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Blaming the Rat

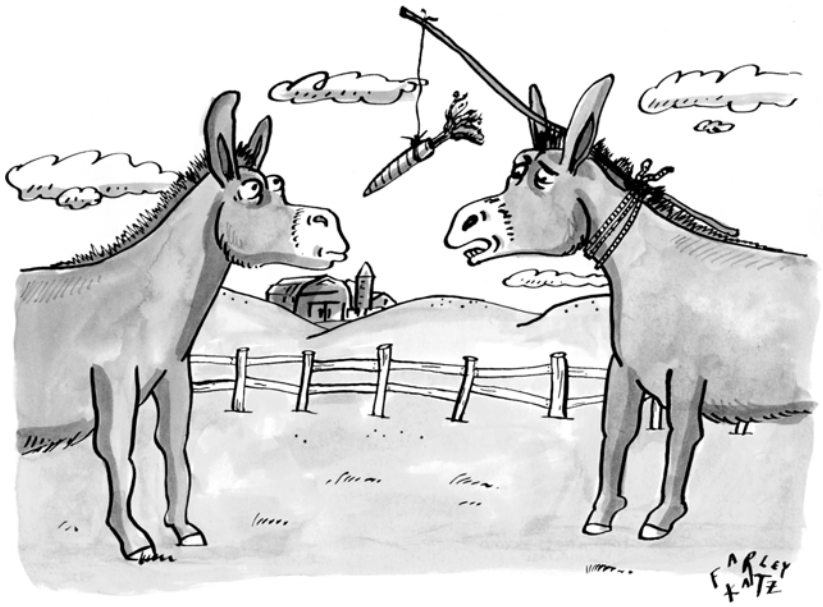
Incentives, Motivation, and How They Interact

People respond to incentives, although not necessarily in ways that are predictable or manifest. Therefore, one of the most powerful laws in the universe is the law of unintended consequences.

-Steven D. Levitt and Stephen J. Dubner
SuperFreakonomics [1]

According to numerous studies in laboratories, workplaces, classrooms, and other settings, rewards typically undermine the very processes they are intended to enhance.

-Alfie Kohn
Why Incentive Plans Cannot Work [2]



"It's the only way I can get myself out of bed in the morning."

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- **The relationship between incentives and behavior is often vastly more complex than how social scientists portray it.**
- **Our mix of jobs has changed profoundly while our approach to incentives has not.**
- **Intrinsic motivation is fragile and relies on autonomy, mastery, and purpose.**
- **Compensation is about perceived fairness and relies on relative, not absolute, value.**
- **Goals have two edges: they have drawbacks as well as benefits.**

A North Star Is More Important Than a Gold Star

Recently some of our portfolio managers and I were on a conference call discussing compensation practices with a chief executive officer (CEO) whom we admire. This company has done a particularly good job of allocating capital, and we were interested in gaining insight into how the company's incentive structures contribute to the decision-making process. As the CEO described the company's decisions and its incentive systems, it became immediately clear that many of the executive team's decisions failed to maximize the pay for management. The excellent capital allocation was not the result of the company's incentive programs and it may have actually been in spite of them.

As we hung up the phone we looked at one another with the same thought: the day this CEO leaves the company, all bets are off. He is not making good decisions because of his incentive compensation program; he is making good decisions because he thinks and acts in the long-term interests of the company. Indeed, operating under the same incentive program another executive could make decisions that would be much better for him or her individually and much worse for the company and its shareholders.

Economists love to talk about incentives and how they shape behavior. They often assume that poor behavior is the result of faulty incentives—think of the recent financial crisis—and that good behavior reflects well-structured incentives. But as the anecdote about the CEO demonstrates, the relationship between incentives and behavior is often vastly more complex than how social scientists portray it. In many cases, drive and mindset are more important than the compensation program.

For shareholders, the goal is to find an intrinsically-motivated leader who has a clear sense of purpose and is inclined naturally to make good capital allocation decisions. Psychologists and economists portray a sense of purpose and value creation to be at odds with one another, and often suggest that leaders choose one or the other. This is a false choice. Great leaders combine purpose with value creation, in large part by maintaining a long-term point of view.

The Migration from Algorithmic to Heuristic

One of the allures of incentives is the possibility that they encourage behaviors (cause) that lead to a desired outcome (effect). So an incentive system must determine the outcomes it seeks to promote, what behaviors lead to those outcomes, and how to encourage individuals to engage in those behaviors. This means there are multiple ways that an incentive can go awry. For example, if the relationship between cause and effect is complex, it may be difficult to pinpoint the behaviors that lead to the desired outcome. So the effectiveness of an incentive is generally related to the nature of the task.

In his excellent book, *Drive*, Dan Pink distinguishes between algorithmic tasks and heuristic tasks. [3] With an algorithmic task, there is a recipe that you can follow to attain the goal. Employers can continually improve the step-by-step procedures in an algorithmic task, and following the formula will allow the employee to meet the objective. A checklist can help ensure that an individual effectively executes an algorithmic task. [4]

Heuristic tasks have no set steps and require individuals to experiment in order to solve problems. Tasks in environments that are evolving and that require novelty are heuristic. Examples include setting corporate strategy, developing a new advertising campaign, or coaching a team. Crafting incentives is inherently more challenging for heuristic tasks because cause and effect are difficult to link.

Almost all jobs combine algorithmic and heuristic elements and the process of creating value requires each. But it is important to acknowledge that over the generations the economy has shifted from a reliance on algorithmic tasks to heuristic tasks. [5] Imagine industry a century ago and you might picture a large steel mill. Such a mill would have lots of employees following instructions—transporting ore, feeding furnaces, shaping steel—and only a handful working on

crafting new instructions. Devising the procedures and implementing them were both important, but manpower was disproportionately allocated toward algorithmic tasks.

Today, a research and development lab is a fitting picture of industry. Scientists, for instance, may be working on developing a drug to cure an illness. If the R&D pays off and the recipe for the new drug is ready to go, manufacturing the product is relatively straightforward and inexpensive. Again, algorithmic and heuristic tasks each contribute to value creation, but the emphasis is on the heuristic tasks.

Research by McKinsey, a consulting firm, shows that over 40 percent of employees in the U.S. today have jobs based primarily on heuristic tasks, and that 70 percent of the new jobs in recent years are heuristic. Further, the average wage for an employee doing heuristic tasks is one and one-half times the wage of a worker dedicated to algorithmic tasks. [6] Employees engaged in heuristic activities appear to be the main drivers of value creation. [7]

Here's the problem in a nutshell: our mix of jobs has changed profoundly while our approach to incentives has not. As a consequence, we have employees who have lost motivation and faulty incentive programs that have introduced a raft of unintended consequences.

Why Do Gamers Waste So Much Time? – Intrinsic versus Extrinsic Motivation

If you've ever been around a school-aged child who has access to video games, you've probably had a thought along these lines: How can this kid spend *hours* playing video games without ennui but struggle to do just a few minutes of homework? After all, hard work in school can lead to improved grades, admission into a more selective college, and a better job, while completing a campaign in *Battlefield: Bad Company 2* doesn't seem to improve your lot in life at all. But clearly there's something about playing a video game that's vastly more engaging than doing schoolwork, and tapping that something may be essential to motivating behavior.

For decades, psychologists believed that two kinds of drive were essential to human behavior. [8] The first drive is biological and reflects the need for food, water, shelter, and reproductive activities. The second drive is external and comes from rewards and punishments in the environment. The idea is that if you reward someone for a certain behavior you'll get more of it, and if you punish them you'll get less of it. This type of extrinsic motivation is at the core of a lot of training techniques.

But scientists have long acknowledged that there is behavior that the classic sources of drive do not explain. Under certain conditions, some tasks provide intrinsic reward. Completing the task doesn't satisfy a biological need or come with extrinsic recompense, yet people are willing to spend valuable time and energy doing it simply because they enjoy it. They are intrinsically motivated. One example is open content production, best exemplified by contributions to Wikipedia. Hundreds of thousands of individuals have given their time and expertise by contributing to articles on Wikipedia without any compensation. Researchers who have studied this behavior conclude that "the incentive to freely contribute largely comes from intrinsic motivation." [9]

You might assume that leaders of organizations are really excited about intrinsic motivation and are keen to tap into it. The challenge is that intrinsic motivation only thrives when an organization fosters autonomy, a sense of mastery, and a feeling of purpose. Unfortunately, these conditions are frequently absent in a corporate setting. Many popular management techniques—budgets, goal-setting, and financial reward systems—actually undermine the conditions that encourage intrinsic motivation.

Autonomy and the Four "T's"

Autonomy means you have a sense of "volition and choice," while a lack of autonomy is associated with "the experience of pressure and demand toward specific outcomes" that are deemed to be "external to the self." [10] Autonomous regulation has been positively linked to improved results (especially in heuristic tasks), greater well-being, and more persistent performance. Studies that contrast organizations that treat their employees either as players (autonomy) or pawns (directed) find better results and greater satisfaction at firms that encourage autonomy. [11]

Dan Pink suggests considering four "T's" when assessing whether an organization is promoting autonomy. The first is task, or what you choose to work on. Giving employees some latitude to decide what they'd like to pursue contributes to their intrinsic motivation. Perhaps the best-known example of this idea is the policy of "15 percent time" introduced at 3M, a diversified technology company, over a half century ago. A number of 3M's most important innovations, including Post-it notes, sprung from 15 percent time. More recently, Google embraced a similar idea with 20 percent time—basically a day a week to work on side projects. Gmail and Google News are two products of 20 percent time. [12]

The next "T" is time. In a sense, this issue is coming full circle. Before the Industrial Revolution, workers including farmers and craftsmen were generally paid based on output—what management researchers now call a "results-only work environment" (ROWE). The Industrial Revolution de-emphasized individual efforts and oriented output around an integrated succession of algorithmic tasks. Not only was time equal to money, but all employees had to work at the same time to achieve maximum output. Because of inertia, the mentality of working from 9-to-5 has carried over to those individuals doing heuristic work.

As fewer jobs require employees to work elbow-to-elbow in real time, more companies are adopting a ROWE. Employees pick the time and place to get their work done, and employers evaluate their performance based on results. Best Buy, the large electronics retailer, was one of the earlier adopters of ROWE and over 4,000 employees participate in the program. The University of Minnesota's Flexible Work and Well-Being Center conducted a survey of over 600 Best Buy employees and found that ROWE employees had lower turnover intention, higher job satisfaction, and greater organization commitment than those employees who were not part of the ROWE program. [13]

Technique is the third "T." This means that workers should have as much flexibility and discretion in determining how to do their jobs as possible. There are, of course, right and wrong ways of doing things as well as costly and inexpensive approaches. An employer can encourage a balance by establishing a set of ground rules for employees and then letting them select the best way to get the job done. One company that has done an effective job of promoting autonomy through technique is Zappos.com, which was acquired by Amazon.com in 2009. The company's guiding principle is to create the best possible customer experience and individual employees are given lots of flexibility to meet that goal in the way they see fit.

The final "T" is team. The concept is that teams are more effective if they are self-organized around a task, project, or goal than if individuals are assigned to teams. Opting into teams promotes an alignment of interests and creates an environment of accountability. No one wants to let down the team that they selected.

Autonomy is about an employee feeling that he or she has perceived control of his or her job. What defines that control may vary among employees and may present a challenge for management to assess, but what is clear is that a lack of perceived control dents motivation.

Mastery—It's Getting Better All the Time

The second component of intrinsic motivation is mastery. To be engaged in an activity an employee must feel that his or her ability closely matches the challenge of the task. Tasks that are too easy or too difficult reduce motivation. Mastery is mostly a sense of progress toward a goal that's never fully attainable. And mastery matters: in studying over 1,700 scientists and engineers, researchers found a strong correlation between the importance of intellectual challenge and patent applications. While salary was important for these scientists and engineers, intellectual challenge showed a much higher correlation with novel ideas than pay did. [14]

Core to mastery is a belief in the benefit of hard work and a specific structure to that work. Intrinsically-motivated individuals are willing to persevere in their attempt to achieve long-term goals. Carol Dweck, a professor of psychology at Stanford University, distinguishes between a fixed and a growth mindset. A fixed mindset is the sense that your qualities—intelligence, athletic ability, musical skill—are carved in stone. A growth mindset is the belief that you can cultivate your skills through hard work. Intrinsically-motivated people tend to have a growth mindset and perceive effort as a part of the reward. Effort also demonstrates commitment and provides meaning to a task. [15]

However, hard work does not mean simply putting in lots of hours. Hard work means operating at the fringe of your ability and getting accurate and timely feedback in order to help improve performance. In many organizations, employees find their tasks either too difficult or too simple and management fails to provide quality feedback. Examples of mastery exist in fields like music and athletics. [16]

The strive for mastery has no finish line. There is always something that you can improve. The writer can craft a more elegant sentence, the golfer can tweak her swing, or the executive can improve the company's processes and position. Intrinsically-motivated people always see, and seek, ways to improve. The strive for improvement is a signature of a growth mindset.

Mastery also includes a sense of competition. Part of performance feedback is keeping score, and intrinsically-motivated individuals are frequently fiercely competitive. In activities including sports and business, mastery is not only about individual improvement but also relative improvement versus competitors. For instance, a retailer that improves its inventory turnover from 3.0 to 5.0 times will remain behind a competitor that goes from 4.0 to 7.0 times during the same period. Better absolute performance does not seal victory if the competition is improving at an even faster rate. [17]

Purpose—Working for Something Bigger

The final part of intrinsic motivation is purpose, a sense of serving a greater objective. Barry Schwartz and Kenneth Sharpe, professors at Swarthmore University, refer to Aristotle's word to describe purpose or aim: telos. They write, "The telos of teaching is to educate students; the telos of doctors is to promote health and to relieve suffering; the telos of lawyering is to pursue justice." [18] Intrinsically-motivated people are not simply going through the motions to reach an end; they believe that their actions contribute to a greater good. Purpose often comes through as passion.

Most vocational professionals go into their chosen field with a clear sense of telos. Teachers really do want to educate and doctors want to heal. But in many fields, incentives and goals—which are meant to encourage good outcomes—ultimately reduce the motivation of the professionals. Purpose is fragile, and employers have to be careful to foster it. Dan Ariely, a professor at Duke University who has Ph.D.'s in psychology and business administration, provides two examples of how to dash a sense of purpose.

The first is an experiment that Ariely conducted along with some collaborators. They pinned up signs that read, "Get paid to build Legos!" and drew a sample of subjects who were, not

surprisingly, Lego fans. All the subjects were offered the same basic deal. They were asked to construct fighting robots out of 40 Lego pieces, and the researchers offered to pay $2.00 for the first one, $1.89, for the second one, $1.78 for the third one, and $0.11 for each subsequent robot. Once the subjects felt that they were done, the researcher paid them. The researchers also made it clear that they would have to disassemble the robots in order to reuse them.

Here's where the experiment got interesting. For one-half of the subjects, the researcher took the completed robot and put it in a box, untouched. For the other half, the researcher disassembled the robot in front of the subject while he was building the next one. In both cases it was clear that the Legos would be used again, but one group saw their work preserved while the other saw it dismantled. Note that the subjects were self-selected to be Lego enthusiasts, and that the monetary rewards were identical.

When Ariely and his colleagues tallied the results, they found that the group that saw their Legos preserved built almost 50 percent more robots and earned 25 percent more money than those who saw their work dismantled. The subjects who saw their Legos dismantled lost their zeal because the researchers effectively treated their work as meaningless. [19]

A shift in norms can also deter purpose. Because humans are inherently social, a set of social norms has evolved. Social norms encourage day-to-day acts that aid others: helping a friend move, opening the door for a colleague, donating time to help the less fortunate. Social norms can include a sense of reciprocity—if I help you, you'll feel like you should help me—but the paybacks don't have to be immediate. Market norms are different. They represent a payment for service and are cut and dried. Ariely offers examples including wages, prices, and rents. Mixing social and market norms is tricky and can have a detrimental effect on the sense of purpose.

Ariely describes an experiment where subjects were asked to drag a circle from the left side of the computer screen into a box on the right side of the screen. The scientists offered one group of participants $5 to perform the task for five minutes. A second group was offered the sum of only $0.50 for the same task. And a third group was asked to do the task simply as a favor, with no remuneration attached.

As you would expect, on average the first group dragged more circles into boxes than the second group, 159 versus 101. That monetary reward shaped the outcome is not a surprise. But the third group, without any pay, dragged 168 circles. This group worked harder for nothing than the other groups did for something, indicating the power of social norms. Since purpose often includes an element of social norms, dwelling solely on market norms can stymie a sense of purpose.

Ariely's main point is that if you establish a relationship based in part on social norms, as many companies attempt to do with customers and employees, you must maintain those norms. A migration from social to market norms, even if backed by good intentions, can upset intrinsic motivation. Ariely argues, for example, that the U.S. educational system has seen such a migration, with results that seem to please no one. [20]

Accounting for the Total Engagement of Gamers

The components of intrinsic motivation—autonomy, a sense of mastery, and a feeling of purpose—explain the total engagement of gamers. Successful games provide elements of all three components and provide a legitimate model for thinking about how to structure work. Should you believe that what gamers do is removed from the real world, here's a challenging tidbit: Gamers report that all of the 40 skills that O*NET (the primary source of occupational information) lists as the building blocks of modern jobs are represented in their gamer experience. Whether real or virtual, the tasks are the same. And so is the motivation. [21]

How Does Compensation Fit with Intrinsic Motivation?

The prior discussion may leave you with the impression that intrinsically-motivated individuals don't care about pay. But that is wrong: In a work setting where some market norms apply, compensation is still very important. There are a few crucial considerations when considering pay for intrinsically-motivated employees.

Almost all employees have a sense of a level of fair pay. This level establishes a psychological threshold. Compensation below the level of perceived fair pay leaves employees dissatisfied, creates anxiety, and erodes loyalty. Once the employer meets the threshold, or pays a little above it, additional pay does not equate with additional performance. In fact, if pay shifts exclusively to market norms, performance may suffer. [22]

The level of perceived fair pay is not based solely on the economic contribution of the individual, as you might expect. People are, by and large, quite poor at judging correct absolute values but are astute about determining relative values. [23] Psychologists call this coherent arbitrariness, which suggests that individuals are coherent when they compare prices on a relative basis but arbitrary when those prices are considered versus fundamental value. [24]

In determining what wage is fair, employees simply evaluate what their peers make. In a study in which researchers asked subjects which new employee was happier, the one making $36,000 in a firm where the average starting salary is $40,000 or the one making $34,000 in a firm where the average starting salary was $30,000, 80 percent of the respondents said the employee earning less absolute pay ($34,000 versus $36,000) but higher relative pay (compared to $30,000 and $40,000) would be happier. [25]

This discussion has obvious relevance for CEO pay. There are two theories that might explain the sharp rise in CEO compensation over the past 30 years. The first is that the market for CEOs is narrow and highly competitive, so the compensation rise reflects the scarcity of talented CEOs. An alternative theory is that managers effectively set their own pay by influencing their boards and using compensation consultants. While the evidence suggests neither theory alone fully explains the increase, there is little doubt that the idea of relative pay has been instrumental in swelling CEO compensation. [26]

Once they are beyond the threshold of fairness, intrinsically-motivated individuals (which includes some fierce competitors) sometimes use money as a means of keeping score. This is predominantly true in realms including investing and gambling, where making or losing money is the tangible outcome of the activity. Professional poker players are noted for equating their bankrolls to a scoreboard. Says Chip Reese, one of the world's top gamblers, "Money is just the yardstick by which you measure your success. In *Monopoly*, you try to win all the cash by the end of the game. It's the same in poker: you treat chips like play money and don't think about it until it's all over." [27] Great investors, including Warren Buffett, have a similar attitude. For these individuals, money has little to do with satisfying material needs but is important as evidence of excellence.

Pay is important for both intrinsically- and extrinsically-motivated employees. Intrinsically-motivated individuals must feel that their compensation meets the threshold of fairness, which is a relative concept. While self-reported surveys suggest that pay is on average only the fifth most important factor in determining employee satisfaction, empirical studies of pay changes for algorithmic tasks shows a strong positive correlation (studies in the social sciences based on self-reporting are notoriously suspect). [28] This observation leads to a discussion of how to think about, and structure, compensation programs.

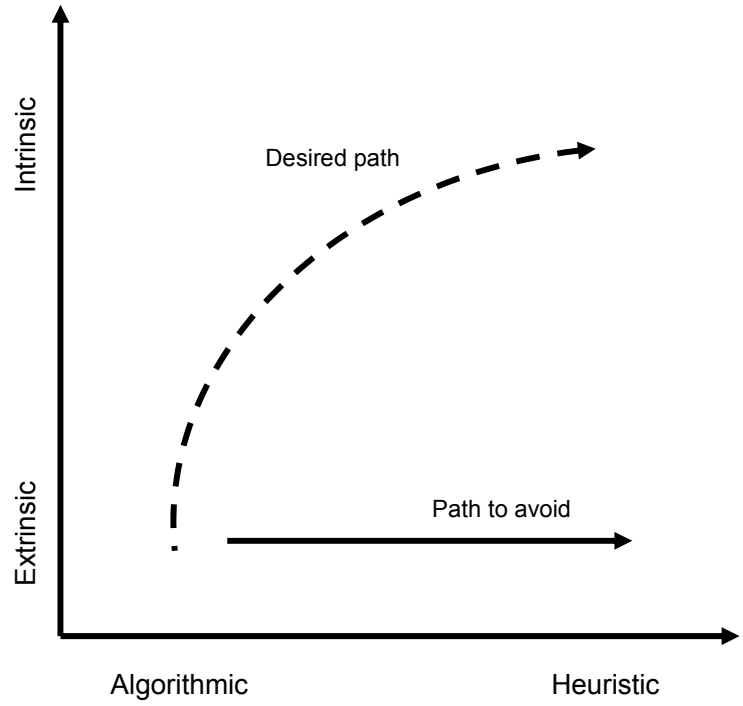
Thinking About Pay for All Employees

Proper incentive systems, like most issues in business, are dependent on context. Dan Pink offers a sensible way to navigate different types of tasks and motivations and shows how to match rewards to the various outcomes. [29] He starts with a basic question: Is the task mostly algorithmic or heuristic?

If the task is routine, the challenge is to introduce the elements of intrinsic motivation by allowing more autonomy, increasing variety, or connecting it to a larger purpose. If there's no way to make the task more of a heuristic one, then standard cause and effect rewards apply and have been shown to work. Pink adds that it is useful to emphasize to the employee why the task is necessary, acknowledge that it is tedious, and provide the flexibility for people to complete it in their own way.

If the task is not routine, the key is to foster the conditions that promote intrinsic motivation. Extrinsic motivators—the "if-then" rewards—tend to fail in this setting, although reaching a threshold of perceived fair pay is important. Pink recommends offering unexpected and noncontingent rewards for a job well done, noting that these rewards are most effective if they are based on praise and feedback (versus money) and if they provide useful information rather than a means of control. Exhibit 1 shows the desired path in navigating between algorithmic and heuristic tasks as well as extrinsic and intrinsic motivators.

Exhibit 1: Setting Up Incentives



Source: LMCM analysis.

The Mistakes We Make

While research in psychology and economics provides a path to improving how we think about and use incentives, change in the corporate world has been slow. Here are some areas where thinking could improve:

- *We assume that incentives shape our behavior and environment, but the environment can shape our incentives.* The classic approach is to figure out what goals the organization wants to achieve, the steps required to meet those goals, and then set up incentives to take those steps. The embedded assumption is that the incentives drive behavior that serves a goal.

  In reality, the environment can shape incentives. For instance, consider the use of employee stock options (ESOs) during the 1990s. As the stock market soared in the decade, the use of options in compensation exploded from tens of billions of grants early in the decade to more than $100 billion by 2000. The grants from the 1990s provided executives with huge windfalls, whether they delivered superior or subpar results. [30]

  The ostensible reason for giving executives more ESO grants was to align their interests with those of shareholders. But a more accurate point of view is that the swell in options reflected the bull market. That options grants quickly dried up after the market peaked—they fell over 60 percent from 2000 to 2003—suggests ESOs were more of a pay-delivery system than a pay-for-performance program. Further, the bull market and heavy option grants encouraged executives to focus on the short-term stock price more than ever, in many cases at the expense of building long-term shareholder value. [31]

  Another instance of the environment shaping incentives is the story of Howie Hubler, as told in Michael Lewis's book, *The Big Short*. Hubler was a successful and competent asset-backed bond trader at Morgan Stanley. When the housing and mortgage market took off, Hubler went along for the ride. First, his group generated spectacular profits—reportedly one-fifth of the firm's total—and he himself earned a handsome $25 million in one year. Hubler then determined that he would be better off managing a hedge fund. Morgan Stanley didn't want to let him go, so they allowed him to start a proprietary trading group within the firm with an incentive structure that would mirror that of a hedge fund. The booming housing and mortgage market compelled Morgan Stanley to change Hubler's incentive structure.

  What happened next will go down in Wall Street lore. Hubler put on a derivatives position that ended up losing Morgan Stanley somewhere around $9 billion, likely the largest loss on a single trade in history. His bet was that the weakest part of the subprime market would do poorly but that the highest-rated part would remain largely unscathed. The gargantuan loss came when the whole market came tumbling down. [32]

  Look for cases where incentives change as a result of what is going on. Ask whether those changes promote the conditions for intrinsic motivation, and in particular a sense of purpose. Be cautious when you sense that changes in incentives work counter to purpose.

- *Goals can have negative consequences.* In many organizations, setting goals and structuring incentives go hand-in-hand. Virtually all organizations set goals, confirming the belief that goals lead to improved performance, and link incentives to those goals. [33] Naturally, some goal-setting is good. But there are negative side effects to goals that leaders often don't understand or overlook. Here are some examples. [34]

  Goals encourage individuals to focus and narrow their attention. This creates a problem when people face important issues that are unrelated to the goal but that are relevant to the purpose. A well-known example is the work of Daniel Simons and Christopher Chabris's work on inattentional blindness. Researchers show a video of two small groups passing a basketball back and forth. One team has black t-shirts and the other team has white t-shirts. The subjects have the task of counting the number of passes the team in white makes. During the video, a woman in a gorilla suit walks into the middle of the scene, beats her chest, and walks off. Roughly half of the subjects fail to see the gorilla. If

you have seen the video, go to www.youtube.com and search for "the monkey business illusion." See how you do the second time. [35]

By narrowing attention, goals can also discourage creativity and exploration. In one experiment, researchers asked subjects to read a poorly-written draft of a paragraph promoting a business school and to correct the grammar, improve the content, or to simply "do your best." The groups asked to correct grammar or content did their tasks, but individuals in the "do you best" group were more likely to correct both types of errors. [36] Goals, however well intentioned, may interfere with purpose.

Too many goals can also be problematic. Employees have a difficult time prioritizing and often default to one or two goals. Good business judgment requires evaluating trade-offs. But trade-offs are impossible to assess without a single objective—a purpose. That purpose should be consistent and complementary with the principle of creating long-term shareholder value.

Goals can lead to unethical behavior. For example, imposing sales goals on employees without any concern for the process by which they meet those goals invites bad behavior. Preceding the recent financial crisis, branch managers gave mortgage brokers enormous volume targets, turned a blind eye to credit standards, and enabled fraudulent document processing. Not surprisingly, the brokers responded to the extrinsic incentives. [37]

Organizations tend to introduce more goals as they grow, largely to promote efficiency. Some of these goals and their related incentives make sense. But goals also create a corporate rigidity that inhibits innovation and change. In addition, as organizations grow the rules become further removed from the original purpose, so employees lose sight of the organization's original spirit and intent.

- *Non-financial goals and incentives are poorly aligned with shareholder value*. An increasing number of companies have introduced non-financial goal and incentive systems, including quality measures, customer satisfaction, and employee turnover. Executives set these goals in order to improve the performance of the organization.

  Research by Christopher Ittner and David Larcker found that most corporations spend little time reflecting on how those non-financial measures relate to the company's strategy or to value creation. [38] Less than one-quarter of the companies they surveyed built and verified models that showed cause-and-effect relationships between the goal they selected and the outcome they were seeking. It is always important to ask to what degree incentives are tethered to legitimate strategic and economic outcomes.

- *Incentives reward luck instead of skill.* Many activities have outcomes that are the product of skill and luck. Examples include sports, gambling, investing, and wide swaths of business. In these cases, incentives should align with the process by which individuals make decisions, and not by the outcomes. The objective is to avoid paying, or penalizing, anyone for randomness. This is especially relevant for incentives based on short-term outcomes. In many realms, short-term outcomes are mostly the result of randomness.

  Equity-based compensation is a good illustration. The rationale for using equity pay is that it reduces agency costs by putting management in the same boat as shareholders. The challenge is that the stock market reflects many factors beyond what executives can control. Contrasting the 1990s with the first decade of the 2000s makes the point. For the ten years ending in 1997, for example, the total return to shareholders was positive for each of the 100 largest U.S. companies. [39] So even below-average performing executives enjoyed huge gains from their stock options.

The following decade has produced the opposite pattern. A poor stock market has meant that executives who delivered superior results earned little from their options. The vagaries of the stock market overwhelmed the actions of executives. Even though indexed options effectively wring out randomness, almost no companies use them.

In probabilistic realms, process-oriented incentives encourage correct decisions (and a good process ultimately leads to a good outcome) and sidestep the mistake of rewarding individuals for outcomes that are outside of their control.

Conclusion

Most organizations would like to operate near the peak of their potential. They try to hire the best people, pursue the most attractive strategies, and deliver financial results that meet or beat expectations. How an organization chooses to motivate its employees is a central ingredient in that recipe and one that is overlooked or misunderstood.

Over the past few decades, there has been an explosion of research in psychology showing what motivates people. For now, though, most organizations in business, education, and medicine rely on extrinsic motivators. While extrinsic motivators work in some situations, they tend to backfire for employees who are potentially intrinsically motivated. Researchers have identified the conditions that promote intrinsic motivation, but those conditions are more fragile than the classic carrots and sticks.

The relevance of extrinsic motivators is also slipping because the nature of work is changing. Fewer people are needed for algorithmic tasks, and jobs that rely on heuristic tasks are gaining share. This has created a large mismatch between incentives and tasks.

Ideally, incentive programs for profit-oriented organizations should blend a sense of purpose—telos—and the objective of creating long-term shareholder value. Academics and businesspeople who portray purpose and value as mutually exclusive typically fail to understand what the terms mean. The term shareholder value, in particular, has been co-opted to mean boosting the short-term stock price when in reality the concept is all about maximizing long-term cash flows. [40]

When B.F. Skinner, the famed psychologist, observed his rats doing something unexpected in an experiment, he was said to scream, “Why don’t you behave? Behave as you ought!” He later realized that the reward system he had set up was flawed and that what the rats were doing made sense. Still, lots of managers blame the rat when in fact it is the incentive system that is flawed. [41]

With no abatement in sight for global competition, companies will have to figure out ways to attract, retain, and motivate employees. Psychologists and economists again have to meet and recognize that good solutions require the best thinking from each field.

Incentive Checklist

Here is a brief checklist to help guide the assessment of an organization's incentive program:

□ Does management combine a sense of purpose with a shareholder-value-friendly approach to capital allocation?

□ Do financial incentives align with shareholder value creation?

□ Do non-financial incentives serve strategic goals and add value?

□ Have incentives changed to reflect the environment in a way that might create future problems?

□ Does the company create an environment that is conducive to intrinsic motivation by promoting autonomy, mastery, and purpose?

□ Is the company taking steps to engage all employees, especially those whose jobs primarily involve heuristic tasks?

□ Are the incentives in the organization narrowing focus or encouraging unethical behavior?

□ If the company promotes social norms with its employees or customers, is it maintaining them?

□ Are the incentives appropriate given the employee's day-to-day responsibilities?

□ Does the incentive program focus solely on outcomes and hence conflate skill and luck?

The views expressed are those of the author as of January 12, 2011 and are subject to change based on market and other conditions. These views may differ from the views of other authors, portfolio managers or the firm as a whole, and they are not intended to be a forecast of future events, a guarantee of future results, or investment advice. Forecasts and model results are inherently limited and should not be relied upon as indicators of future performance. Investors should not use this information as the sole basis for investment decisions.

Any statistics have been obtained from sources the author believed to be reliable, but the accuracy and completeness of the information cannot be guaranteed. The information provided in this commentary should not be considered a recommendation by LMCM or any of its affiliates to purchase or sell any security.

Endnotes

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[7] Two quick points here. First, whenever productivity in a sector outstrips demand, employment in the sector will decline. Strong productivity gains are often the result of improvements in algorithmic jobs. A terrific resource for this argument is Bruce C. Greenwald and Judd Kahn, *Globalization: The Irrational Fear That Someone in China Will Take Your Job* (Hoboken, NJ: John Wiley & Sons, 2008). Second, certain macroeconomic statistics, including trade deficits, appear less (or more) worrisome when viewed using value added than by full commercial value. For example, research suggests that Apple's iPhone added $1.9 billion to the U.S. trade deficit with China in 2009. But when researchers credited China solely with the portion of the value it added to the iPhone, the value of the exports dropped to only $73.5 million. Taking into consideration the U.S components that went to China to assemble the phone, the result is a U.S. trade surplus with China of $48.1 million. See Andrew Batson, "Tech Supply Chain Exposes Limits of Trade Metrics," *The Wall Street Journal*, December 15, 2010. Also, Yuqing Xing and Neal Detert, "How iPhone Widens the US Trade Deficits with PRC," *GRIPS Discussion Paper 10-21*, November 2010.
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[14] As mentioned in Pink, 117. See Henry Sauermann and Wesley M. Cohen, "What Makes Them Tick? Employee Motives and Firm Innovation," *Management Science*, Vol. 56, No. 12, December 2010, 2134-2153.
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