through who you are and what you do best.

889 In helping people learn how to be responsible, our educational system is more and more

counterproductive.

890 The longer you stay in school, the fewer decisions You have to make.

891 For instance, the decision whether to take French II or Art History may be based on whether one likes to get up early in the morning.

892 And graduate school is much worse. ¶¶¶

893 Most graduates start with big companies because they have not figured out where to place themselves, and companies send in the recruiters.

894 But as soon as the recruits get through training and into a job, they have to start making decisions about the future.

895 Nobody's going to do it for them. ¶¶¶

896 And once they start making decisions, many of the best will move to midsize companies in three to five years, because there they can break through to top management.

897 With less emphasis on seniority, a person can go upstairs and say, "I've been in accounting for three years, and I'm ready to go into marketing." ¶¶¶

898 Strange as it may seem, a knowledge economy's greatest pitfall is in becoming a Mandarin meritocracy.

899 You see creeping credentialism all around.

900 Why should people find it necessary to tell me so-and-so is really a good researcher even though he or she doesn't have a PhD?

901 It's easy to fall into the trap because degrees are black-and-white.

902 But it takes judgment to weigh a person contribution. ¶¶¶

903 You not only have to understand your own competencies, but you also have to learn the strengths of the men and women to whom you assign duties, as well as those of your peers and boss.

904 Too many managers still go by averages.

905 They still talk about "our engineers."

906 And I say, 'Brother, you don't have engineers.

907 You have Joe and Mary and Jim and Bob, and each is different."

908 You can no longer manage a workforce.

909 You lead individuals.

910 You have to know them so well you can go and say, "Mary, you think you ought to move up to this next job?

911 Well, then you have to learn not to have that chip on your shoulder.

912 Forget you are a woman; you are an engineer.

913 And you have to be a little considerate.

914 Do not come in at ten minutes to five on Friday afternoon to tell people they have to work overtime when you knew it at nine AM." ¶¶¶

915 The key to the productivity of knowledge workers is to make them concentrate on the real assignment.

916 Do you know why most promotions now fail?

917 Poor fit.

918 The standard case, of course, is the star salesman promoted to sales manager.

919 That job can be any one of four things—a manager of salespeople, a market manager, a brand manager, or a super salesman who opens up an entire new area.

920 But nobody figures out what it is, so the man or woman who got the promotion just tries to do more of whatever led to the promotion.

921 That's the surest way to be wrong. ¶¶¶

922 One of the worst problems in managing knowledge workers is the assumption among knowledge workers that if you are understandable, you are vulgar.

923 When I was growing up, it was taken for granted that economists, physicists, psychologists, leaders in any discipline, would make themselves understood Einstein spent years with three different collaborators to make his theory of relativity accessible to the layman.

924 Even John Maynard Keynes tried hard to make his economics accessible. ¶¶¶

925 We cannot afford arrogance among knowledge workers.

926 Knowledge is power, which is why people who had it in the past often tried to make a secret of it.

927 In knowledge work, power comes from transmitting information to make it productive, not from hiding it. ¶¶¶

928 That means you have to be intolerant of intellectual arrogance.

929 At whatever level, knowledge people must make themselves understood, and whatever field the manager comes from, he or she must be eager to understand others.

930 This may be the main job of the manager of technical people.

931 He or she must not only be an interpreter but also work out a balance between specializations and exposure. ¶¶¶

932 The productivity of knowledge has both a qualitative and a quantitative dimension.

933 We know executives must be both managers of specialists and synthesizers of different fields of knowledge—really of *knowledges*, plural.

934 This situation is as threatening to the traditional manager, who worries about high-falutin high-brows, as it is to the intellectual, who worries about being too commercial to earn respect in his or her discipline.

935 But in the knowledge-based organization, the highbrow and the lowbrow have to play on the same team. ¶¶¶

936 Finally, with respect to managing social impact and social responsibility,

937 ... managers will have to learn how to think through systematically and carefully the difficult and risky "trade-offs" between conflicting needs and conflicting rights.

938 At the same time, managers will have to learn to think ahead with respect to the social impacts of the institutions—whether business enterprises, schools and colleges, hospitals, or government agencies; whether the impacts are technological or social; and whether they are impacts on individuals within the organization or on society, community, and the environment outside.

939 This is a leadership responsibility.

940 And in a society of organizations, managers as a group are the leadership—however modest the personal role and individual power of a specific manager might be.

941 These are new challenges for management and new demands on it.

942 But one can also predict a major change for the individual manager.

943 **[The Individual Manager]**

944 The manager of tomorrow will increasingly have more than one career.

945 Increasingly, men and women will change their work, their environment, their own role, sometime between the ages of forty and fifty.

946 And the more successful a person is as a manager or professional, the more likely that he or she will make such a career change.

947 It may only be a move from one company to another or a shift from accounting work to sales management. ¶¶¶

948 But it may also be a move from one kind of institution to another.

949 The successful controller of a fair-sized company may move, as administrator, into a hospital, for instance.

950 "Second careers" are by no means uncommon today.

951 However, tomorrow they may well have become the accepted rule, though we still look upon them as an exception.

952 One reason, and by no means the only one, is the employee pension plan—especially the pension plan of businesses.

953 They now give the middle-aged manager and professional a substantial degree of economic security, where hitherto economic uncertainty alone tended to keep people in jobs and employment they had outgrown, had become bored with, and had ceased to feel as challenging and enjoyable.

954 And this, it is safe to predict, will put a high premium

955 on continued learning by managers,

956 on their taking responsibility for self-development as a person and as a manager, and

957 on a thorough knowledge of a manager's work, managerial skills, and managerial tools. ¶¶¶

958 But the most important thing one can predict, with respect to the manager of tomorrow, is that there will be a manager of tomorrow, one defined **by expected contribution**.

959 In all likelihood, there will be **more managers tomorrow than there are today, and they will matter more**.

960 Unless mankind destroys itself in some such self-inflicted catastrophe as nuclear war, society will continue to be a society of organizations and a knowledge society.

961 And to the degree to which developing nations advance socially and economically, they will increasingly become societies of organizations too. ¶¶¶

962 Organizations are far from perfect.

963 As every manager knows, they are very difficult; full of frustration, tension, and friction; clumsy and unwieldy.

964 But they are the only tools we have to accomplish such social purposes as economic production and distribution, health care, governance, and education.

965 And there is not the slightest reason to expect society to be willing to do without these services that only performing organizations can provide.

966 Indeed, there is every reason to expect society to demand more performance from all its

institutions, and to become more dependent upon their performance. ¶¶¶

967 And it is managers who make institutions perform.