The Motivational Properties of Tangible Incentives

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Employers who spend considerable sums on noncash tangible incentives need to document their effectiveness and investigate the best means of delivery.

Many firms in North America use tangible incentives, physical items that are noncash yet contingent on performance, to reward and motivate their employees. For example, almost everyone knows about the pink Cadillacs that Mary Kay Cosmetics awards to its top sales representatives; however, few people are aware of the extent to which this type of incentive is used in firms. A recent survey by an industry group found that 78% of firms are using tangible incentives with their sales employees and 67% of firms are using them with nonsales employees.[1]

An industry executive estimates (Tim Houlihan, personal communication, April 10, 2006) that almost US$1 billion was spent on this type of incentive in 2004 and that number is expected to grow at approximately 7% per year. Although $1 billion of spending may seem small in comparison to total U.S. payroll of more than $4 trillion dollars, there has been almost no research done on the properties of tangible incentives that make them motivating to employees. Therefore, a significant amount of money is being spent on tangible incentives with a limited understanding of how they can best be utilized.

Note that tangible incentives, though noncash, should still be considered extrinsic motivators because they are generally contingent on performance and are provided by a source outside of the individual. Therefore, this article does not attempt to extend the debate regarding the use of extrinsic incentives and their effect on intrinsic motivation. Rather, it focuses on the characteristics of tangible incentives and why employees find them to be motivating. We introduce and explore the psychological concepts of *justifiability, social reinforcement, separability,* and *evaluability*, and examine how they affect the motivational power of tangible incentives.

Psychology of Tangible Incentives

Expectancy theories of motivation hold that the effort exerted in pursuit of a reward is positively related to the value of the reward offered for performance.[2] This value is associated with

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the value of the award itself and any additional positive benefits gained through earning the incentive rather than purchasing it.

Justifiability

One feature of many tangible incentives is that they are things the recipients see as luxuries—things that employees could not normally justify buying for themselves, even if they had sufficient funds. If an item is something that an employee values highly but would never purchase on his or her own, then the opportunity to earn it as a reward for hard work provides a way to obtain the desired object without violating one's standards of justification. If an employee is constrained to accept the award offered for good performance, there is no need to justify its consumption.

For example, a salesperson might never propose that his or her family take an expensive and "frivolous" trip to Hawaii; however, everyone might be pleased if it were earned as a reward for good performance. Hard work thus becomes an attractive means to acquire a good that would be difficult to obtain through other means, causing the earning of a tangible nonmonetary incentive to carry additional value. Therefore, we believe that the perceived value of a tangible incentive will increase with the difficulty the employee would have in justifying the purchase of that incentive with his or her own funds.

Because the determination of what is a justifiable purchase will differ, the strength of this effect will no doubt vary across national and organizational cultures and among people with different incomes. In cultures where spending money on whatever one wishes is acceptable, the effect may not be as strong. In the presence of stricter social guidelines regarding appropriate purchases, employees would receive more utility from being able to earn a difficult-to-justify incentive for hard work because it would be less likely that they could purchase it on their own.

Social Reinforcement

One of the central tenets behind reinforcement theories of motivation is that rewarding specific behavior will lead to additional instances of that behavior.[3] Beyond the pure consumption value of the reward, employees also enjoy the recognition and acknowledgment of their performance by peers, supervisors, family and friends. The value of this "social reinforcement" comes from others knowing about the good performance rather than the receipt of the incentive per se.

A tangible incentive is an effective carrier of this type of utility because of its high level of visibility. Because of this visibility, others will know about this type of incentive without the employee advertising that he or she earned it. Rather, friends and colleagues may broach the subject of the award with questions such as, "So Bill, how are those golf clubs you earned from the firm? Have you played with them yet?" Although cash may also be highly visible, it is less socially acceptable to say, "So Bill, how's the $1,000 you earned from the firm?" This enhances the social utility available through the earning of a tangible nonmonetary incentive.

Even if it were necessary for the employee to broach the subject, it would be easier to do so with a tangible incentive. In most situations, employees would not feel comfortable bragging about cash earnings because of social proscriptions against it. However, they would feel less constrained in talking about golf clubs or a vacation they received from the firm. By providing a better means to indirectly bring attention to one's good performance, the value of earning a tangible incentive is enhanced.

An additional side benefit to the use of tangible nonmonetary incentives is that they serve as reminders of the exemplary performance that led to their receipt. Physical goods such as a big screen television will remind the employee of their performance and the firm every time they turn it on. Vacation travel will provide memories, pictures and mementos that will do the same thing. The memory of these incentives will further reinforce that the company values the employee.[4]

Separability

People do not consider all of their income collectively; they mentally segregate some sources and uses of funds and aggregate others, assigning subsets of income to different "mental accounts."[5] For example, investment income and home appreciation are likely to be placed into different income accounts than salary. When a source of income is categorized, the value of that incremental income is calculated relative to what else is categorized in that account. As shown by much research, there is diminishing marginal utility in additional earnings. This implies a person gains less utility from each additional dollar as the total pay increases.

Because a cash bonus is earned as part of the job, it is likely that it will be mentally combined with the rest of the employee's employment income. Therefore, an employee may see a cash bonus simply as "more salary." This means that the employee will evaluate the increase relative to his or her base salary, making the award subject to the value-reducing effects of diminishing marginal utility.

For example, if a person makes $50,000 a year, a $1,000 bonus will only be considered a 2% increase if it is mentally aggregated with salary. A tangible incentive is less susceptible to this problem. Because it is consumed less frequently, it is more likely that tangible incentives to be evaluated in isolation, or at least as part of a much smaller mental account (e.g., travel, entertainment). For example, suppose that an employee has a "vacation" budget of $3,000 per year, and that employee is awarded a $1,000 vacation from the firm. This change represents a 33% increase, much higher than the 2% gained through cash.

Evaluability

Firms often use hedonic goods or services as noncash rewards—items that are associated with pleasurable experience rather than more instrumental or functional items. When considering whether to exert additional effort in pursuit of a bonus award such as this, employees must predict what the item offered is worth to them; that is, the predicted consumption utility of the award. The hedonic nature of this type of incentive triggers an emotional reaction to the incentive that becomes the most salient attribute of the item. Because these feelings are difficult to monetize, the affective reaction to the award will be used as a proxy for the predicted utility of the item.[6]

A more emotional evaluation leads to a higher level of ambiguity in value. This allows for employees to cognitively alter the perceived value of the award. Cognitive dissonance research suggests that if an employee is working hard to achieve the award, then he or she will attempt to convince himself or herself that the award is worth a great deal, bringing his or her beliefs in line with his or her actions.[7]

This can increase the perceived value of a tangible nonmonetary award through a virtuous circle. The harder the employee works toward an award, the more he or she will think it is worth. This, in turn, leads to more effort. This is less likely to occur with cash awards because the economic value of cash is less ambiguous and less prone to the psychological modification of perceived value.

Although an employee may inflate the value of a tangible incentive, it is also possible that an employee could psychologically lower the value of the award under certain conditions. Much as Aesop's fox convinced himself that grapes just out of his reach were probably sour, employees who are not likely to earn an award may be able to tell themselves that the award is not as valuable as they initially believed it to be.

This ability to raise or lower the value of the outcomes of performance allows an employee to bring himself or herself back into an equity "equilibrium" without resorting to negative behaviors such as *leaving the firm, reducing effort or sabotaging others*.[8] Although it is true that believing the award is of less value might reduce effort, it will also diminish the likelihood that an employee will engage in dysfunctional behaviors toward the firm or other employees.

In summary, a noncash incentive is unique in its flexibility during evaluation. While pursuing a noncash incentive, an employee will use his or her affective reaction to the award to determine its value. An affective response to a tangible incentive is likely to be greater than the response to a cash incentive because of the increased likelihood of positive visual imagery associated with the tangible incentive.

Furthermore, if it becomes clear that an employee will not obtain the tangible incentive, an employee can discount the incentive's utility in an effort to reduce disappointment—thus demonstrating its flexibility to the situation without undermining the firm. These four concepts and the way they motivate employees can be seen in Exhibit 1.

Why Not Just Give Cash?

The primary benefit of cash as an incentive is that it has option value; the employee can purchase whatever would provide the most value to him or her. However, there are a number of reasons why something purchased by the employee with funds from the firm would not carry the same motivational properties of the tangible incentive itself.

First, the justifiability concerns outlined earlier might make it difficult for an employee to purchase a luxury item. The concept of *justifiability* means that the incentive carries additional value because it does not have to be purchased by the employee. This leads us to conclude that an employee would purchase a more utilitarian item.

EXHIBIT 1
How Tangible Incentives Work

Psychological Phenomenon	How It Motivates Employees
Justifiability	Employees feel guilt over purchase and consumption of frivolous items. This guilt is assuaged by earning rather than purchasing the incentive.
Social reinforcement	Tangible incentive has "trophy value" and is highly visible to family, friends and peers.
	Visibility brings indirect attention to performance which led to item's receipt.
Separability	Cash bonuses are often considered "more salary" and therefore lose their impact. Tangible incentives are more likely to be evaluated in isolation.
	Cash bonuses become "lumped" with other funds and so linkage to the firm is lessened.
Evaluability	Tangible incentives cause an emotional response that serves as a proxy for the anticipated value of the incentive
	Ambiguity of value allows employees to mentally manipulate the value, increasing it when it is earnable, decreasing it when out of reach.

In fact, even though the marginal propensity to consume windfall gains (such as an unexpected bonus) is higher than that of expected income such as salary, research has shown that people are more likely to spend windfall money on utilitarian (functional) rather than hedonic (more frivolous) items. This implies that an employee would not purchase the award that they most want, lowering the value of the cash incentive provided by the firm.

Even if the employee were to purchase the incentive the firm offered, it would not carry the same social reinforcement as if it were awarded by the firm. Mental accounting research suggests that when the money is given to the employee it becomes the employee's money, and therefore anything purchased with it is something the employee chose to purchase rather than something the firm awarded to the employee.

Family, friends and colleagues will also be more likely to view the trip or other purchase as something the employee bought rather than something he or she received for good performance. In addition, if an employee were to discuss something he or she bought using firm-provided funds, it might be perceived in a manner similar to bragging about cash. These issues make the link between the company and the award weaker and so would not provide the same means of discussing good performance.

In addition to these motivational differences, there may be additional pecuniary benefits that accrue to firms that use tangible incentives, stemming from the possibility that a firm may be able to acquire these goods at a lower cost than an employee could. Take for example a trip to Hawaii for which an employee would have to pay \$5,000. Potential recipients might only find the trip to be as valuable to them as, say, \$3,500 in cash, less than its retail cash value.

Through some arrangement, this award might be available to the firm for \$3,000. This would make the tangible nonmonetary incentive more efficient at motivating this employee than the cash cost to the firm because the firm receives the motivational power of something worth \$3,500 but only needs to pay \$3,000.

Finally, a firm might even be able to offer an incentive that the employee could not purchase at any price. For example, pink Cadillacs cannot be purchased directly from General Motors; they can only be awarded by Mary Kay Cosmetics. Luxury boxes at sports venues and hospitality tents at golf tournaments, which are controlled by corporations, are similarly out of the reach of most employees.

Presumably, the fact that these are unobtainable except through the firm makes them more valuable than the cash it would cost the firm to provide them. These reasons are summarized in Exhibit 2, each suggesting that cash should not be the only incentive used by firms.

Design and Implementation

To capitalize on the proposed factors of *justifiability, social reinforcement, evaluability,* and *separability*, the right incentive must be chosen and the program must also be implemented correctly. This section discusses the selection of awards and the implementation of award programs and discusses some potential drawbacks of

EXHIBIT 2
Why Not Just Give Cash?

- Justification concerns could decrease possibility of buying frivolous item that would be most highly valued, reducing the motivational power of the cash incentive.
- If bonus money is used to purchase an item, then that item is no longer from "the firm," reducing its "trophy value."
- Even if a similar item is purchased, it will be the "employee's money," and the link to the firm will be broken.
- Firm may have preferential financial access to items (e.g., bulk discounts).
- Firm may have the ability to obtain items otherwise unavailable to employees (e.g., box seats, pink Cadillacs).

EXHIBIT 3
Implementation Suggestions

What to Do	Why to Do It
Choose incentives that are unique and infrequently purchased	Smaller "mental account" so less negative impact of diminishing marginal value Higher "trophy value" due to uniqueness
Choose "splurge" items that people are unlikely to buy for themselves	High justification hurdle increases value by providing guilt-free way to acquire valuable good Higher "trophy value" as others might find them too difficult to justify for themselves as well
Do not disclose cash value of incentive	Increases likelihood of emotional evaluation Will make salient the "option value" of the foregone cash
Use a "cafeteria" style system	Allow people to choose what they want as one prize doesn't "fit all"
Change the available awards	Don't want tangible items to become "more of the same"

tangible nonmonetary incentives. The suggestions are summarized in Exhibit 3 and discussed below.

The incentives chosen should be unique so that the award is evaluated in relative isolation, thereby exhibiting less impact from diminishing marginal utility. This also suggests that the award must be changed over time; if the item is given frequently, it may quickly become "more of the same," making it subject to the value-reducing effects of diminishing marginal utility.

The chosen award should also be hedonic rather than utilitarian in nature. Not only does this make the award's purchase less justifiable but it will also trigger a more affective reaction, necessary for the value-enhancing evaluation process discussed earlier. A cold cognitive evaluation of the award will not allow for these value-enhancing processes and will also make the loss-of-option value associated with a noncash incentive more salient.

To increase the perceived value of earning the award, the prize should be something that is infrequently purchased. If the employee is less likely to purchase the item on his or her own because of justifiability concerns, this will increase the value of earning the award and thus increase effort expended in pursuit of that award.

Social reinforcement would also be increased by using an infrequently purchased item or service as an incentive. Because these items are not frequently purchased, these types of awards would be easier to use as a means to discuss the performance that led to their receipt. In addition, items that are not frequently purchased are likely to attract the attention of colleagues, increasing the so-called trophy value of the award. Because the employee's colleagues, friends and family will admire the award, it would be easier to use that award to broach the subject of the performance that led to its receipt.

To encourage an emotional rather than cognitive evaluation of the prize, employees should not be told the market value of the prizes for which they are working. If there is a monetary value attached to the prize, it becomes more like cash and will be more likely to trigger a cold cognitive evaluation.

Knowing the value of the prize also makes it more difficult for the employee to psychologically alter the predicted utility of the award. This will reduce the ability of the employee to mentally increase the value of the award while working toward it or to decrease the value when it appears that the award will not be earned.

There is one additional point that is important for the design and implementation of tangible incentives. Cash awards can be used by the employee to purchase that item that carries the most utility, yet noncash awards do not generally have such flexibility, even if the award is something "near cash" such as a gift certificate. The general problem with noncash rewards is that the firm cannot be sure to pick something that every targeted employee likes.

Some employees will find any prize chosen to be more valuable than others find them. On average, this will make a nonmonetary award less motivating to the employee population as a whole. A way to solve this problem is through the use of a cafeteria-style incentive program. For each performance level, employees should be able choose from a list of prizes so that they can receive the prize that they like the best. This will still capture the benefits of tangible incentives yet minimize the downside associated with diverse employee tastes.

Potential Drawbacks

As with the use of any extrinsic incentive, there are possible drawbacks to using tangible incentives. If a firm switches from a cash incentive program to a tangible incentive program there may be issues of loss aversion and other problems created by a contrast effect. Loss aversion, as first addressed by psychologists Kahneman and Tversky, causes the negative utility created by losing an item to be greater in absolute value than the positive utility associated with receiving that same item.[9] In their own words, "losses loom larger than gains."

Some estimates put this loss aversion coefficient between 2 and 2.5. This means that if a firm takes away a cash incentive worth $100, it would need to replace it with a tangible award worth between $200 and $250 for the employees to be satisfied with the exchange. This would be difficult and probably not in the firm's best interests. The implication of this is that firms should consider utilizing tangible incentives only as a new incentive scheme rather than a replacement of an existing one.

Any ambiguity in value of tangible incentives could also make them less effective if employees do not trust the firm. For example, employees may think that the firm is just trying to save money by somehow cheating workers. This would have a negative effect on the motivational power of the incentive and negative long-term consequences for the employees' relationship with the firm.

If the relationship with the firm is somewhat negative to begin with, an employee may attribute the firm's actions to greed rather than the interests of employees. If the relationship is good, the employee is more likely to think the firm is doing something nice for him or her. Therefore, it is critical to understand the nature of the employment relationship prior to implementing a tangible incentive program.

There are also possible problems if the actual consumption utility of the award varies greatly from the predicted utility of the award. For example, the employee may have been looking forward to receiving a home entertainment system but then be disappointed when he or she actually uses it. The employee may feel that he or she worked too hard in exchange for the prize actually earned.

If the employee is disappointed over the prize received, it may reduce the effort exerted in pursuit of future tangible nonmonetary incentives. It could also feasibly change the employee's perception of the firm and the firm's motives. Research on cognitive dissonance suggests however that this may not be a major problem. If the employee believes that the value of the award is high, then the employee will be motivated to enjoy it as much as the employee had predicted.

Tangible nonmonetary incentives may have different levels of efficacy across different tasks. For example, if an employee is savoring the potential receipt of an incentive, he or she may stay at a task requiring persistence for a longer time. Previous research has shown that hedonically rich items such as the ones used as tangible incentives are savored more than pallid items such as cash incentives. The increased savoring of these incentives make increased effort seem more worthwhile.

It may also be the case that noncash rewards are more effective with certain types of employees. Those employees who place high personal relevance on cash might not respond well to nonmonetary incentives. There may also be financial boundary conditions associated with the effectiveness of nonmonetary incentives. If an award were too large a part of an employee's salary, the perception of the foregone cash would become more negative.

Although a person making an annual income of $30,000 might like a $5,000 trip to the Bahamas; he or she might realize that if he or she were to go to a firm offering cash bonuses, he or she could earn more money to better provide for basic necessities. At much higher levels of salary however these basic needs become satisfied, making the use of expensive tangible nonmonetary incentives more appropriate. The key implementation issue is that incentive awards should be scaled to the wages of the target employees.

Conclusion

Although the $1 billion spent on tangible incentives is small in relation to the amount of employee compensation, it is still a substantial amount of money. Given the large amount spent, the lack of rigorous research in this area needs to be addressed. Also, given the theories presented in this article, firms may be underutilizing this type of incentive. At the very least, firms are spending a great deal of money on these incentives with little theoretical guidance. We have also discussed implementation methods that will better utilize tangible incentives.

We have introduced and discussed the psychological mechanisms of justifiability, social reinforcement and separability. The motivational power of a tangible incentive can be understood by identifying the properties of these incentives in relation to these constructs. We do not argue for the elimination of cash incentives in favor of tangible incentives—cash is and always will be an important motivator. Rather, it would be valuable for scholars and practitioners to understand the role of tangible incentives in a compensation scheme—to know how, when, and with whom tangible incentives should be used in place of cash.

There has been much work on whether or not to use extrinsic incentives for employees, however, relatively little work has been done on the use of tangible incentives. Research in this area could determine when they should be used, with which type of employees they will be most effective and how these incentive systems should be implemented. Understanding how tangible incentives increase employee motivation has the potential to greatly improve the effectiveness of all incentive programs.

Notes

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