

# A FRAMEWORK FOR COMPENSATION PLANS WITH INCENTIVE VALUE

William J. Liccione

Although Vroom's expectancy theory and its later application to the workplace by Lawler have significant implications for the development of compensation plans with incentive value, they do not consider at least two critical components of incentive plan design: individuals' initial commitment to their goals and the relative value of rewards individuals receive for accomplishing their goals. This article integrates expectancy theory, goal theory, and equity theory into a comprehensive framework for the effective design of compensation plans with incentive value.

ORGANIZATIONS HAVE NOT always recognized the importance of compensation in motivating individuals. Herzberg's (1966) and McGregor's (1966) two-factor theories of motivation held that individuals were motivated by factors intrinsic to their jobs, such as the sense of autonomy and of accomplishment their jobs provided, and that factors external to their jobs, such as compensation, could only prevent individuals from becoming dissatisfied. In essence, compensation represented a set of no-win issues for employers, because ignoring these issues brought with it the risk of individual dissatisfaction and tending to them brought with it no promise of improved individual performance. Not surprisingly, the years following the introduction of the two-factor theories of motivation also saw the introduction of programs like job rotation, quality circles, flexible scheduling, and so forth that focused heavily on job content and ignored compensation.

As later research (for example, Porter, Lawler, & Hackman, 1975; Kanungo & Mendonca, 2001) began to challenge the two-factor theories with growing evidence that pay was among the most powerful rewards organizations have to offer, individuals' compensation assumed growing importance in discussions of how to motivate people. Today, many if not most organizations recognize both the importance of compensation and the need to link individuals' performance to their compensation to improve performance (see, for example, Hein, 1996; Stiffler, 2006).

Despite this evolution in thinking about the importance of linking individuals' performance and pay, many organizations are dissatisfied with their pay-for-performance plans (see, for example, Pfeffer, 1998; Shaw, Gupta, & Delery, 2002). One reason for this may be the absence of a framework for designing effective incentive compensation plans that comprehensively address the major issues now associated with using compensation as motivation. For example, Vroom's (1964) original statement of *expectancy theory* and Lawler's (Porter & Lawler, 1968; Lawler, 1981) later expansion and application of this theory to the workplace focus attention on the importance of individuals' beliefs regarding the attainability of their goals, the probability that they will be rewarded for achieving their goals, and the absolute value of their rewards. However, expectancy theory does not consider the importance of individuals' commitment to their goals, a concept central to *goal theory*, or the motivational impact of the relative value of individuals' rewards for goal achievement, a concept central to *equity theory*.

This article reviews the implications of expectancy theory for developing effective incentive compensation plans. Goal theory and equity theory are then reviewed as extensions of expectancy theory, and an integrated framework for designing incentive compensation plans is proposed that integrates major postulates of all three theories and, in so doing, provides a more complete basis for eval-

uating individuals' motivation for achieving their assigned goals.

## EXPECTANCY THEORY

According to expectancy theory (Vroom, 1964; Porter & Lawler, 1968; Lawler, 1981), individuals' motivation to perform specific tasks is the product of three subjectively assigned values: (1) the perceived probability that individuals' efforts will be sufficient to accomplish the performance targets for which they are held accountable, (2) the perceived probability that individuals will experience certain work-related outcomes as a result of achieving their performance targets, and (3) the value, or valence, that individuals attach to the expected work-related outcomes.

As a probability, the first value may assume values between 0 and 1, and defines a key concept in the theory called *instrumentality* (*I*). Similarly, as a probability the second value may assume values between 0 and 1, and defines a key concept in the theory called *expectancy* (*E*). The third value may assume values ranging from -1 to +1, to reflect individuals' evaluations of expected outcomes ranging from very undesirable to very desirable, and defines a key concept in the theory called *valence* (*V*).

According to expectancy theory, *I*, *E*, and *V* stand in multiplicative relationship to each other. Hence, individuals' motivation to perform particular tasks is determined by multiplying the values they assign to *I*, *E*, and *V*. Since its inception this formulation has undergone rigorous testing, which has generated strong empirical support for the proposed linkages among the key variables (Fudge & Schlacter, 1999). The basic expectancy theory paradigm is shown in Figure 1.

In those cases where *task performance* refers to the achievement of goal targets that individuals are held accountable for and *outcomes* refers to the compensation the individuals expect for accomplishing their goals, expectancy theory effectively describes the basic incentive compensation plan paradigm illustrated in Figure 2.

In this application of expectancy theory, *I* and *E* remain probabilities that may assume values between 0

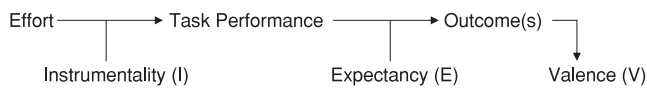
and 1. However, *V* assumes values between 0 and 1, rather than between -1 and +1. Although individuals may attach little, if any, value to compensation they see as inadequate, it is unlikely they will assign it a negative value.

## Key Plan Design Considerations

When incentive compensation plan design is considered within the framework of expectancy theory, at least two key design considerations emerge: the importance of individuals' perceptions and the importance of the total plan design.

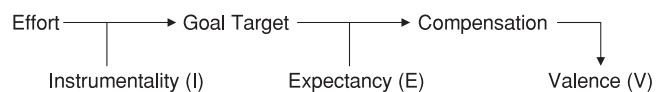
**Importance of Individuals' Perceptions.** Individual motivation works from the inside out. In other words, the effectiveness of incentive compensation plans in motivating individuals depends on the values assigned to *I*, *E*, and *V* by the individuals who participate in these plans, and not by the employers who sponsor them. This is not to say that employers' evaluations of their incentive compensation plans are unimportant. On the contrary, the best reason for sponsoring incentive compensation plans is that they promote the employers' business interests. Still, organizations cannot expect their individuals to become excited about participating in these plans simply because the employers want them to. Ultimately, the power of incentive compensation plans to compel individuals to accomplish key goals depends on the individuals' evaluations of the plans.

The importance of individuals' perceptions to the effectiveness of incentive compensation plans has a number of implications. One is that individuals must believe the goals they are being held accountable for are attainable. Hence, even though employers may be convinced that individuals can and should accomplish the goals they are being held accountable for, unless their employees share these convictions, the incentive compensation plans will not motivate employees to try. Instead, these individuals will assign the value of 0 to the plans' instrumentality (*I*), and their resulting motivation will be 0. To avoid this pitfall, employers should consider encouraging individuals' active participation in the goal-setting process, rather than simply imposing goals on employees.



$$\text{Motivation} = I \times E \times V$$

FIGURE 1. VROOM'S BASIC EXPECTANCY THEORY PARADIGM



$$\text{Motivation} = I \times E \times V$$

FIGURE 2. APPLICATION OF EXPECTANCY THEORY TO INCENTIVE COMPENSATION

*Despite . . . evolution in thinking about the importance of linking individuals' performance and pay, many organizations are dissatisfied with their pay-for-performance plans.*

A second implication of the importance of individuals' perceptions to plan effectiveness is that individuals must believe their employers recognize and support the link between pay and performance. Hence, practices such as forcing individuals to chase moving targets, which effectively eliminates employees' opportunities for rewards, deciding to eliminate rewards that individuals had previously anticipated receiving, and granting all individuals the same rewards for goal-related performances, despite significant performance differences, may effectively eliminate the perceived link between pay and performance. Under these conditions, individuals will assign a value of 0 to their plans' expectancy ( $E$ ), and their resulting motivation will be 0. To avoid this pitfall, employers should be willing to commit to the consistent administration of incentive compensation plans and should build a work culture that recognizes and promotes paying for performance.

A third implication of the importance of individuals' perceptions to plan effectiveness is that employers need to offer individuals rewards for accomplishing goals that the individuals consider worthwhile. However, employers may instead offer individuals the promise of payouts for accomplishing goals so small that the individuals no longer consider them worth the effort it takes to accomplish them. Under these conditions, individuals will assign a value of 0 to their plans' valence ( $V$ ), and their resulting motivation will be 0. To avoid this pitfall, employers should be willing to offer individuals sufficiently large payouts for accomplishing their goals. Although there is no clear dividing line above which payouts have enough reward value to motivate individuals and below which they do not, anecdotal evidence suggests that payouts equal to less than 10% of individuals' pretax compensation rapidly lose their power to motivate individuals to actively pursue their goals.

**Importance of Total Plan Design.** When plan design is viewed from an expectancy theory perspective, it becomes

clear that the design of the total incentive compensation plan is more important than the design of any one component. Because individuals' motivation to accomplish their goals is determined by multiplying their incentive plans' instrumentality ( $I$ ), expectancy ( $E$ ), and valence ( $V$ ), a value of 0 assigned to any one of these variable means the entire plan loses its ability to motivate them. Hence, organizations that become preoccupied with ensuring that the rewards offered for attaining assigned goals are large enough to produce high values for  $V$  may still develop ineffective plans because individuals are convinced the assigned goals are unattainable, and therefore the individuals assign a value of 0 to  $I$ . Alternatively, organizations that commit to developing clear, attainable goals that produce high values for  $I$ , may still develop ineffective plans because individuals do not believe they will actually be rewarded for accomplishing these goals, and so they assign a value of 0 to  $E$ . To effectively motivate individuals, incentive compensation plans must convince individuals that they can accomplish the goals they are being held accountable for, that they will be rewarded if they accomplish their goals, *and* that the rewards they receive will be worthwhile.

## GOAL THEORY

Although expectancy theory provides significant insights into the requirements for effective incentive compensation plans, it assumes individuals will always be motivated to some degree to pursue attainable goals for which they expect positively valued rewards. However, some goals may not be pursued, despite the fact that they are attainable and hold the promise of positive rewards. Research (for example, Stedry, 1960; Locke, 1968; Diefendorff & Lord, 2003) indicates that goals influence individuals' behavior only after these goals have been accepted as consistent with the individuals' personal aspirations. When this is not the case, the quality of individuals' goal-related performance may diminish, the goals may be ignored altogether, and steps may even be taken to actively avoid pursuing the goals.

An example of active goal avoidance can be seen among strongly technically oriented engineers in some industries who find that their employers suddenly expect them to assume active roles in the sale of the products they help design. These engineers may find attainable sales goals with the promise of substantial payouts anathema to them and may elect to seek new jobs rather than pursue these goals. Similarly, bank tellers who thoroughly enjoy the highly structured, detail-oriented role of transaction specialists may find their employers' expectations that they now embrace sales-oriented goals, such as expanding the

bank services purchased by their customers, so unappealing that they quit rather than pursue the goals, even though the goals are perceived as attainable and the anticipated payout for achieving them is meaningful.

When individuals define their goals as consistent with their personal aspirations, the resulting commitment to goal attainment represents a driving motivational force (see, for example, Hollenbeck, Klein, O’Leary, & Wright, 1989). From this perspective, goal commitment represents a source of motivation for goal pursuit that is separate from and that precedes individuals’ assessments of goal attainability or the value of the rewards they are likely to receive for attaining the goals.

## EQUITY THEORY

Although expectancy theory calls attention to the impact of anticipated reward values on individuals’ motivation to achieve their goals, its focus is on the absolute values of these rewards. In other words, although recognizing that different individuals may value the same rewards differently, expectancy theory’s primary concern is with the ultimate values individuals assign to their rewards.

In contrast, equity theory calls attention to the importance of the rewards’ relative values. According to Adams (1965), individuals compare the ratio of their reward for accomplishing a goal (that is, the output) to the effort they expended to do so (that is, the input) with the output to input ratios of selected others in the workplace. If the ratios are perceived as equivalent or the differences between them are perceived as fair, the individuals making the comparisons will consider their rewards equitable. However, if the ratios are not equivalent and the differences between them are not considered fair, the individuals making the comparisons will consider their rewards inequitable.

For example, if the director of human resources for an organization earns a bonus equal to 25% of her base pay for accomplishing what she perceives to be a difficult goal

(that is, she perceives a ratio defined by moderate output and high effort), and the director of sales in the same organization earns a bonus equal to 50% of his base pay for accomplishing a goal the director of human resources perceives as easy (she perceives a ratio defined by high output and low effort), the director of human resources will feel her bonus is inequitable even though it equals 25% of her base pay. Alternatively, if the director of sales earns a bonus equal to 15% of his base pay for accomplishing the same goal as before (so that the director of human resources perceives a ratio defined by low output and low effort), the director of human resources will feel her bonus is equitable because both the output and input of the director of sales are lower than her perceived output and input.

According to Adams (1963), perceptions of inequity are a special case of *cognitive dissonance*. Hence, consistent with cognitive dissonance theory (Festinger, 1957), individuals who consider their rewards inequitable experience psychological discomfort, or cognitive dissonance, and take actions to eliminate that discomfort. For example, they may decrease their productivity or efforts to attain future goals if they feel they have been, or will be, undercompensated for their efforts relative to others, or they may increase their productivity or efforts to attain future goals if they feel they have been, or will be, overcompensated for their efforts relative to others. In this example, both undercompensation and overcompensation cause psychological discomfort and attempts to restore equity (Robbins, 2005).

From this perspective, rewards perceived as equitable should not affect the values, or valences, individuals assign them, because equity is not a noxious psychological state. However, rewards perceived as inequitable should negatively affect the values individuals otherwise assign them, because inequity is a noxious psychological state. Therefore it is reasonable to assume that inequity detracts from the satisfaction with their rewards that individuals would otherwise feel.

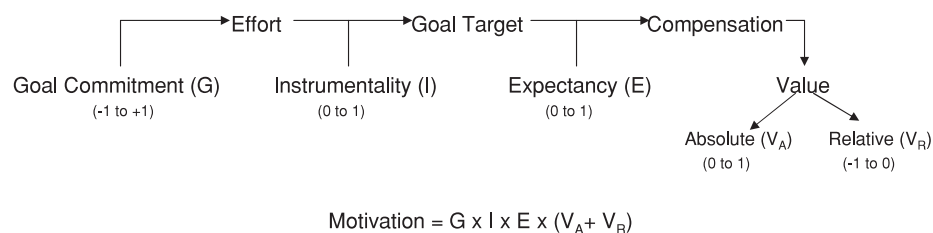


FIGURE 3. FRAMEWORK FOR COMPENSATION PLANS WITH INCENTIVE VALUE

## A FRAMEWORK FOR COMPENSATION PLANS WITH INCENTIVE VALUE

Figure 3 shows the application of expectancy theory to incentive compensation (see Figure 2) expanded to incorporate major findings from both goal theory and equity theory.

### Terms

In this framework, individuals' motivation for achieving their assigned goals is driven by the following five key variables.

**Goal Commitment.** Goal commitment ( $G$ ) represents individuals' commitment to their goals and consequent interest in pursuing them. It is affected by both (1) the extent to which individuals see their goals as compatible with their personal aspirations and (2) the motivation to attain these goals that may result from anticipated over-payments, or compensation that is high relative to the rewards others are expected to receive. Goal commitment ranges in value from  $-1$ , for aversive goals that generate avoidance behavior, to  $+1$  for goals that are extremely compelling.

**Instrumentality.** Instrumentality ( $I$ ) represents individuals' estimated probabilities of achieving their goals should they attempt to do so. It ranges in value from  $0$ , for estimates that goal attainment is practically impossible, to  $1$ , for estimates that goal attainment is almost certain.

**Expectancy.** Expectancy ( $E$ ) represents individuals' estimated probabilities that they will receive compensation for attaining their goals. It ranges in value from  $0$ , for estimates that compensation will definitely not be received for goal attainment, to  $1$ , for estimates that compensation will definitely be received for goal attainment.

**Absolute Value of Compensation.** The absolute value of anticipated compensation for goal attainment ( $V_A$ ) represents the actual amount of the reward individuals expect to receive for accomplishing their goals. It ranges in value from  $0$ , for compensation that is so small that it is regarded as being almost meaningless, to  $1$ , for compensation that is so large it is regarded very positively.

**Relative Value of Compensation.** The relative value of anticipated compensation for goal attainment ( $V_R$ ) represents the perceived equity of the reward expected for accomplishing goals. It ranges in value from  $-1$ , for compensation that is perceived as being very inequitable, to  $0$ , for compensation that is perceived as being equitable.

### Motivation

In the proposed framework for compensation plans with incentive value, individuals' motivation for accomplishing their assigned goals is determined by the following equation:

$$\text{Motivation} = G \times I \times E \times (V_A + V_R)$$

Once the total value of compensation is calculated in this equation, the major variables in the equation stand in the same multiplicative relationship to each other that was assumed in expectancy theory.

## FUTURE RESEARCH

Since its original formulation, expectancy theory has generated research on a host of issues, including potential interactive effects among key variables (Lawler, 1981), differences between subjective and objective probabilities (Edwards, 1961), and the importance of within-subject analysis when investigating the relationship among key variables (Van Eerde & Thierry, 1996). In addition to such issues, it remains for future research to determine whether the modifications to the basic expectancy theory paradigm in the framework for compensation plans with incentive value affects the multiplicative relationship among the key variables, whether the relationship between the absolute and relative values of compensation is additive, as proposed, and, perhaps most important, whether the power of the framework to predict individuals' motivation to achieve their assigned goals achieves its promise. 🏔

## References

- Adams, J.S. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, 67(5), 422–436.
- Adams, J.S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 267–299). New York: Academic Press.
- Diefendorff, J.M., & Lord, R.G. (2003). The volitional and strategic effects of planning on task performance and goal commitment. *Human Performance*, 16(4), 365–387.
- Edwards, W. (1961). Behavioral decision theory. In P.R. Farnsworth, O. McNemar, & Q. McNemar (Eds.), *Annual Review of Psychology* (pp. 463–498). Palo Alto, CA: Annual Reviews.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

- Fudge, R.S., & Schlacter, J.L. (1999). Motivating employees to act ethically: An expectancy theory approach. *Journal of Business Ethics*, 18(3), 295–304.
- Hein, K. (1996). Raises fall, but incentives save the day. *Incentive*, 170, 11.
- Herzberg, F. (1966). *Work and the nature of man*. Cleveland, OH: World.
- Hollenbeck, J.R., Klein, H.J., O’Leary, A.M., & Wright, P.M. (1989). Investigation of the construct validity of a self-report measure of goal commitment. *Journal of Applied Psychology*, 74(6), 951–956.
- Kanungo, R.N., & Mendonca, M. (2001). Evaluating employee compensation. *California Management Review*, 31(1), 23–40.
- Lawler, E.E. (1981). *Pay and organization development*. Reading, MA: Addison-Wesley.
- Locke, E.A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Performance*, 3, 157–189.
- McGregor, D. (1966). *Leadership and motivation*. Cambridge, MA: MIT Press.
- Pfeffer, J. (1998). Six dangerous myths about pay. *Harvard Business Review*, 76(3), 108–119.
- Porter, L.W., & Lawler, E.E. (1968). *Managerial attitudes and performance*. Homewood, IL: Dorsey Press.
- Porter, L.W., Lawler, E.E., & Hackman, J.R. (1975). *Behavior in organizations*. New York: McGraw-Hill.
- Robbins, S.P. (2005). *Essentials of organizational behavior*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Shaw, J.D., Gupta, N., & Delery, J.E. (2002). Pay dispersion and work force performance: Moderating effects of incentives and interdependence. *Strategic Management Journal*, 23, 491–512.
- Stedry, A.C. (1960). *Budget control and cost behavior*. Upper Saddle River, NJ: Prentice Hall.
- Stiffler, M.A. (2006). Making pay-for-performance a reality. *Performance Improvement*, 45(1), 25–30.
- Van Eerde, W., & Thierry, H. (1996). Vroom’s expectancy models and work-related criteria: A meta-analysis. *Journal of Applied Psychology*, 81(5), 575–586.
- Vroom, V.H. (1964). *Work and motivation*. New York: Wiley.

WILLIAM J. LICCIONE is the founder and managing partner of Compensation Planning Group (CPG), Inc. His firm develops and audits strategically aligned executive compensation, incentive compensation, salary management, and performance management plans for clients in both the nonprofit and for-profit market sectors. Prior to founding CPG, Bill provided compensation consulting services for over 20 years to three international compensation and benefits consulting firms. He received a BA degree in English from the University of Rio Grande, an MA degree in sociology from Northern Illinois University, an MBA degree in accounting and finance from Southern Illinois University-Edwardsville, and a PhD degree in social psychology from the University of Missouri-Columbia. Bill is an adjunct professor of business at the Maryville University Simon School of Business in St. Louis, where he teaches courses in organizational behavior, leadership, and statistics, and at the Webster University School of Business and Technology in St. Louis, where he teaches a course in compensation. He may be reached at [bliccione@msn.com](mailto:bliccione@msn.com).