

WELCOME TO THE ATTENTION ECONOMY

Rob Lippincott is starved

for attention. As senior vice president of an online learning network in Boston, he spends virtually every minute of his day working or catching up on family business—he has nothing left for “hobbies,” a term that has come to seem quaint. At home, he’s devoted to his wife and school-age daughters, but even so he feels compelled to check voice mail and e-mail on a regular basis.

At work, the scarcity of attention is palpable. About thirty-five people work for him—software developers and content experts—and all of them feel the need for more of Rob’s attention. They and his peers in the company often ambush him on his way to the bathroom. Sometimes the best he can do is to offer someone who wants a meeting with him a shared wait in the cafeteria line. His office is

surrounded by great restaurants, but he rarely has enough spare time and attention to visit them. Rob spends the great majority of his day in meetings; in between he answers e-mails and voice mails. He and his colleagues often resort to instant messages because regular e-mails aren't attention

getting enough. Even his commutes are consumed by cell-phone conversations or voice mail. Occasionally Rob will put the top down on his convertible on sunny days so that the wind noise will dissuade callers from long conversations.

As the information assault persists, Rob worries about the implications of his attention deficit. Is he giving his family all the attention it deserves? As a manager, does he owe more attention to the employees who report to him? Does his inability to reflect quietly mean that he'll overlook something important in his business? These concerns persist, and Rob has no idea how to address them. No massive infusions of free attention seem to be forthcoming.

If this situation sounds familiar, you are not alone. We all know a person like Rob Lippincott (though, in fact, he is a friend of ours). He is your boss, your neighbor, your spouse—or perhaps even you. His experience represents today's most pressing problem: not enough attention to meet the information demands of business and society.

Rob and the rest of us live in an attention economy. In this new economy, capital, labor, information, and knowledge are all in plentiful supply. It's easy to

start a business, to get access to customers and markets, to develop a strategy, to put up a Web site, to design ads and commercials. What's in short supply is human attention. Telecommunications bandwidth is not a problem, but human bandwidth is. At one point, software magnates had the ambition to put "information at your fingertips." Now we've got it, and in vast quantities. But no one will be informed by it, learn from it, or act

Taking Stock

Insider trading is one of those rare Wall Street practices, or malpractices, in which investors want to stay beneath the attention radar. But here's what draws a blip on the Securities and Exchange Commission (SEC) screen:

- An unusually large amount of shares trade hands, particularly in companies about to take part in a promising, yet unannounced, merger. Of the forty-nine instances of insider trading that got the SEC's attention in 1998, twenty-seven involved mergers and acquisitions.
- A company that has received a downgraded rating, or has falling or flat share prices, gets a sudden spike in the amount of shares. The spike occurs just days before the company's discovery of, say, Prozac, or its equivalent, is announced.

Source: Steven Mufson. "Regulators Crack Down on Insider Trading." *Washington Post*, 26 February 1999.

Prominence as Wealth. "It is becoming popular in our affluent society to rank income in attention above money income. When rising numbers of people are able to afford the insignia of material wealth, then the desire for distinction will create a demand for attributes which are more selective than a large money income. In accordance with the law of the socialisation of luxuries, such attributes will be found among privileges which are still élitist. The undisputed common denominator of present-day élites is prominence—and prominence is nothing but the status of being a major earner of attention."

Source: Georg Frank. "The Economy of Attention." *Telepolis*, 12 July 1999. <<http://www.heise.de/tp/english/special/au/5567/1.html>>

on it unless they've got some free attention to devote to the information. Unfortunately, most organizations have precious little attention to spare. This leads us to a key principle of attention management.

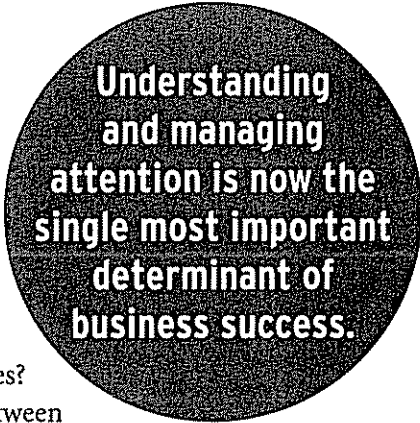
DEFICIT PRINCIPLE: Before you can manage attention, you need to understand just how depleted this resource is for organizations and individuals.

What is it that makes the economy hum, but is not growing? What's the limiting factor behind all those Web pages, business plans, strategies, books and articles, marketing initiatives, partnerships and alliances, and expansion initiatives?

An attentive human mind. Attention is the missing link between the "bloomin' buzzin' confusion" (to use the phrase of William James, an early fan of attention) of the world around us and the decisions and actions necessary to make the world better.

Today, attention is the real currency of businesses and individuals. Purist economists may take some umbrage at our calling attention a "currency." But it does have many attributes of a monetary instrument. Those who don't have it want it. Even those who have it want more. You can trade it; you can purchase it—any job description that falls under the "consultant" category exemplifies this. People work to preserve and extend what they already have—just look at the proliferation of caller ID devices and e-mail filtering software. And attention can be converted into other currencies, like accumulating enough "e-points" by viewing online ads to "earn" a DVD player.

In postindustrial societies, attention has become a more valuable currency than the kind you store in bank accounts. The vast majority of products have become cheaper and more abundant as the sum total of human wealth increases. Venture capital dollars have multiplied like breeding hamsters. The problems for businesspeople lie on both sides of the attention equation: how to get and hold the attention of consumers, stockholders, potential employees, and the like, and how to parcel out their own attention in the face of overwhelming options. People and companies that do this, succeed. The rest fail. Understanding and managing attention is now the single most important determinant of business success. Welcome to the attention economy.



**Understanding
and managing
attention is now the
single most important
determinant of
business success.**

Information Glut

Previous generations of citizens didn't have an attention problem, at least not compared to ours. They didn't have the Internet with its ever-increasing number of Web sites. At most, they had a few channels of broadcast television, a local newspaper, and a few magazines—*Life*, perhaps, which was mostly pictures, or *Time* or even *Reader's Digest* if they were particularly ambitious. Given the explosion of information sources since then, these previous objects of our attention seem rather paltry.

**The Sunday
New York Times
contains more factual
information in one edition
than in all the written
material available to
a reader in the
fifteenth century.**

But even those sources are voluminous compared to what our earlier ancestors consumed. The Sunday *New York Times* contains more factual information in one edition than in all the written material available to a reader in the fifteenth century. In 1472, for example, the best university library in the world, at Queen's College in Cambridge, housed 199 books. Francis Bacon complained of the available books in English that "the whole stock, numerous as it appears at first view, proves on examination to be but scanty."¹ Back in the days before Gutenberg, it took months or years for a few dedicated scribes to create a single copy of a single book. A literate medieval person, provided he or she was not interrupted by the Inquisition or bubonic plague, could probably read the book as fast as your typical modern American high school student. The problem was not finding time to read, but finding enough reading to fill the time. Information was a seller's market, and books were considered far more valuable than, say, peasants.

But now it's difficult to imagine how we could possibly devote enough attention to all the information in our society. Think about all the text in those 60,000 new books that spew out of U.S. presses every year, or the more than 300,000 books published worldwide. Think about the more than 18,000 magazines published in the United States alone—up almost 600 from the year before—with more than 225 billion pages of editorial content. There were more than 20 billion pages of magazine editorial content about food and nutrition alone!² Consider the 1.6 trillion pieces of paper that circulate through U.S. offices each year. Try scanning the 400,000 scholarly journals published annually around the world. If you

The Role of Control. "To control attention means to control experience, and therefore the quality of life. Information reaches consciousness only when we attend to it. Attention acts as a filter between outside events and our experience with them. How much stress we experience depends more on how well we control attention, than on what happens to us."

Source: Mihaly Csikszentmihalyi. <<http://www.thousandmonkeys.com/cs060499.html>>

prefer lighter reading, peruse some of the 15 billion catalogs delivered to U.S. homes in 1999, or the 87.2 billion pieces of direct mail that reached U.S. mailboxes in 1998.³

If you believe that print media are obsolete, consider the more than 2 billion Web pages in the world, a large chunk of which can't even be found with the best search engine. A U.S. government study estimates that the amount of Internet traffic doubles about every hundred days.⁴ And online information is not restricted to the Internet. A 2000 University of Illinois study revealed that there are 11,339 distinct electronic databases on the market (up from 301 in 1975).⁵ If you like to sit in front of larger screens, you have 80 percent more feature films to watch today than were released in 1990.

Of course, information arrives not only in the form of words and pictures. Every new product or business offering is a form of information that requires attention to be comprehended and consumed. During the 1990s, for example, 15,000 new products were introduced in grocery stores each year.⁶ Today the average grocery store stocks about 40,000 different items, or stock keeping units (SKUs). So, how do they get attention when the average household buys only 150 SKUs per year? How does a single brand of salsa attract your attention when two hundred other brands are available? The answer in the attention economy is to buy attention with money. Grocery manufacturers in the United States spent \$25 billion on trade promotions in 1999; this money went for stocking allowances for new products, advertising, coupons, end cap displays, and so forth. The number of dollars spent buying attention, interestingly, is about five times all the profits made by U.S. grocery chains in 1999.

Until the beginning of the twentieth century, most people still had enough wherewithal to learn an enormous percentage of the information available to them. In 1900, a well-educated person could still grasp the

Ignored Business Travelers Unite!

Have baggage handlers lost your Samsonite lately? Ever tried filing a lost luggage claim? Ever called Air Uganda's toll-free customer-service number? How do you say, "Do you speak English?" in Swahili? The crescendoing whines of an unprecedented number of business travelers has grabbed the attention of the National Business Travel Association (www.nbta.org), which is, in turn, trying to grab the attention of business travel service providers with its new complaint-sharing Web site (www.biztraveler.org). Input from the community of violated business travelers is cataloged and posted on airlines, hotels, car rental agencies. Now can I have my new golf clubs back?

Source: Joe Sharkey, "Horror Stories about Life on the Road Are Getting Some Attention That Could Make a Difference," *New York Times*, 20 October 1999.

Sheets to the Wind. "Accumulating productive capacity has always been the means by which economies grow, from seed corn to factories to mutual funds. Now the focus is shifting to your knowledge capital and relationships. Capital, too, is connecting, picking up speed, and becoming intangible. As it does, its future capability to create value becomes far more important than its cost. Productive capacity will be bought and sold at auction, rather than built on a balance sheet. And the most productive resource isn't even connected yet: attention."

Source: Stan Davis and Christopher Meyer, *Blur: The Speed of Change in the Connected Economy* (Reading, MA: Addison-Wesley, 1998), 175.

existing knowledge in almost every field of science and the arts (in fact, this was what a college education was supposed to provide). Human knowledge was still increasing at a rate that a single human brain could handle.

Then the size of humanity's information base zoomed sharply upward, as those pesky geometric growth curves are wont to do. Scientists, increasing in both population and specialization, uncovered more and more new knowledge about the nature of the physical universe. This allowed them to create new technologies that, in turn, sped up the search for knowledge. The technologies were used to communicate more information to more people, who then went on to create even more knowledge, which then had to be communicated to other people within the organization, thus creating the need for more bandwidth, and so on, and so on. This simultaneously virtuous and vicious cycle got us where we are today.

**How much
does an attention
deficit cost us
on the job
and at home?**

BANKRUPTCY PRINCIPLE: If you run an attention deficit too often or too long, there will eventually be serious psychological and organizational consequences.

We all understand the attention deficit problem at some level; we live it every day, even if we don't quite understand how to manage it. But what are the consequences of our individual and organizational attention deficits? One possible concern is the psychological impact of feeling constantly overwhelmed by the imbalance of information over our available attention. Such *info-stress* is not uncommon. In an Institute for the Future study describing a two-hundred-message-per-day communications environment, 71 percent of white-collar workers said they felt stressed by the amount of information they received each day; 60 percent felt overwhelmed.⁷ And yet we question how serious info-stress really is. Certainly no one has ever shot up an office or held coworkers hostage while claiming that info-stress had motivated the rampage. Info-stress, then, may not be enough for the average CEO to address the attention issue in a serious way.

Members Only. "In modern industrial societies, a growing percentage of the individual's social life occurs in 'secondary' relationships. . . . People must seek to satisfy their basic needs—including attention—in interactions governed directly or indirectly by the market. Attention has become increasingly available as a commodity to be purchased from people who give attention in the course of their work and expect to be paid for their services. Members of the dominant classes are best able to afford attention of this kind and consume the greatest amount."

Source: Charles Derber, *The Pursuit of Attention* (New York: Oxford University Press, 2000), 59.

So what other rationale is there for doing something about attention? How much does an attention deficit cost us on the job and at home? With a couple hundred messages zinging by every day, how do we know what's important? If we believe that humans work best when they have some time to reflect before acting, we need to assess how much room we have for concerted attention and reflection. There can't be much reflecting going on in an info-glut environment. And if we were all honest with ourselves, we could think of occasions when we could have reacted earlier to information in our environments. Without so much information bombarding us every day, we could have headed countless problems off at the pass. Further, it's unlikely that any project can get the concerted, long-term attention it needs if everyone is so busy responding to incoming e-mails and flashing voice mail lights. Any ambitious initiative in business needs substantial attention over substantial periods. Yet we're becoming used to skipping from topic to topic like fairy sprites. Can we focus organizational attention and stretch the organizational attention span when we need to?

Just as attention deficit disorder is diagnosed with increasing frequency in individuals (production of Ritalin, the primary drug used to treat ADD, is up ninefold since 1990),⁸ organizations can suffer from "organizational ADD."

Failures of attention management are undoubtedly responsible for many business catastrophes, but because attention is one of those slippery intangible assets, it's difficult to document its presence (though its absence is surely felt). How many executive teams have been justifiably accused of being asleep at the switch while a major business or competitive trend was overtaking them? How many managers can claim that their attention has been focused laser-sharp on the truly important issues to their businesses and careers? All of us make the tacit—and, we believe, correct—assumption that when managers and professionals devote attention to a business problem or issue, it will usually be resolved or get better. But what if there simply isn't enough attention to go around? What if attention is going to the wrong topics?

Because attention is one of those slippery intangible assets, it's difficult to document its presence (though its absence is surely felt).

Symptoms of Organizational ADD

1. An increased likelihood of missing key information when making decisions
2. Diminished time for reflection on anything but simple information transactions such as e-mail and voice mail
3. Difficulty holding others' attention (for instance, having to increase the glitziness of presentations and the number of messages to get and keep attention)
4. Decreased ability to focus when necessary

If you want to be successful in the current economy, you've got to be good at getting attention.

The risks of not managing attention carry opportunity costs for individuals and organizations. If you want to be successful in the current economy, you've got to be good at getting attention. If you want to keep your employees, you need to catch and hold their attention. If you want to sell products and services, at some point customers will have to direct some attention your way. If you run a public company and want your stock value to rise, you've got to attract the attention of investors and analysts. In other words, it's no longer sufficient to be a solid, competent organization; you have to stir the brain cells—and the hearts—of your intended audience.

Objects of Our Attention

Over the past several decades, we've witnessed an information revolution in business. The amount of internal electronic information available to managers has grown enormously. With the advent of the Internet, a manager has more external information handy at the click of a mouse than he or she could ever deal with. At the same time, the volume of noncomputerized information has continued to increase—volumes of phone calls, faxes, and paper mail are all up.

At earlier stages of the information revolution, we could continue to point to the need for more and better technologies as the primary shortcoming in managing information effectively. "Access to information" was the rallying cry that justified the expenditure of trillions of dollars on hardware, software, and telecommunications. But we've won the technology war. New technologies will continue to emerge, and they'll offer nifty new features that promise to make our information environments better. But if the past is any indication, they'll create an even greater need for attention. Computer scientists have prophesied the rise of *filters* and *agents*—tools for limiting and personalizing the amount of information someone receives—for decades now, but any progress in this direction has been woefully outstripped by progress (if you can call it that) in techniques for information

Blazing Attention Trails While Truckin' up to Buffalo

The Grateful Dead allowed its audiences to make bootleg tapes of their live shows since the late 1960s. This innovation got the attention of the free lovin' (and then, free bootleggin') hippies and never hurt the band's ticket sales. Many within earshot of a bootleg became ticket buyers. When Jerry Garcia died in 1995, the Dead was the largest grossing concert-draw in history. The bootleg idea was an effective, "free," noncoercive attention getter. The Dead's counterintuitive and revolutionary stance toward intellectual property was attractive to antiestablishment types. Anyway, the tactic fueled the Dead's primary profit vehicle—the live concert.

distribution and access. The Internet and e-mail alone have increased by several orders of magnitude the amount of information an individual can access easily. Most of us have learned the hard way that the answers to the attention deficit depend not on better technology or simply more information but on finding better ways to manage attention.

MARKETS PRINCIPLE: As with any other scarce and valuable resource, markets for attention exist both within and outside an organization. As with other markets, some people do a lot better than others in the attention markets.

Economies based on any scarce good have certain recognizable characteristics. For example, every economy has markets in which its key goods are bought and sold. No, there's no New York Attention Exchange, but markets for attention do exist both inside and outside organizations. Both on the Internet and in more traditional media like television, viewer attention is exchanged for money thousands of times a day. Anyone who wants to sell something or persuade someone to do something has to invest in the attention markets. If I want the attention of a large group of customers, I try to get it by paying to monopolize their TV screens, Web pages, mailboxes, and ultimately their brains.

Another fundamental principle of an economy is that the currency has to be scarce. When the currency becomes too widely available (as in Weimar Germany, for example), it becomes worthless. We're unlikely to see an inflationary rise in attention. The biggest risk to the attention economy would be that individuals could expand their attention at will—that they could engage in unlimited multitasking with no loss of comprehension or meaning. But we're not worried. True, our children sometimes make this argument when they try to do their homework while simultaneously watching television, listening to music, and sending instant messages over the Internet. But as much psychological research attests, attention has its definite limits. What is spent in one place cannot be simultaneously allocated elsewhere. Automobile safety researchers tell us that cell-phone users in cars are four times more likely to have accidents.⁹ Other studies suggest that heavy Internet users spend less time doing other things—watching television, for example, and more importantly, spending face-to-face time with other human beings.¹⁰ The American

Overheard. "We are the first society with ADD."

Evan Schwartz. "Interrupt-Driven"

Academy of Child and Adolescent Psychiatry suggests that children who watch a lot of television have lower grades in school, read fewer books, and exercise less.¹¹ There is only so much attention to go around, and it can only be increased marginally by somehow exercising the brain or by adding new sentient beings to the planet.

There is only so much attention to go around, and it can only be increased marginally by somehow exercising the brain or by adding new sentient beings to the planet.

Like other markets, some people and topics do a lot better than others in the attention economy. In *The Entertainment Economy*, consultant Michael Wolf argues that more attention is devoted to the entertainment industry now than in the past, and within that industry, the supply of attention goes to a small group of performers (think Gwyneth, Julia, and Tom Cruise).¹² Entertainment-oriented information is flourishing; the year 1998 brought thirty-nine new magazines about media personalities, more than any other type of content. Certainly the public attention seems focused on a small number of sports figures: Michael Jordan, Tiger Woods, Wayne Gretzky. Even in the political sphere, only the leading presidential candidates seem to get any attention or votes. During the 1990s, for example, the number of presidential election stories in four major newspapers published fifteen months before the relevant election almost doubled compared with the number published during the same period in the 1980s.¹³ When there is contention for attention, those who seek it turn to the most reliable attention getters: sex, hierarchy, calamity, and so forth.

Every economy has organizational and individual participants, and the attention market qualifies as an economy in this respect. Organizations participate when they want to attract attention from their customers, business partners, investors, or employees. But every individual in business is also an actor in the attention economy. We're all information providers, trying to attract attention to our memos, e-mails, projects, presentations, and careers. Although we know of no sociological study relating the ability to mobilize attention to career success, it's business common sense that those who get noticed get ahead.

Economies have currency and measurement systems. This has long been true for attention in a metaphorical sense, as we are always talking about "paying" attention. Since attention is invisible within human brains, we'll probably never have formal attention currency. But in this

Overheard. "Rule Number One is to pay attention. Rule Number Two might be: attention is a limited resource, so pay attention to where you pay attention."

Howard Rheingold. *Virtual Community*

book, we will describe several ways in which attention can be measured, either through self-reporting or more invasive techniques like brain wave or eye movement analysis.

In the absence of precise attention currency, we often use the proxy of time. I can't know for sure if my customer is paying attention to my advertisements, but I can at least determine the likelihood that he or she was watching during the time it appeared. I don't know if anyone is actually attending to my Web site, but I can measure the total time it was displayed on someone's screen. We'll show in chapter 2 that time is not the same as attention and is sometimes a poor proxy for it, but you measure what you can in this world.

All economies have both producers and consumers, supply and demand. The attention economy qualifies in spades. As noted, we're all producers of information, seeking the attention of consumers. But we're all information consumers as well, with only a limited amount of attention to bestow upon the world. To consume information, we must also be investors of our own attention portfolios. The payoff for allocating my attention in a specific direction can be great—I can learn something, change something for the better, fix what's broken, or gratify another human being.

But remember that if attention goes one place, then it can't go another. As a consumer of information, I have to be very careful about my attention allocation. And like airplane seats and fresh food, attention is a highly perishable commodity. Once a moment's attention is gone, it can never be brought back. Just as airlines have created "yield management" systems to maximize the value of their perishable seats, perhaps we need similar approaches to optimize the use of our attention.

Certainly the attention economy has laws of supply and demand. The most obvious one is that as the amount of information increases, the demand for attention increases. As Herbert Simon, a Nobel prize-winning economist, put it, "What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention."¹⁴ Yet the supply stays constant or even shrinks if there are fewer people available to attend to vastly more information. As more women have entered the workforce, for example, the number of people who watch daytime television or receive door-to-door salespeople



**Like
airplane seats
and fresh food,
attention is a
highly perishable
commodity.**

Overheard. "In the end it may turn out there's a cash market for human attention, the most coveted commodity of all."

Thomas Weber. "With Cash for Clicks, Web Marketers Turn Advertising on Its Head"

has decreased. The mismatch of demand and supply has already led to a widespread attention deficit that can only get worse. More information will be ignored, and many key business issues will not receive the benefits of concerted human attention.

As with stock and commodities markets, some segments of the attention economy are hotter than others. As the century turned from twentieth to twenty-first, the hottest attention market was the Internet and the world of electronic commerce. In this environment, attention was at a premium. Internet companies were highly motivated to get attention from Web users; the area has been called a gold rush. The real rush, however, was for user attention. To get it, firms were willing to spend several times their annual revenues on Super Bowl advertisements (e.g., Computer.com), give away millions in sweepstakes and lotteries (iWon.com, Freelotto.com), or sell goods at or below cost (buy.com).

One other law of attention economics is worth mentioning here. Like many other aspects of the "new economy," attention involves "increasing returns." The more we have of it to begin with, the easier it is to get more. If I'm a rock star, anything I do will attract attention. If I'm a very well known politician or CEO, any pronouncement I make will be covered by the press. Those who are rich in attention seem only to get richer. Even as media outlets proliferate, they all seem to be covering the same celebrities and the same issues. With so much contention for their readers' attention, they all pursue the most attention-getting topics they can find.

Internal Attention Markets

Just as the broad economy around us can be thought of in terms of attention, every organization has its own internal attention market. Although it overlaps somewhat with the external market, it's composed of internal information providers and consumers who either need attention or have it to give.

Here as in the external markets, there is an attention deficit. The sources of information supply have multiplied, whereas the sources of attention supply have not expanded and may even have shrunk. Many large firms have become leaner through reengineering and personnel

More information will be ignored, and many key business issues will not receive the benefits of concerted human attention.

Overheard. Of those who access the Internet at work, 50 percent use it for personal business.

The UCLA Internet Report. "Surveying the Digital Future"

reductions, and there are fewer people around to do the same or more work. In an economy based primarily on physical labor, increases in the amount of work done while a business employs fewer people should lead to unequivocal celebrations of productivity gains. In an attention economy, however, one has to wonder how the numbers all add up. How can we be paying attention to all the information flying around our organizations when there are fewer people to do so?

We believe that the numbers balance in internal attention markets because of two factors. One is the increase in the hours worked by professional and white-collar workers. Although analysts debate whether U.S. workers in general are working more hours, most agree that professional and managerial workers are working more hours. And many knowledge workers now devote considerable "off-hour" attention to work-related information. Remember Rob Lippincott, checking voice messages and e-mail at home? Do you listen to voice mail messages on a cell phone in the car to and from work? Do you check e-mail after dinner? Ever talk to coworkers while at home? And the wireless Web is only going to exacerbate the problem—imagine being able to access broadband anywhere, anytime. All these behaviors are means of coping with attention deficit in business—unfortunately at the expense of our private lives and families. Given the need to sleep, eat, and spend some time in social interaction with family members or friends, this strategy has limits—and many of us have already reached them.

The other factor that balances the supply of information against the limits of attention is more focus on, and more rapid processing of, informational messages. Even though much of our workday is now spent processing various types of messages, we cannot possibly spend as much time on each individual message in a two-hundred-message-a-day world as we did in the past. As a result, we delete e-mails based only on their headings, skim the contents of messages, and skip big chunks of voice mail messages. We also spend major chunks of our so-called home lives processing messages. Since few of us have a good sense of how to process vast amounts of information effectively, we're bound to allocate attention ineffectively. We don't devote enough attention to some messages, and we spend too much on others. And we have virtually no attention left for reflecting on what all the messages mean.

Since few of us have a good sense of how to process vast amounts of information effectively, we're bound to allocate attention ineffectively.

Any internal attention market has several definable roles. The market maker should be the leader of the organization. He or she determines who gets attention for what and controls the resources that can create attention-getting information. The CEO generally controls the resources and should be able to mobilize the attention of whomever he or she wants within the firm. After all, the CEO has power, money, and the communications department at his or her disposal. The leader of an organization also has to be attuned to what things other people in the organization are paying attention to. If they're paying attention to the wrong things

(as judged by the leader), the organization will be unlikely to move in the direction the leader desires. If the CEO wants my attention focused on cost control, but it's actually on deciphering politics after a merger, costs are unlikely to decline much.

The primary consumers of an organization's information can be employees or parties external to the organization, namely, customers, suppliers, investors, and so forth. We've all worked in organizations that sometimes seemed more interested in the attention of customers than that of their own employees (of course, this is not all bad). Firms totally preoccupied with market value may be overly focused on getting and managing the attention of investors or investment analysts. How much attention from these different groups should a firm be seeking? The right proportions will vary across organizations, although almost every organization should be seeking attention from a mixture of audiences.

It is getting more difficult both to capture the attention of your employees and to get a sufficient amount of your customers' attention at the same time. Your customers are just as distracted by all the things going on in today's complex information environment as the people in your own firm. One way to get attention from customers, of course, is to give them attention. Suppliers must use all the means at their disposal, including personalization technologies that provide retail-level attention at wholesale costs, to persuade customers that they are getting attention. "Satisfy the customer" has new meanings in a society in which technology is enabling companies to give attention to customers at an unprecedented level. In yet another "new economy" book, *The Experience Economy*, Joe Pine and Jim Gilmore argue persuasively that organizations need to offer

One way to get attention from customers, of course, is to give them attention.

Overheard. "To get attention you really have to be different, it's not enough just to be good."

Paul Schulman, quoted in Kyle Pope, "NBC Entertainment Chief Says Network Will Tone Down Shows' Explicit Content"

rich and compelling experiences to their customers if they want to attract their attention. Of course, creating those experiences itself requires a great deal of attention.

New Lens

As these examples suggest, the study of attention provides a new lens on business. Many business topics people thought they understood already look substantially different when the attention lens is placed in front of their previously naïve eyeballs. In our approach to the topic, we first describe attention's many facets, examining four perspectives that are particularly relevant in the business context: the measurement of attention, its psychological and biological dimensions, the technologies that attempt to structure and protect attention, and, finally, the industries in which attention management has become high art. These four perspectives illuminate familiar business activities. They also elucidate several business domains in which attention becomes a particularly critical element for success: electronic commerce, project and process management, organizational leadership, strategy, and information and knowledge management. The later chapters will address how managing attention can transform these and other business domains.

To close this chapter, we'll return to our friend Rob Lippincott, otherwise known as Attentional Everyman. Will the demands on Rob's attention decrease in the coming years? Will his attention somehow become less valuable to himself or his organization? Absolutely not. Rob's problem is hardly going to disappear, and it's likely to get worse. If it's going to get any better, Rob will have to become a diligent manager of attention. He'll have to use the tools of economics and measurement, technology, and psychobiology and apply the lessons from the attention industries to manage his own attention and that of his organization. As an e-commerce executive, he's playing in the most competitive attention market on earth. He needs help, and fast. Come to think of it, we'd better get him an advance copy of this book!

CHAPTER 2

**ATTENTION,
THE STORY
SO FAR**

Every business is an engine

fueled by attention. In the farms and fields of primitive societies, and in the factories of the Industrial Revolution, physical manpower drove the economy. In the information era, knowledge was power—the more a company had, the more successful it could be. But now, as flows of unnecessary information clog worker brains and corporate communication links, attention is the rare resource that truly powers a company. Recognizing that attention is valuable, that where it is directed is important, and that it can be managed like other precious resources is essential in today's economy.

Although a large body of literature on attention exists in the fields of psychology and physiology, very little has developed about the systematic understanding of attention in the context of business or management. As early as the

nineteenth century, academics have assumed that the definition of attention was self-evident. O. S. Munsell, a prominent early psychologist and president of Indiana Wesleyan University, put it this way: "On attention itself, it is needless to discourse at length; its nature and conditions are familiar to every thoughtful student."¹ William James (to whom both of us have a certain devotion, since we both spent much of our student careers in William James Hall), who devoted a significant portion of his life's work to the topic, defined attention this way: "Everyone knows what attention is."²

Yet the definition is complicated, as the word seems to mean something slightly different to almost everyone. Early psychologists were some of the first to study and define attention as one of the bedrocks of the entire discipline. The first psychology experiments on attention were all about sound. Scientists were fascinated by how the mind worked when a subject was trying to grapple with stereo sound: Which ear would the brain pay attention to, the left or the right? (It turned out that the particular ear doesn't matter much; more importantly, attention almost always is given to one's own name and to loud sounds.)

Mixed Messages

Early studies by Donald Broadbent in 1954 asked experimental subjects to listen to two or more messages simultaneously and then answer questions about, or repeat back, the messages they were hearing. These competing messages were delivered from loudspeakers or stereo headsets. In general, Broadbent found that the farther apart the sound sources (left and right headset speaker instead of both messages from the same speaker), the greater the attention listeners would give to both messages. About the same time, E. Colin Cherry began to study how subjects listen to two messages, one for each ear simultaneously, and then restate the messages. As it turned out, when the subjects were asked to pay more attention to one particular message (i.e., the right versus the left), they were very good at repeating the message they were asked to listen to. The conflicting sounds in the other ear didn't distract them too much—in fact, most couldn't even recall if the speaker in the nonattention ear was speaking English or if the recording was played backward. They could, however, report if the nonfocus speaker was a male or female or if the speech was replaced by a tone. In other words, as long as the subject was processing

similar messages that were processed in similar parts of the brain, attention was limited. But when the direction of the sound or the type of processing required changed (tones replaced by speech), attention could be more effectively split.

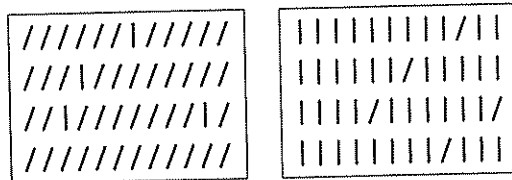
In more recent experimental designs on attention, the maxim is that “the eyes don’t lie.” If you want to know what people are paying attention to, follow what they are looking at. Now we all know that this is not entirely true. Who hasn’t feigned interest in a business meeting by staring directly at the speaker while thinking about plans for the weekend?

THE EYES DON'T LIE

THE BULK OF RECENT RESEARCH on attention psychology has been experiments in visual attention. Since the experts argue that the “eyes don’t lie,” researchers have designed tests to understand how quickly the eye can focus on a particular object in a visual field. Drawing from these experiments, we find better ways to manage attention in organizations. By maximizing both speed and attention, companies will create more competitive, more satisfying homes for their employees.

Employees must attend to a variety of inputs throughout the day. Getting attention is a function of the mind’s singling out specific items or issues from the distractions or “noise” in the surrounding environment. Experimental psychology has taught us several ways to get attention most effectively:

- **Pop-out effects:** In attention experiments, search times (the time necessary for the eye to find a given target) are longer when features of objects are similar. (It is easier to find an “S” than an “I” in a field of “T’s.”) Consequently, it would make sense that if you are trying to direct your employees’ attention, you should have unique features that stand out in the world around them. Similarly, in the exhibit shown here, people find the slanted lines in a field of straight lines faster than they find the straight lines among slanted lines. Researchers hypothesize that we are more accustomed to processing “straight lines”—it is easier for our minds to recognize the abnormal in a familiar field than to pick out the normal in an unfamiliar setting.



- **The boy-who-cried-wolf effect:** An extension of the pop-out experiments showed that novel features among a set of different novel features (“flankers”) do not gain a performance benefit. In other words, the company that is always doing something new and different will not gain any advantages by doing something new and different yet again. In these cases, novel has become expected and therefore yet another novel notion or initiative will gain little if any natural attention.

- **Counterintuitive role of distracters:** Evidence shows that attention getting is most effective when the field has other distracters, and that directed attention has no benefit when only one stimulus is presented within a visual field. Attentional benefits (enhanced performance) of directed attention occur only in the context of distracters. We’ve all met managers who try to keep their employees focused on the work and let some strategic planning group think about the external, competitive world. But the attention psychology literature suggests that employees will pay more attention to their work if they understand it in the context of the competitive world.

In other fields of study, attention has come to be related to a variety of different concepts. In political science, attention is closely related to the notion of agendas.³ In sociology, economics, and organization theory, attention is central to the study of search and decision making.⁴ The point is that every discipline takes its own cut at attention. Since our attempt in this book is to convince you that attention is the most important concept in the economy today, perhaps we need to present our own definition.

Attention involves understanding how to work despite an overabundance of "information competition."

Let's look at the word *attention*: Notice that its root word is *attend*. To attend to something is to tend it—to take care of it. A typical employee in today's world is expected to take care of more things than a worker would have at any other time in history. That is what makes this topic important. So much information and so many activities, people, and places are vying for our attention today that the mere *management* of attention has become one of our most important activities. Attention involves understanding how to work within an overabundance of "information competition," whether you are interfacing with customers, coworkers, or your own priority list. We do not necessarily notice the ticking of the clock or the sound of the noisy streets just because they are there. As discussed in chapter 1, frequent complaints about time pressures and information overload suggest that individuals have more things to do than they have the time and mental resources to do them. Thus, priorities must be established.

Our Definition

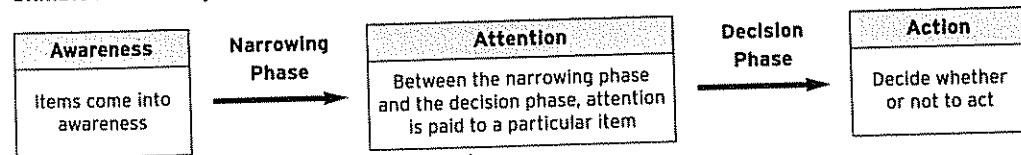
Our simple definition of attention is this: *Attention is focused mental engagement on a particular item of information. Items come into our awareness, we attend to a particular item, and then we decide whether to act.* Attention occurs between a relatively unconscious *narrowing phase*, in which we screen out most of the sensory inputs around us (we are aware of many things, but not paying attention to them), and a *decision phase*, in which

Laser Guidance. "The focused beam of light generated by a laser is hundreds of times more powerful than an ordinary light beam from the 100-watt bulb in a desk lamp. Ordinary, incoherent light consists of waves of many frequencies, in all phases, and moving in all directions. Light waves in the laser beam are coherent, organized at the same frequency and phase, and traveling in the same direction. This gives a laser the power to cut through even very dense materials that are normally difficult to penetrate with precision. This power and precision comes from the organization of its individual light waves. . . . the remarkable thing is that the light waves organize themselves"

Source: Suzanne Kelly and Mary Ann Allison. *The Complexity Advantage: How the Science of Complexity Can Help Your Organization Achieve Peak Performance* (New York: McGraw-Hill, 1999) 3

we decide to act on the attention-getting information. Without both phases, there is no attention. A causal relationship exists between awareness, attention, and action. For example, attention is a link in the decision-making chain prior to the decision to buy, move, or otherwise act. If you do not get to the point at which you are considering some kind of an action, you really have not given an item your attention. The action may be as simple as telling someone that you thought about the topic, or that you simply thought about writing it down, or that you made a mental note to yourself to remember it. Whatever the topic, our definition of attention requires some consideration of action, or at least a willful decision not to take action. In the end, you may or may not act, but your consideration of the action suggests that you gave the matter some degree of attention. Exhibit 2-1 shows the relationships between awareness, attention, and action.

Exhibit 2-1: A Graphic Model of Attention Processes



Beyond Advertising

Although it is fairly obvious that there are links between advertising and attention (links from which we'll draw some important lessons in later chapters), the concept of attention management is far broader than advertising alone. Leaders of organizations, for example, must manage attention on several levels: They must direct their own attention to particular projects and information, they must focus the attention of their employees on the most profitable activities, and they must attend to the most important buyers, suppliers, and other stakeholders. Equating attention management to advertising or customer-relationship management is like equating the motion picture industry with the selling of popcorn.

Bull's-Eye

Nor is attention management the same thing as simple awareness, a conscious recognition of a piece of information. The word *awareness* often is substituted erroneously for *attention*. The two terms are not interchangeable,

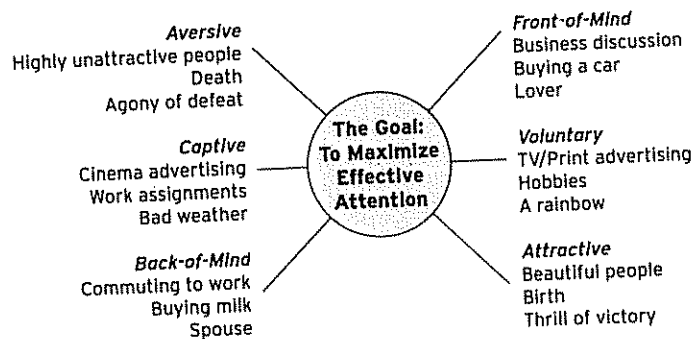
but are linked in a mental sequence. Awareness is a precursor of attention. Awareness becomes attention when information reaches a threshold of meaning in our brains and spurs the potential for action.

You can throw oodles of information into a person's awareness. The problem is that *everybody* is doing it. Awareness is vague, general information, and doesn't by itself catalyze any action. Attention is targeted and specific. It gets people moving. In a simple analogy, awareness is the target, and attention the bull's-eye.

TYPES PRINCIPLE: Six basic units of currency are exchanged in an attention market, each emphasizing a specific facet of focused mental engagement.

Now that we have a sense of the meaning of attention, we can move toward a more nuanced understanding of it. Six types of attention can be paired into three dimensions. Each pair contains two opposing kinds of attention: (1) captive or voluntary, (2) aversion-based or attraction-based, and (3) front-of-mind or back-of-mind (exhibit 2-2).

Exhibit 2-2: Paired Opposites: Types of Attention



The first two types of attention—*captive* and *voluntary*—have to do with choice. Attention is driven by rules concerning what is relevant and what is not, and who is permitted to attend to what and when. Although attention is often expedient, it can also be driven by curiosity, a desire to learn, or sometimes a desire to escape from the demands of the environment. People pay attention not only to things they *have* to pay attention to, but also to what they *want* to pay attention to. You pay voluntary attention

to things you find innately interesting, things you'd focus on even if doing so were explicitly forbidden. Captive attention, on the other hand, is thrust upon you. The inordinate amount of attention people pay to car accidents or other such tragedies exemplifies voluntary attention. The attention that "speeding school" attendees pay to a film on the tragedies caused by speeding and poor driving, on the other hand, illustrates captive attention. Of course, the coercion involved in captive attention may be much more subtle than an explicit command. For example, the teasers and slide-show ads projected on a movie screen before the main event are examples of forced attention. If you're going to see the movie, you'll have to sit there letting the cinema trivia questions rot your brain until you actually start caring about the answers.

The second category of attention, *aversive* versus *attractive*, has to do with carrot-and-stick motivation. We pay attention to some things because we wish to avoid negative experiences (aversive attention), whereas we pay attention to other things because we think they may bring us positive experiences (attractive attention). For example, Michelin tires advertisements elicit aversive attention. Television commercials show adorable babies using empty tires like sleds, while a voice-over proclaims, "Michelin. Because so much is riding on your tires." The underlying message is that if you do not buy Michelin tires, you will jeopardize your children's safety. Conversely, a car with a dubious safety record might be pitched exclusively on attractive attention: Ads would encourage consumers to remember that the machine is sleek, powerful, and prestigious enough to make any driver irresistible to members of the opposite sex, while downplaying the car's unfortunate tendency to burst into flames at speeds over thirty-five miles per hour.

Finally, attention may be *front-of-mind* or *back-of-mind*. Front-of-mind attention is conscious, focused, and explicit. You use this kind of attention to write reports, pay your taxes, read magazines, and have conversations. At the same time, your remarkable brain is paying back-of-mind attention to dozens of other subjects—things that will never even come into your conscious awareness unless something unexpected occurs. For example, you could be paying highly focused, front-of-mind attention to a cell-phone conversation while paying back-of-mind attention to driving home from work.

When you are first learning a skill or confronting new information, you will usually need to devote front-of-mind attention to it. But psychological

research suggests that when tasks become familiar, they can often be relegated to back-of-mind (or, as some psychologists have called it, automatic) attention, freeing up more focus for challenging tasks. Processing information in the back of the mind, or automatically, seems to free up front-of-mind attention.⁵ This suggests that organizational phenomena that currently require too much attention could be made routine through practice.

Combinations

In our research, we've found that the paired opposites for each aspect of attention are *not* mutually exclusive. In other words, the attention you're paying to any given item may be both captive and voluntary, both avoidance- and attraction-based, and both front-of-mind and back-of-mind. Think about it: You may be sitting in a dark theater, waiting for your movie

to start, when a trailer for another film appears on the screen, demanding captive attention. However, the trailer may be pretty interesting—so much so that within a few seconds you're happily giving it voluntary attention as well. The trailer has created in you captive and voluntary attention. If a car manufacturer develops a gorgeous automobile that also gets high safety ratings, the firm could simultaneously pitch its advertising toward both aversion-based attention ("This car could save your life . . .") and attraction-based attention (" . . . and women love it!"). A mountain climber may be paying back-of-mind attention to using his gear properly, while focusing front-of-mind attention on the path ahead or the gorgeous view. Different parts of his mind may be attending to different elements of the climb, but climbing is his sole focus.

Because the effect of combining extremes is additive, the ultimate attention-getter draws all six extremes of attention at once. This type of all-consuming attention seems to be a feature of what psychologist Mihaly Csikszentmihalyi calls *flow experiences*.⁶ Flow experiences characterize the most intensely rewarding and enjoyable moments of our lives, and we

We love to have our attention totally saturated, to an extent that some of us risk our lives for the experience.

The Power of Purpose. "When you want a thing deeply, earnestly and intensely, this feeling of desire reinforces your will and arouses in you the determination to work for the desired object. When you have a distinct purpose in view, your work becomes of absorbing interest. You bend your best powers to it; you give it concentrated attention; you think of little else than the realization of this purpose; your will is stimulated into unusual activity, and as a consequence you do your work with an increasing sense of power."

Source: Grenville Kleiser. <<http://www.geocities.com/Athens/Acropolis/7025/desire.html>>

human beings have a tendency to seek them out or create them. Extreme sports are good examples of activities that elicit captive and voluntary, avoidance and attractive, front-of-mind and back-of-mind attention. Bizarre as it sounds, many people devote enormous amounts of time, energy, and money to things like jumping out of airplanes so that they can fall like rocks, only to be rescued at the last second by pieces of nylon tied to their backs. We love to have our attention totally saturated, to an extent that some of us risk our lives for the experience.

One and Many

Another definitional issue is whether attention is an individual or a group phenomenon. Obviously, at its most basic level, attention is a physiological, sensory, orienting response in individuals. Early psychological treatises on attention asked readers to notice how they were holding their heads or positioning their eyes to figure out what was holding their attention. One of the early psychologists who studied attention at the turn of the twentieth century, W. B. Pillsbury, noted that “there is no act of attention that is unaccompanied by some motor process.”⁷ We constantly position our bodies to be able to “attend” to the most important external stimuli. For example, dogs cock their ears in the direction of a sound, and people generally orient their eyes so that a perceived image falls within the fovea area of their retinas. Other signs of sensory attention—as identified in Pavlov’s famous experiments—include increased muscular tension and other physiological changes detectable with instruments.

Obviously, focusing only on the physical aspects of attention limits the usefulness of the concept. We can pay attention without even opening our eyes or moving our heads. Attention is about psychology more than physiology; it is a selective, cognitive process through which we absorb selected information. Attention principally has been studied at this individual level—and that is where attention (in its basic forms) must be understood. Some researchers, however, have suggested that attention can be studied at the group level as well.⁸ William Ocasio of the University of

Examples of Collective Attention

- Everyone in a theater is usually facing and paying attention to the screen.
- As professors, we often teach in lecture rooms with squeaky chairs. When the noise levels of the squeaky chairs goes up, we’re certain that the collective attention to our lectures wanes.
- Members of the Secret Service scan crowds for individuals looking in a different direction from the rest of the crowd—an indication of attention’s departing from the social norm.
- Workers in U.S. steel factories in the 1950s were much more likely to pay attention to the quality of their output, whereas Soviet workers of the same era focused more on quantity.

Michigan brought the collective nature of attention into the executive suite by arguing that corporate strategy can be understood as a “*pattern of organizational attention*, the distinct focus of time and effort by the company on a particular set of issues, problems, opportunities, and threats, and on a particular set of skills, routines, programs, projects and procedures.”⁹ We’ll discuss at greater length in chapter 10 how strategy relates to attention.

When a group of individuals is brought together, each person with his or her own focus of attention, an aggregated, collective attention is likely to exist. Of course, organizational attention is fundamentally related to individual attention in that organizations are no more than groups of individuals. Like the individuals who form them, organizations are limited in their information-processing and decision-making capacities. As the political scientist Graham Allison pointed out after studying the Cuban missile crisis, “Companies are physically unable to possess full information, generate all alternatives . . . the physical and psychological limits of man’s capacity as alternative generator, information processor, and problem solver constrain the decision-making process of individuals and organizations.”¹⁰ Although it is possible for people and organizations to “buy” additional attention resources through delegation and specialized intelligence units, the organization is still allocating attention to one thing and not another, just as individual attention has to be rationed.

Clearly, there are problems with taking a concept that is best understood at an individual level and applying it to an organization. Organizations are complex social systems that cannot be fully understood when analyzed solely in terms of an aggregation of their individual components. People come and go, but organizations preserve some forms of knowledge, cognitive systems, memory, and intelligence, as well as a capacity to learn and adapt to rapid environmental changes.¹¹ While organizational attention is fundamentally *embedded* in individuals, it can nevertheless be studied successfully at the group level. Furthermore, we believe that attention comes to be *institutionalized*—that is, a consensus builds around what employees should be paying attention to and how they should be doing so—in organizations. Once institutionalized, corporate attention is more than a mere aggregation of individual attention. Though collective attention might seem somewhat unusual, it actually is a common phenomenon.

Overheard. “When the rate of change outside an organization is greater than the rate of change inside, the end is near.”

Jack Welch, quoted in Nick Campbell, “Building Job Security”

Structural Distribution

In short, organizational attention involves rich, parallel processes, whereas individual attention is based on sequential processes. Organizations set up social, economic, and cultural structures, routines, and procedural and communication channels that link organizational members to one another and to the environment. Consequently, the organizations govern the allocation of the decision makers' attention in their decision-making activities. Thus, organizational attention is not a shared activity of a collective mind, but an activity structurally distributed throughout the company's context.¹² Companies learn to allocate attention—marketing will focus on *this* set of issues, the Japan office will think about *those* customers, and Jim in the mailroom *always* plans the parties. A division of labor in organizational attention allows a group of people to pay attention to complex systems in ways that no individual could do alone.

PUNCH-THE-CLOCK PRINCIPLE: Attention management is not time management.

One misconception must be dealt with right up front, or it will haunt us through the book. We repeat the principle for emphasis: *Attention management is not time management.*

We know that the field of time management has practically exploded with popularity since the 1960s. Time, like attention, is a limited resource and irretrievable once spent. The current profusion of books, articles, personal planners, and handheld organizers demonstrates the popularity of time management tools. These tools underscore how important it is for us to avoid "wasting time." Many Americans experience frustration if forced to spend time away from desired tasks or a sense of guilt if they use time to relax. Organizations, managers, and employees, however, are seeking to be more *effective*, which requires more than an allocation of time to tasks. Effectiveness is defined as much by what is accomplished, and how, as by when it is accomplished.

Blinding Flash

Certainly, something to which people allot a good deal of time in practice can receive minimal attention. Anyone who has been in school probably knows the feeling of sitting through a lecture for what seems hours

**Companies that
succeed in the future
will be those
expert not in time
management,
but in *attention*
management.**

on end, while thinking about something totally unrelated. (Since we both teach, we know that a number of our students do this, and we are not surprised: Dating, a forthcoming party, and even lunch can be much more interesting and attention getting than the topics covered in classrooms.) Conversely, a huge amount of effective attention can be given to something in a small amount of time. One blinding flash of insight or a compliment to a coworker may not take much time, but may result in focused attention worth a whole year's worth of work. People truly successful at managing their time may not be very good attention managers. Companies that succeed in the future will be those expert not in time management, but in *attention management*.

Compensation Calculus

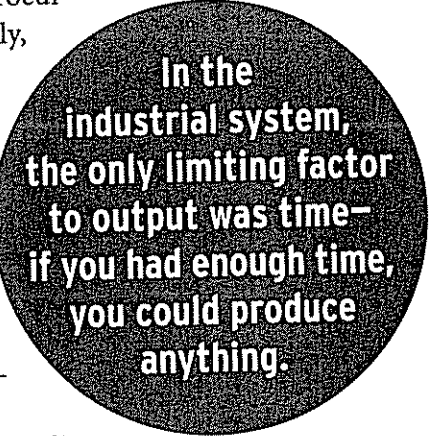
But, you say, what about the adage "Time is money"? Like all axioms, this one is grounded in truth—or at least in the truth of the twentieth century. During your lifetime, the general rule of business has been that the more time you logged, the more money you made. This simple equation worked very nicely in the industrial age.

The image of Charlie Chaplin hanging off a clock in his classic movie *Modern Times* is perhaps one of the best metaphors for the industrial age. Before the industrial age, people were paid for output produced, not time logged. Output received attention and money because it was scarce. In the Dark Ages, people had a lot more free time (in their relatively short lives) than they had output. A European peasant who produced twelve bushels of wheat could trade his harvest for a new pig, or the reassurance that the baron wouldn't kick him out of his home, sell his children, and marry his wife. A Japanese artisan who forged a nifty new sword could trade it to the samurai for, say, the promise that the samurai wouldn't use it to lop off his head. If you were faster at producing the wheat or sword, and if the quality was the same, all the better. You made even more money. The rub was that if you produced nothing, you received nothing, no matter how much time you logged.

Then came the industrial age, and no longer was one individual responsible for the entire manufacture of a product. In this Adam Smith division-of-labor world, a new compensation calculus had to be devised.

Time became a useful proxy for output. People began punching clocks and were paid for the amount of time they spent on the job, regardless of output. From this grew the seemingly perpetual struggle between labor and management to increase productivity while keeping employees happy. Just as this battle was heating up, along came Henri Fayol and Frederick Taylor, the first management consultants or business gurus. They introduced time and motion studies as a means of procuring more product in a given block of time. Additionally, employees were offered benefits, often in the form of time off—coffee breaks, vacation time, sick pay, maternity leave, and so forth. In the industrial system, the only limiting factor to output was time—if you had enough time, you could produce anything. Our world became all about the clock, and our attention and rewards systems switched to time. We came to measure our financial success in terms of dollars per hour. During this period, business developed the first piecework incentive systems, which rewarded workers for jobs completed within specified time limits.

In the current age, the utility of such a system has long since disappeared, although the time-based system has become deeply ingrained in our culture and work practices. Professional service employees still think about their hourly billing rate, and employers still prefer to pay employees by time rather than output, even though this limits both of them in terms of money and output.



In the industrial system, the only limiting factor to output was time—if you had enough time, you could produce anything.

Billionaires and Paupers

In this new century, both time and output likely will become less important. After all, what do either time or weight (of output) really have to do with this emerging era that has been variously described as the century of Internet time, knowledge capital, or networked commerce? In a world in which speed, knowledge, and creativity are vital, doesn't it seem odd that most of us are still paid for how long we take to complete a job or how much the deliverable weighs, rather than the attention paid to the project?

Now that the "time century" is over, we have begun to formulate a new equation for measuring the worth of workers and their companies—shareholder value. It is an appealing measure because it is relatively simple and is measured "objectively" (at least according to economists). In a

Rather than receiving payment for time logged or output generated, employees are now paid for the usefulness of their ideas.

free market, investors (just about everyone with a spare dime these days) decide how much value is in all the time input, product output, and everything else in a company; then they pay money to have a stake in the future of the firm. Owners of the company have devised an interesting new reward method for their employees as well—they offer stock options to the workers. Stock options tie compensation to the future worth of the company, so that all the employees are motivated to pay attention to the things on which stockholders are willing to spend money. As long as

shareholders pay increasing amounts of money for their pieces of a firm, the stock options are as good as platinum. As soon as shareholders become disappointed in the performance of the company, however, the stock options lose value, turning “paper billionaires” into paupers overnight.

Essentially, analysts of shareholder value try to measure the *quality* or *value* of ideas. Rather than receiving payment for time logged or output generated, employees are now paid for the *usefulness* of their ideas. Already we are beginning to implement this new system. Whether acknowledged or not, many companies retain, promote, and award bonuses to their employees based on their employees’ ideas and their ability to implement those brainstorm. And there is always room for ideas, regardless of the type of work an individual is performing. The salesclerk who comes up with a new way to sell shirts should be rewarded for the idea—especially if that new method is passed on to others and improves the firm’s overall sales ability.

But quality ideas are not enough. Ideas need to be disseminated throughout the organization so that not only the originator, but all the employees in the company pay attention to the idea and incorporate it into their work. We want every customer to feel the effect of the idea and buy more products or seek more service from our company.

Niggling

For a closer consideration of the relationship between time and attention, let’s consider a real-life financial-services technology consulting firm (in the interest of anonymity, we’ll call it FinByMe). The leadership of FinByMe wanted to know how the members of the firm collectively and individually divided time and attention—particularly the split between

innovative technology-development projects and business logistics issues. Employees had complained that too much of their days were wasted on niggling issues (e.g., copying each other on memos, tracking down people inside the client organization with whom they needed to talk, making sure their computers were loaded with the latest versions of the software they were developing). These distractions began to take away from their ability to innovate as effectively as they had in the past. Because the leaders of the firm felt that their key to success was innovation, they wanted to see if this was one group's view or a widely held belief.

Management could have followed the employees around with a stopwatch, or they could have asked them to keep a log of their time for a few days. Instead they went for the easy approach and asked people in the firm to state what percentage of their total time they were devoting to "busy work" versus more creative technology development.

The results showed that FinByMe's team was spending about 6 percent of its total time on "housekeeping" activities versus 20 percent on innovation. Although routine work can perhaps be reduced from 6 percent to 4 percent, it can never be banished completely. Managers figured that things were fine as they were and decided not to take any action. A little later, however, on our recommendation, they went back and surveyed the employees on how much attention they were spending on housekeeping (logistics) and innovation. It turned out that the actual percentages were almost inverse from what the employees had reported earlier: They now showed 18 percent on logistics and 8 percent on innovation and technology development.

Given that attention precedes all motivated action, the prognosis for FinByMe was grim. We figured that the firm was unlikely to maintain a high level of innovative activity by devoting such a small amount of attention to it each day. Management was confused by our findings and even more befuddled when it came to thinking up solutions to an attention deficit in their firm.

Here are some of the solutions we suggested:

- *Create attention agendas.* If our world is not about time anymore, why continue to run our meetings around time? A few enlightened (by our definition) executives have started to work with *attention agendas*. Quite simply, this means taking the total amount of attention you expect your attendees to spend on meeting topics. Considering

this amount 100 percent, you then arrange the agenda accordingly. Figure it this way: I want 50 percent of their attention to go to this topic, 30 percent to this topic, 15 percent to the next idea, and 5 percent to the last. Most attention probably will be given to the first and last topics of the meeting. The middle topics of the meeting should be subjects that demand less attention. Manage the meeting by asking participants questions: "Have we given enough attention to this topic?" "How can I get more of your attention on this issue?" "Are we putting enough of our attention toward this to get it accomplished?" Don't assume that, like time, you know where attention is going—you don't! You have to ask questions to understand attention and influence it.

- *Focus attention on novel ideas and their implementation.* Because of our output- and time-based heritage, we tend to think that paying attention to the time we put in and the products we produce will be enough to get the results we want. In today's world, that just isn't the case. As an entrepreneur, you can spend your entire life putting in fifteen-hour days efficiently producing slide rules and, apart from a few novelty items, you are unlikely to sell anything. As an employee, you may be hired to make slide rules (fifteen hours a day with great output); you will be paid for your services until the company goes out of business—which it will. As a consultant, you may spend a year producing a 2,500-page report (in four colors with accompanying PowerPoint presentation) that recommends your client make slide rules. The company that takes your advice will probably end up suing you. But in most cases, you will just be laughed out of the room, acquire a poor reputation, and find yourself clientless. You and the others around you must focus on innovation and implementation. If most of your attention lies outside these two categories all the time, you are doing everyone around you a huge disservice. Reward people for having ideas and for actually implementing those ideas. Drive this notion down to the very lowest levels of your organization. You may no longer be able to exercise "control" as you

Innovation and Differentials. "The only way to survive and thrive is by paying attention to new ideas from any source. Look at the engineering slant: differentials make the world go 'round, literally. High pressure at one point in a pipe and a low pressure at another point create a high differential and high fluid flow. Electricity is similar: high difference equals high potential equals high current flow. Knowledge transfer works exactly the same way."

Source: Jane M. Howell and Christopher A. Higgins, "The Impact of Flexible Scheduling on Employee Attendance and Turnover," *Administrative Science Quarterly* 35 (June 1990): 317

could in a time-based or output-based company, but you'll gain the loyalty of your employees and your customers.

- *Pay for attention.* As employee, contractor, and corporate values evolve, so too must recognition and reward criteria. Managers must try to ascertain where employee attention is going, and reward those who are focusing their mental engagement on the issues that really matter to the success of the organization.
- *Create attention guards.* In the case of FinByMe, one of the most important recommendations we made (and one the company followed with some success) was to make sure that a division of attentional labor would allow people tasked with innovation to concentrate on it more effectively. FinByMe hired an extra assistant to manage the logistics of the firm. This new position took away the other employees' burden of having to remember bits and pieces of logistics issues, and it put the burden, instead, directly on one person. Having been freed from their worries that these issues might somehow fall between the cracks (or the even larger attention drains of "cleanups" after they fell between the cracks), almost everyone in the firm was freer to focus on innovations and creative work.

Companies, both start-ups and multinational empires, are interested in ushering ideas from start to finish in the most efficient way possible. Attention—not time, not ideas (without implementation), not implementation (without ideas), not awareness—is indispensable for that efficiency.