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We look for lessons in the actions of great leaders. We should instead be examining what goes on in their heads—particularly the way they creatively build on the tensions among conflicting ideas.

How Successful Leaders Think

by Roger Martin

Included with this full-text *Harvard Business Review* article:

1 **Article Summary**
The Idea in Brief—*the core idea*
The Idea in Practice—*putting the idea to work*

2 **How Successful Leaders Think**

9 **Further Reading**
A list of related materials, with annotations to guide further exploration of the article's ideas and applications

How Successful Leaders Think

The Idea in Brief

The secret to becoming a great leader? Don't *act* like one, Martin advises. Instead, *think* like one.

Brilliant leaders excel at **integrative thinking**. They can hold two opposing ideas in their minds at once. Then, rather than settling for choice A or B, they forge an innovative "third way" that contains elements of both but improves on each.

Consider Bob Young, cofounder of Red Hat, the dominant distributor of Linux open-source software. The business model Young created for Red Hat transcended the two prevailing software industry models—winning Red Hat entrée into the lucrative corporate market.

How to become an integrative thinker? Resist the simplicity and certainty that comes with conventional "either-or" thinking. Embrace the messiness and complexity of conflicting options. And emulate great leaders' decision-making approach—looking *beyond* obvious considerations.

Your reward? Instead of making unattractive trade-offs, you generate a wealth of profitable solutions for your business.

The Idea in Practice

What does integrative thinking look like in action? Contrast conventional and integrative thinkers' approaches to the four steps of decision making:

STEP 1: IDENTIFYING KEY FACTORS

Conventional thinkers consider only obviously relevant factors while weighing options. **Integrative thinkers** seek less obvious but potentially more relevant considerations.

▶ Example:
Bob Young disliked the two prevailing software business models: selling operating software but not source code needed to develop software applications (profitable but anathema to open-source advocates) or selling CD-ROMs containing software and source code (aligned with open-source values but not profitable). Seeking a third choice, he considered CIOs' reluctance to buy new technology that would be complicated to maintain. Viewing their reluctance as relevant eventually helped Young see that selling software *service* would be a superior alternative to the existing *product*-based business models.

STEP 2: ANALYZING CAUSALITY

Conventional thinkers consider one-way, linear relationships between factors: more of A produces more of B. **Integrative thinkers** consider multidirectional relationships.

▶ Example:
Young analyzed the complex relationships among pricing, profitability, and distribution channels. He recognized that a product based on freely available components would soon become a commodity. Any electronics retailer could assemble its own Linux product and push it through its well-developed distribution channel—leaving Red Hat stranded. Analysis of these causal relationships yielded a nuanced picture of the industry's future.

STEP 3: ENVISIONING THE DECISION'S OVERALL STRUCTURE

Conventional thinkers break a problem into pieces and work on them separately. **Integrative thinkers** see a problem as a whole—examining how its various aspects affect one another.

▶ Example:
Young held several issues in his head simultaneously, including CIOs' concerns, dynamics of individual and corporate markets for system software, and the evolving economics of the free-software business. Each "piece" could have pushed him toward a separate decision. But by considering the issues as an interrelated whole, Young began to realize only one player would ultimately dominate the corporate market.

STEP 4: ACHIEVING RESOLUTION

Conventional thinkers make either-or choices. **Integrative thinkers** refuse to accept conventional options.

▶ Example:
To pursue market leadership, Young devised an unconventional business model. The model synthesized two seemingly irreconcilable models by combining low product price with profitable service offerings. Red Hat began helping companies manage the software upgrades available almost daily through Linux's open-source platform. It also gave the software away as a free Internet download. Thus, Red Hat acquired the scale and market leadership to attract cautious corporate customers to what became its central offering: service, not software.

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How Successful Leaders Think

by Roger Martin

We are drawn to the stories of effective leaders in action. Their decisiveness invigorates us. The events that unfold from their bold moves, often culminating in successful outcomes, make for gripping narratives. Perhaps most important, we turn to accounts of their deeds for lessons that we can apply in our own careers. Books like *Jack: Straight from the Gut* and *Execution: The Discipline of Getting Things Done* are compelling in part because they implicitly promise that we can achieve the success of a Jack Welch or a Larry Bossidy—if only we learn to emulate his actions.

But this focus on *what a leader does* is misplaced. That's because moves that work in one context often make little sense in another, even at the same company or within the experience of a single leader. Recall that Jack Welch, early in his career at General Electric, insisted that each of GE's businesses be number one or number two in market share in its industry; years later he insisted that those same businesses define their markets so that their share was no greater than 10%, thereby forcing managers to look for opportunities beyond the confines of a narrowly conceived market. Trying to learn from what Jack Welch did invites confusion and incoherence, because he pursued—wisely, I might add—diametrically opposed courses at different points in his career and in GE's history.

So where do we look for lessons? A more productive, though more difficult, approach is to focus on *how a leader thinks*—that is, to examine the antecedent of doing, or the ways in which leaders' cognitive processes produce their actions.

I have spent the past 15 years, first as a management consultant and now as the dean of a business school, studying leaders with exemplary records. Over the past six years, I have interviewed more than 50 such leaders, some for as long as eight hours, and found that most of them share a somewhat unusual trait: They have the predisposition and the capacity to hold in their heads two opposing ideas at once. And then, without panicking or simply settling for one alternative or the other, they're able to

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creatively resolve the tension between those two ideas by generating a new one that contains elements of the others but is superior to both. This process of consideration and synthesis can be termed integrative thinking. It is this discipline—not superior strategy or faultless execution—that is a defining characteristic of most exceptional businesses and the people who run them.

I don't claim that this is a new idea. More than 60 years ago, F. Scott Fitzgerald saw "the ability to hold two opposing ideas in mind at the same time and still retain the ability to function" as the sign of a truly intelligent individual. And certainly not every good leader exhibits this capability, nor is it the sole source of success for those who do. But it is clear to me that integrative thinking tremendously improves people's odds.

This insight is easy to miss, though, since the management conversation in recent years has tilted away from thinking and toward doing (witness the popularity of books like *Execution*). Also, many great integrative thinkers aren't even aware of their particular capability and thus don't consciously exercise it. Take Jack Welch, who is among the executives I have interviewed: He is clearly a consummate integrative thinker—but you'd never know it from reading his books.

Indeed, my aim in this article is to deconstruct and describe a capability that seems to come naturally to many successful leaders. To illustrate the concept, I'll concentrate on an executive I talked with at length: Bob Young, the colorful cofounder and former CEO of Red Hat, the dominant distributor of Linux open-source software. The assumption underlying my examination of his and others' integrative thinking is this: It isn't just an ability you're born with—it's something you can hone.

Opposable Thumb, Opposable Mind

In the mid-1990s, Red Hat faced what seemed like two alternative paths to growth. At the time, the company sold packaged versions of Linux open-source software, mainly to computer geeks, periodically bundling together new versions that included the latest upgrades from countless independent developers. As Red Hat looked to grow beyond its $1 million in annual sales, it could have chosen one of the two basic business models in the software industry.

One was the classic proprietary-software model, employed by big players such as Microsoft, Oracle, and SAP, which sold customers operating software but not the source code. These companies invested heavily in research and development, guarded their intellectual property jealously, charged high prices, and enjoyed wide profit margins because their customers, lacking access to the source code, were essentially locked into purchasing regular upgrades.

The alternative, employed by numerous small companies, including Red Hat itself, was the so-called free-software model, in which suppliers sold CD-ROMs with both the software and the source code. The software products weren't in fact free, but prices were modest—$15 for a packaged version of the Linux operating system versus more than $200 for Microsoft Windows. Suppliers made money each time they assembled a new version from the many free updates by independent developers; but profit margins were narrow and revenue was uncertain. Corporate customers, looking for standardization and predictability, were wary not only of the unfamiliar software but also of its small and idiosyncratic suppliers.

Bob Young—a self-deprecating eccentric in an industry full of eccentrics, who signaled his affiliation with his company by regularly sporting red socks and a red hat—didn't like either of these models. The high-margin proprietary model ran counter to the whole philosophy of Linux and the open-source movement, even if there had been a way to create proprietary versions of the software. "Buying proprietary software is like buying a car with the hood welded shut," Young told me. "If something goes wrong, you can't even try to fix it." But the free-software model meant scraping a slim profit from the packaging and distribution of a freely available commodity in a fringe market, which might have offered reasonable returns in the short term but wasn't likely to deliver sustained profitable growth.

Young likes to say that he's not "one of the smart guys" in the industry, that he's a salesman in a world of technical geniuses. Nonetheless, he managed to synthesize two seemingly irreconcilable business models, placing Red Hat on a path to tremendous success. His response to his strategic dilemma was to combine the free-software model's low product price with the proprietary model's profitable

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service component, in the process creating something new: a corporate market for the Linux operating system. As is often the case with integrative thinking, Young included some twists on both models that made the synthesis work.

Although inspired by the proprietary model, Red Hat's service offering was quite different. "If you ran into a bug that caused your systems to crash," Young said of the service you'd buy from the big proprietary shops, "you would call up the manufacturer and say, 'My systems are crashing.' And he'd say, 'Oh, dear,' while he really meant, 'Oh, good.' He'd send an engineer over at several hundred dollars an hour to fix his software, which was broken when he delivered it to you, and he'd call that customer service." Red Hat, by contrast, helped companies manage the upgrades and improvements available almost daily through Linux's open-source platform.

Young also made a crucial change to what had been the somewhat misleadingly dubbed free-software model: He actually gave the software away, repackaging it as a free download on the Internet rather than as an inexpensive but cumbersome CD-ROM. This allowed Red Hat to break away from the multitude of small Linux packagers by acquiring the scale and market leadership to generate faith among cautious corporate customers in what would become Red Hat's central offering—service, not software.

In 1999, Red Hat went public, and Young became a billionaire on the first day of trading. By 2000, Linux had captured 25% of the server operating system market, and Red Hat held more than 50% of the global market for Linux systems. Unlike the vast majority of dot-com era start-ups, Red Hat has continued to grow.

What enabled Young to resolve the apparent choice between two unattractive models? It was his use of an innate but underdeveloped human characteristic, something we might call—in a metaphor that echoes another human trait—the opposable mind.

Human beings are distinguished from nearly every other creature by a physical feature: the opposable thumb. Thanks to the tension that we can create by opposing the thumb and fingers, we can do marvelous things—write, thread a needle, guide a catheter through an artery. Although evolution provided human beings with this potential advantage, it would have gone to waste if our species had not exercised it in ever more sophisticated ways. When we engage in something like writing, we train the muscles involved and the brain that controls them. Without exploring the possibilities of opposition, we wouldn't have developed either its physical properties or the cognition that accompanies and animates it.

Analogously, we were born with opposable minds, which allow us to hold two conflicting ideas in constructive, almost dialectic tension. We can use that tension to think our way toward new, superior ideas. Were we able to hold only one thought or idea in our heads at a time, we wouldn't have access to the insights that the opposable mind can produce.

Unfortunately, because people don't exercise this capability much, great integrative thinkers are fairly rare. Why is this potentially powerful but generally latent tool used so infrequently and to less than full advantage? Because putting it to work makes us anxious. Most of us avoid complexity and ambiguity and seek out the comfort of simplicity and clarity. To cope with the dizzying complexity of the world around us, we simplify where we can. We crave the certainty of choosing between well-defined alternatives and the closure that comes when a decision has been made.

We often don't know what to do with fundamentally opposing models. Our first impulse is usually to determine which is "right" and, by the process of elimination, which is "wrong."

For those reasons, we often don't know what to do with fundamentally opposing and seemingly incommensurable models. Our first impulse is usually to determine which of the two models is "right" and, by the process of elimination, which is "wrong." We may even take sides and try to prove that our chosen model is better than the other one. But in rejecting one model out of hand, we miss out on all the value that we could have realized by considering the opposing two at the same time and finding in the tension clues to a superior model. By forcing a choice between the two, we disengage the opposable mind before it can seek a creative resolution.

This nearly universal personal trait is writ large in most organizations. When a colleague admonishes us to "quit complicating the issue," it's not just an impatient reminder to get on with the damn job—it's also a plea to keep the complexity at a comfortable level.

To take advantage of our opposable minds, we must resist our natural leaning toward simplicity and certainty. Bob Young recognized from the beginning that he wasn't bound to

choose one of the two prevailing software business models. He saw the unpleasant trade-offs he'd have to make if he chose between the two as a signal to rethink the problem from the ground up. And he didn't rest until he found a new model that grew out of the tension between them.

Basically, Young refused to settle for an "either-or" choice. That phrase has come up time and again in my interviews with successful leaders. When asked whether he thought strategy or execution was more important, Jack Welch responded: "I don't think it's an 'either-or.'" Similarly, Procter & Gamble CEO A.G. Lafley—when asked how he came up with a turnaround plan that drew on both cost cutting and investment in innovation—said: "We weren't going to win if it were an 'or.' Everybody can do 'or.'"

The Four Stages of Decision Making

So what does the process of integrative thinking look like? How do integrative thinkers consider their options in a way that leads to new possibilities and not merely back to the same inadequate alternatives? They work through four related but distinct stages. The steps themselves aren't particular to integrative thinking: Everyone goes through them while thinking through a decision. What's distinctive about integrative thinkers is how they approach the steps. (See the exhibit "Conventional Versus Integrative Thinking.")

Determining salience. The first step is figuring out which factors to take into account. The conventional approach is to discard as many as possible—or not even to consider some of them in the first place. In order to reduce our exposure to uncomfortable complexity, we filter out salient features when considering an issue.

We also do this because of how most organizations are structured. Each functional specialty has its own narrow view of what merits consideration. Finance departments haven't traditionally regarded emotional factors as salient; similarly, departments concerned with organizational behavior have often ignored quantitative questions. Managers pressure employees to limit their view of what's salient to match the department's doctrine, leaving people with only a subset of the factors to which they might otherwise have productively paid attention.

When our decisions turn out badly, we often recognize after the fact that we've failed to consider factors that are significant to those outside the immediate reach of our jobs or functional specialties. We say to ourselves, "I should have thought about how the employees in our European operation would have inter-

Conventional Versus Integrative Thinking

When responding to problems or challenges, leaders work through four steps. Those who are conventional thinkers seek simplicity along the way and are often forced to make unattractive trade-offs. By contrast, integrative thinkers welcome complexity—even if it means repeating one or more of the steps—and this allows them to craft innovative solutions.

	1 Determining Salience	2 Analyzing Causality	3 Envisioning the Decision Architecture	4 Achieving Resolution
CONVENTIONAL THINKERS	Focus only on obviously relevant features	Consider one-way, linear relationships between variables, in which more of A produces more of B	Break problems into pieces and work on them separately or sequentially	Make either-or choices; settle for best available options
INTEGRATIVE THINKERS	**Seek less obvious but potentially relevant factors**	**Consider multidirectional and nonlinear relationships among variables**	**See problems as a whole, examining how the parts fit together and how decisions affect one another**	**Creatively resolve tensions among opposing ideas; generate innovative outcomes**

preted the wording of that memo" or "I should have thought about the state's road-repair program before choosing a site for our new distribution center." The integrative thinker, by contrast, actively seeks less obvious but potentially relevant factors. Of course, more salient features make for a messier problem, but integrative thinkers don't mind the mess. In fact, they embrace it, because it assures them that they haven't dismissed anything that may illuminate the problem as a whole. They welcome complexity, because that's where the best answers come from. They are confident that they'll find their way through it and emerge on the other side with a clear resolution.

Integrative thinkers don't mind a messy problem. In fact, they welcome complexity, because that's where the best answers come from.

In his thinking about a new business model for Red Hat, Bob Young added into his calculations something ignored both by software companies generally and by Linux suppliers in particular: the day-to-day concerns of corporate CIOs and their systems administrators. Doing this allowed him to envision an innovative model that tapped into an entirely new market for Linux-based products and services.

As a whole, the software industry disdains CIOs' reluctance to buy the newest and best technology, attributing it to timidity or strict adherence to the "you'll never get fired for buying IBM" mantra. Young not only empathized with the CIOs but found their caution understandable. "It's *not* FUD—fear, uncertainty, and doubt," he said. "It's sensible."

Linux software was an entirely new product for corporate buyers, one that didn't follow any familiar rules. It was free. No one supplier controlled it. Thousands of versions were out there, and each one changed nearly every day. From the CIOs' perspective, that Linux was cheaper and better than Windows-based products—the basic sales message delivered by Red Hat's rivals—played a relatively small part in the calculation. The CIOs were thinking about whether their investment would be in a stable and consistent platform that would work across their organizations and whether their suppliers would still be around in ten or 15 years. Systems administrators worried that the complexity of Linux—with its random and almost daily upgrades—would create a management nightmare, since different teams of people throughout the company would have to maintain the software packages.

Viewing these concerns as salient helped lead Young to conclude that, in the case of Linux, service was a bigger selling point than product and that a vendor's long-term credibility was crucial.

Analyzing causality. In the second step of decision making, you analyze how the numerous salient factors relate to one another. Conventional thinkers tend to take the same narrow view of causality that they do of salience. The simplest type of all is a straight-line causal relationship. It's no accident that linear regression is the business world's preferred tool for establishing relationships between variables. Other tools are available, of course, but most managers shun them because they're harder to use. How many times has a superior scolded you for making a problem more complicated than it needs to be? You protest that you're not trying to complicate anything; you just want to see the problem as it really is. Your boss tells you to stick to your job, and a potentially complex relationship becomes a linear one in which more of A produces more of B.

When we make bad decisions, sometimes it is because we got the causal links between salient features wrong. We may have been right about the direction of a relationship but wrong about the magnitude: "I thought that our costs would decrease much faster than they actually did as our scale grew." Or we may have gotten the direction of a relationship wrong: "I thought that our capacity to serve clients would increase when we hired a new batch of consultants, but it actually shrank, because the experienced consultants had to spend a huge amount of their time training the new ones and fixing their rookie mistakes."

The integrative thinker isn't afraid to question the validity of apparently obvious links or to consider multidirectional and nonlinear relationships. So, for example, rather than simply thinking, "That competitor's price-cutting is hurting our bottom line," the integrative thinker may conclude, "Our product introduction really upset our rivals. Now they're cutting prices in response, and our profitability is suffering."

The most interesting causal link that Young identified was the rather subtle one between the free availability of Red Hat software's basic components and the likely—or inevitable, in Young's view—evolution of the industry. The relationships he saw between pricing, profitability, and distribution channel drove his company in a different direction from its

Linux competitors, which saw a perfectly good market for their "free" software. This is what allowed him to create and then lock up the new corporate market.

For example, Young recognized the vulnerability of a product based on freely available components. Whatever you charged for the convenience of getting a Linux operating system bundled together on one CD-ROM, inevitably "someone else would come in and price it lower," he said. "It was a commodity in the truest sense of the word." He also realized that a company that wasn't a current rival—say, a big electronics retailer—could put together a Linux product of its own and then push it through its own well-developed distribution channel, leaving Red Hat and other suppliers out in the cold. "I knew I needed a product I had some control over so I could make CompUSA a customer"—that is, a corporate purchaser of Red Hat's service package—"rather than a competitor" with its own CD-ROM product.

The causal relationships spotted by Young weren't earth-shattering on their own, but putting them together helped Young create a more nuanced picture of the industry's future than his competitors were able to.

Envisioning the decision architecture. With a good handle on the causal relationships between salient features, you're ready to turn to the decision itself. But which decision? Even the simple question of whether to go to a movie tonight involves deciding, at the very least, which movie to see, which theater to go to, and which showing to attend. The order in which you make these decisions will affect the outcome. For example, you may not be able to see your preferred movie if you've already decided you need to be back in time to relieve a babysitter who has plans for later in the evening. When you're trying to invent a new business model, the number of decision-making variables explodes. And with that comes the impulse not only to establish a strict sequence in which issues will be considered but also to dole out pieces of a decision so that various parties—often, different corporate functions—can work on them separately.

What usually happens is that everyone loses sight of the overriding issue, and a mediocre outcome results. Suppose that Bob Young had delegated to different functional heads questions concerning the pricing, enhancement, and distribution of Red Hat's original software product. Would their individual answers, agglomerated into an overall Red Hat strategy, have produced the spectacularly successful new business model that Young came up with? It doesn't seem all that likely.

Integrative thinkers don't break down a problem into independent pieces and work on them separately or in a certain order. They see the entire architecture of the problem—how the various parts of it fit together, how one decision will affect another. Just as important, they hold all of those pieces suspended in their minds at once. They don't parcel out the elements for others to work on piecemeal or let one element temporarily drop out of sight, only to be taken up again for consideration after everything else has been decided. An architect doesn't ask his subordinates to design a perfect bathroom and a perfect living room and a perfect kitchen, and then hope that the pieces of the house will fit nicely together. A business executive doesn't design a product before considering the costs of manufacturing it.

Young held simultaneously in his head a number of issues: the feelings and the challenges of chief information officers and systems administrators, the dynamics of both the individual and the corporate markets for operating system software, the evolving economics of the free-software business, and the motivations behind the major players in the proprietary-software business. Each factor could have pushed him toward a separate decision on how to address the challenge. But he delayed making decisions and considered the relationships between these issues as he slowly moved toward the creation of a new business model, one based on the belief that dominant market share would be critical to Red Hat's success.

Achieving resolution. All of these stages—determining what is salient, analyzing the causal relationships between the salient factors, examining the architecture of the problem—lead to an outcome. Too often, we accept an unpleasant trade-off with relatively little complaint, since it appears to be the best alternative. That's because by the time we have reached this stage, our desire for simplicity has led us to ignore opportunities in the previous three steps to discover interesting and novel ways around the trade-off. Instead of rebelling against the meager and unattrac-

tive alternatives, instead of refusing to settle for the best available bad choice, the conventional thinker shrugs and asks, "What else could we have done?"

"Much else," the integrative thinker says. A leader who embraces holistic rather than segmented thinking can creatively resolve the tensions that launched the decision-making process. The actions associated with the search for such resolution—creating delays, sending teams back to examine things more deeply, generating new options at the 11th hour—can appear irresolute from the outside. Indeed, the integrative thinker may even be dissatisfied with the fresh batch of options he's come up with, in which case he may go back and start over. When a satisfactory outcome does emerge, though, it is inevitably due to the leader's refusal to accept trade-offs and conventional options.

The outcome in the case of Red Hat was completely unconventional—not many companies suddenly decide to give away their products—and ultimately successful. Young's gradual realization that only one player in his industry would have leverage with and support from corporate customers—and that such leverage and support could reap attractive service revenues from totally free software—shaped the dramatically creative decision he made.

The thinking that he intuitively engaged in is very different from the thinking that produces most managerial decisions. But, he said, his experience was hardly unique: "People are often faced with difficult choices—for instance, 'Do I want to be the high-quality, high-cost supplier or the low-quality, low-cost supplier?' We're trained to examine the pros and cons of such alternatives and then pick one of them. But really successful businesspeople look at choices like these and say, 'I don't like either one.'" Using that recurring phrase, he added: "They don't accept that it's an 'either-or.'"

Born and Bred

The consequences of integrative thinking and conventional thinking couldn't be more distinct. Integrative thinking generates options and new solutions. It creates a sense of limitless possibility. Conventional thinking glosses over potential solutions and fosters the illusion that creative solutions don't actually exist. With integrative thinking, aspirations rise over time. With conventional thinking, they wear away with every apparent reinforcement of the lesson that life is about accepting unattractive trade-offs. Fundamentally, the conventional thinker prefers to accept the world just as it is, whereas the integrative thinker welcomes the challenge of shaping the world for the better.

Given the benefits of integrative thinking, you have to ask, "If I'm not an integrative thinker, can I learn to be one?" In F. Scott Fitzgerald's view, only people with "first-rate intelligence" can continue to function while holding two opposing ideas in their heads. But I refuse to believe that the ability to use our opposable minds is a gift reserved for a small minority of people. I prefer the view suggested by Thomas C. Chamberlin, a nineteenth-century American geologist and former president of the University of Wisconsin. More than 100 years ago, Chamberlin wrote an article in *Science* magazine proposing the idea of "multiple working hypotheses" as an improvement over the most commonly employed scientific method of the time: testing the validity of a single hypothesis through trial and error. Chamberlin argued that his approach would provide more accurate explanations of scientific phenomena by taking into account "the co-ordination of several agencies, which enter into the combined result in varying proportions." While acknowledging the cognitive challenges posed by such an approach, Chamberlin wrote that it "develops a habit of thought analogous to the method itself, which may be designated a habit of parallel or complex thought. Instead of a simple succession of thoughts in linear order…the mind appears to become possessed of the power of simultaneous vision from different standpoints."

Similarly, I believe that integrative thinking is a "habit of thought" that all of us can consciously develop to arrive at solutions that would otherwise not be evident. First, there needs to be greater general awareness of integrative thinking as a concept. Then, over time, we can teach it in our business schools—an endeavor that colleagues and I are currently working on. At some point, integrative thinking will no longer be just a tacit skill (cultivated knowingly or not) in the heads of a select few.

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Further Reading

ARTICLE

The Seasoned Executive's Decision-Making Style

by Kenneth R. Brousseau, Michael J. Driver, Gary Hourihan, and Rikard Larsson
Harvard Business Review
February 2006
Product no. R0602F

The authors affirm the importance of "integrative thinking" to leadership success. But they also argue that integrative thinking may not always create advantage for lower-level managers. At lower levels, the job is to get widgets out the door (or solve glitches on the spot). Action is at a premium. At higher levels, the job involves making decisions about which widgets or services to offer and how to develop them. To climb the corporate ladder and be effective in new roles, managers must change their decision-making styles. Making decisions like a full-fledged senior executive too soon can hurl an ambitious manager right off the fast track. And it's just as destructive to act like a first-line supervisor after being bumped up to senior management. By understanding the distinguishing characteristics of four different decision-making styles, managers can ensure that they use the right ones during each stage in their career.

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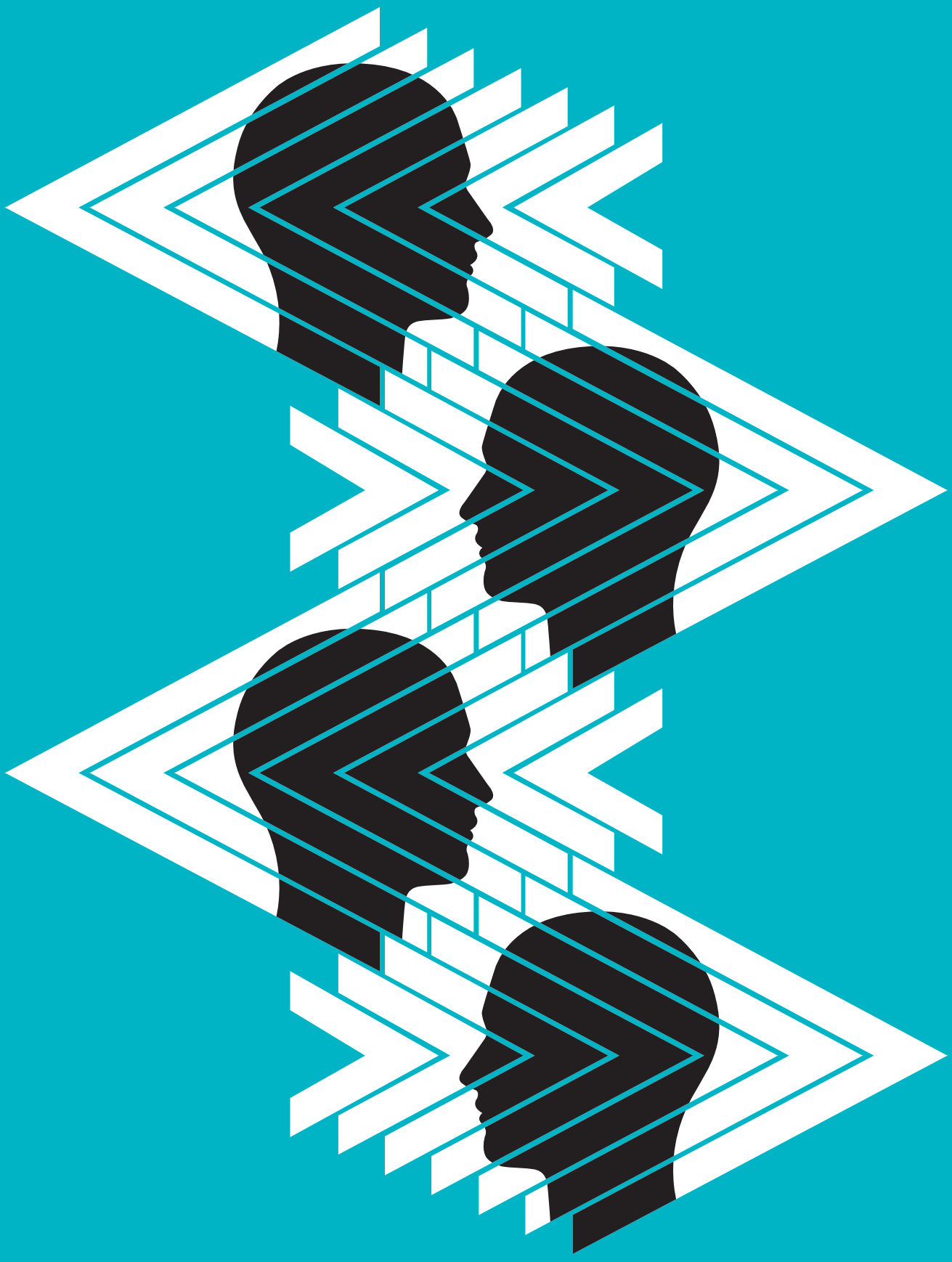

INTEGRATIVE THINKING 2.0: A USER'S GUIDE TO YOUR OPPOSABLE MIND

How to embrace opposing models and apply Integrative Thinking in four (not always easy) steps.

by **Jennifer Riel and Roger Martin**

IN *THE EFFECTIVE EXECUTIVE*, **Peter Drucker** writes at length about decision making, arguing that it is a central executive task. An effective decision-maker, he says, focuses on the most important decisions, works to achieve deep conceptual understanding and isn't overly impressed by speed. But Drucker also points to a particular idiosyncrasy of effective decision-makers: "The understanding that underlies the right decision grows out of the clash of divergent opinions and out of serious consideration of the competing alternatives."

Effective decision makers, Drucker says, disregard conventional wisdom about reaching consensus and instead work to create disagreement and dissention. As an example, he points to the man who turned **General Motors** into the largest company in the world:

> "**Alfred Sloan** is reported to have said at a meeting of one of his top committees: 'Gentlemen, I take it we are all in complete agreement on the decision here.' Everyone around the table nodded assent. 'Then,' continued Mr. Sloan, 'I propose that we postpone further discussion of this matter until our next meeting to give ourselves time to develop disagreement and perhaps gain some understanding of what the decision is all about.'"

Sloan, Drucker says, "knew that the right decision demands adequate disagreement." In other words, it is in the tension between competing ideas that we come to understand the true nature of a problem and start to see possibilities for a better answer.

This notion is at the very heart of Integrative Thinking. But it is also challenging to operationalize due to a key tenet of the human condition: conflict is uncomfortable and runs counter to our natural desire for certainty. We feel intuitively that opposing views are threatening to organizational harmony and that consensus should be our goal. No wonder, then, that when we're faced with opposing options, we often discount one of them as simply wrong, and its proponents as either 'misguided' or 'ill-intentioned'.

In fact, as Drucker hints, opposing models are only a problem when we choose to treat them as such. Sloan's example offers another, more productive approach, which is to use conflicting ideas to truly understand the problem. We can dig deep into the opposing alternatives, and into the tension between them, to look for a better answer, treating opposing models as the raw materials — the building blocks — to create something new.

The question is how. Unfortunately, most successful integrative thinkers have, like Sloan, developed their integrative

Effective decision makers disregard conventional wisdom about reaching consensus and instead work to *create* disagreement and dissention.

approach over a long career. Few could identify just how they explored opposing alternatives and created new answers. None have been explicitly taught what Integrative Thinking is or how to do it; they became integrative thinkers through trial and error, building idiosyncratic methods for integration, mainly implicitly and subconsciously.

Over the past seven years, we've developed a process to apply Integrative Thinking in a deliberate, conscious and directed way. Following this process won't necessarily produce integrative solutions every time, but it will provide a higher probability of coming to a creative solution.

The Four Stages of Integrative Thinking

As indicated in **Figure One**, here are four key stages to the Integrative Thinking process. The first stage is to *articulate the models* — to tease out the opposing ideas. The second stage is to *examine the models* — thoughtfully, deeply and with as much affection as you can muster. These two stages are about deeply understanding the nature of the problem at hand — taking a deep dive into opposing models to understand what makes them work and what might be important to an integrative answer.

In stages three and four, we shift away from understanding existing models and towards generating new possibilities. The third stage is to *explore new possibilities* — to ask, What kind of better answers might be possible? This is a rapid prototyping exercise — a generative challenge to explore a number of different resolutions, testing and refining as you go. The final stage is to *assess the prototypes*, in order to produce a comfortable level of confidence in your solution before moving ahead. After all, as Drucker said, unless a decision has been translated into action, "it is, at best, a good intention."

At a glance, the process we have described appears to be linear. In practice, it isn't quite so simple. Often, the real learning only comes with repetition, as your understanding shifts and deepens. Iteration is an inherent and important part of the process. For now, though, let's assume a step-wise progression through the stages and explain each in turn.

STAGE 1: ARTICULATE THE MODELS

First, identify two extreme and opposing answers to the problem, turning an issue (e.g. how can we more effectively deliver training in a large multinational organization?) into a two-sided dilemma (centralize all training through HR vs. entirely decentralize training to the functions/regions.) In this stage, the goal is to make the solutions extreme expressions of a core idea.

Why two extreme ideas? First, it gives you a manageable place to start. Rather than having to work through a daunting range of 'all possible answers', it narrows the field to a manageable size. Second, by making the two options extreme alternatives, the starting options naturally subsume a large number of alternatives between them (i.e. many alternatives for the training issue fit on a continuum between 'do it all centrally' and 'do it all locally'.) If there is another very distinct option (like, 'outsource all training to a global partner'), it can be included as a third opposing model. However, exploring a fundamental tension between two options tends to surface enough information to generate new possibilities.

It is important to sketch the two opposing ideas out to enough resolution that an observer could understand the essence of each model. This means taking the time to explain, in a few sentences, what each model would look like in practice (e.g. centralization = all development of training programs and content delivery is done at the head office, based on corporate priorities; decentralization = every unit is given the funds to develop or source their own local training, addressing whatever needs are most pressing for them).

Once the opposing models are clear, you explore each model in greater detail. To do so, ask who the key players are — the people most affected by the issue, who most need to be engaged by the answer. Often, these players will be customers, employees and the organization itself (as a proxy for shareholders.) Alternatively, players could be different types of employees (e.g. HR, front-line employees and management), partners, government, etc. Exploring multiple perspectives helps to expand the salient features under consideration. For example, while an organization may care very much about how a model delivers profits or motivates employees, customers care most about the value a model delivers to them. Exploring the perspectives of multiple players helps to create a clearer picture of *what really matters*.

For each player, explore the benefits the model confers on them. This approach — focusing only on the supporting logic and not on the negatives — goes against conventional wisdom. But focusing on the positive effects of the models, rather than looking generally at pros and cons, is intentional and important for three reasons:

- Citing negatives can easily shut down discussion of a given model; if a particular drawback seems insurmountable at the outset, it is hard to understand what might nonetheless be valuable in it;

- It is essential to understand the virtues, or what's best about each model, so that valuable elements can be incorporated into a new integrative model; and
- If the models are truly opposing, the negatives of one model should be the positives of the other. For example, if we note that decentralization provides agility, it isn't necessary to say that centralized models are often bureaucratic and slow.

When exploring the logic of each model, work in sequence and genuinely attempt to 'fall in love' with each model. Explore, as deeply as you can, what makes each model work well and what is valuable about it. For the moment, forget that any other models exist. Avoid judging or critiquing the models; the task isn't to determine which is best, it is to consider rather than evaluate. As an example, see page 8 for the logic of the centralization vs decentralization options.

STAGE 2: EXAMINE THE MODELS

Integrative Thinking is about leveraging the tension between models to create something new. So, once opposing models have been articulated separately, the next step is to look at the models together, explicitly holding them in tension. To do so, three sets of questions are helpful.

First, look across the models. How are they similar? For instance, 'networking' appears in both models as a benefit to employees. In decentralization, the benefit is working with close peers; in centralization, it is meeting folks from across the company. So, both models produce a networking benefit, but in very different ways. Start to consider how the benefit is produced differently in the two models, and how it might be produced in a new model. Then, consider the genuine points of tension between the models. For instance, centralization enables consistency across the organization, which is in tension with an ability to specifically address local needs in the decentralized model. It is hard to have both benefits at the same time; any attempt to create a better answer should take this tension into account.

Second, after looking across the models, look *within* them. Ask, What assumptions underlie each model? What are the crucial causal relationships? These questions are aimed at digging deeper into how the models work, where they break down, and how they might be understood differently. An assumption behind the centralized model, for instance, might be that employees from each region have more in common than not. An assumption of the decentralized model might be that individual needs are best understood and met locally. What if these assumptions didn't hold? How might you think about the problem then?

In terms of causal relationships, have a look at the critical outcomes of each model and how they are produced. What, really, is the relationship between autonomy and learning? Does local decision-making necessarily increase speed? And how does each model affect learning outcomes? By digging into the causal relationships, you can reconfigure the models thoughtfully and anticipate the effects of new models.

Third, look at the problem again with fresh eyes. Re-ask what problem you are trying to solve, recognizing that this may have shifted during the analysis. Is it really about the allocation of training dollars, or about finding the most effective path to a learning organization? Finally, ask which elements of each model you love and would want to keep in a new model (e.g. "I want both *agility of execution* and *consistency of message*.") The purpose of this exploration is to find piece-parts of a potential solution. Remember, there is no single right answer: the things you value in the models may be different from the things I value. But by identifying them, we can progress towards a range of possible 'better worlds'.

STAGE 3: EXPLORE THE POSSIBILITIES

The third stage of the process signals a fundamental shift from *analysis* to *creation*. Once the models themselves, their respective

FIGURE ONE: AN INTEGRATIVE THINKING PROCESS

1. Articulate the models

a) Identify two extreme and opposing models

b) Sketch out the ideas

c) Define the logic of each model:
- Identify the most important players
- Define how the model works for them

2. Examine the models

a) Look Across
- What are the similarities?
- What are the genuine points of tension?

b) Look Within
- What assumptions underlie each model?
- What are the crucial causal relationships?

c) Look Again
- What, again, is the problem we're hoping to solve?
- Given all of this, what would I want to keep from each model?

3. Explore the possibilities

a) Under what conditions could one model actually generate the benefits of the other?

b) How could a new model be created from one building block from each model?

c) Could I parse the choice in a new way, so that each model could be applied to a different part of the problem?

4. Assess the prototypes

a) Under what conditions is this possibility a good one?

b) What conditions may not hold?

c) What tests could I run against those barriers?

FIGURE TWO: COMPARING THE LOGIC OF TWO OPPOSING MODELS

	Benefits of Centralization	Benefits of Decentralization
For Employees	• Opportunity to cross-train (personal growth) • Equitable access to training (fairness, opportunity) • Networking: access to a broader personal network through cross-function, out-of-country training	• Customized training suited to specific context (fit) • Faster, simpler path to local training (no travel, less planning) • Networking: ability to work on local issues with close colleagues while learning new skills together (may be reinforcing)
For Central HR	• Control of content — ensure consistent message • Higher overall quality of programs and facilitators • Able to compare measures across programs more effectively (continuous improvement)	• Able to meet the needs of individual units more effectively • Less administrative work centrally • Opportunity to collaborate with functions and business units on their training objectives
For the Company	• Reinforces global corporate culture • Lower overall costs, through economies of scale • Able to direct training to specific business objectives and learning goals — could lead to better results	• Agility, in terms of what can be offered and when, to meet specific business needs quickly • Might actually spur more communication and sharing of best practices out of necessity • Could create lower direct costs per program
End Result	Reliability: a consistent outcome across the company and around the world	Validity: an outcome perfect for each function or region

benefits and their relationships are understood, you are ready to ask, How might they be integrated into a new and better answer? One way to approach this stage is to reflect on your thinking and simply ask, How might I turn those elements I want to keep into a better model? (e.g. How might I create a training model that is both agile and consistent?)

This is not an easy task. It requires creativity, reflection, insight and some luck. Fortunately, when the answers aren't forthcoming, or time is a pressing issue, the task can be made easier by exploring three guiding questions, which you can think of as a 'search mechanism' of sorts:

1. Under what conditions could one model actually generate one core benefit of the other?
Here, imagine taking one model and extending it in order to capture a single important benefit from the opposing model. Perhaps you liked the culture-reinforcing effect of centralization; how might you extend the decentralized model in such a way that it begins to reinforce something important about the company's culture? Could a highly decentralized model, for instance, help to create and reinforce a culture of autonomy?

2. How could a new model be created using a small building block from each model?
Here, take one component from each model (such as 'customizing content to context' from decentralization and 'economies of scale' from centralization) and ask how they might be productively combined in new and interesting ways. Could an all-online model, for instance, keep costs low and yet be easily and quickly customized to a given context?

3. How might the problem be parsed in a new way, such that each model could be applied discretely?
In this case, explore how you might think differently about the problem, breaking it apart along an important fault line and applying each of your two opposing models to its distinct parts. For instance, you might break the training problem apart by task: could the *development* of training and the *delivery* of training be

It is essential to understand what is best about each model, so that valuable elements can be incorporated into a new integrative model.

divided in such a way as to get the best of both centralization and decentralization?

The goal of stage three is to create 'prototype integrations', so rather than censoring ideas at the outset, encourage wide and diverse suggestions. After generating a set of solutions, you'll pare down the ideas as you explore them more deeply. Work to articulate what each prototype solution could be, and in the process, some solutions will move to the fore and some will fall away.

How will you know when you're ready to move to the next stage? There is no algorithm to it. You will be ready to move on when you have made a genuine effort to work through the three questions, have generated several prototypes and have developed at least one answer that strikes you as having the potential to create more value than either of the initial opposing models.

STAGE 4: ASSESS THE PROTOTYPES

The final stage of the integrative process is to test your prototype solutions. Testing is crucial, because one of the most significant challenges for any new idea is a lack of data to prove that it will work. This presents a challenge: all organizations want innovation, but most feel safer in the status quo, so new initiatives are either quashed before they start (with a demand for pre-emptive proof) or sidelined when they fail to meet initial hopes and dreams. Given this dynamic, work to shorten the odds: test out the new ideas to *create* the data you need.

The simplest methodology for testing your prototypes is to share your ideas — as clearly and concretely as possible — with customers. Early on, get the prototype into the hands of real customers, and ask for feedback and suggestions, co-creating better prototypes together. For the training dilemma, you might generate a series of possible answers and storyboard the different experiences for users.

From there, employ a simple but essential question: What would have to be true for this integrative solution to be a good idea? It may seem counterintuitive — after all, isn't the relevant question, What do we know to be true, relative to this idea? The problem with defining what we know to be true is that we get bogged down in arguments about different data sets and semantics about what constitutes 'proof'. Asking *what would have to be true* separates ideas from individuals and helps suspend judgment long enough to explore the ideas in full.

Let's assume, for now, that we're focusing on a single prototype answer (e.g. all curriculum development work is done centrally, as is regular training of geographically-distributed trainers; those trainers then deliver and adapt content locally). Prototype in mind, return to the same players you considered up front and ask, What would have to be true, relative to them, for the new solution to be a truly happy integrative answer? Reflect on what would have to be true about what each player wants and values to make this possibility a good one. For the training dilemma, for instance, it would have to be true that HR can effectively design all training programs without specialized local or functional knowledge. It would have to be true that the company will get better learning outcomes for the same or less investment. And so on.

Once these conditions are captured, move on to identifying those conditions you are least confident actually hold true. Remember, the daunting thing about new ideas is their lack of proof; knowing the specific aspects of the new idea that are most 'worrisome' allows you to set about generating data specifically directed at those worries. For each worrisome condition, a test can be designed to determine whether the condition holds. So, you might build a pilot train-the-trainer program, or model out the costs of the different possibilities, or explore secondary research on learning outcomes under different delivery models.

In closing

As testing of your new model progresses and you gain confidence in the integrative solution, it is important to note that the challenge isn't over. All solutions will eventually be made obsolete, and as a result, integrative thinkers tend to treat their solutions as provisional. As new models emerge in opposition to the integrative solution, the process begins anew. However, if applied thoughtfully, the process described herein will give you a fighting chance at resolving the wicked problems you face. ***RM***

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