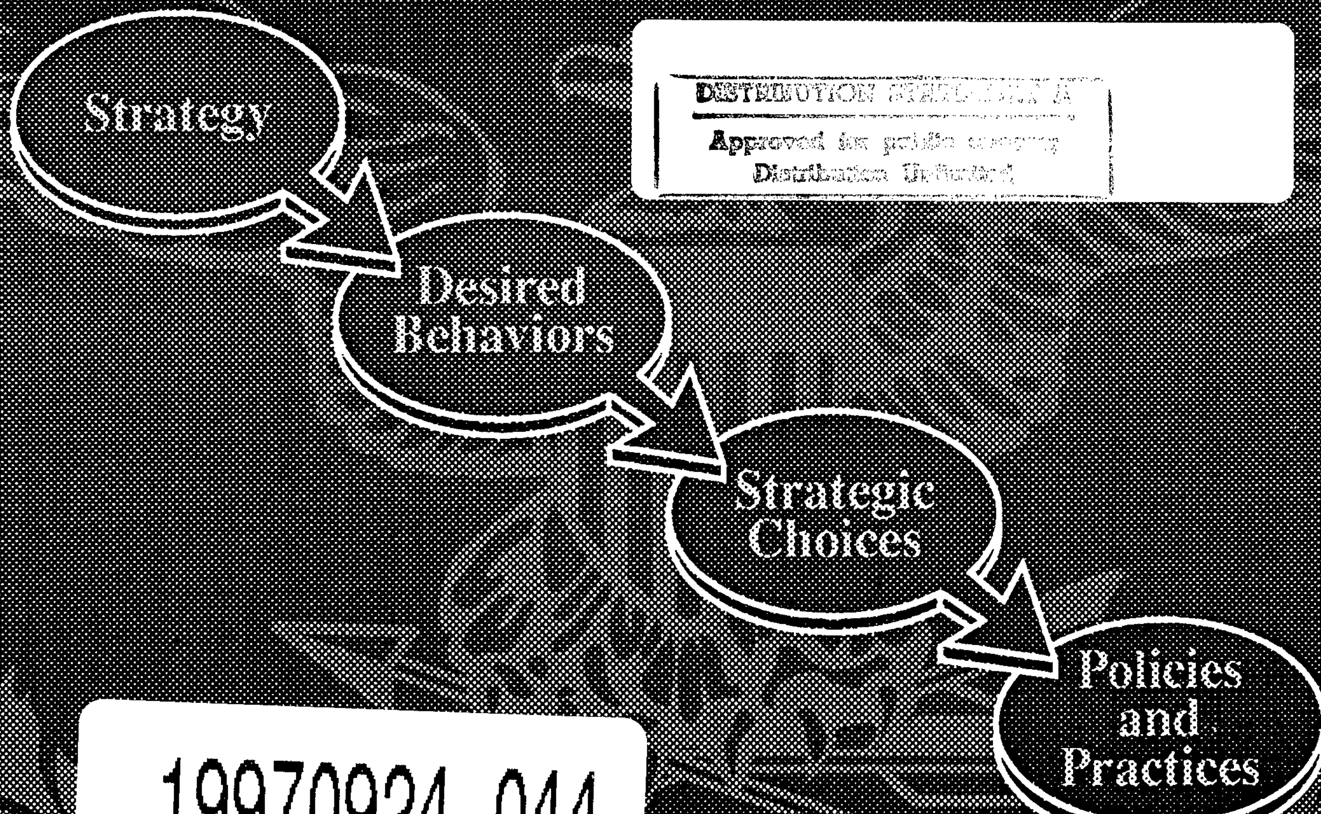
Rewarding, Organizing and Managing People in the 21st Century:

Time for a Strategic Approach



Report of the

8th Quadrennial Review of Military Compensation

June 30, 1997

Working Papers

Rewarding, Organizing and Managing People for the 21st Century: Time for a Strategic Approach

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8th Quadrennial Review of Military Compensation Publications

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Rewarding, Organizing and Managing People for the 21st Century:
Time for a Strategic Approach
June 30, 1997

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Compensation

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Chapter 1
Introduction

An organization designs and implements a reward system to focus employees on the specific behaviors the organization determines necessary to achieve its objectives and goals.

Organizations are designed to accomplish specific purposes. The dynamic resource that enables organizations to survive and succeed is people. Organizations must attract, hire, retain and motivate people who possess the appropriate knowledge, skills, aptitudes, and attitudes. While an integrated human resource management system is required to address all "people needs" of an organization, the primary focus in this working paper is the reward system.

An organization designs and implements a reward system to focus employees on the specific behaviors the organization determines necessary to achieve its objectives and goals. Specific behaviors may range from arriving at work at a designated time and meeting specific performance standards to providing innovative contributions that lead to desired outcomes.

Various motivational theories attempt to explain the effect of rewards on behavior. Some succeed in explaining behavior in general but fall short of explaining the behavior of specific individuals. The perceived value of a reward varies significantly over time and is influenced by lifestyle changes. Designing and managing a reward system that will benefit the organization is difficult and complex.

The purpose of this working paper is to summarize the theories, practices, principles, advantages and disadvantages underlying the elements of a compensation system.

CHAPTER 2
MOTIVATIONAL THEORIES AND COMPENSATION

Introduction

There are numerous studies, research reports, and theories that attempt to explain the complex behavior of people at work. They try to give managers prescriptions for the best way to manage an organization's human resources enabling them to achieve organizational ends. This section briefly introduces a number of motivational theories from the field of industrial and organizational psychology. The first set of theories, called content theories, focuses on the specific factors that motivate people. The second set of theories, the process theories, attempts to explain and describe how people start, direct, sustain and stop behavior. The discussion of these theories will be followed by examples of how they might be used to think about compensation.

Content Motivational Theories

Maslow's Hierarchy of Needs

. . . people spend their entire lives seeking to satisfy certain needs.

Maslow believed that people spend their entire lives seeking to satisfy certain needs. This activity determines and directs human behavior. People proceed from the satisfaction of lower level needs to the satisfaction of higher level needs. This occurs in a specific hierarchical order. *Relative* satisfaction of a lower level need is required before a person can focus on higher level needs. These needs and ways in which they might be satisfied are listed below:

Level 1 – Physiological needs are the basic survival needs for food, water, shelter, sleep, and other physical essentials. Money makes it possible for people to satisfy these basic needs.

Level 2 – Safety needs focus on the need for people to assure themselves that they are relatively safe from the dangers and insecurities of their environment. Money, specifically benefits, generally enables people to satisfy this fundamental need. People often express this need by seeking medical, unemployment and retirement benefits.

Level 3 – Need for belongingness involves the need for social interaction. This is the need to belong to a group, to affiliate with other people, and to be accepted by those with whom they associate. This need is most often satisfied within the context of jobs. People look to the workplace to provide opportunities for finding and establishing interpersonal relationships.

Level 4 – Need for esteem is divided into two aspects. First, people need to experience self-worth, competence, and mastery in their primary areas of activity. Second, people need appreciation, recognition, and respect from others. Leaders often address this need by the use of public recognition and reward.

Level 5 – Need for self-actualization is the highest level need toward which people strive. Once lower level needs are *reasonably* satisfied, people are motivated toward fulfillment of their inner selves or "to become everything that one is capable of becoming." Self-actualized people feel that they have reached their full potential. Managers trying to motivate people in this category may use involvement strategies in planning job design. They make special assignments that capitalize on employees' unique skills or involve employee groups in designing work procedures and plans for implementation.

Maslow contended that most workers in America had already satisfied their lower level or "deficit" needs (for example, the first two levels). Managerial strategies such as increasing income, strengthening job security or enhancing feelings of social satisfaction would not accomplish any worthwhile purpose. Only when individuals performed the type of work that led to satisfaction of their higher level needs for esteem and self-actualization would they be able to make significant contributions to their organizations.

McGregor's Theory X and Theory Y (1960-1970)

McGregor believed that a manager's styles of leading and directing people are very closely related to their belief systems. He offered two diametrically opposed theoretical constructs or fundamental assumptions regarding the behavior of people at work.

Theory X, the traditional management view, calls for firm direction and control of people. It assumes average employees dislike work, prefer to be directed by superiors, wish to avoid responsibility, are relatively unambiguous, are unconcerned about their organizations and are motivated by the need for security. Managers accepting these assumptions will use coercion, fear and threats of punishment to get their employees to produce. McGregor stressed that this approach would achieve minimal results.

Theory Y, this contemporary management approach, rests on the following assumptions:

- Expending effort in work is as natural as play or rest. Depending on a number of conditions, work can either be a source of satisfaction and employees will want to perform it or it can be a source of punishment and employees will want to avoid it.
- Employees will exercise self-direction and self-control to reach objectives to which they are personally committed.
- Commitment to objectives can be achieved through the satisfaction of an employee's ego and self-actualization needs.
- The average person can learn to accept and actively seek responsibility.

. . . work can either be a source of satisfaction and employees will want to perform it or it can be a source of punishment and employees will want to avoid it.

- The capacity to demonstrate imagination, ingenuity and creativity and apply them to solving organizational problems is widely distributed in the work population.
- In most job environments, the intellectual potential of the average employee is only partially used.

McGregor's strategies for implementing Theory Y, which he considered most successful in attaining organization objectives, included delegating more responsibility to employees, broadening their areas of work activity, and allowing people to participate more actively in matters directly affecting them on the job.

Herzberg's Motivation-Hygiene Theory

When people experience true job satisfaction and motivators are activated, they are stimulated to do high-quality work and, thereby, make worthwhile contributions to their organizations.

Herzberg assumed there are two sets of factors present in any job situation: satisfiers and dissatisfiers. These factors are *not* opposite ends of the same continuum. The absence of one set of factors does not indicate the presence of the other factors; in other words, not having job dissatisfaction does not mean having job satisfaction, but merely nonsatisfaction.

Motivators are factors that result in job satisfaction. They relate to the intrinsic *content* of the job and include achievement, recognition, the nature of work itself, responsibility, advancement and a feeling of personal growth. These factors contribute to satisfying Maslow's ego and self-actualization needs.

Hygiene factors are the aspects of a work situation that lead to job dissatisfaction. They are related to the extrinsic *context* of the job. Included in these factors are company policy and administration, supervision, working conditions, job security and salary. Hygiene factors, contribute to satisfying Maslow's lower-level needs.

When people experience true job satisfaction and motivators are activated, they are stimulated to do high-quality work and, thereby, make worthwhile contributions to their organizations.

McClelland's Achievement Motivation Theory

... people are motivated according to the strength of their desire to perform in terms of a standard of excellence or their desires to succeed in competitive situations.

McClelland assumed people are motivated according to the strength of their desire to perform in terms of a standard of excellence or their desires to succeed in competitive situations. There are three major characteristics of high achievers: (1) they like to set their own goals, (2) they tend to avoid the extremes of difficulty levels in selecting goals, and (3) they prefer tasks that provide timely feedback. High achievers value money as a strong symbol of their achievement and adequacy, but compensation may create dissatisfaction if they feel it inadequately reflects their contribution. High achievers also get the most from jobs containing high levels of competition.

Process Motivational Theories

Expectancy Theory

Expectancy theory views people as having their own needs and ideas of what they desire from work and its rewards.[1] They use these desires to make decisions about what organization to join and how hard to work on the job. Therefore, people are not inherently motivated or unmotivated; motivation depends on the situation people are facing and how it fits their needs.

. . . people are not inherently motivated or unmotivated; motivation depends on the situation people are facing and how it fits their needs.

There are three elements of expectancy theory: expectancy, valence and instrumentality. Expectancy is the belief that a particular level of effort will be followed by a particular level of performance. Valance is a measure of an individual's feelings about a particular outcome. The product of expectancy and valance determines motivation. Instrumentality is the relationship between performance and outcomes.

On this basis, it is possible to build a model of behavior. An example of one of these models can be found in Figure 1. The model shows motivation as the force that causes an individual to expend effort. Effort alone is not enough. Unless the individual sees that his or her efforts can lead to some performance level, the individual will not put forth much effort. This expectancy of being able to perform at a given level will determine the amount of effort expended. Also, the more an individual believes that a certain level of performance will lead to a desired outcome, the more the person will be likely to perform at that level. This relationship is instrumentality. So it can be seen that in order for an individual to put forth effort, the individual must feel that he or she is likely to perform at that level, and that the outcome associated with that level of performance is desirable.

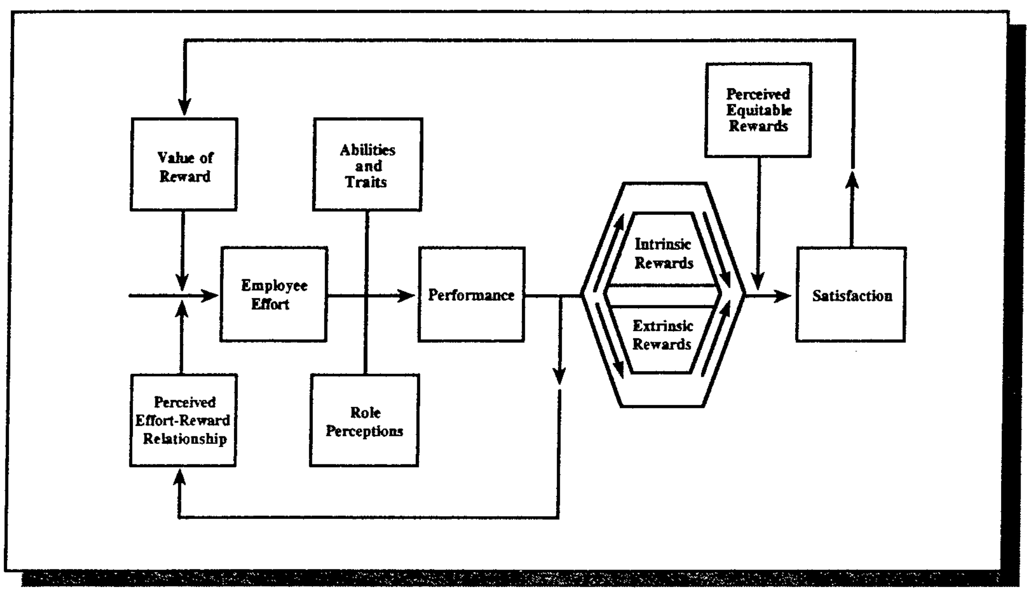


Figure 1 – Integrated Motivation Model

[1] William P. Anthony, Pamela L. Perrewe, and K. Michele Kacmar, *Strategic Human Resource Management* (Orlando, FL: Harcourt Brace Jovanovich, 1993), pp. 431-432.

Equity Theory

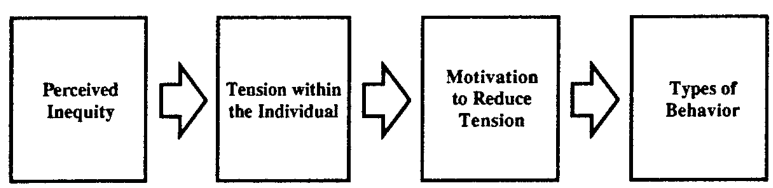
Equity theory focuses on individuals' feelings of how fairly they were treated when compared to others.[2] The two primary elements of the theory are (1) that people evaluate their social relationships just as they would evaluate buying a car, home or stock and (2) that people do not operate in a vacuum – they compare their own situation with others.

Equity exists when the ratio of a person's outcomes to inputs equals the ratio of others' outcomes to inputs.

Equity theory considers the relationship of two variables: inputs which are what an individual contributes to an exchange – and outcomes – what an individual receives from the exchange. Equity exists when the ratio of a person's outcomes to inputs equals the ratio of others' outcomes to inputs. Inequity occurs when the ratios are not equal. People who work harder than others, complete work on time and put in longer hours expect a larger outcome or reward. Inequities cause tensions which people will seek to reduce through six behaviors:

- Change their inputs upward or downward.
- Change their outcomes to restore equity.
- Distort their own inputs and outcomes. (This is a mental adjustment to achieve equity. They may say things like "this job is a piece of cake," or "this job is really important!")
- Leave the organization or request a transfer.
- Change their comparison group.
- Distort the inputs or outcomes of others.

An example of an equity theory framework can be found at Figure 2.



Source: Adapted from Introduction to Organizational Behavior by Richard M. Steers, p. 157. Copyright 1981 Scott, Foresman and Company.

Figure 2 – Motivational Process of Inequity

[2] Anthony, Perrewe and Kacmar, pp. 429-431.

Motivational theories have not enabled all managers to increase the productivity of their employees. Several factors may help to explain the confusion, discrepancies, and paradoxes surrounding the entire work motivation issue. For example, the degree of work motivation varies widely among people. It is difficult to generalize the motivational theories to fit every situation. People vary in their psychological needs, motivational pattern, and values as they do in their abilities, personality characteristics, and levels of mental ability. People have different opinions about the importance of work. For many, a job is the means to an end – for example, getting money to enjoy off-the-job leisure or family activities. Additionally, there has been a significant change in the attitudes of many employees toward work. The overall work ethic is not as strong as it was. The will to work varies widely from person to person. Another reason for the attitude change is the rise in affluence in the nation. Clark Kerr, a noted researcher, made this observation, "hard work leads to affluence, affluence leads to new life-styles, and new life styles diminish the work ethic." Finally, there has been an increase in government social support programs.

Motivational theories have not enabled all managers to increase the productivity of their employees.

Extrinsic vs. Intrinsic Rewards

The difference between intrinsic and extrinsic rewards is another important concept in understanding compensation theory. Extrinsic rewards are those things that originate outside the individual. They are things like pay, benefits and awards – things the employer gives directly to the employee. Intrinsic rewards originate *inside* the individual; they are rewards that people give themselves. They are largely independent of an organization's formal compensation program and depend more on employees' needs and the work they do. Jobs that are interesting and challenging and those that provide opportunities for growth and development are said to be jobs that are intrinsically rewarding. That is, an employee can reward or compensate himself or herself by just performing the work. Management can not provide intrinsic rewards to employees, only the opportunity for employees to reward themselves in this way. Both extrinsic and intrinsic rewards are important in the design of a compensation system.

Example of Theory Application

McCoy[3] provides one perspective for integrating extrinsic and intrinsic rewards and motivational theory into a complete system. McCoy's concept – Behavior Based Incentive Compensation – is summarized: "Maslow and Skinner have shown us that the human drive to fulfill specific needs will produce specific behavior. It is widely accepted that specific behavior will produce specific results. By identifying the desired results in specific terms, an organization can work backward and identify the behavior that will generate those results. Next, it must identify the employees' intrinsic and extrinsic needs that are within the organization's power to fulfill. By providing the opportunity to fulfill those needs, and by making such an opportunity contingent upon the specific performance that has been identified, it is possible to link the needs of the employees and the organization."[4]

[3] Thomas J. McCoy, *Compensation and Motivation* (New York, NY: AMACOM, 1992).
[4] McCoy, p. 85.

Both extrinsic and intrinsic rewards are important in the design of a compensation system.

The author proposes a system that combines both intrinsic and extrinsic aspects into a "fishbone diagram" (Figure 3). The diagram has two sides. One side represents the employees' needs, the other the needs of the organization. The employee side is divided into extrinsic and intrinsic parts.

The intrinsic part, found in the upper left of the diagram has three sections: empowerment, positive reinforcement and focus. These are defined as follows:

- *Empowerment:* reflects the basic need to feel in control of one's own environment.
- *Positive reinforcement:* represents the basic human need for achievement and accomplishment and the reassurance those provide to self esteem.
- *Focus:* reflects a sense of purpose and direction.

The bottom left portion represents the employees' extrinsic needs. This part is divided into three sections: How-Pay, What-Pay and Why-Pay. The important idea here is that the satisfaction of the extrinsic needs listed in the bottom left cause or foster the environment that leads to the satisfaction of the intrinsic needs in the upper left. For example, the Why-Pay rewards can give an individual focus – such as, paying for specific goals – and some positive reinforcement; the What-Pay rewards give positive reinforcement and some empowerment – namely, it lets the employee make a cost-benefit comparison.

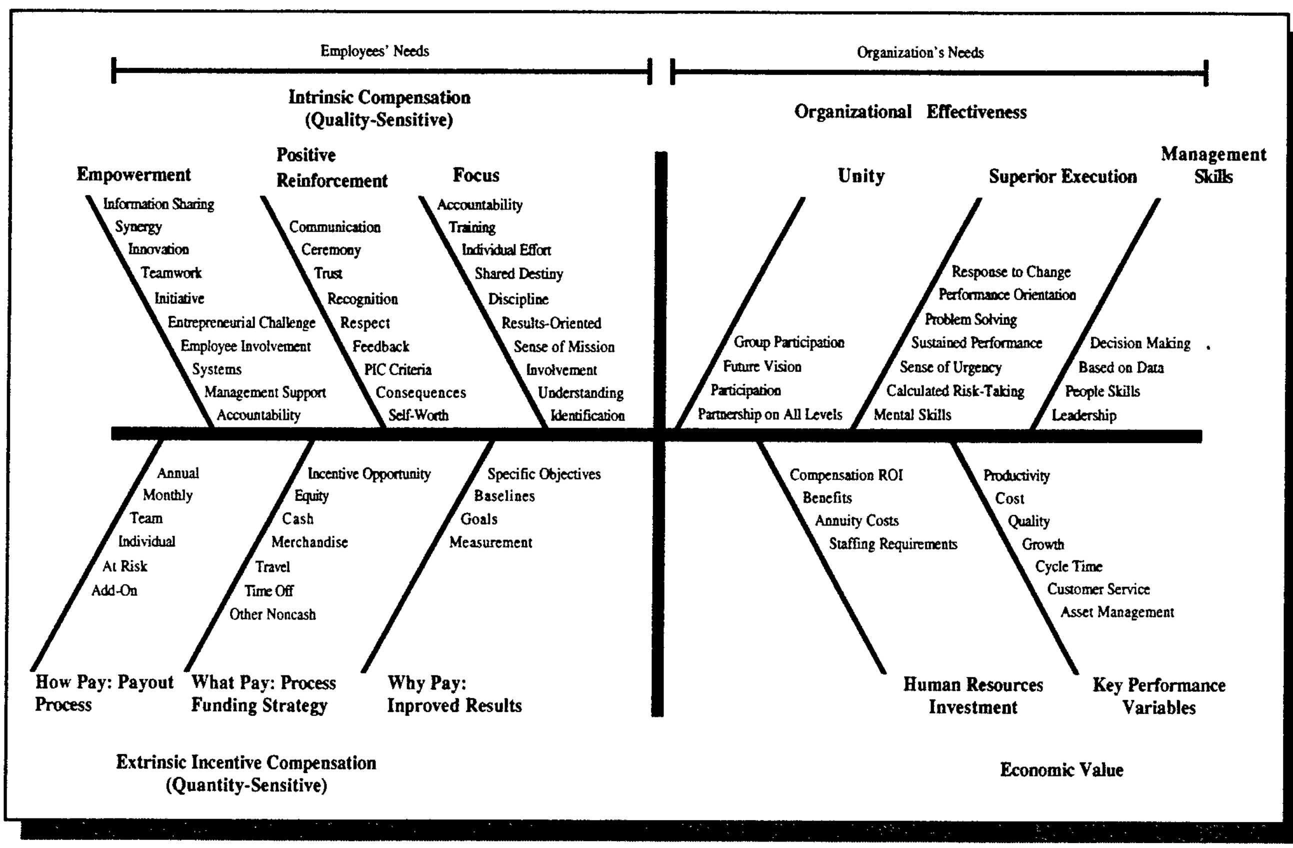


Figure 3 – The Congruent Fishbone Diagram[5]

[5] McCoy, p. 114.

The organization's needs are divided into two sections on the right-hand side. The top section is somewhat analogous to the intrinsic needs of the individual. These are the organization's needs as they pertain to organizational effectiveness and are divided into unity, superior execution and management skills. The bottom right quadrant represents the organization's economic or "extrinsic" needs: human resources investment and key performance variables.

The author proposes that the senior managers of an organization choose the fundamental objectives they wish to attain. These can be used to fill in the right-hand side of the chart. The next step is to design a compensation and management system in such a way that the employees' intrinsic needs are fulfilled through their efforts in helping the organization reach its objectives.

Compensation Team Framework

After analyzing the theoretical background, the Compensation Team devised the following framework to think about the compensation process.

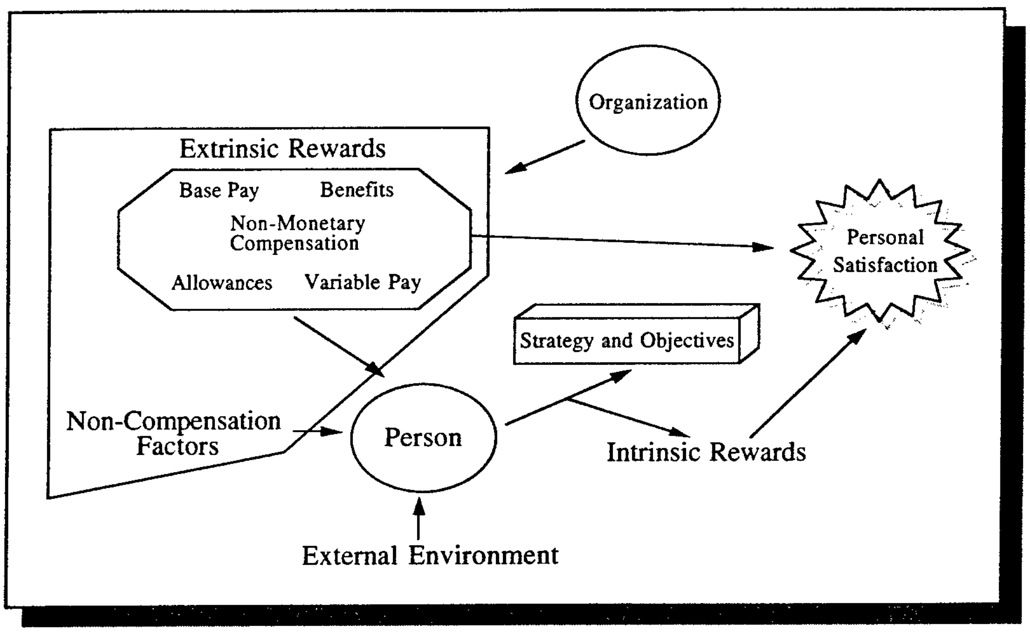


Figure 4 – Reward Framework

Organizations have many ways to get employees to work for them. The most obvious way is through the reward system, more specifically through extrinsic rewards. These rewards cause the employee to work for the organization and, by meeting some individual need, will provide some level of personal satisfaction.

However, there are also factors, not directly related to the amount of extrinsic rewards that affect the employee. These include the environment as well as things like positive peer relationships, feelings of ownership and empowerment, availability of status symbols, etc.

These *non-compensation factors*, affect how the person perceives and does the job, just as the extrinsic rewards do. When all of these means are applied effectively, the person receives intrinsic rewards through working for the organization. The intrinsic rewards further increase the level of personal satisfaction. It can be seen that there is more to creating personal job satisfaction for employees than just providing extrinsic rewards through the compensation system. In order for this to be most effective, the organization must also have a personnel system and management culture that provide these non-compensation factors.

CHAPTER 3
COMPENSATION PROGRAMS

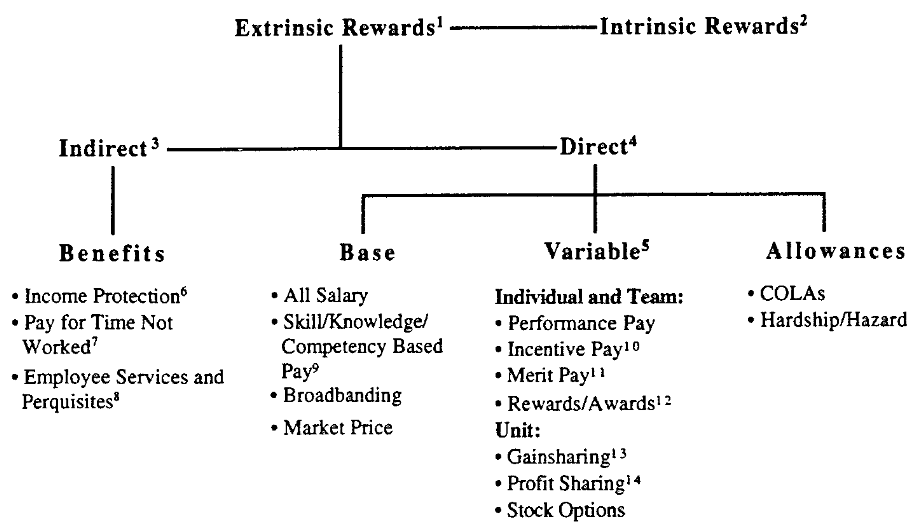
Introduction

... a total compensation program consists of extrinsic rewards and intrinsic rewards ...

"The reward system of an organization includes anything that an employee may value and desire and that the employer is able or willing to offer in exchange for employee contribution."[6] The components of a total compensation program consist of extrinsic rewards and intrinsic rewards as described in Chapter 2. Two types of extrinsic rewards will be covered in this chapter: direct and indirect rewards.

Direct rewards or pays are tangibly given in terms of cash or financial expenditures as payments to employees for time worked or results obtained. There are three types of direct pay: base pay, variable pay and allowances. (Allowances are not discussed in this paper as the literature focuses on the private sector policies and practices that do not use allowances as extensively as the military.) Indirect pays are expenditures that are made for the benefit of an organization's employees. Indirect compensation programs are often referred to as the "fringe benefits" or "employee benefits" programs.

[6] Richard I. Henderson, *Compensation Management,* 6th ed. (Englewood Cliffs, NJ: Prentice Hall, Inc., 1994).



[1] Rewards provided by the organization in which work is performed.
[2] Rewards people give themselves primarily through emotions such as a feeling of accomplishment. Management can not provide these rewards only the opportunities for employees to reward themselves.
[3] Remuneration not found in the paycheck.
[4] Remuneration found in the paycheck.
[5] Remuneration that is not guaranteed and that varies. It is generally in addition to base pay.
[6] Examples are life, travel, accident, disability and medical insurance and retirement plans.
[7] Examples are paid lunch hours, paid vacations, maternity leave.
[8] Examples are food service subsidies, educational assistance, company cars, recreational facilities.
[9] Base pay levels are dependent upon the skills and abilities of the person as opposed to the job requirements.
[10] Remuneration designed to incentivize performance. Examples are commissions, performance bonuses, profit sharing, gainsharing. Incentives are predetermined; goals and rewards are known and results are measurable.
[11] System that awards periodic, permanent pay increases based on individual performance as measured by the appraisal system.
[12] Either monetary or nonmonetary reward based on performance and may or may not be predetermined. Examples are spot cash awards, vacations, suggestion program certificates, service awards or trophies.
[13] Bonus based on gains in productivity, quality, cost effectiveness, etc., for the "local" organization, not corporation profits.
[14] Bonus opportunity tied to the entire organization's financial performance.

Figure 5 – Breakdown of Reward Types

Base Pay

Organizations may use base pay to reflect the economic, competitive market, and strategic value of jobs or skills. Base pay helps organizations to reflect the relative importance of jobs, compete economically for talented people in the external market, and acknowledge differences in performance among people. Other pays, including indirect pay, are often computed as a percentage of base pay.

Base pay programs in traditional organizations focus on the individual employee, the job assigned, and the next higher job in the hierarchy. Employees become focused on themselves and close internal relationships around them. Their most pressing concerns are vertical career growth and internal job and pay relationships rather than horizontal job and skill opportunities. Individuals compete to expand their control of people and resources as a way to add greater value to their job.

Base pay is not an effective reward for performance . . .

In most businesses today, base pay follows industry practices without much concern about the impact on organizational performance. Base pay costs are allowed to increase without regard to improvements in performance, quality and productivity. The driver for base pay is competitive practice and internal equity. Base pay is not an effective reward for performance because it ignores the importance of overall organizational results; it is most often viewed by employees as an entitlement. It focuses on the individual and not teams; therefore, it is generally ineffective as a reward for work that is best accomplished in teams.

As organizations move into the future, base pay will accomplish three goals. It will reflect changes in the economics of the labor markets in which the organization elects to compete for talent; serve as the foundation of variable pay; and reflect either the economic, market or strategic value of jobs.

Base pay effectively represents the market value of jobs or skills. Jobs and skills that have greater external market value receive higher base pay. In the future, base pay will need to respond to changes in the external market. It will also be used to control costs so that the organization is not placed in a disadvantageous competitive position by having excessive fixed labor costs.

Base pay levels are determined in many ways, but generally they are based on the level and experience required of the job and performance in that job. As more organizations move to flatter structures and team-based cultures, two other programs are becoming more widely used in structuring base pay: **competency-based pay**, broadly used to include skill-based/knowledge-based/mastery-based, and **broadbanding**.

Competency-based pay rewards employees for particular skills or knowledge or competencies and job related behaviors. These programs provide organizational flexibility by developing a pool of employees capable of working in multiple jobs. Managers can increase rewards to employees based on skill acquisition and lateral movement instead of promotions. These programs support an organization's ability to base pay on the person, not the job, and are easily used in pay for performance programs.

Broadbanding is a program that consolidates a number of salary ranges or levels of base pay into fewer and wider pay bands. Pay varies among individuals within a band based on an individual's skills, knowledge and experience, and individual or team performance.

Increases in base pay are still widely based on a merit system. Theoretically, this merit pay system gives the best performers a larger increase than average performers and average performers larger increases than marginal performers. Statistical studies do not support this claim. As an example, a two percent difference between base pay increases granted to a "average" and "best" employee will not have a long-term effect on both the employees total compensation and the cost to the organization.[7]

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[7] Jay R. Schuster and Patricia K. Zingheim, *The New Pay: Linking Employees and Organizational Performance* (New York, NY: Lexington Books, 1992).

Employees usually view this pay increase as too small to reflect the difference in performance and to make excellent performance worthwhile. A number of studies indicate that the percent increase would need to be about ten percent in order for employees to believe that exceptional performance is worth the effort required to achieve it.[8] Many firms have merit pay as part of their pay for performance program. In the future, employees may not be guaranteed an annual, or any, pay increase. Pay increases will be given only if the organization can afford it and the employee's performance warrants it.

In the future, employees may not be guaranteed an annual, or any, pay increase.

Another idea for organizations to get the most out of increases to base pay is to create from proposed base pay increases an amount of potential base pay that is at risk. An employee would get the potential base pay at risk if they meet or exceed performance targets. Once the funds are designated as potential base pay at risk, they are part of variable pay because they are contingent on performance. Employees may also increase their base pay in competency based systems by acquiring new competencies.

Questions to consider when setting strategy for future base pay:

- What should the organization expect from employees in exchange for base pay?
- What factors should determine the level of base pay paid within the organization? The labor market? Internal equity across the organization? Internal equity within broad functional areas? Job content? Skills? Individual performance? Organizational performance? Strategic value of jobs to business goals?
- If competitive practice should play a role in determining the level of base pay, what should constitute competitive practice?
- How should the value of jobs be determined using the elements under the various options such as skill-based, strategic value of jobs or internal equity?
- How should the organization determine how it benefits from base pay?
- What should be the basis of any base pay increase granted?
- If merit pay is to play a part in granting base pay increases, what role should it play?
- What criteria and methodology should be used to appraise employee performance?

There are two primary factors that form the basis of pay: pay for the job and pay for the person. Pay for the job is based on a job description, job evaluation, and job appraisal system. It is prevalent in hierarchical organizations. Pay for the person seeks to separate the person and their skills from the specific aspects of the job they hold. The following sections will cover these two factors in greater detail.

[8] Edward E. Lawler III, *Strategic Pay: Aligning Organizational Strategies and Pay Systems* (San Francisco, CA: Jossey-Bass, 1990).

Paying for the Job

Introduction

Job-based pay typically rests upon the foundation of a job evaluation system. In designing and implementing such a system, the first step is to identify the work content of each job and the requirements of the jobholder. The organization must be able to accurately and precisely identify the required responsibilities and duties, education, experience and skills necessary to perform these assignments. Management must also address the conditions under which tasks are performed in order to compensate based on job content and performance. This analysis must validly measure and differentiate job and performance requirements so that all employees receive fair and equitable treatment. There are a number of advantages, disadvantages and conditions that should be considered when implementing job-based pay.

Job-based pay typically rests upon the foundation of a job evaluation system.

Advantages

- Can pay people the same rate for comparable job duties regardless of where they are in the organization.
- Is simple to understand and easy to administer, once it is in place.
- Ensures market competitiveness.
- Avoids the difficulties of moving to a skilled-based pay system.
- Makes moving from one part of the organization to another easier.
- Allows for centralized control of pay systems and costs.
- Gives the appearance of objectivity because it is usually based on complex quantitative methods.

Disadvantages

- Provides little, if any, opportunity for variation based on individual performance, experience or skill.
- Promotes bureaucratic management style.
- Reinforces hierarchy.
- Depersonalizes value orientations and establishes the principle that people are only worth what they do rather than who they are and what they can do.
- Fosters internal focus and impairs a strategic orientation.
- Is very labor intensive, initially.
- Potentially inflates the pay system's operating costs. Employees will build job descriptions to get more pay.
- Does not encourage skill development.

Conditions Under Which Job-based Pay Works Best

- Organizations that desire high levels of internal equity or pay comparability.
- Union jobs, for example, electrician or welders.
- Temporary or apprentice jobs, for example, clean-up crews after major disasters.
- College interns.
- Sales representatives for the "fixed" portion of their pay.

Conditions Under Which the Job-based Pay Does Not Work Well

- Organizations where people are rewarded and respected for their expertise and ideas, not for the "value" of their jobs.
- Environments of rapid change.
- Hierarchies that encourage the best and brightest to move up.

Discussion

To implement this type of pay system, basic employee groups must defined, according to their values, pay needs, skills, and the strategic role each group will perform in the organization. Next, the organization must effectively convey strategic role messages to each group, keeping in mind that the message should be consistent with their cultural values and needs. Three assumptions lie at the heart of this type of pay system:

- Every employee belongs to a basic group.
- The role of each basic group, though differentiated in pay, is important to organizational success.
- When used properly as management tools, the company's compensation plans communicate and reinforce what that role is and how well it is being accomplished.

Employers must remember that base pay serves as the economic foundation for employees. It provides security and must be delivered with regularity. It should be relatively inflexible and adjusted periodically to offset the effects of inflation and to keep pace with the market. Essentially, it is compensation for being competent in a job – for possessing the knowledge and talent to do the job and applying that knowledge in a proficient and productive way.

Employers must remember that base pay serves as the economic foundation for employees.

Not all jobs have the same value. Differentiating base pay for various jobs establishes a hierarchy of value within the company. This differentiation is usually based purely on the results of a job analysis program. This is an analysis of job

Differentiating base pay for various jobs establishes a hierarchy of value within the company.

activities, tasks, and behaviors which involves compiling a detailed description of responsibilities and duties, determines the relationship of the job to technology and market data, the amount of knowledge required to prepare for and perform the job, accountabilities and the conditions under which the job is performed. Job analysis also involves the identification, collection, classification of task statements and job behaviors. A list of tasks provides a detail analysis of what the incumbent does in performing the various job activities, whereas the job behaviors provide insight as to what can be considered acceptable or unacceptable behavior.

Since job-based pay is directly linked to job value, a hierarchy of job values provides a significant opportunity for employees to increase their earning power over time through promotions. However, the recent trend toward flatter organizational structures suggests there may be fewer promotions available in the future.

Job-based pay motivates in two ways – one positive, the other negative. When employees know that another job carries a higher base pay, they are motivated to work toward a promotion. At the same time, because base pay compensates for being competent, workers will maintain competency or risk losing their jobs. The pay components and weight for each strategic group of employees will vary based on the role assigned to that group and the results, activities, or behaviors expected.

Paying for the Person

Introduction

Paying for the person can be based on any personal characteristics: the person's value in the marketplace, skills, education, knowledge or experience, family status, age, seniority within the organization, or any other characteristics one might imagine. The most widely used method of pay for the person is *skill-based* pay. More recently, emphasis on strategic planning for competitive advantage and limitations of skill-based pay have given rise to *competency-based* pay.

As organizations have downsized and restructured, they have sought new ways of paying people that are congruent with the new structures.

One reason these kinds of pay are receiving emphasis today is that companies' reactions to increasing global competition over the past thirty years have reduced the viability of the "job" as the basic unit of organizational structure in this country. As organizations have downsized and restructured in order to be competitive, they have sought new ways of paying people that are congruent with the new structures. For example, organizations must have the flexibility to respond quickly to innovative competitors in order to provide existing products at lower cost or bring new products to market efficiently – or must have the flexibility to *be* the low-cost producer.

The organization must be able to assign people to new jobs or tasks easily and efficiently. A system requiring detailed evaluation of each facet of a job needed to produce a product may be too slow to respond to changing job requirements because it simply takes too long to develop job descriptions – the tasks may come and go too fast.

As a result, companies are shifting their focus from *jobs* to *people*, with the skills and competencies they possess, as a more stable basis for structuring the organization.

We discuss both skill-based and competency-based pay, then some possible applications to human resource management in the military.

Skill-based Pay

In skill-based pay, the starting point for an individual's pay is the *mix and depth of skills* rather than the *job.*

The essential requirement of skill-based pay is that the organization be able to determine which skills ought to be rewarded. The organization has to identify the tasks that need to be done, the skills needed to do those tasks, and it has to place a dollar value on those skills. Then, the organization has to determine the number and types of skills each employee can be rewarded for learning, explain the system to the employees, and, finally, pay for those skills that employees learn and are willing to perform. Payment may be per skill or for a collective combination of skills; it may be a lump sum payment or continuous. There must be a mechanism for assessing the skills of each employee, and the plan should consider both horizontal and vertical learning. Payment could also include a pay-for-performance element by paying according to how well the skill is performed.[9]

The use of skill-based pay is widespread and increasing. The proportion of Fortune 1000 companies using some form of skill-based pay has increased from 40 percent in 1987 to 60 percent in 1993, a fifty percent increase.[10]

Skill-based pay is most appropriate in new, high-involvement organizations – that is, where there is a high degree of employee participation in management. The reason is that this system works best when employees help identify the skills that would be most beneficial to the organization. Skill-based pay is easiest to implement at the start-up of a new organization; or in a company transitioning to a more participative management style. It is most applicable when the organization's performance depends on coordination and teamwork.[11]

. . . this system works best when employees help identify the skills that would be most beneficial to the organization.

The primary limitation of skill-based pay is that, while it is relatively easy to identify and measure needed skills for technical or repetitive work (for example, as in manufacturing or in paperwork processing functions within financial institutions like insurance companies), it is very difficult to do so for managerial, staff support, or other "knowledge-based" work. Further, there is the danger that paying for lateral or downward skills may not keep managers on the track for advancement. A principle of human resource management appears to be that *all components of human resource management must adjust to maintain alignment with organizational strategy when any one component (such as the pay system) changes.*

Lawler[12] points out an interesting concept: that paying for skills could permit one to eliminate pay increases solely for promotions – the increases would come from learning new skills, instead. He argues that people ought to be taking new jobs

[9] Lawler, 1990.
[10] CEO, 1995.
[11] Lawler, 1990.
[12] Lawler, 1990.

(promotions) because they are capable of and eager to do the work; not for the pay associated with the new job.

Finally, like paying for the job, the heaviest cost is in initially setting up the system. Once skills are identified and evaluation mechanisms devised, maintenance costs are relatively low as long as the needed skills are stable over time.

Advantages. The two main advantages of skill-based pay have to do with horizontal flexibility and what might be termed "employee empowerment."

Horizontal flexibility. If employees know multiple aspects of the business, they can shift around as needed to fill temporary overages and shortages, enabling leaner staffing. Giving employees some control over their pay can also result in lower turnover and absenteeism.

The greatest advantage comes when skill-based pay is combined with participative management, because they reinforce one another.

Empowerment. The greatest advantage comes when skill-based pay is combined with participative management, because they reinforce one another. As employees learn more about how the whole business operates and how their work affects other parts of the organization, they can develop the ability to solve systemic problems more efficiently, and they can develop a greater sense of commitment, both of which can increase intrinsic motivation. Allowing and encouraging employees to learn horizontal *and* vertical skills increases the potential for self-management. The organization can have a flatter structure that can reduce management overhead and costs.

Disadvantages. The main disadvantage is that skill-based pay generally results in higher pay rates and, therefore, in higher personnel costs – which may have to be offset by employing fewer workers. If a lot of employees are simultaneously learning new skills, productivity may decline in the short run. Skill assessment may have to occur frequently and may need difficult-to-implement peer-level assessment. However, it would seem that if there is a corresponding increase in productivity, *net* costs ought to be lower. The lack of conclusive statistical evidence for the success of skill-based pay may be partly due to the fact that most of the costs tend to be incurred in the near term while most of the benefits are longer-term.

Another disadvantage is that people are still subject to discontent on having "topped out," if there is an upper level to the number of skills they can learn and be paid for. There may be a tendency for employees to want to "job hop;" therefore, a "payback" period may be required; it is difficult for people to remain current in a multitude of skills at the same time because skills may atrophy if not used; and there is a problem with what to do when the skill upon which an employee's pay is based becomes obsolete. [13]

Competency-based Pay

Competency-based pay is the natural evolution of skill-based pay and can be thought of as "skill-based pay for knowledge workers." [14] This evolution manifests itself in a broadening of the concept of skills (to "competencies") and in tying competency-

[13] Lawler, 1990.
[14] Ledford, 1995.

based pay to strategic goals that have long-term significance for an organization's viability ("competitive advantage").

The success of many companies in the face of global competition in the 1980s and 1990s has been linked to their focus on the acquisition and development of "core competencies." [15] Core competencies can be thought of as the fundamental things an organization does well – well enough to give it a competitive advantage over other organizations. They are "bundles of competencies" that no one individual possesses, but that develop within an organization over time, measured in decades, and whose key characteristic is that they generate enduring value to the customer. It is the long-term nature of these characteristics that lends promise to the notion that "competencies" may have potential to replace "jobs" as the basic unit of organizational structure.

The logical extension of core competencies is *individual* competencies – the competencies that individuals develop that together constitute the organization's core competencies. The question that each organization must answer for itself is how to translate its core competencies into competency requirements for individuals. Competencies have been defined in several ways, but all definitions have in common that they include a broader array of possible qualifying characteristics than just "skills." The emphasis is more on *how* skills are used rather than what the skills themselves are: competencies are *any* characteristics of an individual that can be tied unequivocally to productivity of the organization. Some other definitions:

- Competencies are "demonstrable characteristics of the person, including knowledge, skills, and behaviors, that enable performance." [16]
- A competency is "an *underlying* characteristic of an individual which is *causally* related to *effective* or *superior* performance in a job." [17]
- Competencies are "individual performance behaviors that are observable, measurable, and critical to successful individuals or corporate performance." [18]

The rationale for competency-based pay suggests some practical considerations for any organization contemplating its use. Foremost is the necessity that the individual competencies an organization defines must be directly related to the strategic goals of the organization. This requires that the organization engage in strategic planning prior to implementing a competency-based pay system. Perhaps the most difficult part of the process is correctly identifying the necessary competencies – there is no tried-and-true methodology for doing this in the literature; organizations must figure it out for themselves.

. . . the individual competencies an organization defines must be directly related to the strategic goals of the organization.

There is a considerable body of research that examines the characteristics of recognized high performing individuals that relate directly to job performance. The research has documented detailed descriptions of competencies and how to evaluate individuals to determine to what extent they possess the competencies. [19]

[15] Prahalad and Hamel, 1990.
[16] CEO, 1995.
[17] Hay-McBer, 1990.
[18] ACA.
[19] Hay-McBer, 1990.

The challenge for the organization is two-fold: to "personalize" the competencies to the organization to create a unique set of competencies for the purpose of establishing a competitive advantage; and to correctly identify the core competencies that the organization does not possess now but will need to possess in the future, and for which there may be no existing models of high performance.

A final caveat is that competency-based pay does not address how to motivate work *effort* in an employee, and so should not be confused with "pay-for-performance." A competency-based pay system would still need pay-for-performance elements if the organization wants to incentivize individual performance.

Application to the Military

The current military approach to pay appears to be person-based, but not particularly *skill*-based. Military pay is person-based pay in that:

- Members are paid levels almost completely independent of the specific job the member holds.
- Pay is differentiated by marital status (in the allowances).
- *Longevity* and *rank* together determine the majority of military pay.
- Education is indirectly rewarded via the promotion system and commissioning requirements.

Why is military pay based on these characteristics as opposed to job, skill or competency? One might conjecture that the military early on naturally focused on individuals rather than jobs because such a focus best fits the nature of warfare. Principles of egalitarianism and paternalism have also played a role in the development of our military compensation system. And, it is easy to understand, measure, and predict the manpower costs of our military – a budget concern.

Does military pay have to be this way? Perhaps not. New Zealand, for instance, has implemented a skill-based pay system for its defense forces. In addition, some of the earliest research into competencies was based on studies of the military.

Future DoD strategy may require more flexibility than currently exists in our human resource management system.

Future DoD strategy may require more flexibility than currently exists in our human resource management system. Because the components of human resource management should be related to organizational strategies, other changes to the way the uniformed services manage people may require changes to the compensation system. For instance, the different strategies needed to effectively operate the different parts of an organization as large and diverse as the Department of Defense may lessen the historical need for pay egalitarianism.

Could military culture support a competency-based pay system? Such a system would require integrity, objectivity, commitment to maintaining standards – all these are values that military members adhere to. It requires a strong link to widely embraced strategic goals. It would be difficult to argue that the military should not support this requirement.

Pay for Performance

Introduction

"Pay for performance" refers broadly to any compensation paid to individuals or groups for the purpose of improving individual or organizational performance. Most often these are in the form of variable pay incentives, such as profit-sharing, gain-sharing, or bonus plans. Other types of pay that may have elements of performance pay are merit pay, promotion pay, and deferred compensation.[20] Historically, pay has been and is even now mostly based on the time an employee spends on the job rather than for either the labor input provided or the output produced.[21] Theories of motivation suggest potential for increasing the productivity of employees by providing specific incentives. The obstacles to doing this effectively, however, are many. This section explores the theory, practice and empirical evidence related to pay for performance.

Theory

Economic theory suggests that individuals should be paid a wage equal to the value of the work they perform (their marginal product). Employers can just cover the costs of staying in business at that wage level, while employees could quit and work elsewhere if an employer were not willing to pay that wage.

In practice, the wages that employees are paid deviate from the "values of their marginal products" for many reasons. The most notable, for the purposes of this discussion, is that there are costs involved in monitoring and measuring output of employees; indeed, in many cases, output is impossible to measure directly at all. When employee output is easily measured, as in the case of a salesman or of a worker producing a final physical product from some raw materials, a piece-rate variable pay incentive system is common. But these situations cover a small proportion of all work.

Workers supply two resources to their employers: *availability* and *effort*. Traditionally, organizations pay for availability – either directly for time spent on the job or implicitly – and assume a certain level of effort will accompany that employee's presence on the job.

"Pay for performance" focuses on ways of increasing the effort that employees put into their work. The basic theory is fairly simple and intuitive: Rewards from work are a benefit to employees, while work effort itself is a cost. Work effort is a cost because takes the place of other things a person could be doing (for example, relaxing, doing personal tasks, gossiping with co-workers); additionally, hard work may require longer recuperation or a need for "unwinding" after work, again creating opportunity costs. Therefore, employees will supply effort to the point that the cost of any additional effort is greater than the benefit to be gained from exerting that effort.

"Pay for performance" focuses on ways of increasing the effort that employees put into their work.

It is obvious from this formulation that if no rewards are associated with work effort, no effort is likely to be forthcoming. This implication is accompanied by

[20] Hogan, 1995.
[21] Blinder, 1990.

several others. If work effort *is* rewarded, then people who like to work, or for whom the cost of work is relatively low, will be attracted to and gravitate to those organizations. Similarly, if work effort is rewarded, hard workers will tend to remain in those organizations that reward it.[22]

In theory, then, rewarding employees for performance should draw forth greater effort. However, the theory is limited in its ability to predict whether it would be worthwhile for an employer to pay for performance. In particular, the theory says nothing about whether the costs of implementing a program will be less than the productivity gains the program produces.

It is important that a pay for performance program incentivize performance that will actually benefit the organization – the incentives of the employees must be aligned with the organization's goals. Further, people vary in their responsiveness to incentives, as well as in their potential for increased productivity. Finally, it may be that other aspects of the personnel management system impose a drag on worker performance such that changing those may be more efficient than increasing explicit rewards. Following are some of the theoretical problems surrounding pay for performance:

It is important that a pay for performance program incentivize performance that will actually benefit the organization . . .

Free riders. The "free rider" problem can exist when group performance rather than individual performance is the basis for rewards. Because an individual member will benefit from the efforts of every other member of the group, the reward for the individual member is less directly affected by that member's performance. Therefore, the individual has an incentive not to supply additional effort, but to be a "free rider" on the efforts of the other members. The presence of free riders will reduce the gains from paying for performance.

Moral hazard. If individual performance is rewarded in such a way that comparisons are made to the performance of other workers, then there may be some incentive to direct effort at subverting the performance of other workers rather than increasing one's own level of performance. One can envision this happening in competition for promotion, for example.

Risk. People generally prefer certainty over uncertainty when it comes to pay, yet they would be willing to risk some portion of their pay for the potential of increased rewards. If all pay is at risk, employees may not be motivated because they perceive a danger that they may lose pay due to circumstances beyond their control. The challenge is to design a pay system that correctly balances base pay with pay "at risk."

Codetermination. The term "codetermination" refers to what is also called the "principle-agent" problem – that the interests of the employee are not necessarily the same as those of the employer, or the organization. The incentive system must do more than incentivize effort; it must also ensure that the effort is directed toward achieving the goals of the organization. In theory, if workers have information that employers do not have or that it would be costly for them to obtain, then it may be possible for workers to supervise themselves more efficiently than for the employer to do it. This is one argument for employee empowerment.

[22] Hogan, 1995.

Rewards may be demeaning. It has been argued in one segment of the psychology literature [23] that *any* rewards contingent on performance – whether "carrots" or "sticks" – demean the employee and, while they may work in the short run, eventually cause the worker to dislike the task and do not work in the long run.

Motivational theories offer additional insights into understanding the way in which rewards effect the behaviors of people. Content theories, which pertain to factors in the workplace that motivate behavior, include Maslow's needs hierarchy, developed further by Alderfer, and Hertzberg's motivation factors, developed further by Hackman and Oldham.

Lawler's work in this area noted that management and human resource management systems must interact in a positive and dynamic manner, or rewards will have only minimal influence on employee behavior. There is little doubt that if managers could hire the right person for each job (properly match employee knowledge, skills, and abilities) and the right person to match the organization's culture (select individuals with the values that are similar and reinforce organizational values), the reward system would operate much more efficiently.

. . . management and human resource management systems must interact in a positive and dynamic manner, or rewards will have only minimal influence on employee behavior.

Process theories, those which attempt to explain and describe how people start, direct, sustain and stop behavior, include Skinner's "operant behavior," Vroom's expectancy theory, and Adams' equity theory. Together they indicate that more motivational value can be achieved by a pay for performance program when the employee recognizes a direct link between activities performed, results achieved, and rewards gained. Motivational value also increases when the delivery of rewards closely follows the demonstration of behavior, the completion of an assignment, or the achievement of a result.

Hackman and Oldham [24] describe task-related intrinsic motivation as accruing to individuals who experience, meaningfulness, autonomy, and feedback on the job. Thomas and Jansen [25] build on this theory to describe intrinsic motivation in terms of the worker's feelings of choice, meaningfulness, competence, and progress.

Practice

Because individual performance is often difficult to measure, pay for performance is most often concerned with generating increased *organizational* productivity by linking variable pay, in the form of incentives and awards, to desired employee behavior, contributions or results. Pay for performance programs have little positive effect if (1) little trust exists in the program and in the way it is administered; (2) the organization fails to communicate the procedures to be followed; (3) policies are not developed that relate specific pay increases with particular levels of employee performance; and (4) performance ratings are viewed as being biased or relating poorly to actual performance.

[23] Kohn, 1994.
[24] Hackman and Oldham, 1975.
[25] Thomas and Jansen, 1995.

Pay for individual performance. This type of pay for performance is a basic practice in traditional organizations. It fits well when the work environment values individual jobs and uses job descriptions, job evaluations and appraisal systems. In the perception of employees, being rewarded for individual performance is an issue of equity and fairness. Individual rewards can motivate employees if they are designed and administered properly. These rewards may also help an organization attract and retain employees who are high performers. The key to a successful pay for individual performance is the establishment of an effective system to measure performance and a clear relationship between performance and rewards.

Rewarding teams works best when their performance is easily measurable and where the work requires a high level of team behavior.

Pay for team performance. If an organization uses teams as the approach for work design, it is appropriate to create systems that reward team performance. An objective of such a reward system is to reduce competition between team members for rewards. In most cases, it is desirable that team members get the same size bonus or salary increase. Rewarding teams works best when their performance is easily measurable and where the work requires a high level of team behavior. When a team is primarily self-directed and responsible for a complete product or process, an organization may be able to use a gainsharing plan for the team. Organizations may also use merit pay based of performance appraisals. Team members can provide input that will affect the level of individual reward. Congratulations and social recognition from the other team members are often the most valued rewards.

Pay for organizational performance. Organizations may use three methods of rewarding individuals for organizational performance: bonuses based on profitability of the organization (profit sharing), employee ownership, and gainsharing.

- *Profit Sharing*. Profit sharing is usually based on a formula that measures the organization's overall financial performance. After some base-level of profit is achieved, a percentage of all additional profits is shared. Bonus amounts may be shared among employees as a percent of pay, an equal dollar amount, or based on the level in the organization (higher levels usually get a larger bonus). A fourth approach bases the bonus on individual performance.
- *Employee Ownership*. This pay plan puts some or all of the ownership of an organization into the hands of its employees. Stock options plans, stock purchase plans, stock grant programs, and employee stock options plans (ESOPs) are some of the means to achieve employee ownership.
- *Gainsharing*. In this type of plan, organizations use a formula to share financial gains with all employees in a single location. The organization establishes a historical base period of performance and uses this base to determine whether or not gains in performance have occurred. The popularity of gainsharing is related to features that make it a way of managing and developing organizations. It is a way to foster or reinforce participative management. Studies have shown the following results:
  - Coordination, teamwork and sharing of knowledge are enhanced in the organization.

- Employees' social needs are recognized via participation and mutual reinforcing group behavior.
- Attention is focused on cost savings.
- Acceptance of change due to technology, market, and new methods is greater because higher efficiency leads to bonuses.
- Employees change their attitudes, and they demand more efficient management practices and better planning.
- Employees demand better performance from each other.
- Employees try to work smarter.
- Employees produce ideas as well as physical work.
- When unions are present, union-management relations become more flexible.
- When unions support the plan, they are strengthened because the better work situation and higher pay result from the plan.
- Unorganized locations tend to remain nonunion.

Empirical Evidence

The question of whether or not pay for performance "works" is ultimately an empirical one – does it work where it has been tried? There have been many studies attempting to measure the effect of incentive pay plans on productivity, but none are without flaws which cast doubt on their findings – findings that themselves tend to be weakly supportive at best.[26] That is not to say that pay for performance does not work; rather that its effectiveness is as difficult to measure as the performance itself. After evaluating evidence on profit-sharing plans, employee stock ownership plans, and the influence of employee participation in decision-making, Blinder concludes that "there is good reason to believe that profit sharing does indeed raise productivity;" that the evidence is "particularly persuasive if one accepts the view that a large number of weak, but consistent, studies add up to a strong statistical case;" that "worker participation apparently helps make alternative compensation plans like profit sharing, gainsharing, and ESOPs work better – and also has beneficial effects on its own;" and the overall conclusion that "it appears that changing the way workers are *treated* may boost productivity more than changing the way they are *paid,* although profit sharing or employee stock ownership combined with worker participation may be the best system of all."

. . . effectiveness is as difficult to measure as the performance itself.

[26] Blinder, 1990.

Team-based Pay

Introduction

Flexibility presents the greatest challenge to designers of reward systems . . .

Organizations have adopted team-based work systems, at least in part, because of the flexibility they offer. Flexibility presents the greatest challenge to designers of reward systems, as organizations seek to develop customized reward programs that carefully integrate with the team's work system. Unless the company addresses gaps or contradictions that might limit team or organizational success, it risks losing any gains resulting from the team-based work system. Designing rewards that align with and support the work of a team-based organization is well worth the investment in time and resources. Implementing a reward system that supports the organization's objectives and work system sends a powerful signal about what is important to the company and what it takes for it to achieve success.

Team-based pay is a reward system that nearly everyone can identify with; it rewards teams for achieving specified goals. Individual performance may still be measured, but pay is determined by the performance of the team as a whole. The performance criteria used in team incentives must be under the direct influence of the team. Most team incentives attempt to provide a clear link between outcomes and rewards. This link is often referred to as the "line of sight." As a result, the performance measures among plans vary widely based on the expectations for the team and the nature of the work performed.

Companies talk about the benefits of teams. But unless they link the team's success or failure to the employees' bottom line, they aren't ensured of results. Companies are realizing that team-based rewards are crucial to achieving high performance and quality results from teams. Traditional pay-for-individual-performance systems, by their very structure, get in the way of team performance simply because they constitute a force whereby managers regard individuals as individuals, instead of dealing with them in the context of what the team has to do. The most divisive example of this is when colleagues are actually ranked against each other for pay purposes.

Implementing a reward system that supports the organization's objectives and work system sends a powerful signal about what is important to the company.

Many organizations didn't recognize the importance of changing their human resource support systems – particularly rewards – to align with their new work systems. But when companies changed the dynamics of work from structure-driven – organized around individual roles and functions – to process-driven – often organized around teams – they changed the reward system to support those new dynamics. Team-based rewards can be critical to reinforcing team success. The only way money will effectively influence performance is if employees see the connection between the stated objective and their ability to achieve it. The larger the team, the more important it becomes to supplement the reward with participative initiatives to maintain the link among team members.

Reinforcement is key to effective team-based compensation. Different kinds of teams are suited for specific work cultures. Pay design for each of these team types must vary according to the type of behavior you want to reinforce. Positive reinforcement motivates effort, dispels confusion and eases anxiety. Recognition promotes a sense of team identity by allowing the team to take pride in its progress and accomplishments.

Advantages

- Helps employees unify their efforts.
- Promotes adaptability of skills among the members.
- Improves the collective productivity of the team.
- Encourages teamwork by rewarding team performance.
- Is based on team goals which are easier to devise and track than individual objectives.
- Is easier to administer.
- Provides a clearer link between pay and performance.
- Generates peer pressure for poor performers to improve.
- Introduces variable costs into the pay program.
- Enhances flexibility in job definition and assignment.
- Improves project management.

Disadvantages

- Is subject to "cycling," where the improvements achieved by one team are offset by the poor performance of another.
- Reduces emphasis on individual performance. Poor performers can "hide" behind the performance of the team and will ultimately be rewarded for their poor performance.
- Encourages high performers to slow down so they feel less like they are "carrying" the other team members.
- May pay for performance that might have been achieved without the implementation of a team incentive.

Most Common Problems with Teams

> "Listen carefully and you'll sense a growing unease, a worry that these things are more hassle than their fans let on – that they might even turn around and bite you. It's not that teams don't work. It's that there are lots of obstacles."[27]

[27] Quote by Eileen Appelbaum, author of "The New American Workplace."

The Center for Effective Organizations at the University of Southern California recently conducted a survey of Fortune 1,000 companies showing that 68 percent use self-managed or high-performance teams. But the study also shows that only 10 percent of workers are in such teams, hardly a number betokening a managerial revolution. "People are very naive about how easy it is to create a team. Teams are the Ferraris of work design. They're high performance but high maintenance and expensive."[28]

Companies make teamwork a key issue in an individual's annual performance review.

Pay the team as a group? Then won't your star performers feel slighted? Pay for individual performance? What does that do to encourage teamwork? Companies that use teams best generally still pay members individually, but with a significant difference. They make teamwork, a sharing attitude – the ability to deal well with others – a key issue in an individual's annual performance review. People still want to be acknowledged for their individual contributions, but the problem with this is that it's really hard to separate out what any particular individual really contributes.

One way to do this is to begin to compensate individuals based on the skills and capabilities they bring to the team by replacing the merit-pay system with skill-based pay. Employees continue to be recognized for their individuality, but they can begin to focus on their competencies and what they have to offer the team, instead of worrying about whether their team members are carrying their weight.

ESCA Corporation, an engineering firm in Bellevue, Washington, uses a three-tier team compensation system in which part of the employee's pay is team-based, part of it is organizationally based and part of it is based on individual achievement. To receive their base pay, employees must accumulate and demonstrate career competencies. When more competencies are demonstrated, employees can advance to higher levels within their career path.

Traditional promotions no longer exist at ESCA, and movement among levels, work teams or assignments is not necessarily accompanied by direct or immediate salary action. Instead, employees are considered to be on a pay curve during their employment, and the key to salary or career advancement is expanded knowledge, experience and demonstrated career competencies. Workers advance by demonstrating the behaviors that are described in the company's career competency listing.

Each year, the employees' base salary is adjusted based on their demonstration of competencies. The company also utilizes a team incentive program in which team leaders are given a pool of reward money that is based on how well the team itself performed. Team leaders then award bonuses to members based on their individual contributions. Some members receive bonuses, other may not. The company also gives employees an annual bonus based on how well the corporation did in meeting its overall objectives. ESCA has established an across-the-board pay program by reorganizing into self-managed work teams.

[28] Quote by Edward Lawler, Management professor that oversaw the study at USC.

> Teams often get launched in a vacuum, with little or no training or support, no changes in the design of their work, and no new systems like E-mail to help communication between teams. Frustration mount, and people wind up in endless meetings trying to figure out why they are in a team and what are they expected to do.[29]

"When teams are introduced in combination with other organization changes, they work. When they're introduced as an isolated practice, they fail. Gut feeling is most are introduced in isolation."

. . . compensation must change in support of a new team-based organization, or the organization won't be team-based for long.

"Teams are overused." Many companies will create teams where they're not really needed. They don't realize that workers who are lone wolves or creative types aren't necessarily better off in a team. Making them sit in a team meeting waiting to reach a consensus can even stifle creativity.

The Four Types of Teams

Management teams. Consisting mainly of managers from various functions like sales and production, this type coordinates work among teams.

Work teams. An increasingly popular type, work teams do just that – the daily work. When empowered, they are self-managed teams.

Virtual teams. A characteristic of this new type of work team is that members talk by computer, flying in and out as needed, and take turns as leader.

Quality circles. In danger of extinction, this type, typically made of workers and supervisors, meets intermittently to air workplace problems.

Comments

Compensation is not just about money. It's about communication.

Changing a compensation system is fraught with risks. After all, people get very emotional when their paychecks are affected. For some employees, pay isn't a dollars-and-cents issue so much as it is a question of how the company regards their contributions. If you don't pay them enough, in other words, you must not value them. Despite the risk, compensation must change in support of a new team-based organization, or the organization won't be team-based for long. Compensation is not just about money. It's about communication.

Variable Pay

Introduction

In today's environment, organizations are looking for ways to achieve higher productivity. Many advances have been made in technology and business strategies, but only recently have organizations begun to concentrate on their employees as a means of

[29] Quote by Paul Osterman, a professor of management at MIT's Sloan School.

reaching this goal. Since a large part of many organizations' budgets are spent on payroll costs and benefits, why not use some of this money to improve productivity? The use of variable pay systems is one way to do this.

Variable pay is a means of controlling costs, supporting long-range cultural change, and directing performance toward the accomplishment of specific organizational objectives. A variable pay plan can help an organization do one of three things:

- More or better work with the same number of employees.
- The same or better work with fewer employees.
- More or better work with fewer employees.

Variable pay plans have two common elements. First, individuals or teams receive rewards for specific accomplishments that help the company achieve its goals. Therefore, some portion of pay should be dependent on organizational performance. Second, the payment for those accomplishments does not become part of base pay.

Definition of Variable Pay

Variable pay is an element of compensation that varies with performance. It does not become a part of base pay. In order for a payout to occur, employees must perform to a predefined level. In order for a payout to recur, performance at the predefined level must reoccur. In other words, employees are not entitled to a payout unless they meet a prescribed performance level each measurement period.[30]

Pay is, then, exposed to risk, namely, the risk of not receiving it. Variable pay is also referred to as incentive pay because it encourages, through rewards, activities beneficial to the organization, thus attempting to align employee interests with those of the organization.

There are several issues to consider in trying to implement a variable pay plan. First, ask the question "What are we trying to achieve?" The pay plan must be directed toward accomplishing all or a part of the organization's overall strategy. Some organizations will benefit from variable pay plans, and some may not. Careful thought must be given to ensure the plan will improve performance and to whether it is really necessary or just an administrative burden.

Just as the plan must fit with the organizational strategy, it must also fit with the culture of the organization.

Just as the plan must fit with the organizational strategy, it must also fit with the culture of the organization. A sales division may be very supportive of an incentive plan, but a unionized, bureaucratic organization may resent the differentials that could be introduced. The culture of the organization will also dictate what kind of variable pay plan to implement.

Another important consideration is how work is accomplished in the organization. If work is done by independent teams, then individual incentives may not be appropriate. If, however, work is accomplished by independent salesmen who bring in and cultivate their own customers, an individual incentive plan may be the right way to go.

[30] Compensation Guide.

Finally, and perhaps most important, is the thought given to the basis for the reward. The employee must have a clear picture of what is expected if he is to perform as the company wants. Many organizations implement programs with the best of intentions but fail to consider the possible unintended consequences of the plan.

For example, if a manufacturer were to pay its machinists solely based on the number frame components cut from stock metal tubes, there would be a large increase in the production of frame components, but the machinists might not spend as much time maintaining their equipment and they may change cutting blades more frequently in order to keep the highest level of productivity possible. While this may seem good in the short term, the company may pay for it later when the cutting equipment wears out sooner than expected and more cutting blades have to be ordered because the old ones being thrown out before they are really worn out. This "law of unintended consequences" is an important factor in any incentive program.

This "law of unintended consequences" is an important factor in any incentive program.

An important factor in deciding the basis for a reward is the line of sight. The line of sight is how directly the employee connects the work performed to the reward given. Rewards will most effectively influence performance if employees see clearly the connection between achieving the stated objective – their performance – and what they get for doing it – the reward. For example, if an employee gets a bonus if a certain number of boxes are assembled, the line of sight is very short. The employee knows that if he assembles enough boxes, he gets the reward. However, if the same employee gets a profit sharing bonus based on the overall performance of the company, the line of sight is very long. In this case, it is difficult for him to see how his assembling boxes might cause stock prices to rise or fall.

One of the greatest strengths of variable pay programs over base pay programs is their ability to strengthen the link between performance and rewards and provide a more direct, unobstructed line of sight. By committing to vary pay based on performance, and following through with the promised rewards, an organization will create greater employee motivation.

Employees will continue to perform to those levels that were rewarded and will want to maintain membership in an organization that continues to satisfy their needs. Greater employee job satisfaction, retention and consistently high productivity are the potential paybacks for the organization. Keep in mind that shortening the line of sight can also be accomplished by something as simple as better communicating to the employee how the system works.

. . . shortening the line of sight can also be accomplished by something as simple as better communicating to the employee how the system works.

The Two Major Categories of Variable Pay

Individual incentives. Individual incentives should be used when the opportunity for improvement comes from working harder, not from working differently (for example, on a team vice individually). The organization is paying the individual based on his individual performance. Factors to consider are:

- *Line of Sight.* As described above, the directness of the connection between performance and the corresponding reward is important.
- *Cycling.* Performance cycles can mean uneven payouts.
- *Individual performance measures.* Individual incentive plans work best when used in conjunction with an understandable and effective method of measuring the individual's performance. If performance is not measured accurately, or the employee can not understand how he or she is being evaluated, the incentive plan will lose support.
- *Measures of long-term effectiveness.* Just as the individual's performance must be measured effectively, thought must be given to how to evaluate the effectiveness of the incentive program in accomplishing organizational objectives.
- *Work organization.* Individual incentives should be used when work is done by individuals working separately. Individual incentives should not be used when work is done by teams.
- *Organizational culture.* In order for the plan to be effective, the organizational culture must support individual achievement.

... team incentives usually require employees to change the way they work together.

Group or team incentives. Unlike individual incentives, team incentives usually require employees to change the way they work together. In this case, learning new skills (team building) is required to reach the appropriate level of performance. Included in this category are gainsharing and goalsharing plans. Gainsharing measures improvements in performance, then calculate the net financial results of those improvements and share them according to a predetermined formula. Gains are measured in relation to past performance. These rely heavily on employee involvement to maintain line of sight. Goal sharing plans compare performance to future goals. The primary objective of these plans is to reward performance improvements in the business unit. For both types of plans, factors to consider are:

- *Team training.* In order for a team based plan to be effective employees must have training on how to work together as a team. Though this may seem obvious, it is very important in making the plan work. Just throwing a bunch of people together and calling them a team may not bring the desired level of performance and may frustrate efforts to make a variable pay plan work.
- *Line of sight.* Just as in individual plans, this is an important consideration. Additionally, gainsharing plans take time to implement; therefore, time must be spent setting the stage for the new culture. This helps keep the employees focused on what they are working for.
- *Performance measures.* How performance is measured is very important in team based plans just as it is in individual incentive plans.

- *Division of reward pool.* How the reward money is divided among members of the team is also critical in how the plan will be received. In some cases money may be divided equally, and in others more money may go to the people on the team who put in the most effort or are most senior.
- *Employee's effect on performance measures.* Employees must understand how they affect performance measures. Feedback is very important in this process.
- *Cycling.* Teams can experience performance cycles just as individuals do.
- *Team structure.* How a team is organized will determine how an incentive plan might be implemented. Do all members of the team have equal responsibility? Are all members expected to do equal amounts of work?
- *Team function.* What is the team designed to do? Some teams are designed to see a project through from start to finish with relatively stable membership. Some teams are designed to exist over long periods of time and make recommendations. The membership of these teams may fluctuate substantially over time. These factors will affect how the incentive plan is designed.
- *Work organization.* Along with team structure and function, the organizational structure of the organization is important. For example, gain and goal sharing plans work best if the organization is structured in semi-autonomous units. Though some understanding of how what each unit does leads to the final product is helpful, it is not absolutely necessary for the plan to work.
- *Sharing information.* In gain and goal sharing, it is important to share financial information with the employees. This way they understand how what they are doing affects the organization. It also helps them understand the performance measures
- *Organizational culture.* These plans rely heavily on trust between the group of employees and management. In gain and goal sharing plans, communication about the performance objectives and the financial situation of the organization is key to success.

Once the type of plan is determined, there must be some thought given to *how* people are paid. One important distinction is between bonuses and incentives. Bonuses are announced after the occurrence of the performance they are rewarding. There is, therefore, much management discretion involved in their use. They are not necessarily awarded again, nor do they direct the performance of another employee who may wish to earn the same reward. Incentives are announced before performance; therefore, less management discretion is involved. However, they can be used to help achieve a certain goal. Incentives are both motivating and rewarding while bonuses, for the most part, are simply rewarding.

The type of payout is also important. Payouts can occur in the form of cash or stock, or even in the form of a non-cash award. Again, in making this decision, the company must consider what it wants to accomplish. For example, if the goal is to leverage personnel costs and foster a sense of ownership among the employees, a stock option plan might be appropriate. In most circumstances, some combination of these is most effective.

... the largest part of variable pay should be results-based.

Turnasella,[31] for example, splits variable pay into two parts: results-based and behavior-based. He contends the largest part of variable pay should be results-based. Results-based pay can be based on either attainment of planned results, or for unplanned outcomes that benefit the organization. The plans that are based on planned results use variable pay as an incentive, usually cash, that is given for reaching a specific objective. The plans based on unplanned outcomes usually award variable pay as awards or bonuses. These can be either cash or non-cash. The other part of variable pay is behavior-based. This pay is given to an employee that exhibits a desired behavior over time and is awarded to communicate to other employees what behaviors are desirable. Usually very few employees receive behavior-based variable pay, and it can given in many forms from spot-bonuses to plaques to paid vacations.

Benefits and Services

This part of compensation includes time off with pay, pay when employment is suspended or terminated, pay when unable to work, payment for medical protection and attention, retirement pay, pay to dependents upon death of employee, and a wide range of desired goods and services from a company car to child and elder dependent care.

Flexible Benefits

Introduction

... flexible benefits have become a recognized form of compensating employees.

In the private sector, flexible benefits have become a recognized form of compensating employees. Flexible benefits are defined as those forms of compensation in which the employee has control, either in the degree or in the mix of benefits.

The Revenue Act of 1978 and the Miscellaneous Revenue Act of 1980 approved the use of benefits as non-taxable forms of compensation. The 1978 legislative changes made it possible for eligible employees to select between cash and other currently taxable compensation components or one or more non-taxable components (medical expense insurance, group life insurance plans, disability insurance) and only those components subject to taxes are taxable. Prior to 1978, having the option to select taxable items could make the entire benefits program taxable. The 1980 act further broadened flexible benefits opportunities by granting with this kind of plan the option of having cash or deferred profit sharing arrangements. This enabled companies to offer employees a choice under qualified stock bonus or profit sharing plans between currently taxable cash payments or tax-free deferrals that become taxable when actually paid.[32]

[31] Ted Turnasella, "Aligning Pay With Business Strategies and Cultural Values," *Compensation & Benefits Review*, Vol. 26, Iss. 5 (September 1994), pp. 65-72.

[32] Henderson, 1994, p. 574.

In 1984 the Deficit Equalization Fiscal Reduction Act (DEFRA) restricted the benefits that could be offered under a flexible benefits plan. Employers were permitted to offer only tax-free benefits. Rollovers or cash paybacks of unused benefits to finance future benefits were prohibited. This was designed to block payment of tax-free income. Most existing tax-free benefits remained in effect, but it because difficult to qualify new benefits as tax free. DEFRA authorized the following benefits in a cafeteria plan: cash, group term life insurance, accident and health coverage, dependent care assistance, deferrals into 401(k) plans, and vacations. Non-qualifying benefits are any noncash benefit that is taxable income to the employee, scholarships and fellowships, van pooling, educational assistance, employee discounts, free parking, and meals and lodging for the employer's convenience.

Finally, the Tax Reform Act of 1986 (TRA 86) clarified the question of taxability by authorizing non-taxable flexible benefits, including salary reduction as not subject to FICA or other taxes so long as there was no discrimination in favor of the highly compensated. Since then, the use of benefits in general has increased. Thirty to forty percent or more of an employee's compensation may be in the form of benefits.

Categories

The major categories of flexible benefits are:

- health insurance
- disability income benefits
- death benefits
- time off with pay
- retirement capital accumulation plans

Other categories less frequently treated as flexible are:

- dental plans
- option for vision and hearing exams
- life insurance
- accidental death and dismemberment insurance
- survivor income insurance
- dependent's life insurance
- financial planning option
- stock purchase plan
- purchase of extra vacation time
- tuition aid plan for dependents
- educational assistance plan for employees (including travel expenses)

Advantages

- As a non-taxable form of compensation per the Revenue Act of 1978, it benefits employees in higher tax brackets the most.
- Accommodates the needs of widely heterogeneous workers.
- Accommodates employee needs without adding new benefit costs.
- Gives a sense of limit on total benefits without denying specific coverage.
- Assists in recruitment, retention, absenteeism, etc., because it is often viewed as an indication of an innovative, people-oriented company.
- Giving employees choices is inherently rewarding in itself.
- Because of the company's buying power, the perceived value of the benefits to the employee may be greater than the company's actual cost.
- Gives employees a sense of "ownership" in the firm's compensation system, and thus in the entire firm as a result.
- The broader the selection of flexible benefits, the greater the opportunity for the employee to gain intrinsic rewards.
- Provides the opportunity to meet a hierarchy of employee's needs (Maslow's theory). Creates an intrinsically rewarding atmosphere by allowing employees to satisfy basic safety and survival needs first, then interpersonal needs, and finally personal, self-actualized needs.

Disadvantages

- Flexible benefits are still the exception rather than the norm. Some companies may feel uncomfortable with less standardized forms of compensation.
- Start up costs of changing to a new system.
- Maintenance costs (equipment and personnel resources) to input employee changes to the flexible benefits mix and costs to educate the employee.
- Flexible benefits may be "carved out" of the existing benefits. If so, the result may be a reduction in the pre-flex plan level of benefits.
- Decisions on core coverage (namely, minimum levels of each flexible benefit, such as minimum $10,000 life insurance and 2 weeks vacation) must be made before implementation. Without such coverage, employees may exclude "vital" coverage's such as health insurance which may have a negative impact on the employer in the long term.
- Some employees may not be capable or comfortable choosing benefits. The company must decide whether to create a default selection of flexible benefits.

Conditions Under Which Flexible Benefits Work Well

- Largely independent of organizational structure and human resource management philosophy. Works well in almost every structure.
- Particularly effective if the employee has the ability to periodically review and update his/her benefits mix. This can be accomplished electronically at modest cost.
- In organizations where longevity is valued, longer time-in-service can be rewarded by increasing the level of benefits.
- In flat organizations with fewer promotion opportunities, the level of benefits can substitute for a new title or other trappings of promotion.
- In organizations with a majority of employees in higher tax brackets, tax-advantaged benefits have extra value.

Conditions Under Which Flexible Benefits Do Not Work Well

- Less effective in organizations with mostly transient workers.
- Less popular in organizations where cash benefits are disproportionately valued.
- Of questionable value for employees who are unable or unwilling to determine the most valuable mix of benefits to meet their needs.
- Could become a negative form of compensation if employer is inflexible in allowing changes, doesn't help educate employees on details of program, or doesn't present the program as a change which will benefit employees.
- In paternalistic companies, giving immature, uninformed employees significant control of benefits can be disconcerting.

Derivatives

Cost sharing. Employees are offered opportunity to purchase supplemental benefits at a cost lower than what they would be charged if purchased individually. Tax free status may not apply.

Personal discounts. Using the buying power of the company, employees enjoy discount prices on insurance (car, home, household goods, etc.), computer equipment, daycare, recreation (equipment, vacations, tickets, club membership). Administrative cost to employer may be offset by a boost in morale, productivity and loyalty.

Employee spending accounts (ESA). A tax-free reimbursement account that moderates or reduces the costs of benefits for the employee while giving the employer greater control over expenditures. These can be substitutes or supplements to a flexible benefits program. Employees convert a portion of taxable wages into nontaxable

[33] Henderson, 1994, pp. 576-577.

dollars to pay for specific benefits such as medical expense reimbursement (including dental and optometry), insurance premiums, dependent care assistance, legal services, and personal financial planning. This permits employers to shift some of the premium costs and increase deductibles and co-payments. And social security and unemployment taxes are reduced. The IRS requires that employees elect their benefits before the beginning of the plan year, that they not change during the year (except due to a change in family status), that they make separate selections for medical expenses and other services, and that they use the benefits in the plan year only and forfeit unused amounts.[33]

Medical and Dental Benefits

Introduction

In a 1986 survey of 812 major employers,[34] all offered medical coverage. The typical coverage included a deductible of $200 or less, a $1000 annual cap, and some level of employee contribution. The same survey showed that 89 percent of employers provide dental coverage, 21 percent vision care, and 6 percent hearing care.

Benefits of medical coverage are directly enjoyed by both the employee and employer. Health care costs have increased faster than the cost of living, influencing the trend toward joint employee-employer contributions. Another reason for the increase is an increased rate of utilization.

The demographic trend toward two income families sometimes results in redundant medical coverage. Flexible compensation plans allow married employees to adjust their level of coverage.

Basic Plans

Medical indemnity plans. The most traditional. The employer determines the coverage levels and the employee selects the service provider, for example, doctors, hospitals, dentists, etc.

Preferred provider organization (PPO). Networks of providers that agree to discount their normal fees in return for an anticipated increase in volume. Typical discounts are 5-15 percent of normal fee.

Health maintenance organization (HMO). Groups of physicians and other health professionals from whom patients seek a broad range of care for a set fee. HMOs may also cover dental, vision and hearing services. They have met with some success in reducing costs in civilian practice.

Health care flexible spending accounts. A pretax source of reimbursement to the employee for out-of-pocket medical expenditures. Considered a fourth type of health care coverage.

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[34] D. Gifford and C. Seltz, *Fundamentals of Flexible Compensation* (New York, NY: John Wiley and Sons, 1988), p. 6.

Current Military Health Care System

Purpose and Status

- Maintain the health of military personnel in order to carry out missions.
- Be prepared to deliver health care during war time.
- On space available basis, provide health care services to dependents, and retirees and their dependents.
- Using CHAMPUS (Civilian Health and Medical Program), the military equivalent of a health care plan, reimburse beneficiaries a portion of the cost of health care received from civilian providers.
- Estimate: 8.3 million eligible people covered in FY 1995 by the Military Health Services System (MHSS).
- Estimate: In FY-95, the Department of Defense will spend $15.2 billion for health care, $3.9 billion of which is for CHAMPUS.[35]
- Military Treatment Facilities consist of 127 hospitals and 504 clinics.
- CHAMPUS Reform Initiative (CRI) launched in 1988 due to budget growth and user dissatisfaction. Implemented in CA and HI. Nationwide by 1997.

TRICARE (Triple-option Health Care Plan)

TRICARE is a form of managed care designed to contain health care costs through constraints on access to specialists and limitations placed on lengths of stay in hospitals. Usually managed care is controlled by health management organizations (HMOs). TRICARE is a regionalized military managed care program for members of the uniformed services and their families, and survivors and retired members and their families. TRICARE was introduced for the following reasons:

- Cost Containment: CHAMPUS budgets continue to grow despite downsizing. Reasons: civilian medical care costs rise, growing number of retirees eligible for CHAMPUS, closing of military hospitals forces retirees and dependents to use civilian care.
- Complicated CHAMPUS procedures (uncertainties of space-availability, extent of reimbursement for given charges, deductibles, paperwork, and waits for reimbursement).
- Perception of high, unpredictable out-of-pocket costs.
- Few incentives for beneficiaries to control costs since a large percentage of bill is reimbursed. (Military dependents/retirees do make heavier use of medical services than most Americans.)

[35] R. Best, *Military Medical Care Services: Questions and Answers* (Washington, DC: Library of Congress, 1994), p. CRS-2.

It consists of three programs:

- **TRICARE Prime.** Used like a typical HMO with required enrollment. Primary Care Manager (PCM) provides/coordinates all medical needs. Care is from MTF (Military Treatment Facility) or from approved network of civilian providers only. Small co-payments by beneficiaries for each visit to a civilian network provider, but not to MTF. No claims forms, no deductibles, no enrollment fees for active duty and dependents. Retirees and family pay annual enrollment fee. Includes preventative health care (routine physicals, immunizations), education and counseling services, provisions to use providers without an authorization, but at significantly higher cost sharing than with TRICARE Standard. Active duty personnel are automatically enrolled in this option. Medicare eligible beneficiaries not eligible for enrollment in Prime at present. May still seek care from MTFs on space available basis. This could change if Medicare Subvention law is passed.

- **TRICARE Extra.** Used like a preferred provider network (where a network of physicians agree to offer health services for a discounted fee) with choice of selecting own health care provider. No enrollment fees. Can be used on case-by-case basis. Usually no claim forms to file. Network providers accept negotiated rates and cost share as payment in full (after appropriate deductible is met). Users have greater choice of doctors. Can even chose doctor. BUT, must accept higher charges. Costs 5 percent less than TRICARE Standard (after deductible is met) for outpatient visits and also less for inpatient stays. Use of MTFs (Military Treatment Facilities) on space available basis at no cost.

- **TRICARE Standard.** Similar to standard CHAMPUS Fee for service plan (fees are paid when services are obtained) Maximum choice of health care providers, but highest out-of-pocket cost (includes deductibles and co-payments). No enrollment requirements. Use of MTFs on space available basis at no cost.

Options that Could be Incorporated into TRICARE

Flexible Benefits

- Offered primarily to contain or reduce health care costs and to satisfy diverse needs of work force.

- Most companies use a comprehensive medical approach.

- Differences in deductibles and maximum out-of-pocket amounts.

- The following items frequently do NOT change from one option to another within a company: coinsurance, lifetime maximums on benefits, covered expenses. An alternative delivery system (for example, HMOs) may be offered, but even that does not usually affect type of care provided.[36]

[36] Gifford and Seltz, p. 24.

Medical Savings Plans

Employee spending accounts (ESAs) or health spending accounts (HSAs) can be a substitute or supplement to a flexible benefits program. A tax-free reimbursement account that moderates or reduces the costs of benefits for the employee while giving the employer greater control over expenditures. Employees convert a portion of taxable wages into nontaxable dollars to pay for medical expenses not otherwise covered (for example, dental, optometry, well baby care, physical exams or orthodonture). An alternative plan has the employer purchase catastrophic insurance with a large deductible (for example, $3,000 and then deposit that same amount in the medical savings account). Note: savings plans may also be used to fund other types of needs such as insurance premiums, dependent care assistance, legal services and personal financial planning.

ADVANTAGES

- Since the funds are used at the employee's discretion, the responsibility for health choices revert to the consumer.
- Employees can compare services and products.
- Employees can tailor their own type of health care (HMO, PPO, or any combination).[37]

DISADVANTAGES

- May discourage some from seeking preventive care and care during early stages of illness, potentially leading to higher costs in the long term.
- In plans requiring employee contributions, the worker may seek care up to but not beyond the employer's contribution, ignoring needed medical attention.

Because the plan uses pre-tax benefits, social security and unemployment taxes are reduced. The IRS does require that employees elect their benefits before the beginning of the plan year, that they not change during the year (except due to a change in family status), that they make separate selections for medical expenses and other services, and that they use the benefits in the plan year only. Unused amounts may be left in the medical savings account, taken as income, deposited in an interest bearing account for future expenses, or contributed to an under-funded 401(k) plan or IRA. Some of these options have tax consequences.[38]

IMPORTANT ELEMENTS OF A MEDICAL SAVINGS ACCOUNT HEALTH BENEFITS PROGRAM

- Medical savings account;
- Catastrophic, high-deductible medical coverage;
- Incentives for healthy lifestyles, for example, cash incentives to participate in health promotion/illness prevention programs;

[37] S. Barchet, J. Anderson and L. Chapman, "Medical Savings Accounts," *ACA Journal*, Vol. 4, No. 3 (Autumn 1995), pp. 34-47.

[38] Henderson, 1994, p. 576-7 and Barchet, 1995, p. 40.

- Wellness and prevention programs, for example, preventive medical exams, immunizations, and diagnostic tests;
- Clinical and resource support management;
- Efficient administration;
- Communication and education; and
- Implementation, monitoring, and evaluation.[39]

OPT OUT CHOICE/HIGH AND LOW CHOICES

Employers vary in allowing waivers. Some set minimal core level coverage. This is more common with medical than dental coverage. Examples of options: High cost – 100 percent coverage for hospitalization and 80/20 percent sharing of medical costs. Low cost – Coverage for hospitalization with deductible and co-payments and 70/30 percent sharing of medical costs.[40] Most employees who waive medical coverage have another source of coverage, such as spouse's policy.

CASH REWARDS TO EMPLOYEES WHO FILE FEW OR NO CLAIMS

Often paired with high deductible plans to dramatically reduce costs. A derivation of this is well-day incentives – days added to vacation time upon attainment of wellness achievements.[41]

Dental Care

- Dental care represents only about 10 percent of total health care costs in US, and dental costs are increasing slower than medical costs.
- While 83 percent of employers surveyed allowed a choice of dental coverage[42] most often the choice is yes or no, to elect or refuse coverage. Some employers offer a choice of two plans, one providing lower coverage in all areas, or one plan having different coverage emphasis (for example, checkups and cleanings, but not major services).
- Dental HMO enrollment is increasing. Advantage is no deductibles or annual limits on care. No claim forms, costs guaranteed. HMOs emphasize prevention. Costs generally 10-30 percent lower than dental indemnity plans.[43]
- Employers are encouraging workers to use benefits regularly in order to avoid costly problems later.

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[39] Barchet, 1995, p. 40.
[40] M. Manin, "Successfully Administering Flex Plans," *HRFOCUS* (April 1995), p. 7.
[41] Barchet, 1995, pp. 39, 43.
[42] Gifford and Seltz, 1988, p. 236.
[43] K. Robbins, "Dental Plans are Growing in Popularity," *Business and Health*, Vol. 12 (2 Dental care supplement), (February 1994), p. 4.

Vision Coverage

- Third most popular benefit after medical and dental.
- Although increasing (26 percent of organizations surveyed in 1988 had a vision care plan), percentage is still fairly low.[44]
- More often covered as part of health savings account.

Roles and Missions Commission Recommendations

- Users of military medical care should be given the option to use more private care, thus permitting downsizing of the peacetime military medical establishment.[45]
- Any changes in the military medical program must ensure high accessibility to quality care for all beneficiaries at no cost to active duty personnel, at no increased cost on average to active duty families, and at reasonable cost to retirees and their families.[46]
- Require beneficiaries who choose to use military medicine to enroll in the DoD-sponsored health care plan of their choice. Establish a reasonable fee structure for care received by non-active duty beneficiaries through all DoD-sponsored sources.[47]
- For active duty military families, provide a regular medical allowance equal to the average out-of-pocket costs to offset fees.[48]

Retirement

Background

Retirement is ultimately an issue of how individuals who no longer work fund their living. From roughly 1930 to 1960 the system was fairly stable with three levels of retirement income sources: social security, pension and personal savings. Social Security provided minimum subsistence, a pension on top of social security allowed a comfortable living, and personal savings on top of the other two provided the means to live the good life. The retirement system is now in a period of transition, however.

While there are many opinions on social security, demographics alone dictate that 21st-century social security will be different from what it is now. Either recipients will receive less or workers will have to put more into the system. Privatization – essentially switching to an IRA-type system – is not unthinkable. Chile has done so quite successfully.

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[44] Hay, 1988, p. 132.
[45] *Directions for Defense*, Report of the Commission on Roles and Missions of the Armed Forces (advance copy) May 25, 1995, p. 3-11.
[46] *Directions for Defense*, p. 3-12.
[47] *Directions for Defense*, p. 3-13.
[48] *Directions for Defense*, p. 3-13.

Employers that offer traditional pensions (defined-benefit plans) are steadily declining. An increasing number of employers offer defined-contribution plans where the employer only compensates for retirement if the employee has contributed to his or her own retirement. Some companies offer no retirement compensation at all. All in all, it is a complex subject with many implications for an organization.

The retirement spectrum is best described by picturing the defined-benefit plan at one end and the defined-contribution plan at the other with any number of possible hybrids in between. A classic defined-benefit plan is the traditional pension; the classic defined-contribution plan is the 401(k).

Vesting. Vesting is an important concept. An employee is "vested," entitled to retirement benefits, after working for an employer a specified number of years. Vesting was unregulated – left to the employers discretion – until 1983 when vesting was required after five years of service in order to qualify for employer tax benefits for the retirement plans. Prior to 1983 "most employers required at least 25 years of continuous service before an employee had the right to start collecting pension benefits at the prescribed retirement age, which was almost always age 65.[49]

A major reason for the move to shortened vesting was the declining average length of service with the same company. "When Social Security laws were first passed in the 1930s, the average employee worked for one company for about 20 years, based on the sketchy data that was then available. By 1980, the average length of service had fallen to less than ten years. By 1986, the average employee worked for one company for six years. Unless the vesting period was reduced, few workers would collect under any pension plan."[50]

The Defined-benefit Plan

Background. The traditional pension is a defined-benefit plan. The employee gets a regular check for life upon reaching a certain age, typically 65. The pension can be indexed to the Consumer Price Index (CPI), so that the pension value is protected against inflation. The pension is tax-sheltered. In other words, a company is not taxed for the money it sets aside for employee retirement. The company sets aside retirement money into a pension fund, a professional financial consultant manages the fund, and the retirement benefits the worker receives comes out of that fund. By law, the pension fund manager is fiscally responsible to the shareholders. The individual does not pay taxes on the retirement money until he or she starts receiving retirement checks. The standard company contribution is 7 percent of annual salary.

Strengths

- The employee is essentially guaranteed a monthly retirement check.
- There are often ancillary benefits. For example, payments for disabled workers and to the surviving spouses of workers who die before reaching retirement age.

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[49] Sibson, p. 222.
[50] Ibid.

- The employee is insulated from risk; however, the organization's pension fund is subject to the risk of the market.
- A traditional pension combined with late vesting provides a greater long-term retention incentive than defined-contribution.

Weaknesses

- Declining availability.
- Company defined-benefit plans and social security alone may not fund retirement.
- With the option of taking pension accumulation in a lump sum, financial hardship after quickly spending the lump sum may occur.
- The traditional standard pension plan paid retirees a fixed monthly check.
- "Fewer employers will bear the financial risks and regulatory hassles of defined-benefit plans."[51]

Method of payment. One new development in defined-benefit plans is the method of payment. "About a third of big companies that offer the familiar, monthly-check-for-life pensions, such as Merck & Co. and Digital Equipment Corp., now give departing employees the option of taking their pension accumulations in a lump sum when they retire, change jobs or are laid off. By the end of the decade, experts predict about half of old-style pensions will be distributed this way. Lump sums are cheaper for employers to provide than a string of retirement checks because they don't entail continuing administrative expenses or premium payments to the government's Pension Benefit Guaranty Corp."[52]

Defined-contribution

Background. The 401(k) plan is named for the part of the tax code that authorizes employees to set aside untaxed dollars in a special account and that encourages employers to match what employees contribute.

"Congress added 401(k) plans to the Internal Revenue Code to create a device for accumulating savings and other capital on a tax-deferred basis. Often, the plans allow an employee to borrow from accumulated funds under 'hardship' conditions, when emergency medical services are needed and for educational purposes. However, Congress has not, to our knowledge, characterized 401(k) plans as substitutes for traditional pension plans, whose purpose is to pay a lifetime retirement income."[53]

The 401(k) plans offer such investment options as company stock and selected mutual funds. They also offer Guaranteed Investment Contracts (GIC). GICs are primarily fixed-interest-rate options like a CD, except they are sold by insurance companies rather than banks.

[51] Ibid.
[52] Ellen E. Schultz, "Offered a Lump Sum, Many Retirees Blow It And Risk Their Future," Wall Street Journal, 31 July 1995, sec. A, p. 1.
[53] McGinn Actuaries Ltd. Letter.

Withdrawals from the 401(k) are taxed above the return of any after-tax contributions. If the individual is under 55, there is a 10 percent penalty on the taxable amount also. Other options are to leave it in the company plan, transfer it to a 401(k) of the new employer, or shift money to an IRA.

Typically, employers match 50 cents for every $1 the employee invests, up to 6 percent of salary. Nearly all 401(k) plans permit "hardship" withdrawals for such things as buying a home, paying for college or medical care. Most also permit the employee to borrow from the account. The interest rate is usually the prime rate or prime plus one percentage point. In most cases, the interest goes back into the account.

Companies often require their employees to work a set number of years to qualify for the employee contribution accruing in their 401(k)s. One popular method is to vest 20 percent of the contributions the first year on the job, and 20 percent more each year until full vesting after five years.[54]

Strengths

- Portability – 401(k) plans follow the employee.
- Automatic salary deduction often is one of the best ways to save for retirement.
- Employees leaving employment significantly prior to normal retirement age will do better under a defined-contribution plan.

Weaknesses

- Provides no ancillary benefits. If a worker dies, his or her spouse receives only what has accumulated in the 401(k) account.[55]
- Amount of 401(k) balance is not guaranteed but is subject to market forces. There is no direct correlation between the value of an account balance and the amount of monthly income needed at retirement, disability or death.[56]
- "Experience has shown that very few employees leave employment and use their 401(k) plan balance to buy an annuity or roll over the funds to provide retirement benefits. Most spend their entire account balances on impulse items. Fewer than 5 percent purchase annuities."[57]
- Allowing people easier access to their savings undermines saving for retirement.
- Most working Americans do not have the information they need to maximize their investment returns. There is a widespread lack of knowledge about the basics of investing.[58]

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[54] David J. Morrow, "What's It Worth to You? How to put a Price Tag on your Company's Perks," *Smart Money*, April 1994, pp. 133-136.
[55] McGinn Actuaries Ltd. Letter.
[56] McGinn Actuaries Ltd. Letter.
[57] McGinn Actuaries Ltd. Letter.
[58] "Many Are Unprepared for Retirement," Compensation Guide: Benefits and Compensation Update June 1995, Vol. 2, No. 6, p. 3.

Current military retirement system. The current military retirement system is a defined-benefit plan. Individuals vest after 20 years and receive an annuity from the date of retirement. The amount is a percentage of their base pay at separation indexed for inflation. The system has been modified twice in recent years (1980 and 1986), both changes reducing the value of the overall retirement. These changes were grandfathered, applying only to those coming into the service after the change.

CHAPTER 4
PRIVATE SECTOR COMPENSATION TRENDS

Renaissance In Compensation

. . . organizations have started turning to compensation as a means of affecting organizational performance.

In the past few years, organizations have started turning to compensation as a means of affecting organizational performance. Companies are engaged in "broad experimentation with different ways of rewarding people, and a recognition that traditional programs may no longer be appropriate."[59] This chapter summarizes some of the trends in compensation.

Use of Compensation to Gain a Competitive Advantage

In the fiercely competitive private sector, compensation is increasingly recognized as an area that might be exploited to yield a competitive advantage. Edward E. Lawler III uses this as a premise and proposes tailoring compensation strategies to support the organization's strategy.[60] Judging from the large attendance at a recent American Compensation Association conference, mainly by company representatives looking for ideas or success stories along those lines, it is a new idea that is becoming widely accepted.

Total compensation, also known as total remuneration, includes anything of economic value to employees, whether provided directly by a company or mandated by the government. Total remuneration elements include: base compensation, incentives, bonuses, health and disability benefits, death and accident benefits, retirement, savings plans and other tax favored programs, etc. For an organization to achieve competitive advantage using total compensation, it must answer three key questions:

- What is the current cost and value of your total renumeration package?
- How does this benchmark with relevant comparators?
- What is the optimal mix of total renumeration elements?

A key is to ensure that employees understand the value of all forms of remuneration they receive.

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Employee Ownership and Involvement

There is a growing emphasis on employee ownership and involvement. The idea, of course, is that the employee will perform better with a stake in the company. There are a number of ways to implement this. One is compensating with stock or stock

[59] *Compensation Guide,* December 1994.
[60] Lawler, 1990.

options instead of cash. Another is by requiring executives to acquire a certain amount of the company's stock. A third way is when employees buy a large share of a company near ruin in an effort to save the company. In this case though, the company probably needs more than increased employee performance to survive.

Putting Pay At Risk

"There is an increasing commitment to pay-at-risk programs on the part of most organizations. Part of this is because such programs provide some cost control by avoiding ever-increasing base salaries. A more important value of at-risk programs is the performance focus they provide to employees. A well-designed at-risk program specifies both desired outcomes and desired ways of reaching those outcomes. Such programs can focus either on individual performance or group performance. The variety of at-risk programs is increasing, as is the percentage of salary budget devoted to these programs. The relatively large amount of space devoted to at-risk compensation programs in Compensation Guide compared to the space devoted to traditional compensation systems indicates the increasing centrality of alternative rewards."[61]

A well-designed at-risk program specifies both desired outcomes and desired ways of reaching those outcomes.

Shorter Vesting Periods

Time to vest, the period an employee is required to work to qualify for retirement benefits, has greatly decreased. Vesting has moved from 30 to five years in the private sector, and full portability is on the horizon. The driving factor in this trend is the declining average length of service with a single company. This trend has a major, negative impact on an organization's retention.

Move from Defined-benefit Plans to Defined-contribution Plans

There is a definite trend away from the traditional pension plans to defined-contribution plans, especially with smaller companies. There is a good business explanation for this. Pensions' plans are a losing proposition for a company. They are expensive and "involve risks that are not acceptable for the prudent employer."[62] This trend also implies a shift in retirement responsibility from the government and employer being totally responsible for an employee's retirement. The employee is becoming increasingly responsible for his or her own retirement with matching funds from the employer. The idea of control over their own destiny is attractive to many employees. The downside, of course, is that the employees must live with the results of their own decisions; there is no one to bail them out if they fail.

The employee is becoming increasingly responsible for his or her own retirement with matching funds from the employer.

Choice

In the past, the organization has dictated to the individual exactly what the compensation will be. Increasingly, the individual is being afforded the ability to make

[61] *Compensation Guide*, December 1994.
[62] Retirement Plans.

compensation-related choices and decisions. Some examples are cafeteria-style benefit selection, medical savings accounts, 401(k) plan options, etc. An employee may also have a menu of retirement, health care, and benefit plans to choose from. One major factor in this trend is the increased availability of information to all employees from the CEO to entry level. Another might be the transition from the industrial age worker to the knowledge worker.

Additional Trends

. . . the application in an organization should depend on how well they contribute to the strategic intent of the organization.

Listed below is a compilation of compensation examples and methods. The items listed represent those considered to be the most thought-provoking, the most innovative, and the most worthy of further discussion. Further, they may have applicability to the uniformed services. However, although they are "best" in this sense, the application in an organization should depend on how well they contribute to the strategic intent of the organization. What works well for one organization does not necessarily imply it will work well for another organization.

Medical Savings Accounts

Medical savings accounts usually involve both employee and company contributions. The company pays the first $1500 of medical bills and the individual pays the next $1500. Catastrophic insurance coverage pays any additional bills. Normally pre-tax advantages apply.

Flexible Benefit Plans

This plan allows employees a choice in selecting the type and amount of benefits to suit their needs. Most common choices are health benefits, death benefits and time off with pay. Others include dental, vision and hearing benefits, dependent life insurance, financial planning and educational assistance.

Sabbaticals

As a form of compensation, individuals could be offered extended leave (paid or unpaid) to pursue further education, travel, charity work or other pursuits.

Enhanced Educational Opportunities

Provide individuals with greater educational and training opportunities. Increase quotas to existing schools, establish remote campuses, or design interactive computer classes (distance learning). May be tied to concept of pay-for-skill or pay-for-knowledge.

Leave of Absence for Family Obligations

Similar to sabbaticals, this is extended leave for the care of newborns, ailing family members, etc. This provides individuals the opportunity to take leaves of absence in order to resolve temporary family issues.

Extended Career Opportunities

Restructuring the policy on mandatory retirement could allow full-time active duty careers beyond 30 years or part-time "emeritus" relationships for positions requiring experience and tenure for senior commissioned, warrant, and chief petty officers. Options for these part-time roles include expenses-only advisory role, "board of advisors" position, consultant, and member of interview boards for initial entry into the service.

Flex-time and Part-time Work Schedules

Flex-time, as used in many federal agencies, does not affect total hours worked. Rather it permits employees to tailor work hours and work days to best satisfy their personal preferences. As an alternative to flex-time, part time schedules enable members to meet pressing obligations such as long-term family needs.

Flexible Work Location Plans and Work at Home Plans

Remote work sites reduce employee commutes. Exploiting technology and communication advances enables employees to complete at least a portion of their office responsibilities from their residences.

Wellness and Fitness Programs for Employees and Dependents

Examples of wellness programs are company-sponsored and supported fitness facilities, presentations and newsletters on wellness, discounts and outings to recreation sites such as ski slopes and pools, etc. Insurance discounts for non-smokers and fitness center members could be offered.

Wellness Medical Care

The emphasis is preventative care and a healthy, knowledgeable work force. Commonly seen in HMOs and dental plans, these plans often include immunizations, education and counseling.

Defined-contribution Retirement Plans

A defined-contribution plan is beneficial to both employers and employees for reasons noted above. Organizations have increasingly moved to 401(k)-type plans for that reason.

Most employees are vested in defined-contribution plans after five years. Full portability, no vesting period at all, is probably not far in the future. Short or no vesting at all removes an incentive to remain with the same employer.

CHAPTER 5
PRINCIPLES OF MILITARY COMPENSATION

Introduction

A compensation system needs a firm base to stand on. This base can be represented by a list of principles of compensation. In its final report, the 7th QRMC stated, "Compensation principles should serve a long-term purpose much like military doctrine: a foundation of theory, philosophy and widely held enduring beliefs to guide both policy and management." Principles are necessary and should represent the core values and beliefs of the organization as they relate to compensation.

Compensation principles might equate to an organization's mission and vision. By serving as an overarching guide, principles align the most important values with an organizational compensation strategy and, in turn, with specific forms of compensation. For example, if the uniformed services value *equity* and *fairness* as important principles of compensation, a compensation strategy might be to employ standardized pay scales across large segments of the service population, establish clearly defined promotion criteria, and minimize the amount of pay for performance.

Specific forms of compensation might be a standard pay table, a restriction on paying bonuses for particular assignments, and allowing choice in the type and amount of benefits received. Lawler states, "The core reward system principles that an organization develops should represent a standard for the organization – that is, the organization should always test its behavior against them. They are something that the organization gives to the employee that allows the employee to trust and depend upon the reward system commitments of the organization." [63]

Compensation principles should present a crystal clear picture of what an organization values.

Compensation principles should present a crystal clear picture of what an organization values. This is not always the case. Just as individuals have competing interests, so do the uniformed services. As an example, equity and flexibility are principles somewhat in opposition. Individuals value base pay and other non-variable income for its equity. Yet they also strive for individual recognition through promotion, personal awards, and choice assignments. That is, they value the compensation system's flexibility. Compensation principles should prioritize the most important values of the organization and ensure those are the ones most richly rewarded.

The principles recommended by the 7th QRMC are listed below. Two additional principles are suggested.

[63] Lawler, 1990, pp. 39-40.

The 7th QRMC's Principles of Compensation

Effective in Peace and War

The compensation system must allow for the smooth transition of active, reserve, and retired forces from peacetime to mobilization status. The system must be designed to accommodate the rapid expansion and contraction of forces.

Equitable and Efficient

Must be perceived to be equitable by the member and efficient by the taxpayer.

Flexible and Competitive

Must provide the flexibility necessary to sustain the skill and force mix objectives, to compete with the private sector, and to deal with revised manpower goals.

Motivational

Must encourage productivity and reward advancement. Because the military is a closed personnel system, whose members perform highly specialized tasks, the compensation system must adequately recognize the value of experience.

Predictable

The system, to remain attractive over time, generally must provide lifetime remuneration promised at the outset of a member's career. Predictability entails both system design at a given time and policy commitment over time.

Understandable

Should be as easy to understand as possible to foster national support and member commitment.

Two additional principles appear useful in designing compensation systems for the 21st century.

Participative and Accessible

Every member of the uniformed services, whether active duty, retired, reserve, guard, or auxiliary should know that they can receive answers to their compensation questions. The uniformed services should view this particular principle as a form of compensation in itself; service members value the ability to receive accurate, timely information. Technological advances make this possible in a low-cost manner. In addition, members of the uniformed services should feel that their opinions and perspectives regarding the compensation they receive are valued by the services in decision making. Choice and preference empower employees and are satisfiers in themselves. Lawler states, "The reward system practices in large organizations are particularly prone to creating the feeling that the organization is highly bureaucratic and that individuals are cogs in the system rather than drivers of the organization." [64] To the maximum extent possible, a compensation system should incorporate the characteristics of accessibility and participation.

Transportable

As members of the uniformed services change status from active duty to reserve or to retiree, they should be assured that their benefits travel with them. Many corporations provide nearly identical *types* of benefits to all employees, regardless of their status. The uniformed services also recognize this concept in areas such as exchange and commissary privileges, medical care, and Space A travel. Note that while *types* of benefits are similar, the *degree and terms* of the benefits may vary. Retirees, for instance, may pay more for the health care they receive; and reservists may be limited in the frequency of their commissary visits. Nevertheless, the concept of transportability adds validity to the principle of "effective in peace and war." Additionally it supports the principles of predictability and equity.

Proposed 8th QRMC Principles of Military Compensation

Both the 5th and the 7th QRMC published principles of military compensation. Based on their work, the 8th QRMC proposes the following updated set of principles of compensation.

Effective Throughout the Spectrum of Military Operations

The compensation system should work transparently throughout the spectrum of military operations from peacetime to global warfare. When the armed forces must mobilize, the senior leadership has to be able to devote their full attention to fighting the war and must not be distracted by compensation issues. Likewise, all service members should be able to direct their full attention to warfighting without financial distractions.

Equitable

Must pay members at a level that fosters self-esteem and allows them to enjoy a decent standard of living similar. Pay should not have a negative effect on the ability of the member to perform his or her duty.

[64] Lawler, 1990, p. 32.

Financially Responsible

The compensation system must assure the taxpayer that neither more nor less is being spent than required for an effective force and to provide for the common defense.

Flexible

The compensation system must provide the flexibility necessary to sustain skill and force mix objectives, the ability to compete with the private sector under changing market conditions, and to deal with revised manpower goals that result from changes in mission, the geopolitical situation, or technology.

Encourage Retention

Given the unique hardships attendant upon military service, the compensation system must encourage sufficient people to remain in the military to provide the needed level of experience.

Dependable

The compensation system must provide the remuneration promised at the outset of a member's career. This principle entails both system design at a given time and policy commitment over time.

Understandable

Military members should understand their compensation system, and the pertinent information should be both accessible and easily understood. The military should be open and honest in its discussion of pay to foster national support and member commitment. Every member of the uniformed services, whether active duty, retired, reserve, guard, or auxiliary should know that they can receive answers to their compensation questions. In addition, members of the uniformed services should feel that their opinions and perspectives regarding the compensation they receive are valued by the services in decision making. To the maximum extent possible, the compensation system should incorporate the characteristics of accessibility and participation.

CHAPTER 6
SYSTEMS MAPPING

Introduction

The numerous compensation options detailed in earlier chapters have both intended and unintended consequences. It is important that an organization considers both consequences to accurately assess the effect of a policy or practice.

One highly effective method of capturing both beneficial and detrimental consequences is to look at the compensation alternatives as part of a system and to apply some of the principles and techniques of systems thinking. Briefly, systems thinking is a discipline for seeing wholes. [65] That is, it emphasizes relationships between the components in a system and how the interaction of these components moves the whole system. It specifically attempts to remove the distinction between dependent and independent variables, preferring to view all variable as dependent on some or all of the components of the system.

Several archetypes describe recurring system patterns that exhibit similar relationships between components. Two archetypes particularly useful in examining the consequences of a compensation system are "shifting the burden" and "fixes that fail." Both these archetypes provide a visual description of the intended and unintended consequences of a particular plan and a logical framework to explain why the effect may be smaller than anticipated.

Shifting the Burden

The shifting the burden archetype describes a situation where the solution to a problem only addresses a symptom of the fundamental problem. Furthermore, the "symptomatic solution" has the added drawback of exacerbating the "fundamental problem." A good example of this is a case of addiction. Many people seek relief from the stress they are experiencing through alcohol, drugs or smoking. They choose the relief of their preferred substance that in the short run provides the temporary relief. However, there is a side effect; and that is the damage done to their health that causes a reduced capacity to deal with stressful situations. Stress is reduced in the short run, but the cause of the stress is never dealt with, and there is a degradation of health. All of this combines to make the situation much worse despite the short term relief.

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[65] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York, NY: Doubleday, 1990), p. 68.

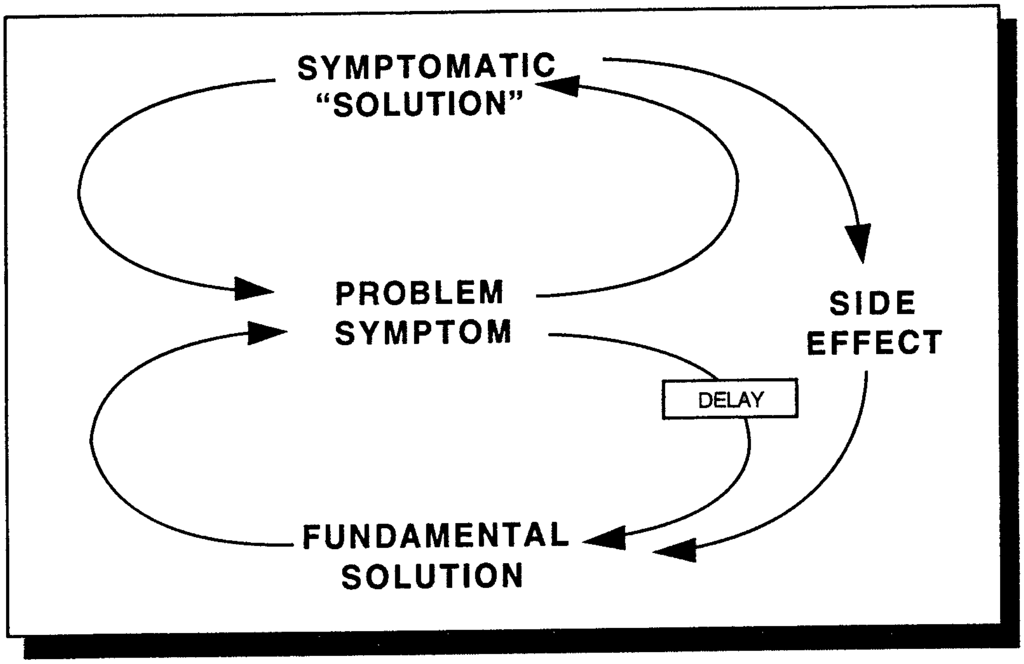

Figure 6 – Shifting the Burden

Poorly administered profit and gainsharing plans can become an addiction for employees caught in them. The diagram below illustrates the potential trap.

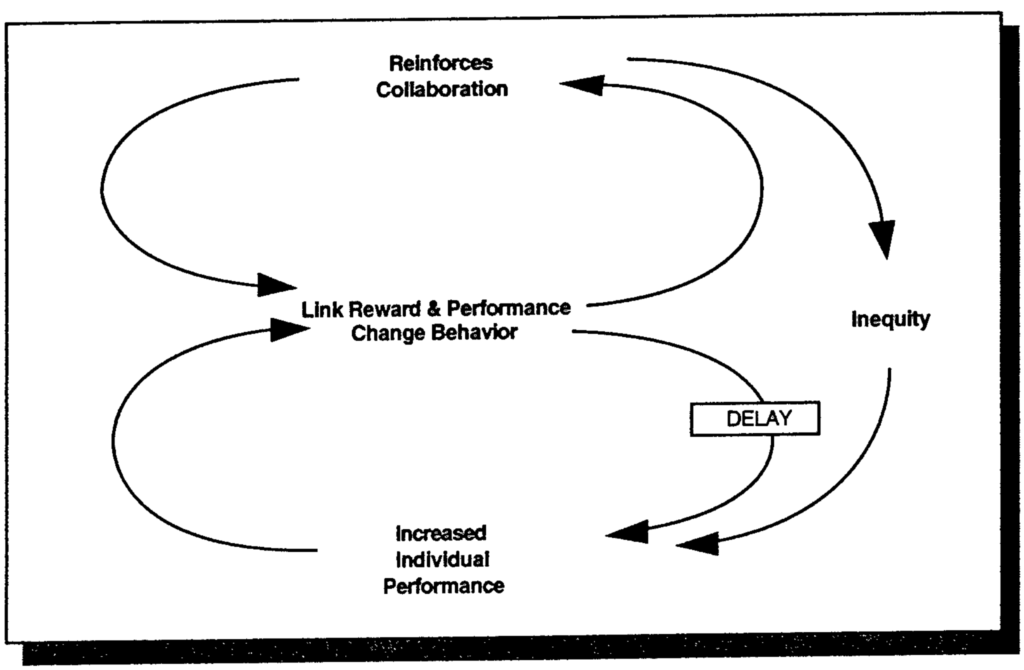

Figure 7 – Gainsharing as Shifting the Burden

In this example profit and gainsharing plans are administered for the purpose of improving productivity by explicitly linking group rewards with performance. The plan initially reinforces collaboration increasing productivity for the organization. Over time, however, workers notice that some of their colleagues contribute less and are receiving the same reward. This inequity may cause others in the organization to shirk, resulting in a number of people performing at a lower level than before implementation.

There is no way to tell whether general productivity will increase, decrease or stay the same. What can be said with confidence is that plans to increase productivity through profit or gainsharing will overestimate the expected results if the detrimental effect of shirking is not considered. Likewise, understanding the potential pitfalls of this type of plan will alert managers to what may be going wrong before things get out of hand, and help them to formulate strategies for corrective action.

Fixes That Fail

As was the case with the "Shifting The Burden" archetype, "Fixes That Fail" describes a situation where the fix has both intended and unintended effects. The unintended consequences are difficult to notice in the beginning, but after some delay what was initially resolving the problem has made the problem worse, and no amount of energy applied to the fix has any capacity to resolve the problem. Examples of "fixes that fail" are common, borrowing to pay interest on debts, or reducing preventative maintenance to save money, both lead to more of what is causing the problem that must be resolved.

Pay for performance schemes can be a "Fix That Fails" if improperly implemented:

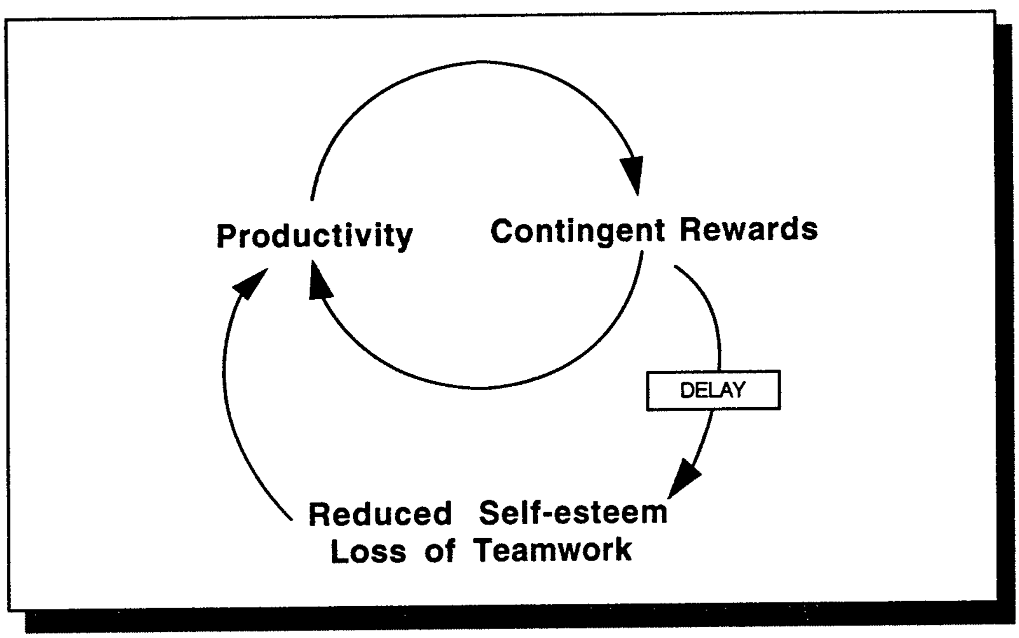

Figure 8 – Pay for Performance as Fix That Fails

Tragedy of the Commons

Teamed based pay strategies suffers a similar drawback as the one described by profit and gainsharing plans. The problem is one associated with communal property rights described in systems thinking by the "Tragedy of the Commons."

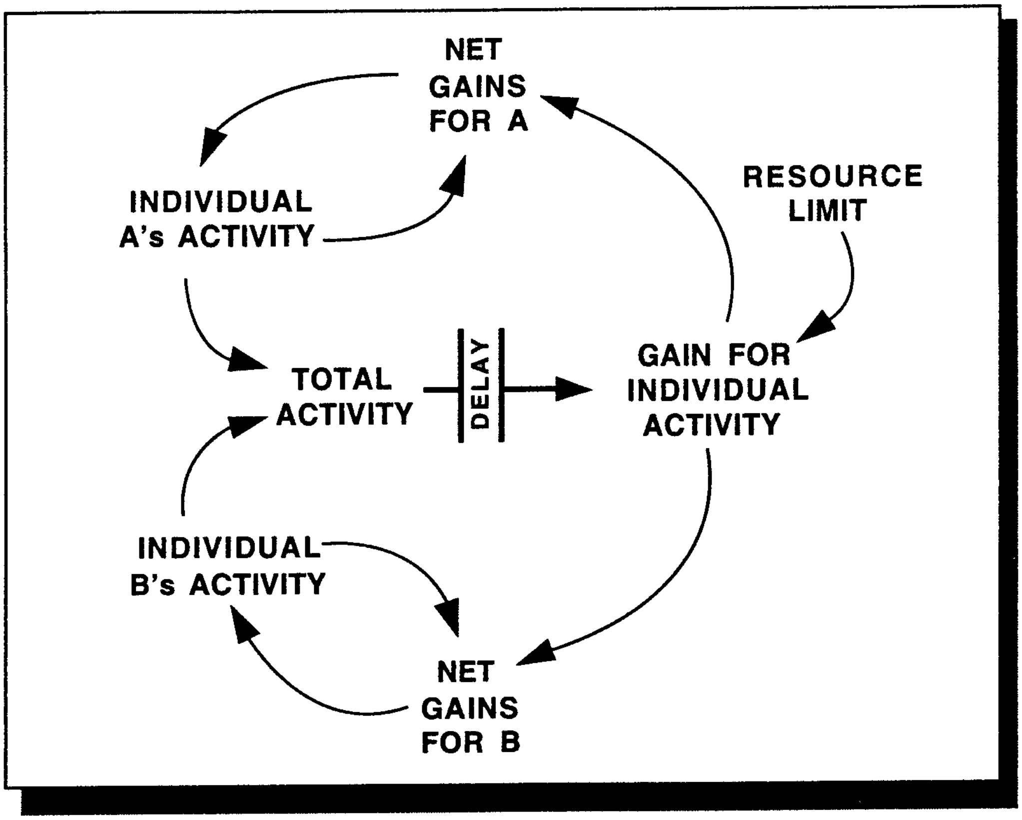

Figure 9 – Team-based Pay as Tragedy of the Commons

The Tragedy of the Commons archetype is illustrated by a situation where a number of dairy farmers all own small plots of land and have communal rights to common area. Each farmer realizes that he can preserve some of his grass land if he puts a few head of cattle out in the common area. He makes his decision of how many cattle to put in the common area based on the number of cattle he would put on a similar plot of land if he owned it himself. The problem is that all the farmers make the same decision and over time the common area is over grazed and eventually no cattle can be sustained in the common area.

Team based pays can potentially suffer the same fate. Each member of the team realizes that their shirking will only result in a fractional decrease in their team based reward. For instance, if a team of 100 people is rewarded $100 for every for every widget assembled and assembly takes a half day, a natural value of a person's labor in this industry is $200 per day.

This arrangement, however, leads to a perverse incentive system. If one person chooses to socialize or relax and is only able to assemble one widget per day he and every one else receives the standard $200 minus the lack of contribution by the one shirking individual, in this case $1, resulting in a total team based pay of $199 per person.

The perverse incentive is obvious when you note that the shirking individual gained a half day of recreation (a $100 value) for the cost to him of one dollar – a very attractive bargain. Likewise the person who would assemble more than his quota of widgets gets a very poor return on his efforts. If he is able to produce a third widget he and everyone else will receive the $200 plus one additional dollar for a total of $201. In this situation the $100 of effort is rewarded to the individual performing it with $1 of compensation.

Game theory also provides a template to describe this situation. The Prisoner's Dilemma describes a situation in which two suspected criminals are brought in for separate questioning on a robbery case. The detective tells each one that if he confesses to the crime implicating his partner, he will receive a reduced sentence of one year and his partner will receive the maximum sentence of 25 years; if they both confess, they will receive a stiff sentence of 20 years; and if neither confess, they will be charged with a greatly reduced crime carrying a five-year sentence. The payoff matrix faced by the suspects is as follows:

		Prisoner B	
		Confess	Don't Confess
Prisoner A	Confess	(20, 20)	(1, 25)
	Don't Confess	(25, 1)	(5, 5)

What is curious about this decision matrix is that even if each prisoner knew the choice that his partner had made he would choose to confess. This is not a probabilistic model, if Prisoner A knows with 100 percent confidence that Prisoner B will choose to confess, he should choose to confess (20<25). If Prisoner A knows with 100 percent confidence that Prisoner B will choose not to confess, he should still choose to confess (1<5). The socially preferred outcome is unachievable without a mechanism to ensure cooperation.

This model can also be used to illustrate the choice a worker faces in the poorly implemented team based pay system describe above.

		Coworkers 2-100	
		Shirk	Don't Shirk
Worker 1	Shirk	(100, 100)	(199, 199)
	Don't Shirk	(101, 101)	(200, 200)

This payoff matrix has the interesting property that the payoffs in the shirk/shirk and don't shirk/don't shirk cells are identical but the pressures of the system will cause all 100 workers to choose to shirk. Specifically worker will see that 200>101 and 199<200 (only slightly less than 200) and, therefore, he chooses to shirk regardless of what the others choose. This same observation can be made of the 99 other workers.

BIBLIOGRAPHY

Anthony, William P., Pamela L. Perrewe, and K. Michele Kacmar. *Strategic Human Resource Management.* Orlando, FL: Harcourt Brace Jovanovich, 1993.

Barchet, S., J. Anderson and L. Chapman. "Medical Savings Accounts." *ACA Journal*, Vol. 4, No. 3 (Autumn 1995).

Beatty, Kate L. "Pay and Benefits Break Away from Tradition." *HRMagazine*, Vol. 39, Iss. 11 (November 1994), pp. 63-68.

Belcher, John G., Jr. "Gainsharing and Variable Pay: The State of the Art." *Compensation & Benefits Review*, Vol. 26, Iss. 3 (May 1994), pp. 50-60.

Best, R. *Military Medical Care Services: Questions and Answers.* Washington, DC: Library of Congress, Congressional Research Service, 1994.

Brown, C. "Dental Benefits: Setting Objectives, Picking A Plan." *Employee Benefit Plan Review,* Vol. 49, Iss. 9 (March 1995).

Caudron, Shari. "Master the Compensation Maze." *Personnel Journal* (June 1993), pp. 64B-64O.

Charles, J. "Health Benefits: Here And Now." *Benefits Canada*, Vol. 18, No. 10 (November 1994), pp. 27-31.

"Commission Releases Recommendations For Health Care Reform." *The Retired Officer Magazine* (July 1995), p. 16.

Davidson, Craig J. "Strategic Planning Programs: A Compensation Perspective." *Benefits Quarterly* (First Quarter 1995), pp. 25-32.

"Dental Benefits Market Has Evolved, But Where Is It Headed?" *Employee Benefit Plan Review*, Vol. 48, No. 9 (March 1994).

Directions for Defense, *Report of the Commission on Roles and Missions of the Armed Forces,* (advance copy) May 25, 1995.

Dolmat-Connell, Jack. "A New Paradigm for Compensation and Benefits Competitiveness." *Compensation & Benefits Review* (September-October 1994), pp. 51-64.

Ewers, A. "Multiple Perspectives: A Series of Essays About the Impact of Shifting Public Benefits Policy on Employers." *ACA Journal,* Vol. 4, No. 3 (Autumn 1995), pp. 22-24.

Fay, Charles H. "Emerging Trends And Challenges In Compensation." *Compensation Guide* (June 1995) pp. 1-3 to 1-28.

"Flex Contained Health Costs For Most Employers." *Employee Benefit Plan Review*, Vol. 48, No. 11 (May 1994).

Gibson, Virgina M. "Align People with Business Strategies." *HRFocus*, Vol. 72, Iss. 3 (March 1995), pp. 12-13.

Gifford, D. and C. Seltz. *Fundamentals of Flexible Compensation.* New York, NY: John Wiley and Sons, 1988.

Hannon, Kerry. "Where the Real Raises Are." *Working Woman*, Vol. 19, Iss. 3 (March 1994), pp. 48-51, 72, 96.

The Hay Group. "Changing Benefits Trends." *Compensation and Benefits Strategies for 1995 and Beyond.* Philadelphia, PA: The Hay Report, 1994.

Hellriegel, Don, John W. Slocum, Jr. and Richard W. Woodman. *Organizational Behavior.* St. Paul, Minnesota: West, 1983.

Henderson, Richard I. *Compensation Management.* 6th Ed. Englewood Cliffs, NJ: Prentice-Hall, 1994.

Heshizer, B. "The Impact of Flexible Benefits Plans on Job Satisfaction, Organizational Commitment and Turnover Intentions." *Benefits Quarterly* (fourth quarter, 1994), pp. 84-90.

Jimerfield, C. "Examples of Flexible Benefits Programs In Eight Companies." 7th *QRMC Background Papers,* 1991 (File 88).

Johnson, Cathe and Kathleen McNally. "Managing Variable Pay Systems." *Compensation Guide*, December 1994, Chapter 33.

Kanin-Lovers, J. and Parr, S. "Developing a Total Compensation Approach," *Compensation Guide*. Boston, MA: Warren, Gorham & Lamont, 1994, pp. 2-7 - 2-8.

Kirwan, John P., Jr. "Use Empowerment for Bottom-Line Results." *HRFocus*, Vol. 72, Iss. 1 (January 1995), p. 19.

Larson, Ruth. "Anti-deficit Group Calls U.S. Pensions Unaffordable Luxury: Military System Singled Out For Reform." *Washington Times*, 11 July 95, sec. A, p. 6.

Lawler, Edward E., III. *Strategic Pay: Aligning Organizational Strategies and Pay Stystems.* San Francisco, CA: Jossey-Bass, 1990.

Lawler, Edward E., III. *The Ultimate Advantage: Creating The Involvement Organization.* San Francisco, CA: Jossey-Bass, 1992.

Leonard, B. "Perks Give Way to Life-cycle Benefits Plans." *HRMagazine*, Vol. 40, No. 3 (March 1995), pp. 45-48.

Lockwood, D. "Allocating The Cost of Fringe Benefits." *Management Accounting*, Vol. 76 No. 5 (November 1994), pp. 50-53.

Manin, M. "Successfully Administering Flex Plans." *HRFOCUS* (April 1995), p. 7.

"Many Are Unprepared for Retirement." *Compensation Guide: Benefits and Compensation Update*, Vol. 2, No. 6 (June 1995), p. 3.

Markowich, M. Michael. "Use Compensation As a Strategic Weapon." *HRFocus*, Vol. 71, Iss. 8 (August 1994), pp. 12-13.

McAdams, Jane B. "Determining Pay Rates and Managing Pay Structures." *Compensation Guide* (1995).

McAdams, Jerry L. and Elizabeth Hawk. "A Strategic Use of Employee Assets." *ACA Journal* Vol. 3 (Autumn 1994), pp. 46-59.

McAdams, Jerry L., and Elizabeth Hawk. *Capitalizing on Human Assets.* Scottsdale, AZ: American Compensation Association, 1994.

McCoy, Thomas J. *Compensation and Motivation.* New York, NY: AMACOM, 1992.

Morrow, David J. "What's It Worth to You? How To Put A Price Tag On Your Company's Perks," *Smart Money* (April 1994), pp. 133-136.

Moyer, H. and C. Armstrong. "Time To Cut Health Care Costs." *Benefits and Compensation Solutions* (May 1995), pp. 36-37.

Rabin, B. "Assessing Employee Benefit Satisfaction Under Flexible Benefits." *Compensation & Benefits Management*, Vol. 10, No. 3 (Summer 1994), pp. 33-44.

Robbins, K. "Dental Plans Are Growing In Popularity." *Business and Health*, Vol. 12 (2 Dental care supplement) (February 1994), p. 4-6.

Santone, Thomas J., Kevin J. Sigler and Raymond Britt. "The Strategic Compensation Planning Process." *Benefits Quarterly* (Fourth Quarter, 1993), pp. 85-96

Schiffres, Manuel and Melynda Dovel Wilcox. "401(k): 12 Keys to Success." *Kiplinger's Personal Finance Magazine* (May 1993), pp. 37-43.

Schultz, Ellen E. "Offered a Lump Sum, Many Retirees Blow It And Risk Their Future." Wall Street Journal, 31 July 1995, sec. A, p. 1.

Schuster, Jay R. and Patricia K. Zingheim. *The New Pay: Linking Employee and Organizational Performance.* New York, NY: Lexington Books,1992.

Schuster, Jay R. and Patricia K. Zingheim. "'New Pay' Strategies That Work." *Journal of Compensation and Benefits* (May-June 1993), pp. 5-9.

Schuster, Jay R. and Patricia K. Zingheim. "The New Variable Pay: Key Design Issues." *Compensation & Benefits Review* (March-April 1993), pp. 27-34.

Senge, Peter M. *The Fifth Discipline: The Art and Practice of the Learning Organization.* New York, NY: Doubleday, 1990, p. 68.

"Shedding Light on the Facts: Readiness, Entitlements, The Military Retirement System." Supplement to the Retired Officer Magazine. December 1994.

Stanton, Erwin. "Reality-Centered People Management Key to Improved Productivity." American Management Association, 1982.

"Successfully Administering Flex Plans." *HRFOCUS,* April 1995, p. 7.

Sibson, Robert E. *Compensation.* 5th ed. New York, NY: American Management Association, 1990.

Sullivan, John F. *The Components, Cost Structure and Objectives of a Total Compensation Program.* Scottsdale, AZ: American Compensation Association, 1991.

"That was the Workweek that was: Dow Chemical joins a Parade of Companies Clocking Out from the Traditional 5-day, 40-hour Employee Schedule." *Washington Post,* October 15, 1995, p. H4.

The Bureau of National Affairs, Compensation & Benefits Library on CD. Washington, DC: The Bureau of National Affairs, 1993.

"The Great Benefits Reprieve." *Kiplinger's Personal Finance Magazine* (December 1994), p. 15.

"The Rudder," National Naval Medical Center (NNMC) Marketing Department, May 1995, Iss. I.

Thomas, Kenneth, and Erik Jansen. "Intrinsic Motivation in the Military, Part I: Models and Strategic Importance." Draft paper for the Eighth Quadrennial Review of Military Compensation, December 1995.

Tritch, T. "These Tax Cuts Could Save You Plenty." *Money* (September 1995), pp. 22-23.

Turnasella, Ted. "Aligning Pay With Business Strategies and Cultural Values." *Compensation & Benefits Review,* Vol. 26, Iss. 5 (September 1994), pp. 65-72.

US Department of Labor, Bureau of Labor Statistics (June 1990) *Employee Benefits In Medium And Large Firms,* 1989, Bulletin 2363.

Wilhelm, R. "Taming the Flexible Beast." *Benefits Canada,* Vol. 18, No. 1 (January 1994), pp. 27-28.

William M. Mercer, Inc. *Employee Performance Pay.* New York, NY: 1995.

Working Paper on

Intrinsic Motivation and Rewards

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CHAPTER 1
INTRODUCTION

The premise of this report is that *rewards motivate performance,* which in turn improves *organizational effectiveness.* We briefly explain why we believe this premise is valid, then present a broad framework for thinking about the connections between rewards, motivation, and performance. The remaining chapters of this report focus on one idea, which social scientists call "intrinsic motivation," within the context of that overall framework.

. . . intrinsic motivation influences behaviors that organizations are interested in.

We assume that motivation results from rewards. "Rewards," in this approach, is an "epistemological construct"[1] to help us to think about motivation. We define rewards very broadly to include all economic and psychological benefits that people either receive from others or give themselves. Further, regardless of what other attributes an individual brings to a job (for example, skills, education, intelligence, etc.), motivation is necessary for performance. Campbell emphasizes this point: "[P]erformance will not occur unless there is a choice to perform at some level of effort for some specified time. Consequently, motivation is *always* a source of performance."[2] Furthermore, "[I]ndividuals influence [organizational] effectiveness through performance."[3] Although it is usually difficult to demonstrate causality between individual performance and organizational effectiveness, intrinsic motivation influences behaviors that organizations are interested in. For example, stronger intrinsic motivation has been found to increase creativity and innovation, reduce stress, improve interpersonal relations, improve quality, and decrease turnover and absenteeism.

Intrinsic motivation is motivation that an individual provides for him- or herself; it comes from within rather than from outside the person. Viewed another way, intrinsic motivation derives from internal, or intrinsic, rewards rather than from external, or extrinsic, rewards. We can also think of intrinsic motivation as resulting from "the psychological compensation that individuals receive from their work."[4]

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[1] Loosely defined, epistemology is the study of the nature of our knowledge about what we perceive reality to be and about the limits and validity of that knowledge. Epistemological constructs are ideas we conceive (that is, intellectually construct) for our purposes of explanation, to help us understand things and communicate with each other about them. Note that, because we intellectually invent these concepts, they have no existence or meaning in reality – the interpretations we collectively assign them are neither right nor wrong. That is, constructs like rewards, motivation and performance are figments of our individual and collective imaginations. Hence, outside the contexts we develop the concepts for, our definitions lose part or even all the meanings we gave them – the definitions can't stand on their own. As a result, it is essential to remember that definitions are neither true nor false but are only more or less helpful in calling attention to certain aspects of the phenomenon under study.

[2] J. P. Campbell, "Modeling the Performance Prediction Problem in Industrial and Organizational Psychology," in *Handbook of Industrial and Organizational Psychology*, ed. M Dunnette and L. Hough, (Palo Alto, CA: Consulting Psychologists Press, 1990), p. 706.

[3] Ibid., p. 715.

[4] Kenneth Thomas and Erik Jansen, "Intrinsic Motivation in the Military, Part I: Models and Strategic Importance," draft paper for the Eighth Quadrennial Review of Military Compensation, December 1995, p. 2.

To facilitate discussion of these topics, we offer a framework for viewing the connections between rewards, motivation, and performance (Figure 1-1). The framework allows us to distinguish between the following four distinct classes of rewards and the motivation and performance that follow from them:

- Task-related extrinsic rewards, such as a bonus for successfully completing a specific project;
- Task-related intrinsic rewards, such as the enjoyment an individual gets from doing a job he or she likes;
- Nontask-related extrinsic rewards, such as a base pay entitlement that is independent of performance of any particular task; and
- Nontask-related intrinsic rewards, such as the pride an individual feels at belonging to an organization.

. . . we offer a framework for viewing the connections between rewards, motivation, and performance.

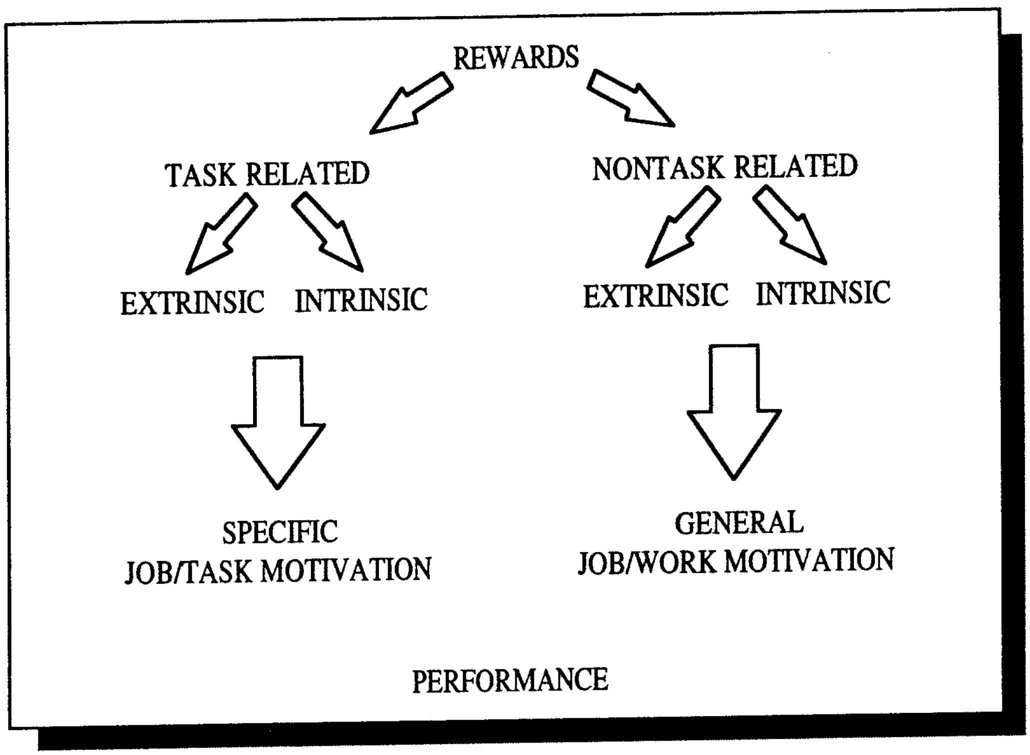

Figure 1-1. Rewards-Motivation Framework

In this framework, task-related rewards motivate performance of the tasks to which the rewards are tied – specific tasks. Nontask-related rewards motivate work performance in general, including both specific task performance and behaviors that are not tied to any particular task, but that contribute to the effectiveness of the organization as a whole. These distinctions are general rather than precise or hard and fast, for it is possible to think of real-world examples that may fall plausibly into more than one category. Figure 1-2 illustrates one possible such arrangement of some rewards available in the military context. The lists are not intended to be complete, exclusive, or invariant.

Job design focuses on the ways in which the work environment and organizational structure interact to inhibit or facilitate intrinsic motivation.

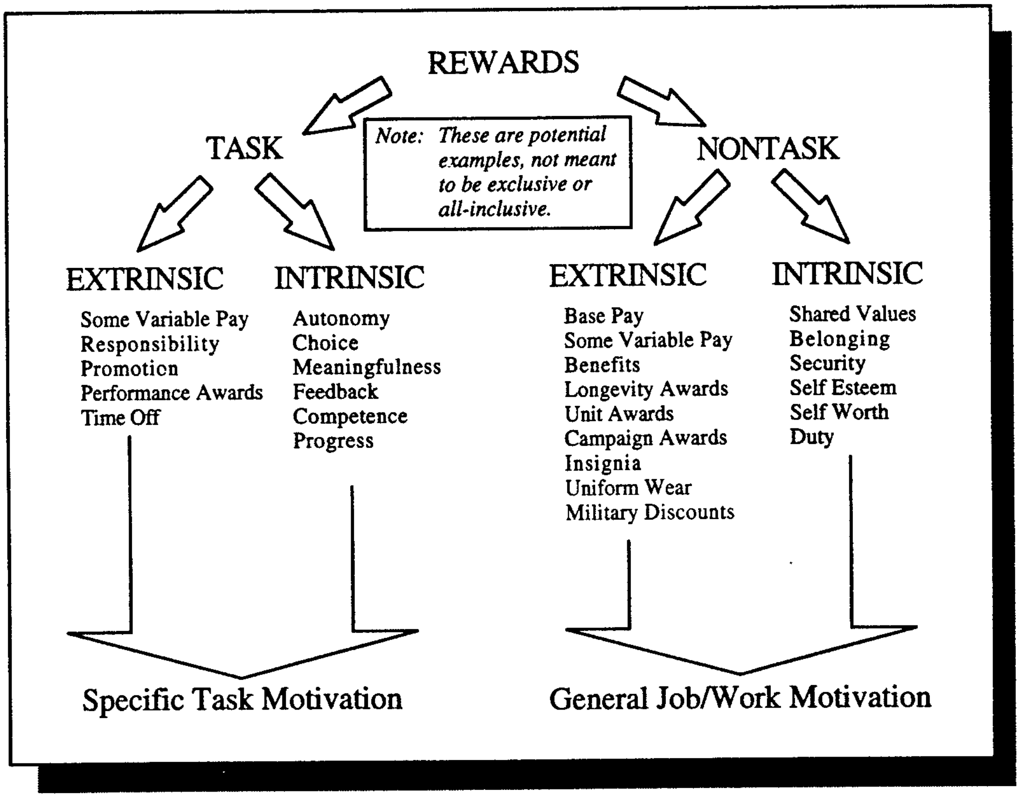

Figure 1-2. Rewards in the Military Context

The framework encourages us to think about military compensation – rewards – in a broad and encompassing enough way to help meet the challenge of aligning compensation, as a component of human resource management, with an organization's strategy. Thomas and Jansen cast the strategic importance of intrinsic motivation in terms of its role in individual *self-management*. They see the military moving increasingly toward self-management as a requirement of future warfare.[5]

Leadership is the "oil" that lubricates the machinery that translates rewards into productive performance.

In this report we introduce several additional concepts (epistemological constructs) to aid in this task; among them are *job design* and *leadership*. Job design focuses on the ways in which the work environment and organizational structure interact to inhibit or facilitate intrinsic motivation. But it is only through the interactions of people on the job that the motivational potential of these designs can be realized. Hence, leadership (defined broadly to include management behavior and interpersonal relations) permeates the entire framework – it is the "oil" that lubricates the machinery that translates rewards into productive performance. Finally, an economic perspective provides insights into the trade-offs implied by this framework and their implications for both organizations and individuals.

With the framework as an anchor for this report, subsequent chapters address the following topics: intrinsic motivation in general (Chapter 2); job design theory and its implications, focusing on task-related intrinsic rewards (Chapter 3); motivation deriving

[5] Ibid., p. 3.

from nontask-related intrinsic rewards (Chapter 4); leadership and its significance for intrinsic motivation (Chapter 5); and finally some observations from an economic perspective (Chapter 6). To aid the reader in maintaining his or her orientation while reading this report, Figure 1-3 depicts the framework again, this time with chapter topics inserted roughly where they fall.

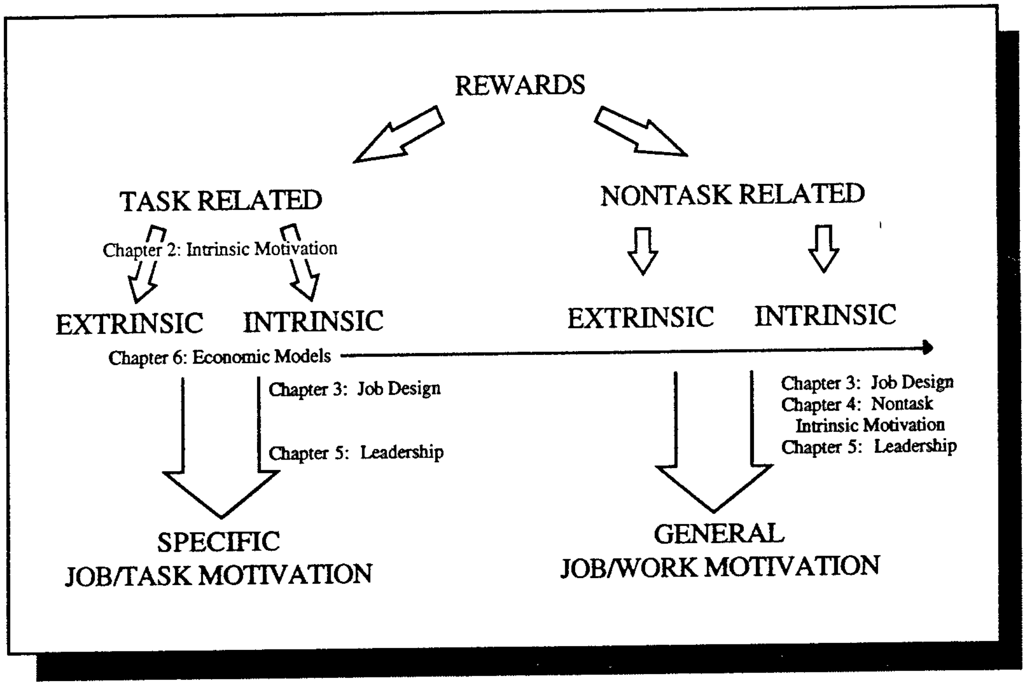

Figure 1-3. Chapter/Topic Placement

CHAPTER 2
INTRINSIC MOTIVATION

What Is Intrinsic Motivation?

Intrinsically motivated behaviors engage individuals to do activities "for their own sake" because doing the activity is rewarding in itself.

Intrinsic motivation is a concept that assumes human beings act upon their internal and external environments to be effective and satisfy a full range of their needs. It is this life force or energy for these activities that is referred to as intrinsic motivation.[1] Intrinsically motivated behaviors engage individuals to do activities "for their own sake" because doing the activity is rewarding in itself; the activities are done simply for the feelings of excitement, accomplishment and personal satisfaction they yield.

These rewards achieve the "attainment of a state of being," a high state of functioning, "a more than ordinary moment of existence" that is about being wholly involved in the activity itself and not with reaching a certain goal.[2] This experience is similar to what Csikszentmihalyi describes as "optimal experience" or "flow." During flow, people can experience concentration so intense that worldly distractions disappear and time becomes distorted. An activity that causes flow is so gratifying that people are willing to do it for its own sake, with little regard for what they will get out of it, even when the activity is difficult or dangerous. Flow activities provide a sense of discovery and push people to higher levels of performance – the reward of the growth of the self is the key to flow or intrinsically motivating activities.[3]

The performance of intrinsically motivated activities assumes people are active, development and growth-oriented, and want to encounter challenges in order to grow and learn.

The performance of intrinsically motivated activities assumes people are active, development and growth-oriented, and want to encounter challenges in order to grow and learn; that is, the desire to "enjoy ourselves" pushes us to stretch our skills or to discover new opportunities to use them. People are inspired to achieve optimal experience by optimal challenge.[4] Other researchers in the field, Carl Rogers and Abraham Maslow, also propose that individuals are constantly striving for enhancement and growth and assert that this may be the only motive underlying all human behavior.[5]

In addition to allowing growth, intrinsically motivating activities also must have, in psychological vernacular, an *internal locus of causality*. Research done by DeCharms shows people consider themselves to be intrinsically motivated if they are the "origin" of their own behavior, namely, they cause their own behavior rather than the cause of their behavior being external to themselves. If the origin of their motivation is external,

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[1] Edward L. Deci and Richard M. Ryan, *Intrinsic Motivation and Self-Determination in Human Behavior*, (New York, NY: Plenum Press, 1985), pp. 5-8.

[2] Edward L. Deci, *Why We Do What We Do: The Dynamics of Personal Autonomy*, (New York, NY: Grosse/Punt, 1995), p. 21.

[3] Mildly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience*, (New York, NY: Harper and Row Publishers, 1990), p. 74.

[4] Deci, pp. 23, 29.

[5] Herbert L. Petri, *Motivation: Theory and Research*, (Belmont, CA: Wadworth Publishing Company, 1986), p. 303.

they perceive they are in less control of the resulting behavior; they consider themselves to be a "pawn." Consequently, intrinsically motivated behavior only occurs when people have the ability to choose, without external regulation, both how they will behave and the activities they will participate in. This way, as the behavior is accomplished, people feel more competent as their skills improve and feel their activity is "self-determined;" that is, they have chosen their activity free from external pressures and acted autonomously. [6]

These intrinsic needs for competency and self-determination generate an ongoing process of seeking out and overcoming challenges free from external drives or pressures. People will seek situations that interest them and require use of their creativity and resourcefulness. The challenges they seek can not be too easy (creating boredom) or too hard (creating anxiety). [7] Self-determination is what people experience when they have both choices and the capacity to choose, and when this alone determines their actions, rather than any eternal force. Theory suggests that humans have a basic, innate propensity to be self-determining – that this is a *need.*

. . . intrinsically motivated behavior only occurs when people have the ability to choose, without external regulation, both how they will behave and the activities they will participate in.

Intrinsic Motivation and Extrinsic Rewards

In contrast to intrinsic motivation, *extrinsic motivation* results when the reason for doing something is other than interest in the activity itself; the motivation results from some external pressure (achieving extrinsic gain or avoiding punishment). Conflicting research studies indicate there is no clear understanding of the exact interaction between intrinsic and extrinsic rewards. A number of studies suggest extrinsic rewards decrease intrinsic motivation for a task. They reason that when we examine our own behaviors, we look for obvious extrinsic motivations for them. When we don't find extrinsic motivations, we assume our behavior is intrinsically motivated. But if an extrinsic reward is added to a behavior that is already intrinsically motivating, the more concrete obvious external explanation for our behavior decreases intrinsic motivation for the task. [8] Deci states this more directly by saying that although intrinsic motivation can be a strong and persistent motivator, it is vulnerable to "the continued encroachment of environmental forces . . . often socially [externally] sanctioned." [9]

Predominantly, American work behavior is controlled through the use of extrinsic rewards and punishments; people will do what they have to do in order to get extrinsic rewards or avoid punishment. But experiments have shown than when behaviors are associated with extrinsic rewards (monetary rewards in this case), people will behave to get these rewards only as long as the rewards are forthcoming; so extrinsic rewards will not motivate performance in the long-term. [10] Also, the controlling nature of extrinsic rewards limits one's sense of freedom. People become dependent on the rewards and are either seduced or forced to comply. To the extent they are forced to comply there is the tendency to defy, to refuse to be controlled or to do the opposite of the behavior expected (namely, sabotage).

[6] Deci, p. 29.
[7] Deci and Ryan, p. 33.
[8] Petri, 301.
[9] Deci and Ryan, p. 43.
[10] Deci, p. 51.

A reason people may act this way is because intrinsic motivation is based on individuals' need to be self-determining – namely, they perceive themselves to be in control of their environment because they can make free choices about their activities in relationship to it. However, external forces control and limit choice, consequently undermining an individuals' ability to be internally motivated to act; behavior becomes dependent on the external contingency, rather than on accomplishing the task for its own sake.[11] The perceived competence individuals might gain as a result of successfully performing a task is undermined because they were not wholly responsible or in control of how they accomplished the task. Consequently, they do not completely attribute their success to their own abilities or skills. Therefore, to the extent their activities were limited or controlled, their growth was also limited.[12]

Most importantly, extrinsic rewards shift the cause of the behavior away from internal desires to accomplish the task for its own sake, diminishing the intrinsic motivation to accomplish the task. When external rewards control behavior and individual freedom of choice is also controlled, the opportunity for workers to grow and display their competency (the reward provided by intrinsic motivation) declines. The ultimate goal should therefore be to create a work environment in which employees can rely on their intrinsic desire to achieve their own success and build their self-esteem by continually being able to prove their own competency to themselves.[13]

. . . external rewards will have differing effects on intrinsic motivation depending on whether the reward has a *controlling* or *informational* influence on the behavior.

For these reasons, some researchers, Alfie Kohn foremost among them, argue that intrinsic and extrinsic task motivation can not coexist.[14] But there is a significant body of research that proposes that external rewards will have differing effects on intrinsic motivation depending on whether the reward has a *controlling* or *informational* influence on the behavior. As stated earlier, it is the controlling aspects of extrinsic rewards that undermine intrinsic motivation.[15]

Deci, Ryan, and others explored the controlling versus informational aspects of how rewards are administered and the subsequent effect on intrinsic motivation. The different types of rewards they investigated were "task-noncontingent rewards," "task-contingent rewards" and "performance-contingent rewards." "Task-noncontingent rewards" do not come as a result of doing a task; the rewards are provided simply for being there; namely, people are paid for being on the job, rather than for particular behaviors or level of performance. "Task-contingent rewards" are given for actually doing or completing a task; piece-rate systems are an example of this kind of reward. "Performance-contingent rewards" are given for a specified level of effective performance relative to some type of standard. These rewards differ from task-contingent rewards in that they depend upon task performance at a specified level of *quality*; some types of bonus or incentive programs are examples of these rewards.

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[11] Deci and Ryan, p. 49.
[12] Ibid., p. 59.
[13] Daniel J. Steininger, "Why Quality Initiatives Are Failing: The Need to Address the Foundation of Human Motivation," *Human Resource Management* (Winter 1994), pp. 602-16.
[14] John H. Davis, "Why Rewards Undermine Performance: An Exclusive Interview with Alfie Kohn," *ACA Journal* (Summer 1995), pp. 6-17.
[15] Petri, p. 302.

Consistent with the theory described earlier, the absence of extrinsic rewards optimizes intrinsic task motivation. Nevertheless, the researchers also concluded that task-noncontingent rewards do not decrease intrinsic motivation when the rewards are not experienced as controlling; the reward is extraneous to the performance of the task itself. Task-contingent rewards are more controlling because one must complete an assignment to get the reward; the performance of the task is then more likely to be a result of the focus on the reward rather than the task itself. The same is true of performance-contingent rewards if they are perceived to be *controlling.*

The most interesting feature of the research exploring the effects of these different types of rewards on intrinsic motivation is the effect of feedback on whether rewards are perceived to be controlling or informational. As Figure 2-1 illustrates, positive feedback or information concerning task performance has a powerful counter-vailing effect on contingent reward programs. Contingent reward programs can still be used without having a detrimental effect on intrinsic motivation if positive feedback is provided on task performance. [16]

Contingent reward programs can still be used without having a detrimental effect on intrinsic motivation if positive feedback is provided on task performance.

Significantly, research on the contextual aspect of how intrinsic and extrinsic rewards affect motivation also shows that extrinsic rewards can have great motivational value in some circumstances. Dull or repetitive tasks may not have enough challenge in and of themselves to be entirely self-sustaining in terms of intrinsic rewards so there will probably always have to be some element of extrinsic reward (or coercion or controlling influence) to get people to do them. [17] A number of studies have found that, while task-contingent rewards impair performance on interesting (complex and conceptual) tasks, they do improve performance on dull, repetitive tasks, although worker intrinsic motivation remains low. So, as this shows, extrinsic, task-contingent rewards can be used without impairing intrinsic motivation if feedback that conveys information about competence is also given. [18]

A number of studies also indicate that intrinsic and extrinsic rewards can coexist without diminishing each other's effects and that behavior may be influenced by both simultaneously. Some studies suggest even intrinsic and extrinsic rewards are additive, so that collective increases in both increase the motivation for a task. [19] Intrinsic motivation may only diminish when extrinsic rewards are present under certain contextual situations: when there is insufficient initial interest in the activity, and when the extrinsic reward is particularly conspicuous, prominent and tangible. [20] Thus, although, the precise effect extrinsic rewards have on intrinsic task motivation is unclear, still, no research was found denying intrinsic task motivation exists. Therefore, we can reasonably assume that, at worst, intrinsic task motivation has a neutral effect on task performance, while under the right conditions, it may be a powerful, long-term motivator of high-quality work performance.

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[16] Deci and Ryan, pp. 73-85.

[17] Mark R. Lepper and David Greene, *The Hidden Costs of Reward: New Perspectives on the Psychology of Human Motivation*, (Hillsdale, NJ: Lawrence Erlbaum Associates, Publisher, 1978), p. 214.

[18] Deci and Ryan, p. 102.

[19] Uco J. Wiersma, "The Effects of Extrinsic Rewards in Intrinsic Motivation: A Meta-analysis," *Journal of Occupational and Organizational Psychology* (1992), pp. 101-114.

[20] Kelli J. Skaggs, Alyce M. Dickinson and Kimberley O'Connor, "The Use of Concurrent Schedules to Evaluate the Effects of Extrinsic Rewards on 'Intrinsic Motivation:' A Replication," *Pay for Performance: History, Controversy, and Evidence* (New York, NY: The Howorth Press, Inc., 1992), p. 50.

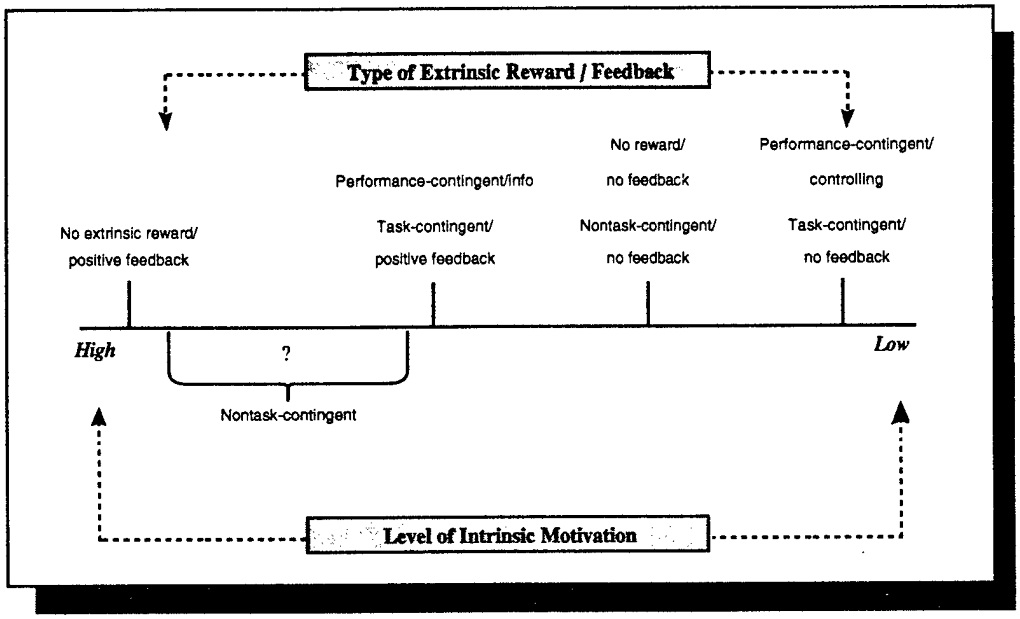

Figure 2-1. Effect of Extrinsic Rewards and Feedback on Intrinsic Motivation

So What?

. . . intrinsic motivation has the potential to be a powerful vehicle for impelling work.

As outlined above, intrinsic motivation has the potential to be a powerful vehicle for impelling work. Research shows people do not perform as well on certain kinds of activities when they are extrinsically rather than intrinsically motivated. These studies have confirmed that the performance of activities requiring resourcefulness, deep concentration, intuition, initiative, resiliency or creativity will suffer when external controls are used to motivate the behavior. Extrinsic motivators that control behavior also have clearly detrimental effects on the performance of any tasks requiring creativity, conceptual understanding and flexible problem-solving.[21] These, implications for enhancing intrinsic motivation in the workplace merit attention in any study of compensation systems.

Certainly, anecdotal evidence shows many managers recognize that people who perform jobs requiring a great deal of creativity and innovation are inspired by minimal external controls and maximum choice. These managers recognize that "creatives" or "wild ducks," as IBM founder Thomas Watson called them, need flexibility and minimum structure and become bored or resentful if direction becomes too explicit or restrictive. Fred Gamble, Human Relations Director for Conde Nast Publications, Inc., publisher of upscale, trendy magazines, comments about the creative staff that, "If you recognize their intelligence and ability to figure things out, and give them room and space to execute an idea, it will pay enormous dividends."[22]

Mary Kay Cosmetics also recognizes the power of intrinsic motivation and has incorporated it into its compensation strategy. The company's high productivity in the cosmetics industry is a result of what Richard Barlett, the company's president, says is

[21] Deci, p. 51.
[22] Shari Caudron, "Motivating Creative Employees Calls for New Strategies," from the Internet, 1-2.

not just the extrinsic compensation, but also the feelings of "self-esteem and self-fulfillment" their employees receive from their jobs. Although high-performing employees' salaries are generous, the company intentionally tries not to overwhelm the power of the job's intrinsic rewards with money recognizing that financial incentives are is not the only source of motivation in their company. [23]

More persuasive than these anecdotal findings are, an important recent study, the Quality Potential Analysis, confirmed a link between individual workers' and companies' assessments of productivity and management-created environmental conditions that facilitate and encourage the expression of human competence in productive work. The Quality Potential Analysis was a three-year study of over 10,000 American workers, covering a wide organizational, demographic and geographic cross-section. In every case where productive and unproductive organizations were compared, productive organizations were characterized by significantly greater support for collaboration, commitment and creativity than were unproductive organizations. The research reveals that workers overwhelmingly wanted opportunities to do what came naturally to them: demonstrate their competence. They realize that work is a major and critical part of their lives and want to identify with what they do and where they work. Workers said they need a strong sense of "personal impact," want direct influence on events in their workplace, and want to control their own operating procedures and guidelines. They want the freedom to determine the best way to do work. They want to be productive and know what it would take for them to be so.

. . . productive organizations were characterized by significantly greater support for collaboration, commitment and creativity than were unproductive organizations.

The productive companies' environmental conditions that best allowed people to bring their innate competence to bear on tasks were the same as those predicted by the laboratory research of Deci and others: conditions that encourage collaboration, commitment and creativity. Collaboration and participation with management in making work-related decisions shows respect and confidence in the capabilities of workers, fulfilling their need to be both self-determining and competent in their interaction with their working environment. This facilitates commitment because it allows people to act on their best judgment "at the point of impact." Replacing precedent and conformity with freedom to act in turn encourages creativity. The survey research also revealed that the greater the discrepancy between existing conditions and the environmental conditions that allow people to demonstrate competence, the greater the stress and frustration people feel performing their jobs. [24]

These survey data also seem to support studies reviewed by Karasek and Thorell [25] confirming people in the United States identify lack of control in the workplace as the number-one contributing factor to the high levels of stress they experience on the job. These studies revealed that it was not the demanding nature of jobs that causes stress, but workers' lack of control over the conditions of working life.

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[23] Thomas J. McCoy, *Compensation and Motivation* (New York, NY: American Management Association, 1992), p. 41.

[24] Jay Hall, "Americans Know How To Be Productive If Managers Will Let Them," *Organizational Dynamics* (Winter 1994), pp. 33-46.

[25] R. Karasek and T. Thorell, Healthy Work Stress, Productivity, and the Reconstruction of Working Life (New York, NY: Basic Books, 1990), cited in Daniel J. Steininger, "Why Quality Initiatives Are Failing: The Need to Address the Foundation of Human Motivation," *Human Resource Management* (Winter 1994), p. 609.

... research appears to indicate a direct link between environments conducive to intrinsic rewards and organizational and worker performance.

These findings indicate that workers need and want to operate autonomously and be self-determining. They want to have control and choice in their behaviors and desire to demonstrate competence. These are also characteristics of conditions that allow intrinsic motivation to flourish. Therefore, this research appears to indicate a direct link between environments conducive to intrinsic rewards and organizational and worker performance.

What We Can Do?

Considering the potential productive power of intrinsic task motivation in the workplace, organizations should concentrate on actions that create a climate conducive to intrinsic task motivation. As stated above, autonomy and competence are key elements in intrinsic motivation, and management can take many actions to promote workers' intrinsic motivation. Management that is participative in philosophy, structure, style and focus promotes intrinsic task motivation by contributing to autonomy and self-determination. Participative management, if properly implemented, encourages employees to set optimally challenging goals, gives them considerable latitude to work out these goals, encourages employees to assess their own performance, and encourages managers to provide the type of informational, constructive feedback that facilitates intrinsic motivation.[26]

... management can take many actions to promote workers' intrinsic motivation.

This model of participative management contrasts with organizational control systems that diminish employees' sense of autonomy. For example, bureaucratic organizations are characterized by paternalistic management-employee contacts; they direct member behavior through established rules and routines that undermine self-determination and limit autonomy.[27] Also, research patterned after the Hackman-Oldham Job Diagnostic Survey found that when first-line managers supported autonomy, subordinates felt more secure, were more satisfied with their pay and had more trust in the organization. When managers were more controlling, subordinates tended to fear for their jobs, were less satisfied with their pay, and trusted the organization less.[28]

The research of Deci and others supports this notion. As noted above, it suggests that extrinsic rewards may decrease intrinsic task motivation unless managers give employees informational, not controlling, feedback on their performance. Many vehicles deliver informational performance feedback to employees. Feedback occurs during informal or formal appraisal processes and when pay and other rewards are provided. As long as this feedback is informational, conveys a sense of appreciation for work well done, and builds employees' own sense of competence, it will tend to maintain or enhance intrinsic motivation.[29]

Informational feedback builds the senses of competency and growth individuals need to feel. Even if employees have little choice in what they must do, their ability

[26] Deci and Ryan, p. 297.
[27] Jay A. Conger and Rabindra Kanungo, "The Empowerment Process: Integrating Theory and Practice," *Academy of Management Review*, Vol. 13 (1988), p. 477.
[28] Deci and Ryan, p. 303.
[29] Ibid., p. 234.

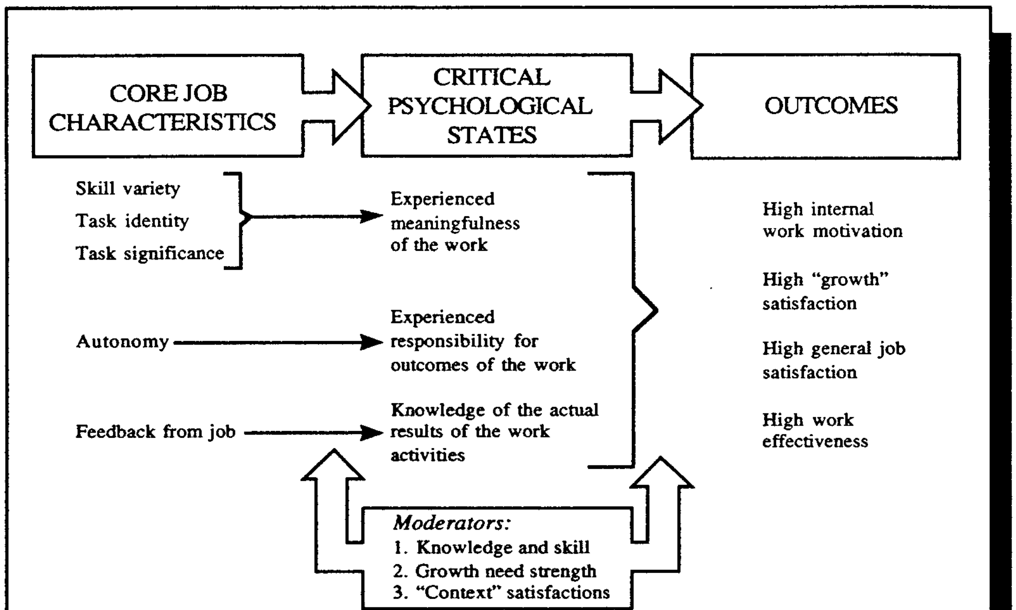
to use their own knowledge and skills to determine how a task will be accomplished increases both their sense of autonomy about the task and their perception that the outcome of the task will be a direct result of their decision-making. Some authors equate the intrinsic need for self-determination to *power* and suggest any managerial technique that strengthens self-determination or autonomy makes employees feel more powerful. This is often referred to as "empowering employees." Studies on leadership and management skills suggest that empowerment is a principal component of managerial and organizational effectiveness and that sharing power and control tend to enhance organizational productivity.[30]

Management systems, that share power and control can become autonomy-supportive environments where people are involved in determining their performance goals and are committed to them because they played a part in developing them. If workers set their own goals properly, and if they receive supportive feedback from others, they can reach their performance potential. Most important in this process is that when performance falls short of standards, it should not be used as a basis for criticism, but rather as a problem to be solved, a developmental need.[31] "Negative" feedback must be given in a way that encourages employees to solve problems and to view improvement as a challenge. This type of feedback is less detrimental and can be quite motivating.[32] Another significant benefit of allowing employees to set their own goals that are contingent upon fulfilling specific organizational needs is that they will have translated the organization's objectives into their own objectives and thus become more committed to achieving them.[33] In a field experiment on management actions on work structures and systems (like human resources), Deci found that managers' orientations tended to be more autonomy-supportive and to positively motivate their subordinates when they focused on creating an informational climate in the workplace by minimizing controls, using structures that allowed people to fulfill their own potential and competence, and administered informational feedback.[34]

. . . empowerment is a principal component of managerial and organizational effectiveness . . . sharing power and control tend to enhance organizational productivity.

[30] Conger and Kanungo, p. 471.
[31] Deci, p. 154.
[32] Deci and Ryan, p. 308.
[33] McCoy, p. 208.
[34] Deci and Ryan, p. 311.

CHAPTER 3
JOB DESIGN FRAMEWORKS



Source: J. Richard Hackman and Greg R. Oldham, *Work Redesign*, Reading, MA: Addison-Wesley, 1980, p. 90.

Figure 3-1. The Complete Job Characteristics Model

The Job Characteristics Model

The Job Characteristics Model (Figure 3-1), proposed by Hackman & Oldham, [1] suggests that five core job characteristics influence three critical psychological states. The three psychological states can then be used to predict four outcome variables. Three moderating factors affect the relationships between the core dimensions and psychological states, as well as the relationships between the psychological states and the outcomes.

Hackman and Oldham propose that any job can be described in terms of five core dimensions:

- *Skill Variety* – the degree to which a job requires a variety of different activities so the worker can use a number of different skills and talents.

[1] J. Richard Hackman and Greg R. Oldham, *Work Redesign* (Reading, MA: Addison-Wesley, 1980).

- *Task Identity* – the degree to which the job requires completion of a whole and identifiable piece of work.
- *Task Significance* – the degree to which the job has a substantial impact on the lives or work of other people.
- *Autonomy* – the degree to which the job provides substantial freedom, independence and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out.
- *Feedback* – the degree to which carrying out work activities required by the job results in the individual's receiving direct and clear information about the effectiveness of his or her performance.

The first three core dimensions cause an employee to view work as meaningful or important, worthwhile and valuable. Autonomy affects the employee's sense of personal responsibility for outcomes. Immediate feedback from the job allows the employee to know how well he or she is doing the job. Another way of saying this is that the employee will receive more internal rewards when he or she learns (knowledge of results) that he or she personally (experienced responsibility) has performed well on a task that he or she cares about (experienced significance).[2] The more these conditions are present, or at least perceived, the more motivated the employee will be, and performance and satisfaction will also increase. All of these relationships are moderated by three factors:

. . . the employee will receive more internal rewards when he or she learns (knowledge of results) that he or she personally (experienced responsibility) has performed well on a task that he or she cares about (experienced significance).

- *Task-Relevant Knowledge and Skills* – the employee's skills and level of knowledge will affect how the employee views his or her ability to complete tasks.
- *Employee's Need for Growth* – employees with a high need for self-esteem and self-actualization are more likely to experience the three psychological states when a job contains the core dimensions.
- *Context Satisfiers* – these are measures of the degree to which employees may be preoccupied with problems of pay, job security, co-worker and supervisor relationships, and therefore unable to experience the growth and personal development opportunities of an enriched job.

The job characteristics model offers five suggestions for managers:[3]

- *Combine Tasks* – Managers should seek to take existing, separate tasks and combine them into larger modules of work. This would increase skill variety and task identity.
- *Create Natural Work Units* – Form employee tasks into an identifiable and meaningful whole piece of work. This would increase employee ownership of work and increase the chance that an employee would perceive the work as meaningful and important.

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[2] Stephen P. Robbins, *Essentials of Organizational Behavior,* 3rd Ed. (Englewood Cliffs, NJ: Prentice Hall, 1992), p. 71.

[3] Hackman and Oldham, pp. 35-142.

- *Establish Client Relationships* – Establish direct relationships between the user of a good or service and the employee. This would increase skill variety, feedback and autonomy.
- *Expand Jobs Vertically* – Give the employee more responsibility, discretion and control over work. This would increase autonomy by closing the gap between the controlling and performing aspects of work.
- *Open Feedback Channels* – Employees need to know how well they are performing, and whether their performance is improving or not. This feedback should be delivered directly as the employee performs tasks, not on a time delayed or occasional basis.

Tests of the Job Characteristics Model have generally produced good results, but several criticisms of the model remain. For example, the research evidence concerning both attitudes and task characteristics must be obtained from the job holders. Consequently, high correlations between an employee's desire for the core dimensions, the presence of the core dimensions, and their satisfaction may reflect the person's desire for consistency rather than on any other factors.[4] Moreover, although the model works well for people with high growth need, it is weak in describing the process for those with low growth need strength.[5] Despite these criticisms, the model still appears to have much practical value as a basis for job design.

The Social Information Processing Approach

. . . the social environment of the organization affects the characteristics used to describe the work environment.

In response to the criticisms of the Job Characteristics Model, Salancik and Pfeffer proposed the "social information processing" approach to job design. In formulating their model (Figure 3-2), they questioned the assumption embedded in the Job Characteristics Model that properly designed jobs better fulfill certain needs people have. In this connection, Salancik and Pfeffer distinguished between objective and perceived job properties. They argued that the social environment of the organization affects the characteristics used to describe the work environment. These effects occur through several processes. One process is that of the overt statements of coworkers on a worker's attitudes. Each worker is susceptible to the statements of coworkers for two reasons. First, because jobs are complex stimuli and a worker may be confused as to how to react, the statements of coworkers can provide signals on of how to react. A second process is the worker's desire to fit in or agree with coworkers.

The next way the social environment influences the worker is by making certain aspects of the environment more or less salient. In other words, coworkers can give clues as to what environmental features are more important. They can do this by talking about these aspects more frequently or just by noting them and not others.

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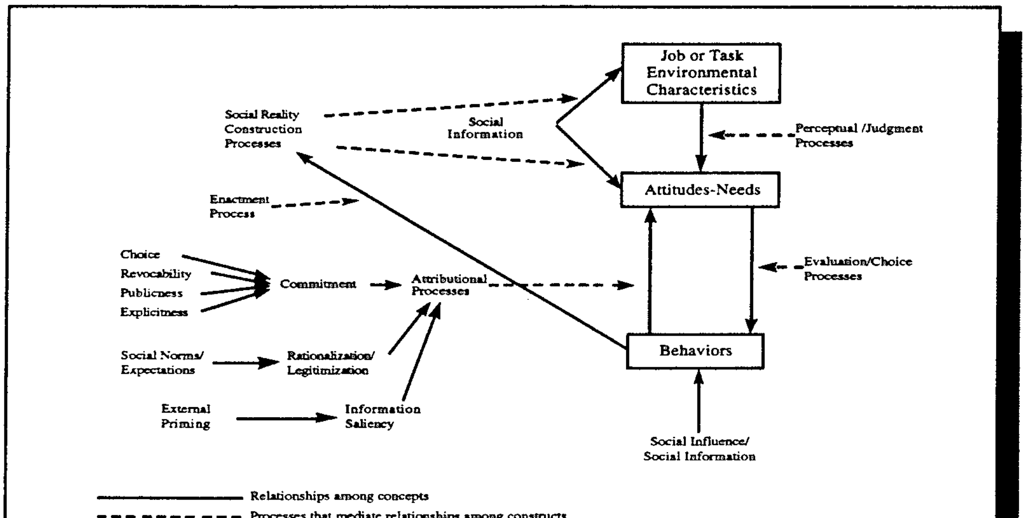
[4] Jen A. Algera, "'Objective' and Perceived Task Characteristics as a Determinant of Reactions by Task Performers," *Journal of Occupational Psychology*, Vol. 56, No 2, p. 95. Cited in Ivan T. Robertson and Mike Smith, *Motivation and Job Design* (Bradford on Avon, Great Britain: Dotesios, 1985), p. 58.

[5] Karlene Roberts and William Glick, "The Job Characteristics Approach to Task Design: A Critical Review," *Journal of Applied Psychology*, Vol. 66, No 2, p. 196. Cited in Robertson *et al.*, p. 59.



Source: Salancik, Gerald R. and Pfeffer, Jeffrey, "A Social Information Processing Approach to Job Attitudes and Task Design," *Administrative Science Quarterly*, Volume 23, No.2, June 1978, p.224.

Figure 3-2. A Social Information Processing Approach to Attitudes, Behavior, and Job Characteristics

The social context also affects the individual through interpretation of environmental cues. Coworkers not only focus attention on certain events, they convey their own interpretations of these events as well. The interpretations that develop may be socially determined. For example, when a supervisor disciplines an employee for substandard performance, the supervisor may be viewed as lacking concern for the employee or, alternatively, as concerned for the well-being of the firm. The interpretation that dominates may be partially determined by the social context.

Finally, other processes affect the individual by influencing how the individual interprets his or her own needs. "In other words, people learn what their needs, values, and requirements should be in part from their interactions with others."[6]

Salancik and Pfeffer also propose that the individual's own past behavior influences how his or her perception of present circumstances. Thus the individual's commitment to the task depends upon information about his or her past behavior that is most salient at the time and the social norms that may or may not legitimize the individual's past behavior.

. . . many things affecting how the individual views the job are a result of general social values and are not controllable by the organization or the individual.

Commitment is made when an individual chooses to engage in a task, when the decision is irrevocable, when the decision is public, and when the decision is explicit or well-defined. It has been demonstrated that when individuals commit themselves to a task, they can develop attitudes consistent with their commitment. In other words, individuals committed to a task are more likely to develop positive feelings toward the task even when the rewards from doing the task seem dubious to an objective observer.

In addition to commitment, how a person rationalizes his or her behavior is important. People develop justifications for their actions as a way of making such behavior meaningful and explainable. Justification for job activities can be associated

[6] Gerald R. Salancik and Jeffrey Pfeffer, "A Social Information Processing Approach to Job Attitudes and Task Design," *Administrative Science Quarterly*, Vol. 23, No. 2 (June 1978), p. 230.

with many things in the environment – the culture, the features of the job, or individual traits. This may mean, however, that many things affecting how the individual views the job are a result of general social values and are not controllable by the organization or the individual. One way an organization can manipulate this process is through the construction of a "rationalizing mythology." For example, screening and recruiting activities become rationalized as aiding organizational effectiveness and performance, while also ensuring that those selected become convinced of the importance of their assignments. Uniforms, titles, organizational sagas, company newspapers, and the passing of stories about organizational accomplishments all facilitate the development of a mythology which provides the meaning, importance, and justification of work activities.[7]

This model, like the Job Characteristics Model, has received some criticism. Although much of the research underpinning the model showed that the social environment does play a role in job perception, little was found to refute the Job Characteristics Model. Having said this, however, there are some possible lessons to take from this work that may help an organization to motivate employees.

. . . it is in the organization's best interest to foster commitment in the individual employees.

The first important implication that might be taken from this discussion is that it is in the organization's best interest to foster commitment in the individual employees. Beginning with the process, the organization should explicitly disclose other options available elsewhere. This adds to the sense of free choice. Once the decision is made, having a contract (irrevocability) that is explicit and public commits the individual to the job. After the individual is hired, choices about other career options are less important (and may, in fact, be detrimental if the person decides to leave), but offering choice in tasks to be performed and setting mutually accepted goals can help foster commitment to individual tasks.

The organization should also be mindful of how corporate signals affect the saliency and meaning of events that occur. For example, posting procedural warnings and signs may inadvertently emphasize that workers are doing the same tasks over and over and, therefore, doing boring work. On the other hand, calling attention to the social importance of a task may make it more meaningful. Another example already outlined above is that of the supervisor disciplining a substandard performer. If the organization is seen as trustworthy, then employees will see that their own best interests are served by trying to ensure everyone carries his or her fair share of the burden.

The third way an organization might affect the social context is through proper use of surveys. This may not seem obvious from the prior discussion, but if thought about in terms of salience, the connection becomes more apparent. If managers conduct surveys only when they think problems might be developing, the employees will pick up on this and assume that there already are problems based simply on the fact that someone is asking questions. Also, it has been demonstrated that by giving signals that a problem exists and that changes are required, an organization will create an expectation of change in the employees. Then, if no changes are seen in a timely manner (even if management can show that they are unnecessary), employees may get discouraged by a perceived lack of management concern. By using routine

[7] Salancik and Pfeffer, p. 232.

surveys, management may actually be able to sense problems earlier without unduly startling the employees or creating unrealistic and unwanted expectations.

One of the most disconcerting things about this perspective is that there is much in the culture of an organization that seems out of control of management. Workers' attitudes and values can be very hard to ascertain or influence. Still, taking a critical look at the social climate in the organization and trying to foresee how organizational decisions might play in this climate seem to be offer important proactive possibilities for managers.

An Integrated Theory of Task Design

To assess the relative merits of the Job Characteristics Model and the Social Information Processing approach, Griffen *et al.* conducted an experiment to test the effects of both task properties and social cues.[8] Subjects worked for one hour on jobs that were either very low or very high in core job dimensions. While they worked, they also received social cues about the tasks they were performing. The results of this experiment showed that changes in both core task dimensions and social cues resulted in predicted changes in perceptions and attitudes. This led Griffen *et al.* to develop a framework (Figure 3-3) that attempted to integrate both views into one theory.

. . . changes in both core task dimensions and social cues resulted in predicted changes in perceptions and attitudes.

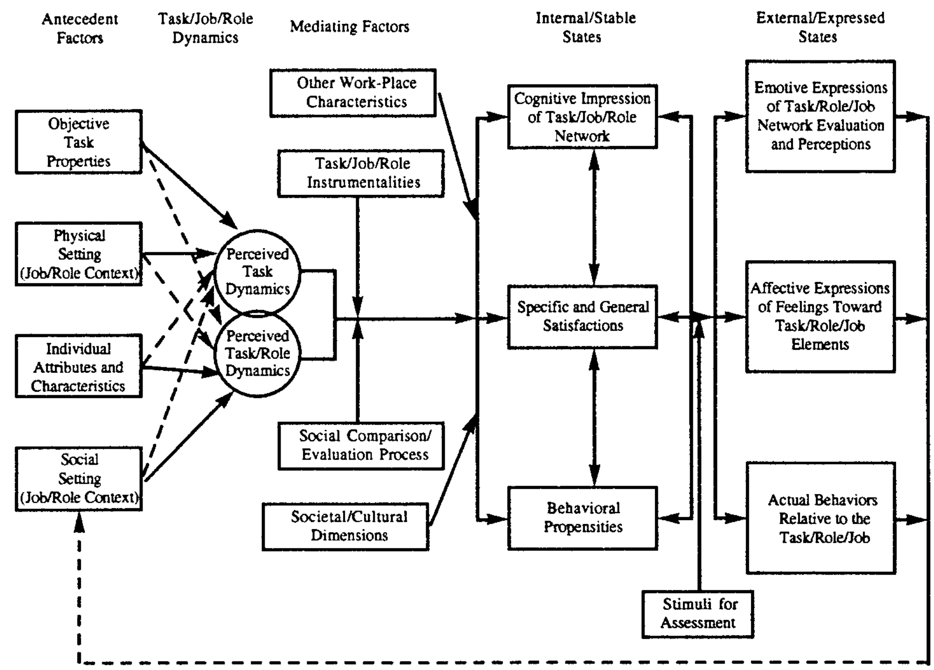
The integrated theory lists four antecedent factors that affect the "Task/Role/Job Dynamics Network." For this theory, *task* is defined as the set of prescribed activities a person performs during a typical work period, a *role* is defined as the decision making rights of the person performing the task, and a *job* is defined as the array of elements and dimensions of the organization with which the individual comes into contact. The job can be seen to encompass both the task and the role. The network idea reflects the fact that people seldom form perceptions and attitudes in a compartmentalized fashion. In other words, people's perceptions about job, task and role are interrelated.

The perceptions and attitudes from the task/role/job network affect the Internal/Stable States of the individual. The theory proposes that, over time, an individual builds up feelings about his or her job. In general, as this repository of feelings grows, the total set takes on an positive, negative, or neutral state and becomes more stable. The three states in the framework exist in the individual on a fairly consistent basis.

The theory also suggests that several factors mediate the relationships between the job/role/task network and the internal/stable states. In other words, the relationships are far from independent. There are many external factors that affect the formation of the internal/stable states.

Finally, the internal states are predicted to cause external/expressed states. These can vary based on mood, emotions or other experiences, or due to some other stimuli.

[8] Ricky W. Griffin, T. Bateman, S. Wayne and T. Head, "Objective and Social Factors As Determinants of Task Perceptions and Responses: An Integrated Perspective and Empirical Investigation," Academy of Management Journal, Vol. 30, pp. 501-523. Cited in Ricky W. Griffin and Gary C. McMahan, "Job Design, A Contemporary Review and Future Prospects," CEO publication T 93-12 (232). October 1993.



Source: Griffen, Ricky W. "Toward an Integrated Theory of Task Design," Research in Organizational Behavior, volume 9, pp 79-120; L.L. Cummings and Barry M. Straw, eds.

Figure 3-3. Integrated Theory of Task Design

The act of expression may then affect the initial antecedent factors, especially individual attributes and characteristics and the social setting, as the process repeats itself.

. . . task characteristics and the social climate can work together or against each other in affecting worker attitudes and motivation.

It must be stated that this theory was not advanced to replace either the job characteristics model or the social information processing approach, but rather to demonstrate how these two models might be merged in order to capitalize on their individual strengths. It is relatively new and quite complex, consequently there is not much proof to verify its effectiveness. However, it seems to be a useful way to think about how individuals view their work and respond to their environment. It shows that both task characteristics and the social climate can work together or against each other in affecting worker attitudes and motivation.

Job Redesign Approaches

There are many different terms for the programs used to redesign jobs. For the purpose of this report, they are classified into four categories: job rotation, job enlargement, job enrichment and group options.

Job Rotation

Job rotation can fall into two categories. In the first, it involves moving people between several tasks throughout a work day to decrease the monotony and boredom of performing one task for a long period. An example might be letting three secretaries rotate the phone answering, typing and copying duties. The main advantage here is that the employee's work can be spiced up a little with not much cost to the organization. The main disadvantage is that there may be some dissension if equity is questioned.

The second application of job rotation involves moving employees from one job to another after a specified period of time. This is designed to increase the number of skills of the employee and the flexibility of the organization. It also gives employees the broad range of experiences that might be required if the employee is to move up into management. For the individual, this approach can offset the boredom experienced once he or she gets good at a particular task. The system is not without its drawbacks, however. Training costs can increase and productivity can be decreased by moving people into new positions just as they become competent in others. Also, people who desire to be specialists, good in a particular technical task, may not like being moved into a different task every few months.

Job Enlargement

Job enlargement programs expand a job horizontally. In other words, these programs increase the number of tasks an individual will perform, thereby increasing diversity in a job. The major shortcoming of this approach is that many workers do not see this as adding variety, just more work. Therefore, this approach works best when dealing with overspecialized jobs that lack diversity.

Job Enrichment

Though some researchers include job enlargement as a subset of another approach – job enrichment – there is an important distinction to be made. While job enlargement is said to expand a job horizontally, job enrichment expands a job vertically to give the employee more control over his or her work. This means that instead of just combining assorted tasks into one job, the worker can assume some of the responsi-bility originally held by the manager. For example, giving the employee greater involvement in scheduling, customer contact, planning and evaluation are all ways of increasing employee responsibility and ownership. Another important aspect of an enriched job is that direct feedback from the job is important so individuals have the opportunity to evaluate their own performance and take appropriate action. Enriching jobs has been shown to increase employee satisfaction and reduce absenteeism and turnover, but the effect on productivity is not clear. In some cases, productivity increases, in others it decreases, but when it does decline, there seems to be a more conscientious use of resources and a higher quality product.[9]

Group Options

Over the last several years, the focus in job redesign has shifted away from the individual and more toward groups of workers. Just like the options for individual jobs above, there are different kinds of redesign for groups. The first is the *work*

[9] Robbins, p. 67.

team. In this program, a group of employees is responsible for the completion of a large task, or group of smaller tasks. The team would decide on how to rotate the jobs among individuals and for assigning specific tasks to people. The group would still have a supervisor who would coach them and oversee their activities.

A second type of group redesign is known as the *autonomous work group*. This differs from the work team described above in the same way an enriched job differs from an enlarged job in the previous discussions. In other words, the group as a whole takes over some of the responsibility of managing themselves. The group, given a goal to obtain, can control work assignments, inspection procedures, evaluation processes, and prioritization; it even may be able to select its own members. Though there is evidence that supports the connection between autonomous work groups and increased productivity,[10] there are still some potential problems. One is that there may be less chance for promotion since there are fewer management positions available. Another is that the work group may set norms or goals inconsistent with those of the organization.[11] For example, the group may focus solely on quality and productivity and ignore things like safety.[12]

Job enrichment and the application of job redesign to teams are currently considered to be the most effective at producing motivated employees.

The final type of group design initiative is the *quality circle*. This is a joint group of employees and management that meets to discuss product quality. Employees must be properly trained in communication and evaluation skills. While the organization gets an increase in product quality, workers get a feeling of participation and ownership in the process and may also get a feeling of job security as they recognize that a higher quality product is more competitive in the marketplace. Potential problems can arise if management doesn't take the process seriously, doesn't properly train the employees, or allows the sessions to involve salary, benefit or environmental problems instead of product quality issues.[13]

Conclusion

In this chapter, three frameworks for the effects of job design and organizational climate were shown, along with some possible ideas for how management might think about applying them to the workplace. Next, typical approaches to job redesign were presented. Job enrichment and the application of job redesign to teams are currently considered to be the most effective at producing motivated employees. However, the tie to organizational productivity has not been clearly demonstrated. It may, in the end, be up to the organization itself to decide what it means when it talks about increased effectiveness and then tailor these ideas to best fit its own strategic plan.

[10] William P. Anthony, Pamela L. Perrewe, and K. Michele Kacmar, *Strategic Human Resource Management* (Orlando, FL: Harcourt Brace Johanovich, 1993), p. 250.

[11] Charles Handy, *Understanding Organizations* (New York, NY: Oxford University Press, 1993), p. 286.

[12] Anthony, Perrewe and Kacmar, p. 250.

[13] Anthony, Perrewe and Kacmar, p. 251.

CHAPTER 4
NONTASK INTRINSIC MOTIVATION

Introduction

Nontask intrinsic motivation describes much of the kind of motivation we associate with the military.

Nontask intrinsic motivation – prompted by rewards not related to or contingent on specific tasks – describes much of the kind of motivation we associate with the military. This includes the "can do" attitude of doing "whatever it takes" to do the best job possible, no matter what that job is; and it explains how concepts like duty, service, patriotism, and idealism can motivate behaviors an organization values. Although theories relating these concepts to motivation are not new, recent interest has been generated by consideration of the Japanese work culture, which, like the military's, is based on "the notion that the employee must act on the basis of responsibilities, obligations, duties, and moral imperatives that supersede her or his self-interest."[1]

As we have stated in earlier chapters, motivation may be broadly categorized as extrinsic or intrinsic, task-related or nontask-related. The source of intrinsic motivation is internal; it comes from within the individual rather than through some external vehicle, such as a paycheck. It is important to emphasize what we mean by the term "nontask" in this definition: *nontask* intrinsic motivation *results from* intrinsic rewards that are not contingent on specific achievements. "Nontask," then, refers to the *source* of motivation rather than its *object* or goal. Thus, we may characterize nontask intrinsic motivation as underlying a general desire to exert effort in performing a job or in performing a task required by that job, regardless of what that task is. This type of motivation may derive from membership in an organization and the "psychic" rewards that accompany that membership, or it may come simply from an individual's dedication to values or goals he or she shares with an organization.

One further caveat: there is no hard-and-fast definition of what is or is not nontask intrinsic motivation, nor is there a consistent terminology. Leonard, for example, talks about what she calls "expressive" behavior, "whether it is termed intrinsic motivation, intrinsically motivated behavior, moral involvement, or internalized motivation."[2]

The first section of this chapter describes the need for self-based theories. The second describes some models of nontask intrinsic motivation that are related to the strength and nature of a person's concept of "self." The third section discusses applications to the military, including empirical support for the theories, policy implications, and a brief discussion of the military "X-factor." We conclude with some general recommendations.

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[1] Howard S. Schwartz, "A Theory of Deontic Work Motivation," *Journal of Applied Behavioral Science*, Vol. 14 (1983), p. 204.

[2] Nancy H. Leonard, Laura L. Beauvais, and Richard W. Scholl, "A Self-Concept Based Model of Work Motivation," *Academy of Management Journal* (Iss. Best Paper Proceedings) (1995), p. 322.

The Need for Self-concept Based Theories

The job design models discussed in the last chapter help to explain task-related motivation, but those models do not account for all behaviors and motivations we observe in the workplace. Some behaviors transcend individual tasks, for example, and some motivation appears to have its source in the values that people hold and in their sense of moral obligation. According to Shamir, we need "theories that can explain individual sacrifices for collective concerns and can account for the role of values and moral obligations in energizing and directing work behavior."[3] A number of researchers conclude that such theories of work motivation must be based on the *self-concept*, an idea that encompasses the way people see themselves, what they would like to be, how they want others to see them, their internal value systems, and the relative strengths of these ideas.

Some behaviors transcend individual tasks and some motivation appears to have its source in the values that people hold and in their sense of moral obligation.

Behaviors

One set of behaviors that need explanation are those that occur or are observable only over time. Shamir offers "commitment" as an example; it is a "pattern of behavior" one can judge over time but not on the basis of any one action. [4] Carlisle and Manning similarly stress the importance of "an enduring sense of obligation, as distinct from a transitory incentive to work in terms of an immediate reward," given that "many organizational tasks are routine tasks."[5]

Frank mentions the need to incorporate what he calls "nonegoistic" forms of behavior, such as *altruism*, into economic models of rational behavior and shows that the models produce different results when such behaviors are taken into account. Moreover, they correspond to what we see in the real world.[6] Organ links organizational performance to what he calls "extra-role" forms of individual performance. These include, again, *altruism*, exemplified by helping a colleague with a specific problem, such as how to use the copier machine; *courtesy*, a preventive measure that diffuses potential interpersonal conflicts that could have negative effects on productivity; *sportsmanship*, characterized by restraint from taking actions that detract from the productivity of the workplace, such as arguments, complaints, grievances, outbursts of frustration; *civic virtue*, or doing the things that help the organization's administration to run smoothly, such as reading one's e-mail, attending meetings, and contributing by suggestion and participation in improving the workings of the organization; and, *conscientiousness*, characterized as conforming to the spirit of rules and policies rather than just to their letter.[7]

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[3] Boas Shamir, "Meaning, Self, and Motivation in Organizations," *Organization Studies*, Vol. 12, No. 3 (1991), p. 410.

[4] Ibid., p. 408.

[5] Ysanne M. Carlisle and David J. Manning, "The Concept of Ideology and Work Motivation," *Organization Studies*, Vol. 15, No. 5 (1994), p. 700.

[6] Robert Frank, *Microeconomics and Behavior* (New York, NY: McGraw Hill, 1994).

[7] Dennis W. Organ and Thomas S. Bateman, *Organizational Behavior* (Homewood, IL: Irwin, 1991).

. . . the congruence of individual and organizational values can affect achievement of organizational goals.

Personal Values

People tend to behave in ways consistent with their internal values. In Shamir's model, the congruence of people's actions with their values affects the way people view themselves (in terms of self-esteem or self-worth), and thereby influences their behavior.[8] Carlisle and Manning argue that "ideological values are held by persons in employment disclosed in the form of an attitude towards their working life," and that the work motivation they inspire is bound up in values reflected in task performance and decision-making.[9] Further, the congruence of individual and organizational values can affect achievement of organizational goals. A shared ideology imparts value to the "practices, procedures, and objectives of organizations," sustaining "motivational commitment" of its members.[10]

Moral Obligation

Among internal sources of motivation is what Leonard *et al.* call "moral involvement," which is "not based on expected satisfaction of needs and may even demand the denial of need satisfaction and the sacrifice of personal pleasure. For example, military personnel who serve in the armed forces demonstrate the value of serving one's country to the point of risking their lives."[11] Shamir observes that currently popular theories take no notice of the concept of an individual's moral obligations to a firm as a motivator of behavior,[12] but that Schwartz' theory of "deontic" motivation fills that gap. It also fits the military enterprise.

. . . currently popular theories take no notice of the concept of an individual's moral obligations as a motivator of behavior . . .

Schwartz' theory of work motivation takes its name from the Greek word for "duty" and suggests that the concept of "obligation" can help to explain work behavior.[13] The crux of the theory is that people can be motivated to perform by a *self-imposed* sense of duty or obligation to the employer or organization. It differs from theories of work motivation underlying the work of researchers such as Hackman and Oldham or Deci in that it treats work as an obligation rather than as a potentially intrinsically motivating activity. While the Hackman-Oldham and Deci views result in suggestions of ways to improve the work environment so that workers will enjoy their jobs more, Schwartz' theory accepts that work is quite likely to consist of onerous duties imposed on the employee by his or her employer. The question is, "How is it possible to account for the feeling of being 'in control,' which we know to have profound motivational significance, with the fact that one's actions in organizational life are in fact, determined by some other agent?"[14] Whereas Deci argues that the issue of autonomy versus control is central to motivation, with the implication that rewards are, by their nature, controlling, Schwartz shows that there is considerable

[8] Shamir, pp. 405-424.
[9] Carlisle and Manning, p. 701.
[10] Ibid., p. 701.
[11] Leonard *et al.*, p. 322.
[12] Shamir.
[13] Schwartz.
[14] Ibid., p. 206.

historical support for the view that work obligation, when that sense of obligation comes from within the worker, can shed its "controlling" nature. [15] That is, "autonomy" and "obligation" (or duty) are not necessarily inconsistent. The result is a theory that supports "the way in which obligation motivation inclines one toward activity that is socially useful, done for others and not for oneself." [16] Additionally, his theory implies that extrinsic rewards can contribute to deontic motivation, insofar as they create a sense of obligation on the part of the employee.

Theories and Models

We present here several models most applicable to the military context. First, however, we describe a comprehensive framework in which to place all theories of motivation (Sullivan's "metatheory"). Then we will discuss the structure of Shamir's "self-concept based" theory and another that fits well with it – Schein's "career anchor" theory.

Work Motivation Metatheory

According to Sullivan, *all* theories of motivation fall under the broad heading of "self." The "self" can then act in some situations and environments as an *agent,* and in others more as a *non-agent,* or *process.* This implies that under some conditions, "agency" or cognitive theories will best explain behavior, while under other conditions self-concept theories will be more predictive. The non-agency approaches are those that emphasize the importance of the self-concept under conditions when "the agency nature of self is muted and self-concept and its various processes are functioning." [17] When there is adequate information, stress is low, and tasks are familiar and important, the agency theories are appropriate in determining motivation. In these situations, for example, job design will be important in motivating behavior. On the other hand, when stress is high, the job's importance is not clear, and information is inadequate, then the self-as-process takes over the job of providing motivation. In essence, under these latter conditions nontask intrinsic motivation will be important in motivating behavior and the employee "may be more prone to motivation through the manipulation of self-efficacy or job enrichment." [18] Table 4-1 shows Sullivan's categorization of theories and corresponding sources of motivation.

[15] He further shows that considerable existing research on the "Protestant Work Ethic" supports the view of the Protestant ethic as deontic motivation to work.

[16] Ibid., p. 209.

[17] Jerry J. Sullivan, "Self Theories and Employee Motivation," *Journal of Management*, Vol. 15, No. 2 (1989), p. 359.

[18] Ibid., p. 359.

Table 4-1. Agency and Non-agency Approaches to Employee Motivation [19]

AGENCY APPROACH	THEORY	MOTIVATION FOSTERED BY
	Stable Self	x Maintenance of familiar environment x Consistent, expected task demands x Self-examination of personal identity
	Economic Self	x Employee selection to match individual personality, expected effort, job tasks, and environment x Instrumental conditioning to maintain effort level
	Developing Self	x Enhancing growth potential x Providing workplace autonomy
NON-AGENCY, CONSTRUCTED SELF (SELF-CONCEPT) APPROACH	**THEORY**	**MOTIVATION FOSTERED BY**
	Self-reinforcement	x Praise, recognition, reward x Autonomy x Professionalizing x Communal team building
	Job Enrichment	x Selection of high growth need individuals x Varied, meaningful tasks x Autonomy
	Self-efficacy	x Employee selection of high self-efficacy individuals
	Self-esteem	x High managerial expectations
	Intrinsic Motivation	x Interesting, involving, challenging tasks x Autonomy
	Self-schemata	x Employee selection of aschematics x If schematic, fostering development of ideal and public selves

The applicability of a particular theory depends upon the degree of "activation" of the self. Although the degree of "activation" varies over a continuum, Table 4-2 shows the conditions that will tend to lead to relatively high or low self-activation and will therefore make some theories more relevant than others.

[19] Sullivan, p. 346.

Table 4-2. A Model of Environment, Self-activation Level, and Relevant Employee Motivation Theories [20]

ORGANIZATIONAL AND TASK ENVIRONMENT	SELF-ACTIVATION LEVEL	SOURCE OF MOTIVATION	RELEVANT EMPLOYEE MOTIVATION THEORIES
Familiar Low Uncertainty Low Stress High Significance	High Activation	Self as Agent	x Economic Theory x Need Theories x Balance Theories x Equity Theory x Expectancy Theory
Unfamiliar High Uncertainty High Stress Low Significance	Low Activation	Self as Process	x Self-reinforcement x Self-schemata x Self-efficacy x Self-esteem x Impression Management x Goal-setting x Job Enrichment x Intrinsic Motivation

Self-concept Based Theory of Work Motivation

Shamir bases his model on the following five assumptions about people that suggest ways organizations can motivate employees. [21] Specifically, he captures the role that values and moral obligation play in work motivation.

1. "Humans are not only goal-oriented but also self-expressive." [22]

   The most extreme expression of such behavior is self-sacrifice. Such extreme personally destructive acts can not be explained within the logic of instrumental or hedonistic motivation theories, but only in terms of a different logic in which the individual, by sacrificing himself, makes a statement about his identity and his relationship with a common cause. While the sacrifice of one's life is not a common work behavior, many smaller sacrifices are regularly made by individuals in work roles. [23]

2. "People are motivated to maintain and enhance their self-esteem and self-worth." [24]

   Self-esteem is based on a sense of competence, power or achievement. Self-worth is based on a sense of virtue and moral worth and is grounded in norms and values concerning conduct. [25, 26]

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[20] Sullivan, op. cit., p. 347.
[21] Shamir.
[22] Ibid., p. 412.
[23] Ibid., p. 411.
[24] Ibid., p. 413.
[25] Concerning the difference between self-esteem and self-worth: one can think of situations in which a person might have high self-esteem but low self-worth, and vice versa. A technically competent criminal lawyer who successfully defends a client he knows is guilty might have high self-esteem based on his competence, but low self-worth based on the knowledge deep down inside that he's slime; a well-intentioned reformer who fails to achieve his goals might have high self-worth but low self-esteem.
[26] Shamir, p. 412.

3. "People are also motivated to retain and increase their sense of self-consistency."[27] Brockner *et al.* find empirical evidence for this in instances where individuals persist in pursuing courses of action they know are ineffective (for example, "throwing good money after bad"), because such actions are consistent with the individuals' self-images.[28]

4. "Self-concepts are composed, in part, of identities."[29] People identify themselves with elements of society such as family, religion, culture, or organizations. The importance of any particular identity relative to others is called an individual's "identity salience" and is a source of motivation of activities that are congruent with that identity. Identities – such as "father," "Air Force officer," or "Little League coach" – and their relative importance fuel Leonard's model of the self-concept as well.[30]

5. "Self-concept based behavior is not always related to clear expectations or to immediate and specific goals."[31] That is, it can be related to peoples' dreams or to imagined futures. Nor may it be related to specific tasks or rewards. Shamir calls these situations "weak," where there are unclear or unspecified goals or reward-performance expectancies, as tends to be more the case in the public sector than in the private sector.[32]

. . . the theory will not apply equally to everyone, but that it will apply most to individuals who have strong values or more "crystallized" self-concepts . . .

Based on these assumptions, Shamir makes five propositions that comprise the model at Figure 4-1. He admits the theory will not apply equally to everyone, but that it will apply most to individuals who have strong values or more "crystallized" self-concepts, such as those associated with levels of self-esteem.[33] The propositions are that motivation will increase when the following five conditions exist:

- Job-related identities are salient in the person's self-concept.
- The job offers opportunities for self-esteem enhancement.
- The job offers opportunities for increased self-worth.
- Actions required on the job are congruent with the person's self-concept or can be performed in a way that is consistent with the person's self-concept.
- Career attributes of the job are congruent with the person's possible selves.[34]

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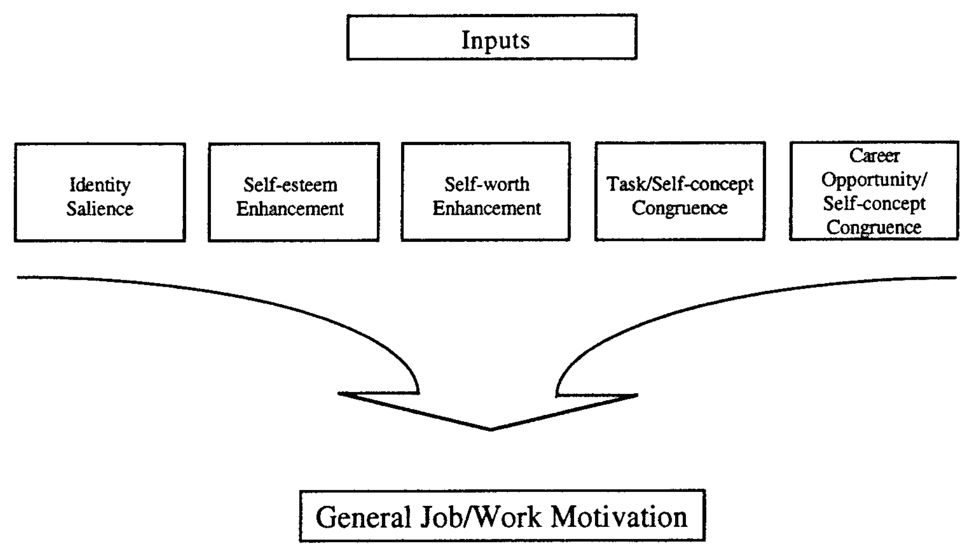
[27] Ibid., p. 412.
[28] Joel Brockner, Robert Houser, Gregg Birnbaum, Kathy Lloyd, Janet Deitcher, Sinaia Nathanson and Jeffrey Z. Rubin, "Escalation of Commitment to an Ineffective Course of Action: The Effect of Feedback Having Negative Implications for Self-Identity," *Administrative Science Quarterly*, Vol. 31 (1986), pp. 109-126.
[29] Shamir, p. 413.
[30] Leonard *et al.*
[31] Shamir, p. 413.
[32] Ibid., p. 407.
[33] Ibid., p. 416.
[34] Ibid., p. 416.



Source: Boas Shamir, *Meaning, Self, and Motivation in Organizations*, Organization Studies, 1991, 12/3.

Figure 4-1. Shamir's Self-concept Based Model of Nontask Intrinsic Motivation

Although Shamir indicates that it is through leadership that these conditions will best motivate behavior, he cautions that "a great deal of employee motivation may not be under [a] manager's immediate control" because the meanings that influence employee behaviors "reflect social judgments and social values that originate, at least in part, outside the organizational system."[35]

Career Anchor Theory

Schein's career anchor theory can be viewed as an expansion of Shamir's fifth proposition regarding the "career attributes" of a job and how well they fit the individual. Schein says that individuals view careers differently than organizations do, so that typical organizational career paths may have little relevance for individuals planning their careers. He proposes that individuals typically go through distinct major stages of development vis-à-vis their careers over their work lives. During a process of self-discovery early in their work lives, they develop *career anchors* based on their perceptions of their own talents, skills, competencies, motives, drives, and values.

. . . individuals typically go through distinct major stages of development vis-à-vis their careers over their work lives.

[35] Ibid., p. 420.

Schein defines a *career anchor* as "that element in our self-concept that we will not give up, even if forced to make a different choice;" he says that the "self-image . . . can remain remarkably stable even if there is no opportunity to exercise it."[36]

Schein's research[37] identified five anchors (he added three more later based on the subsequent research of others); each implies certain management practices relating to type of work, pay and benefits, promotion systems, and types of recognition. Table 4-3 summarizes Schein's posited relationships. The data for the last three anchors are sparse because there have been few empirical studies about them.

According to Schein, individuals vary so widely that it is ultimately up to the individual to design his or her own career. Leaders or managers in organizations can do three things to help:

1. Create more flexible career paths, incentive systems, and reward systems to meet a wider range of individual needs, even within a particular job category.
2. Stimulate more self-insight and self-management, starting with themselves; that is, analyze their own career anchors, manage their own careers more actively, and only then ask their subordinates to do the same.
3. Be clearer about what the organization needs from the individual.[38]

As is discussed in detail in the next section, Derr found evidence of career anchors among Naval officers. Another researcher, Barth, evaluated data from six Federal employee surveys and deduced the career-anchor orientation of Federal workers to the extent possible from the studies, which were originally conducted for other purposes. He found support for the theory and potential for public sector managers; in addition, he proposed an anchor unique to public sector employees: a "public service motive."[39]

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[36] Edgar H. Schein, "Individuals and Careers" in *Handbook of Organizational Behavior*, Jay W. Lorsch (ed.), (Englewood Cliffs, NJ: Prentice-Hall, 1987), p. 158.
[37] A 1960s study of 44 alumni of the Sloan School of Management.
[38] Schein, p. 170.
[39] Thomas J. Barth, "Career Anchor Theory," *Review of Public Administration* (Fall 1993), p. 39.

Table 4-3. Career Anchor/Management Implications Matrix

Career Anchor	Management Area: Work	Pay & Benefits	Promotion	Recognition
Security	stable, predictable; extrinsic rewards matter more	steady, predictable increments based on longevity	seniority based; published grade or rank system & timing	loyalty and steady performance
Autonomy/ Independence	dislikes others' rules, procedures, hours, dress codes; likes clear goals, left on own to achieve	merit pay for performance; immediate payoffs, bonuses; portable/cafeteria benefits	reflects past performance; gives greater freedom, or autonomy; not necessarily greater responsibility	portable (medals, testimonials, letters of commendation, prizes, awards)
Technical/ Functional	challenging; focuses on the intrinsic content; will participate in goal-setting; wants autonomy inexecution	according to skill/education/work experience; oriented to "external equity;" absolute pay level rather than incentives; portable benefits	professional promotional ladder that parallels managerial ladder; need not be in terms of rank	values professional peer recognition; opportunities for self-development
Managerial	needs mixture of skills in analytic, emotional, and interpersonal competence; values work that identifies strongly with success of the organization	oriented toward internal equity; measures success by income level; highly portable benefits	based on merit, measured performance, results	rank, title, salary, number of subordinates, size of budget; frequent promotions; movement; status symbols
Entrepreneurial	easily bored; requires constant new challenges	ownership is the most important issue; benefits not meaningful	power and freedom to move into any roles that meet needs; positions that permit exercise of creativity	highly personal visibility and public recognition
Service	works toward important values; permits realizing essential values	fair pay and portable benefits	recognizes contributions; confers freedom, influence, and autonomy	support from peers and superiors who share values
Challenge	faces perpetually tougher challenges; winning is everything; needs opportunities for self-testing; to exercise competitive skills. Example: Naval aviators			
Lifestyle	balanced personal and professional life; wants flexibility above all; example: dual-career couples	intrinsic rewards important; flexible working conditions, benefits		understanding from managers

Military Applications

Reward/motivation framework. Motowidlo and Van Scotter's 1994 study of 421 Air Force mechanics supports the general construct, presented at the beginning of this report, of distinguishing between task- and nontask motivation. They found evidence that both *task* performance and *contextual* performance provide statistically significant contributions to supervisors' perceptions of the mechanics' overall performance.[40] *Task performance* refers to activities that directly execute, maintain, or service the organization's technical requirements, such as operating machinery in a plant, performing surgery in a hospital, or replenishing supplies. *Contextual performance* behaviors, on the other hand, "support the broader organizational, social and psychological environment in which the technical core must function."[41] These would include Organ's organizational citizenship behaviors.[42]

Self-concept based theory/deontic theory. Both Shamir's self-concept based theory and Schwartz deontic theory focus on explaining a general work or job motivation that may be characterized as *commitment* and *self-sacrifice*.[43] The military services believe these same concepts are important enough to term them core values – service interviewees and published documents include "commitment," "selfless service," "service above self," or "patriotism and selflessness" as core values in the

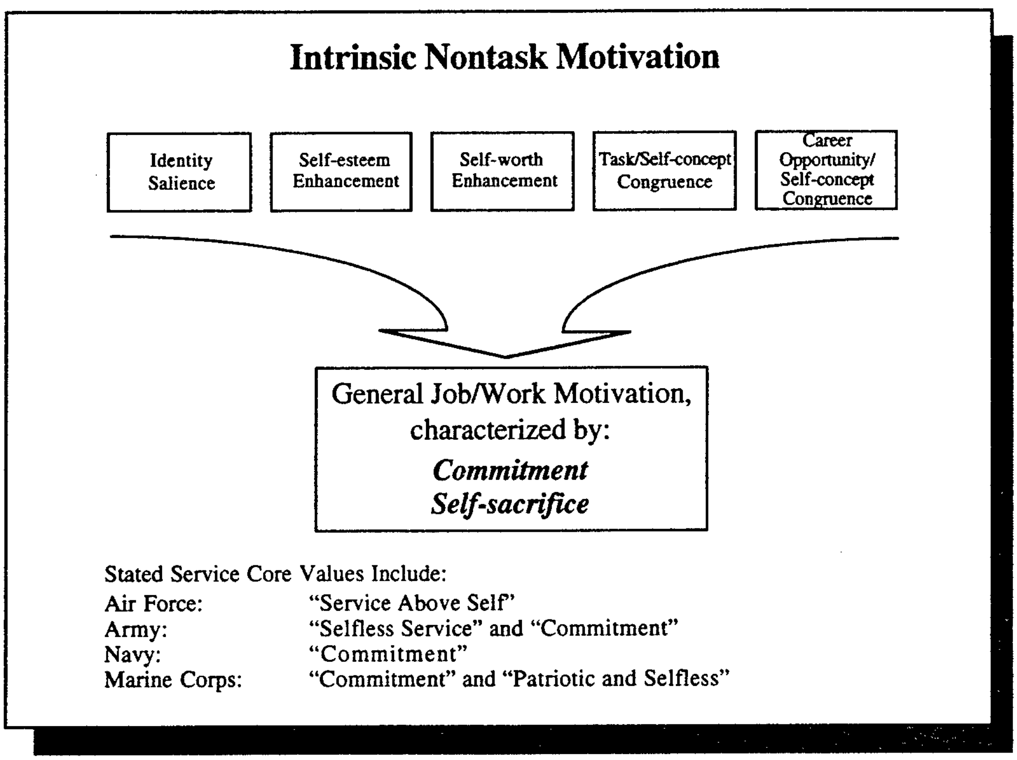

Figure 4-2. "Shamir" Model Adapted to Military Service

[40] Stephan J. Motowidlo and James R. Van Scotter, "Evidence That Task Performance Should Be Distinguished From Contextual Performance," *Journal of Applied Psychology*, Vol. 79, No. 4 (1994), pp. 001-006.

[41] Motowidlo and Van Scotter, p. 002.

[42] Organ.

[43] Shamir.

Army, Navy, Air Force, and Marine Corps, respectively.[44] The theories help explain *why* and *how* these values can motivate individual performance (Figure 4-2).

The U.S. Marine Corps boot camp experience shows the power of self-based motivation. A reporter from *The Wall Street Journal*, through interviews with boot camp participants and their families, found that the boot camp experience imprints the USMC cultural values in individuals.[45] Recruits take on the Marine Corps' core values – Honor, Courage, Commitment – and the transformation is so pronounced that when the trainees return to their families and former friends, they no longer identify with them, their lifestyles, or their values. The boot camp experience transforms an "individual" focus to a "team" focus; pursuit of "self-gratification" to "self-discipline;" and an orientation toward "pleasure" to one toward "sacrifice." Comments of the participants reflect their new cultural orientation: "Society needs to be straightened out," and "Marine Corps *discipline* is about *brotherhood*."[46] From this picture, it appears the USMC does a good job of fostering nontask intrinsic motivation by melding the identity of its members with that of the organization. In terms of Shamir's model, their "identity salience" is strongly with the Marine Corps; self-esteem and self-worth are enhanced by training and by alignment of their personal values with Marine Corps values. Moreover, anecdotal evidence suggests the transformation is lasting – "once a Marine, always a Marine."

Career Anchor Theory. In 1979, Derr completed a study of Naval personnel that involved 154 interviews and questionnaires. The data enabled Derr to categorize Naval officers according to Schein's five (at that time) career anchors. The data show the presence of all five anchors, as well as considerable variation among subspecialties. For example, Table 4-4 shows that 63 percent of aviators had technical anchors and 24 percent had managerial anchors; among surface officers the percentages are reversed. Table 4-5 shows variations within both the aviator and submariner subspecialties.

Table 4-4. Career Anchors of Naval Officers

	Percent of Respondents					
Anchor	N=124 All Officers	N=50 Aviators	N=19 Surface	N=21 Submarine	N=12 CEC	N=22 Supply
Managerial	33.9	24.0	**62.2**	**36.0**	16.6	**56.5**
Security	15.3	10.0	10.5	21.0	24.0	22.7
Technical	**36.3**	**63.0**	21.0	**36.0**	24.0	14.2
Autonomy	4.0	0	0	0	**32.3**	4.5
Creativity	10.4	3.0	6.2	7.0	3.0	2.0

[44] See, for example, Army FM 100-1; and Army People Vision, ASA(M&RA), March, 1994. Interviewees included the Commandant of the Marine Corps and Navy and Air Force Academy officials (8th QRMC, 1995).

[45] "New Marines Illustrate Growing Gap Between Military and Society," *The Wall Street Journal*, Wednesday, July 26, 1995.

[46] Ibid.

Table 4-5. Career Anchors of Aviators and Submariners

	Percent of Respondents						
	Aviators				Submariners		
Anchor	N=14 Fighters	N=13 Attacks	N=13 Helicopters	N=14 Multi-engine	N=15 SSN Fast Attack	N=12 SSBN Missile	N=8 Non-Nuclear
Managerial	30.8	16.6	33.3	15.4	**52.6**	30.0	20.0
Security	7.6	33.3	0	0	15.8	**50.0**	20.0
Technical	**61.6**	**50.0**	**66.6**	**77.0**	31.6	20.0	**60.0**
Autonomy	0	0	0	0	0	0	0
Creativity	0	0	0	7.6	0	0	0

Derr found evidence to support another type of career anchor, that of "warrior," which Schein subsequently included in his expanded list as "challenge." Derr characterizes warriors by their need for action and adventure, by their need for espousing values such as patriotism, by pride in their competence, and by their desire to "carry out a dangerous mission with success dependent on their skill." They may combine technical and entrepreneurial skills with a "high need for autonomy" and "putting their lives on the line is critical." They usually "fear being promoted beyond the action; they especially fear staff positions."[47]

Derr further modified Schein's original classifications to better fit the Navy personnel. He interviewed by subdividing the managerial anchor into two categories, adding "identity affiliation" and subdividing creativity into two categories. The first managerial type is "upwardly mobile," which is oriented toward "power, influence and control."[48] In contrast, the "evolving manager" is less concerned with organizational politics than with simply doing a good job at whatever stage of the organization he or she finds himself, learning and preparing for future stages while enjoying each career phase as it occurs. The identity-affiliation anchor describes those who are there primarily for their attachment to the organization and its esprit de corps, and for the camaraderie and interpersonal relationships they enjoy. Individuals with the creative anchor were either "growth oriented," channeling their creative urges into personal development, or "entrepreneurial," high-achieving, goal-oriented risk-takers. Derr classified his sample according to this scheme, as shown in Table 4-6. Note again that all anchors are present. If, as Schein avers, people with different anchors are motivated by different human resource management practices,[49] then the implication is serious: Navy officers are in a system that does not provide them full opportunity for intrinsic rewards.

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[47] C. Brooklyn Derr, "More on Career Anchor Concepts: The Case of U.S. Naval Officers" (Monterey, CA: Naval Postgraduate School) (NPS54-79-007), 1979, p. 14.

[48] Derr, p.17.

[49] For example, look again at Table 4-3. For the "Security" anchor, the descriptions under "Pay and Benefits" and "Promotion" describe the current military system, as does the description of "Recognition" for the "Managerial" anchor. Conversely, the "Work" and "Promotion" descriptions for the "Autonomy" and "Technical" anchors, respectively, do not describe the present military system.

Table 4-6. Derr's Career Anchors of Naval Officers

CAREER ANCHOR	PERCENTAGE OF OFFICERS
Upwardly Mobile Manager	12
Evolving Manager	20
Technical	22
Security	7
Identity Affiliation	8
Autonomy	4
Growth-Oriented Creativity	8
Entrepreneurial Creativity	11
Warrior	8

Nonegoistic Behavior. Frank demonstrates that it is necessary to take into account altruism and like kinds of motivation in order to explain some observed behaviors and that it is consistent with the economic assumption of "rational man" to do so.[50] He shows that it makes sense for a person to take into account the values and beliefs of other individuals affected by his or her decisions. One example Frank uses to illustrate his point has a player making an offer to share $50 with another player. If the other player accepts the offer, the two split the $50 in the proportions the offeror has specified. If the other player declines the offer, neither gets anything and the game is never repeated. Frank says that knowledge of how the other player may react to an "unfair" split of the $50 will influence the offeror's offer. Thus, the values of the other person influence the behavior of the offeror.

Frank does not address the influence of the offeror's *own* values, but it is easy to infer that they might similarly affect the offeror's behavior. For example, the offeror may offer to keep $40 and give the other person $10; both would clearly be better off if the offer were accepted. But it is likely that if *either* the offeror or the other person had a strong sense of "fairness," the offeror might offer a 50/50 split.

This analysis may suggest why rewards by themselves might not induce the behavior that is intended. That is, *how* the rewards are given could also be important. For example, a soldier might object to being paid more to endure some unpleasant conditions because it makes him or her a "mercenary" creature or, perhaps even more importantly, his or her peers will begin to view him or her that way – a view that may conflict with his or her self-concept. In contrast, the soldier might prefer, and respond positively to, the removal, mediation, or even just the recognition of those unpleasant conditions instead of the extra pay. An implication of this reasoning is that if "equity" is an ingrained value of military members, then resistance to incentive or other pays that disturb the existing balance of rewards might be high.

[50] Robert Frank, *Microeconomics and Behavior* (New York, NY: McGraw Hill, 1994).

The Military "X-Factor"

Background. The military factor, or X-factor, is an explanation of why the pay required to attract and retain a military member might be higher than that required by a private-sector company for a civilian in an identical, but nonmilitary, job. Some foreign armed services, such as those of Australia and the United Kingdom, use an explicit X-factor in calculating military pay. Their methodology is to first compare military and private sector jobs to obtain a "comparable" pay; they then add the X-factor adjustment to arrive at military pay. A constant X-factor value is typically applied across wide ranges of grades. Thus, the X-factor is "an addition to basic pay . . . in order to reflect the difference between conditions of service experienced by members of the armed forces over a full career and conditions in civilian life, which can not be taken directly into account when assessing pay comparability,"[51] and "a broad recognition that a serviceman's employment and lifestyle are substantially different from those of a civilian."[52]

Both the First and Third QRMCs examined the need for an explicit X-factor payment, but neither recommended it. The First QRMC determined that all of the differences between military and civilian life for which compensation might be justified can be done so via "elements of pay other than salary" and that "the distinctions should not therefore affect the linkage of military salaries with civilian salaries."[53]

The Third QRMC was "tasked by the Secretary of Defense to recognize that the unique conditions of military service may require unique forms of compensation."[54] Of eleven unique conditions of military service that the Third QRMC found, six were thought to be so "unquantifiable in any reasonable way" that only the following five were "amenable to compensation:"

- Combat exposure (two levels),
- Frequent directed moves, including overseas assignments,
- Unlimited and irregular overtime without pay, and
- Field training and equivalent training at sea from home port.

A Third QRMC staff paper detailed a comprehensive model to compute X-factor values, based on extensive input data. However, the calculation is inherently very subjective. As a result the staff paper recommended that "the General Military Factor be compensated for by an X Factor in total military compensation above the levels required to achieve total compensation parity for work level comparability with [the]

[51] Ministry of Defence (1), Review Body on Armed Forces Pay: Twenty-Fourth Report, (United Kingdom: HMSO, 1995), p. 7.

[52] Ministry of Defence (2), "Managing People in Tomorrow's Armed Forces," Independent Review of the Armed Forces' Manpower, Career and Remuneration Structures, (London: HMSO, 1995), p. 50.

[53] Department of Defense (2), Modernizing Military Pay: The Report of the First Quadrennial Review of Military Compensation (Vol. II, Appendix VI, Tab D), (Washington, DC: U.S. Government Printing Office, 1967), p. 168.

[54] Department of Defense (4), "The Military Factor," in *Military Compensation: A Modernized System.* The Report and Staff Studies of the Third Quadrennial Review of Military Compensation (Vol. III, Tab H), (Washington, DC: U.S. Government Printing Office, 1976), p. 44.

civilian sector of the economy," and that it be set between 4.4 percent and 15 percent of the military equivalent salary.[55] The staff paper recommendation was not adopted by the Third QRMC.

Instead, the Third QRMC recommended that the military factor be recognized in compensation at two levels: the general and the individual. They argued that commissary, exchange, and medical benefits compensate military members for the general level of the military factor and should therefore be retained at then-current levels. At the individual level, special and incentive pays exist to compensate military members for the military factor. Thus, the Third QRMC recognized the existence of unique conditions of military service as influences on compensation, but it concluded that the current system contains adequate provision for these conditions.[56]

Discussion. The intrinsic-extrinsic and task-nontask framework helps us to see where military compensation fits into the broader picture. It seems obvious that all four kinds of compensation work together to balance the supply and demand of individuals for the uniformed services. The X-factor methodology takes some of this into account but ignores others. A more thorough approach might require, for example, explicitly considering whether jobs could be improved through redesign, or whether careers should be redesigned to be more fulfilling to a wider variety of service members before resorting to pay changes. This makes sense, given that there is little evidence linking *pay* to performance, let alone anything else. Why not instead employ some cogent motivational theory in a more comprehensive approach to motivating service members?

The intrinsic-extrinsic and task-nontask framework helps us to see where military compensation fits into the broader picture.

The Third QRMC's exhaustive study of the X-factor provided solid support that one might reasonably expect the pay of military members to be higher than the pay of civilians in comparable jobs. But, given the difficulties in quantifying *either* the civilian pay for a comparable job or the X-factor, the *de facto* approach the Department of Defense has taken – via labor market-determined levels of relevant special and incentive pays – is probably best.[57] In the future, relatively low-cost, theory-based, empirically informed improvements to military human resource management might be the most effective approaches to change.

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[55] Ibid., p. 46.

[56] Department of Defense (3), "Report of the Third Quadrennial Review of Military Compensation" in Military Compensation: A Modernized System. The Report and Staff Studies of the Third Quadrennial Review of Military Compensation (Vol. 1, Tab A) (Washington, DC: U.S. Government Printing Office, 1976).

[57] Also, consider what Department of Defense has done at times in response to the "pay gap." The military pay raises in 1980 and 1981, for instance, were differentially applied (namely, they were not constant across all pay grades) and were deemed to have restored comparability to the 1972 levels necessary to maintain an all-volunteer force. Department of Defense (1), Military Compensation Background Papers (Washington, DC: U.S. Government Printing Office, 1991).

Recommendations

We have three broad recommendations for the Department of Defense:

- Support behavioral research oriented toward informing policy decisions on human resource management. Topics suggested by this study of nontask intrinsic motivation include research to identify the variety and prevalence of career anchors among military personnel, the strength of "identities" among service personnel, and the current and desired roles of "contextual" performance in the military.
- Teach a deeper understanding of intrinsic motivation and its sources to leaders and managers. Test alternative appraisal concepts as tools for managers to use to learn more about the motivational potential of their own leadership styles.
- In future policy decisions, explicitly consider the potential of each possible type of compensation – task-nontask and intrinsic-extrinsic – to motivate behavior. Develop sets of policy options that include measures aimed at all four forms of compensation.

CHAPTER 5
LEADERSHIP AND ITS IMPACT ON INTRINSIC MOTIVATION

Introduction[1]

The purpose of this paper is to give managers and leaders a different perspective on and new insight into what motivates workers. This paper is also intended to inform managers and leaders about how their actions directly impact the motivation of subordinates. In particular, their actions can either enhance or detract from an individual's internal or intrinsic motivation.

. . . subordinates may be better motivated when supervisors use practices that many contemporary writers classify as part of *leadership*.

There is no question that organizations have a need for both managers and leaders, and whether an individual operates in the capacity of a leader or a manager is largely contingent upon the environment within which the individual is working. However, it is becoming increasingly recognized that subordinates may be better motivated when supervisors use practices that many contemporary writers classify as part of *leadership*. Also, many writers believe that the increasing complexity of the workplace is forcing organizations to rely more on these types of leadership practices.

With the increasing reliance on these leadership practices, individuals will require leadership competencies to effectively operate in their new environment. Of all the competencies that this chapter discusses, principle-centered leadership is certainly the most important. Without principles, a leader becomes ineffective, and whatever the organization does loses meaning for most of their employees. None of the other competencies will do a leader any good if he or she hasn't mastered principle-centered leadership.

With these new insights on intrinsic motivation, the changing environment, and the value of leadership competencies, the uniformed services should reexamine their concepts of leadership and incorporate these new views into their leadership development programs. In addition, it is critical that the human resource management system be aligned with these new developments in leadership.

[1] Like the concept of rewards, leadership and management are epistemological constructs we use to label certain types of phenomena or behavior. As this chapter discusses in some detail, writers on leadership and management differ widely in their definitions of these terms. It might be useful to review the discussion in footnote 1 of Chapter 1 at this point. In particular, it's essential to understand that these various, competing definitions are neither "right" nor "wrong," per se. They are simply the views of different writers, some of whom are widely recognized scholars of these subjects. These divergent perspectives provide varying degrees of insight on the principal subject of this chapter, which is how the various phenomena we refer to variously as leadership and management affect workers' intrinsic motivation (another epistemological construct). In this context, distinctions between the constructs leadership and management are of not of central interest to us. Rather, our focus is on how that particular behavior or phenomenon affects workers' intrinsic motivation. Hence, we have included in this discussion the ideas of a number of references that use the term management, but that address issues, behaviors, and so on that we view as relevant to the question of how leadership affects intrinsic motivation.

What Is Leadership?

"Over the years, the importance attributed to the position of leaders has led innumerable practitioners and theorists to ask the seemingly unanswerable question: What does it take to be an effective leader?"[2] Currently there are "no clear-cut, universally accepted definitions of what [leadership] is."[3] Complicating this is the "need to distinguish between leadership (or leader) and management (or manager). Although the two functions and roles overlap substantially, 'manager' implies that authority has been formally granted to an individual by an organization. In contrast, 'leader' implies effective use of influence that is rather independent of the authority granted to one because of position. In this sense, leadership can not be bestowed upon a person by a higher authority. Effective managers also must be leaders, and many leaders become managers, but the two sets of roles and functions differ."[4]

Of the countless ways leadership has been defined, a few examples include:

- "the influence people exercise over each other."[5]
- "influence based on inspiration, admiration, or appeal to follower's aspirations."[6]
- "the exercise of authority, whether formal or informal, in directing and coordinating the work of others."[7]

"One group of authors defines a successful leader as one who is able to transform an organization when situations call for such action."[8] But, "Probably the most widely accepted current definitions view leadership as an interpersonal process through which one individual influences the attitudes, beliefs, and especially the behavior of one or more other people."[9]

Leadership Theory

There are various categories of leadership theory, including trait theories, transactional approach theories, and cultural and transformative theories.

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[2] J. Steven Ott, *Classic Readings in Organizational Behavior* (Belmount, CA: Wadsworth Publishing Company, 1989), p. 243.
[3] Ibid.
[4] Ibid.
[5] Ibid.
[6] R. Barton and W. L. Chappell, Jr., *Public Administration: The Work of Government* (Glenview, IL: Scott, Foresman and Company, 1985), p. 312; quoted in Ott, p. 243.
[7] J. M. Shafriz, *The Dorsey Dictionary of Politics and Government* (Chicago, IL: The Dorsey Press, 1988), p. 318; quoted in Ott, p. 243.
[8] See W. G. Bennis, "Transformative Power and Leadership," in T. J. Sergiovanni and J. E. Corbally (Eds.), *Leadership and Organizational Culture* (Urbana, IL: University of Illinois Press, 1984), pp. 64-67; W. G. Bennis and B. Nanus, *Leaders: The Strategies for Taking Charge* (New York, NY: Harper & Row, 1985); and N. M. Tichy and M. A. Devanna, *The Transformational Leader* (New York, NY: John Wiley & Sons, 1986); referenced in Ott, p. 244.
[9] Ott, p. 244.

Trait Theories

The trait theories, predominant in the 1950s, "assume that leaders possess traits which are fundamentally different from followers."[10] A *trait* is a "personality attribute or a way of interacting with others which is independent of the situation, that is, a characteristic of the person rather that of the situation."[11] Today, there are many arguments against the trait theory. Mainly, it is hard to contend that "people will be effective leaders because they possess certain traits – without also considering other variables that influence leadership effectiveness."[12]

Transactional Approaches to Leadership

"The transactional approaches see leadership as a set of functions and roles that develop from an interaction between two or more people. Although there are vast differences in emphasis among groupings of transactional leadership theories, all of them focus on the transaction – what happens and why, and what directly and indirectly influences or shapes it."[13]

Leadership Style Theories. Early transactional leadership theorists assumed that "people have relatively fixed styles and thus were often labeled leadership style theories."[14] More recent leadership style theories, which have abandoned the earlier assumption of style inflexibility, are usually called *situational* or *contingency* approaches. "In both cases, leadership is seen as a transaction. The central question for the trait approach is who exerts leadership?"[15] The transactional approaches are interested in determining "how leadership is established and exerted."[16]

"The leadership style-oriented transactional approaches attempt to identify styles of leader behavior which result in effective group performance."[17] In their article, "Life Cycle Theory of Leadership," Hersey and Blanchard "emphasize that leadership should be appropriate for a given situation," and "reject the idea that there is one best leadership style for all situations."[18] "They develop[ed] a matrix with four leadership styles: telling, selling, participating and delegating," suggesting that leaders apply one of the four styles, depending on the maturity of their work group. "Although the model is conceptually intriguing, a major weakness is its lack of a systematic measurement device to measure maturity."[19]

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[10] Ibid.
[11] F. E. Fielder and M. M. Chemers, *Leadership Style and Effective Management* (Glenview, IL: Scott, Foresman and Company, 1974), p. 22; quoted in Ott, p 244.
[12] Ott, p. 245.
[13] Ibid.
[14] Ibid.
[15] Ibid., p. 246.
[16] Ibid.
[17] Ibid.
[18] P. Hersey and K. H. Blanchard, "Life Cycle Theory of Leadership," *Training and Development Journal* (May 1969), pp. 26-34; referenced in Ott, p. 247.
[19] Edgar H. Schein, *Organizational Psychology*, 3d Ed. (Englewood Cliffs, NJ: Prentice Hall, 1980); quoted in Ott, p. 248.

Douglas McGregor points out that the trait approach was "not unimportant, but those (characteristics of the leader) which are essential differ considerably depending upon the circumstances."[20] McGregor describes leadership as a relationship between the leader and the situation, and asserts that past research "has shown that we must look beyond the personal qualifications of the leader if we wish to understand what leadership is."[21] He argues that "it is no longer feasible to assume that certain pre-selected individuals will become future leaders."[22] In essence, McGregor believes that "it is possible for anyone to be a leader, depending on the situation."[23]

Situational or Contingency Approaches. The assumption that leaders can be trained to act in the appropriate way, as called for by their organization, has proven to be a major weakness of leadership style theories. "When leaders return to their organization after leadership training sessions, they seldom exhibit behavior changes."[24] In Ott's assessment, "Despite training, [people] will not necessarily act considerately toward subordinates if their own supervisors do not act supportively toward them. One obvious implication is that changes must be introduced into an organization as a whole – not just to certain employees."[25]

"In practice, leaders apply different styles in different situations. . . . Thus, the 'pure' leadership style emphasis has given way to the contingency approaches. Unlike the trait theory and leadership style approaches, the contingency approaches take into consideration many factors that may influence a leader's style. It recognizes that a successful leader in one type of organization may not be successful in another simply because it differs from the previous one. Its situation (or context) is different, and the choice of a style needs to be contingent upon the situation."[26]

. . . the 'pure' leadership style emphasis has given way to the contingency approaches.

Ott cites Stogdill's summary of the four points that contingency theories stress:

- The type, structure, size, and purpose of the organization;
- The external environment in which the organization functions;
- The orientation, values, goals, and expectations of the leader, superiors, and subordinates; and
- The expert or professional knowledge required of the position.[27]

That is, "The contingency approaches assert that different leadership styles will differ in their effects in different situations. The situation (not traits or styles themselves) determines whether a leadership style or a particular leader will be effective. Thus, contingency theorists maintain that there is no 'one best way' of effective leadership."[28]

[20] D. M. McGregor, *The Human Side of Enterprise* (New York, NY: McGraw-Hill, 1960), p. 180; quoted in Ott, p. 248.
[21] Ibid., p. 182.
[22] Ott, p. 248.
[23] Ibid.
[24] Barton and Chappell, p. 316; referenced in Ott, p 248..
[25] Ott, p. 248.
[26] Ibid., pp. 248-249.
[27] R. M. Stogdill, *Handbook of Leadership: A Study of Theory and Research* (New York, NY: Free Press, 1974); referenced in Ott, p. 249.
[28] Ott, p. 249.

In "The Contingency Model: A Theory of Leadership Effectiveness," Fiedler argues that it is easier to change the work environment (or situation) to fit a leader's style than to train a leader to adopt styles that are best suited for situations. Fiedler believes that "a person's underlying leadership style depends upon one's personality," and "a leader's personality is not likely to change because of a few lectures or a few weeks of intensive training. Therefore, an organization should not choose a leader who fits a situation, but should change the situation to mesh with the style of its leader."[29]

. . . it is easier to change the work environment (or situation) to fit a leader's style than to train a leader to adopt styles that are best suited for situations.

The Best Fit Approach. Charles Handy suggests an approach which is an extension of the contingency theories called the *best fit approach*. "This approach requires that the style preferences of the *leader*, *subordinates*, and the demands of the *task* be ranged along a scale from *tight* (or structured) to *flexible* (or supportive)." Handy further suggests that "for effective performance, the requirements of the three factors have to 'fit' together on the scale. The way the fit is achieved, namely which factors will adapt or be adapted, will depend on *the environment* (organization setting) which includes:

The power or position of the leader;
The relationship with the group;
The organizational norms;
The structure and technology;
The variety of tasks;
The variety of subordinates.[30]

Cultural and Transformative Theories

Cultural Theories. "A growing number of leadership theorists recently have moved past the transactional approaches to write about leadership from an organizational culture perspective."[31] Thomas Sergiovanni in "Leadership as Cultural Expression" argues that "leadership is an artifact – a product of organizational culture. The particular shape and style of leadership in an organization is not a function of individuals or of training programs; rather, it has to do with the mixture of organizational culture and the density of leadership competence." Sergiovanni believes that "leadership needs to be symbolic and strategic, since leadership is what communicates the culture." He views "leadership being less a management technique and more a *cultural expression.* If leadership is effective, norms, beliefs, and principles will emerge in an organization to which members give allegiance."[32]

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[29] F. E. Fielder, "The Contingency Model: A Theory of Leadership Effectiveness," in C. W. Backman and P. F. Secord (Eds.), *Problems in Social Psychology* (New York, NY: McGraw-Hill, 1966), pp. 278-289; referenced in Ott, p 249.

[30] Charles Handy, *Understanding Organizations* (New York, NY: Oxford University Press, 1993), p. 117 (italics in source).

[31] J. M. Shafriz and J. S. Ott, *Classics of Organizational Theory* (2d ed., rev. and expanded) (Chicago, IL: Dorsey Press, 1987); J. S. Ott, *The Organizational Culture Perspective* (Chicago, IL: The Dorsey Press, 1989); referenced in Ott, p. 250.

[32] T. J. Sergiovanni, "Leadership as Cultural Expression," in T. J. Sergiovanni and J. E. Corbally (Eds.), *Leadership and Organizational Culture* (Urbana, IL: University of Illinois Press, 1984), pp. 105-144; quoted in Ott, p. 250.

Transformative Theories. "Transformative leadership is [another] slant on leadership that is theoretically consistent with the organizational culture perspective." Transformative leadership makes *radical changes* in a culture, unlike transactional leadership, which focuses on *incremental* change. "Lee Iacocca is the most visible current embodiment of a transformative leader. Transformational leadership borders on 'great man' theory: Leaders are born, not made."[33] The "great man" theory, also known as the charismatic theory, asserts that "leadership [is] based on the compelling personality of the leader rather than on formal position."[34] As Ott points out, "In many ways, this leadership theory is once again involved in seeking to find the basis of leadership in traits – rather than in relational and cultural factors."[35]

Transformative leadership makes *radical changes* in a culture, unlike transactional leadership, which focuses on *incremental* change.

Tichy and Ulrich describe a transformational leader as "one who must develop and communicate a new vision and get others not only to see the vision but also to commit themselves to it."[36] "They describe transformational leaders as those rare individuals who can lead employees through their fears and uncertainties to the realization of the vision." The primary function of a transformative leader is "to lead and support through carefully conceived change stages, acting as a *cheerleader* . . . verbally and nonverbally communicating belief in the benefits to all that will accrue from the changes." The transformational leader "successfully changes peoples' perceptions of the organization."[37]

Relating Leadership Theory to Intrinsic Motivation

The cultural-transformative approach to leadership is most applicable to senior leaders or managers who want to lead their organization through a change. The transactional approaches to leadership are most appropriate to lower level leader-managers. Senior leader-managers probably have more effect on intrinsic *nontask* motivation, while lower level leader-managers have more effect on intrinsic *task* motivation, since they are closer to the actual task being performed and have more direct influence over the individual performing the task.

The cultural-transformative approach to leadership is most applicable to senior leaders or managers who want to lead their organization through a change.

In applying the best fit approach to leadership, a leader who confronts a lack of fit between himself, the subordinate, and the task must determine which of the three factors to adjust in order to achieve a fit. "Theoretically, it is easiest for him to alter his own style – particularly if the other two factors already have a degree of fit between themselves. . . . [A]lthough the leader's style is easiest to alter in the short term, there are often long-term benefits to be achieved from re-designing or re-defining the task (for example job-enlargement). . . ."[38] Whatever the change, one of the desirable results is to improve intrinsic task motivation.

[33] Ott, p. 251.
[34] Shafriz, p. 89; quoted in Ott, p. 244.
[35] Ott, p. 251.
[36] N. M. Tichy and D. O. Ulrich, "The Leadership Challenge–A Call for the Transformational Leader," *Sloan Management Review*, Vol. 26, p. 59; quoted in Ott, p. 251.
[37] Ott, p. 251.
[38] Handy, p. 112.

Differences Between Leadership and Management Practices

Many writers draw distinctions between the functions and responsibilities associated with managers compared to those of leaders. In general, organizations need both types of functions, and individuals may find themselves using a combination of both "leadership" and "management" practices. Handy's best fit approach recognizes that individuals will need to vary the practices they use because of their changing environment or organizational setting. Most leaders and managers probably fall somewhere on a continuum between the two extremes shown in Table 5-1.

Table 5-1. Leadership and Management Practices [39]

LEADERS ◀——————▶	MANAGERS
Create vision of the future	Plan to reach goals
Strategize	Refine processes
Expand boundaries	Work within boundaries
Influence others	Control resources
Empower	Make decisions
Take risks	Avoid risks
Motivate intrinsically	Motivate extrinsically
Embrace change	Embrace control
People and product oriented	Product oriented
Act based on envisioned future	Act based on past and present
Assess accomplishments against vision	Measure performance against plans

This comparison between leaders and managers is oversimplified for purposes of illustration. In reality, many of the differences between managers and leaders are more subtle.

In Gilbert's opinion, "A leader is someone who operates above and beyond mere mechanical compliance with routine directives of the organization. A leader is a teacher, facilitator, coach, and mentor. A manager is someone who follows the strictness of a job description. Leadership is the ability to influence others to attain group and organizational goals without the exertion of force. Managing involves planning, organizing, directing, and controlling and these skills are certainly helpful to the successful execution of any endeavor."[40] A leader moves beyond these skills by using imagination or creativity to move a company from one place to another.[41]

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[39] Harold Gilbert and Meredith Cash to Hannah Robinson, who in turn released their comments in a collection titled "Summary: Leadership and Management," July 6, 1995.

[40] Harold Gilbert to Hannah Robinson, who in turn released Gilbert's comments in a collection titled "Summary: Leadership and Management," July 6, 1995.

[41] Shlomo Malin to Hannah Robinson, who in turn released Malin's comments in a collection titled "Summary: Leadership and Management," July 6, 1995.

Many organizations get caught up in embracing control. "The vast majority . . . of leaders give employees a wide variety of motivational tools to instill fear, reward performance, or a combination thereof. . . . All such motivators are called extrinsic motivators. . . . They are implemented to motivate an employee to do something he or she is presumed not to want to do." These motivators will work in the short run, but not in the long run because "they fail to recognize that humans perform at optimum only when internally motivated."[42] This might be the down-fall of many leaders. They might rely too much on extrinsic motivators, either because of not knowing about or ignoring those things that may intrinsically motivate workers.

According to James M. Kouzes and Barry Z. Posner in "The Leadership Challenge," "If there is a clear distinction between the process of managing and the process of leading, it is in the distinction between getting others to do and getting others to want to do. . . . In essence leadership appears to be the art of getting others to want to do something you are convinced should be done."[43]

They might rely too much on extrinsic motivators, either because of not knowing about or ignoring those things that may intrinsically motivate workers.

Further Views on Distinctions Between Leaders and Managers

Malin describes what he considers distinct differences between a leader and manager in terms of how they relate with others, how they determine their goals, and their concept of work and sense of self.

How a Leader Relates With Others. A leader relates to others in more intuitive and empathic way rather than relating to others according to their role. A leader exerts influence in altering moods and expectations, in establishing specific desires and objectives rather than maintaining the status quo.

Goals of Leaders. Goals of a leader arise out of desires and their images of the future rather than out of necessities. A leader's goals focus on need for change. To leaders, strategy is a means to a goal and does not assume more importance than the goal. Leaders also define what Malin calls *superordinate goals* (for example, product leadership) for their organizations.

A Leader's Conception of Work. Leaders seek both change and new ideas versus perpetuating the status quo. They develop fresh approaches to long-standing problems rather than needing to coordinate and balance continually. Leaders delegate freely rather than cautiously. They are more intuitive instead of analytical and methodical. Leaders encourage entrepreneurial autonomy more than maintaining control over ideas or preferring to manage people and process. They are active instead of reactive, shaping ideas.

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[42] Steininger, Daniel J., "Why Quality Initiatives Are Failing: The Need to Address the Foundation of Human Motivation," *Human Resource Management*, Vol. 33, No. 4 (Winter 1994), p. 604.

[43] Donna Princess to Hannah Robinson, who in turn released Princess' comments in a collection titled "Summary: Leadership and Management," July 6, 1995.

A Leader's Sense of Self. In Malin's view, leaders work in organizations, but don't belong to them. Whereas a manager identifies totally with an organization, leaders are change agents versus a conservator of events and things.[44]

... the skills associated with this concept of a leader are intended to do more to intrinsically motivate an individual.

In this view of management and leadership, both functions are needed for a successful organization, and there is an understandable tension between them. However, some of the practices associated with this concept of a manager may fall short of intrinsically motivating individuals and may even intrinsically demotivate them. On the other hand, the skills associated with this concept of a leader are intended to do more to intrinsically motivate an individual. Therefore, the uniformed services should reexamine their current views on leadership in the light of the perspectives described above and incorporate these new perspectives into its leadership development programs, particularly for senior leadership. Of course, there will be many circumstances where it isn't feasible to employ many of these leadership practices; however, if the situation is right, they should be used in the interest of intrinsically motivating military members.

A Changing Environment

A changing environment will undoubtedly require the military to adopt new leadership practices or standardize those intrinsically motivating practices they currently use.

A changing environment will undoubtedly require the military to adopt new leadership practices or standardize those intrinsically motivating practices they currently use. In the private sector, greater competitive pressure had led to a call for ever-increasing productivity. This has caused both employee and employer values to change. The use of teams is being valued over individual work because it is believed to lead, in many circumstances, to greater productivity. The employer values the team's or individual's success more than effort, because it is results that keep private organizations in business. Employee involvement is becoming a must in order to meet ever-changing customer bases and customer demands.[45] These trends are most likely to carry over into the military because of tighter budgets and questions about the military's purpose. As in the private sector, there has already been a call for increased productivity in the military, even with reduced manpower.

The complexities of most organizations are making "it increasingly difficult for leaders to maintain tight control from a single location. This is pushing many [leaders] towards a leadership style that stresses participatory decision making and implementation. They are placing much greater emphasis on choosing the right [people] for the problem, task, or situation; then empowering them to define what needs to be done and how to do it."[46] "Managers will have to contend with the new knowledge professional – an individual who constantly questions the value of what he or she is doing, who feels little loyalty to corporate authority yet still longs for connections in a larger organization."[47]

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[44] Malin.

[45] Kenneth Ainslie, Variable Compensation Design and Utilization. Briefing by TRW to the Council for Excellence in Government, Washington, D.C., February 5, 1996.

[46] Mastering Global Leadership, Hay/McBer International, 1995, p. 10.

[47] Martha Nichols, "Does New Age Business Have a Message for Managers?" *Harvard Business Review* (March-April 1994), p. 60.

Changing Work Relationships

The changing environment also redefines work relationships as we know or knew them. In "traditional" work relationships, employers provide job security, regularly increasing pay, and promotion opportunities. The employee provides performance oriented toward defined tasks, loyalty, long service, and patience. However, in many emerging work relationships, employers are providing enrichment and learning, participation in decision-making, and sharing in business risks and rewards. Employees are required to have flexible skills and attitudes, to be customer oriented, and to make value-added contributions.[48]

"Timothy Gallwey has suggested that performance of any kind is equal to potential minus interference." This implies that instead of looking at performance, we need to concern ourselves with "those things which interfere with people's potential" and prevent that interference from being expressed in their performance.[49]

The changing environment also redefines work relationships as we know or knew them.

Paradigm Shift in Management[50]

Ken Thomas points out that the "Old School" of management, also known as command and control, is giving way to a more collegial view. The table below illustrates this shift.

Table 5-2. Paradigm Shift in Management[51]

	"OLD SCHOOL"	"EMERGING VIEW"
Manager's role:	Directing and controlling	Leadership and coaching
Worker's role:	Compliance	Self-management
Worker's motivation:	Mostly extrinsic; No commitment to task; Responds to carrots and sticks controlled by management	Mostly intrinsic; Committed to task; Gets rewards directly from doing the task well

In Thomas' view, the old school of management is easier, more predictable, requires less trust in the worker's competence and commitment, and feels less risky. The emerging view of management attempts to harness the worker's intelligence, innovation, and responsiveness, hence freeing some of the manager's time and lower-ing the cost of decision-making.[52] However, the old-school management system may be at odds with the current situation, because there is a "significant gap between what American workers need to be productive and what their mangers are giving them."[53]

The emerging view of management attempts to harness the worker's intelligence, innovation, and responsiveness, hence freeing some of the manager's time and lowering the cost of decision-making.

[48] Ainslie.

[49] Jay Hall, "Americans Know How to be Productive if Managers Will Let Them," *Organizational Dynamics*, Vol. 22, No. 3 (Winter 1994), p. 44.

[50] As footnote 1 pointed out, we have included in this discussion the ideas of a number of writers who use the term management, but who address issues, behaviors, and so on that we view as relevant to the question of how leadership affects intrinsic motivation.

[51] Ken Thomas, Intrinsic Motivation and the Military: An Initial Briefing. Briefing to the 8th Quadrennial Review of Military Compensation (8th QRMC), Arlington, VA, October 19, 1995.

[52] Ken Thomas, Intrinsic Motivation and the Military: An Initial Briefing. Briefing to the 8th Quadrennial Review of Military Compensation (8th QRMC), Arlington, VA, October 19, 1995.

[53] Ibid., p. 12.

Leadership Competencies Required to Perform in the New Paradigm

The premise of this chapter is that "leadership is an observable, learnable set of practices." Kouzes and Posner assert, "The belief that leadership can not be learned is a far more powerful deterrent to development than is the nature of the leadership process itself."[54] They identified five fundamental practices that they believe enabled successful leaders to get extraordinary results. When these leaders were at their personal best, they:

- Challenged the process
- Inspired a shared vision
- Enabled others to act
- Modeled the way
- Encouraged the heart

They believe all five practices contribute to intrinsically motivating members of an organization.

Challenging the Process. "Challenge is the opportunity for greatness. People do their best when there's the chance to change the ways things are. Maintaining the status quo breeds mediocrity. Leaders seek and accept challenging opportunities to test their abilities. They motivate others to exceed their limits. They look for innovative ways to improve the organization."[55] When service members are given the chance to change things, are able to search for opportunities, and are allowed to experiment and take risks, it may give them a greater feeling or sense of choice. This feeling or sense of choice contributes to intrinsic motivation.

. . . leaders can inspire their organization's members by developing an exciting vision . . .

Inspiring a Shared Vision. Kouzes and Posner believe leaders can inspire their organization's members by developing an exciting vision and by helping members to develop a shared understanding of what is important or valued by members of the organization.

> Leaders spend considerable effort gazing across the horizon, imagining what it will be like when they have arrived at their final destinations. Some call it vision; others describe it as a purpose, mission, goal, even personal agenda. Regardless of what we call it, there is a desire to make something happen, to change the way things are, to create something that no one else has created before. Leaders . . . breathe life into what are the hopes and dreams of others and enable them to see the exciting possibilities that the future holds. Leaders get others to buy into the dreams, showing how all will be served by a common purpose.[56]

[54] James M. Kouzes and Barry Z. Posner, *The Leadership Challenge: How to Get Extraordinary Things Done in Organizations* (San Francisco, CA: Jossey-Bass Publishers, 1991), p. 13.
[55] Kouzes and Posner, p. 29.
[56] Ibid., p. 9.

When leaders successfully inspire a shared vision, they give their members a feeling or sense of meaningfulness. This sense of meaningfulness also intrinsically motivates members.

Enabling Others to Act. "Leaders know that they can not do it alone. It takes partners to get extraordinary things done in organizations." Therefore, "leaders build teams with spirit and cohesion, teams that feel like family. They actively involve others in planning and give them discretion to make their own decisions. Leaders develop collaborative goals and cooperative relationships with colleagues. They are considerate of the needs and interests of others. They know that these relationships are the keys that unlock support for their projects."[57] Leaders also strengthen others by providing opportunities to grow. They allow members of the organization to "stretch" by taking on more challenges. Leaders who foster collaboration and strengthen the members of their organizations give them both a feeling of progress and a feeling of competence. These feelings of progress and competence also contribute to intrinsically motivating individuals.

Modeling the Way. "A leader needs a philosophy, a set of high standards by which the organization is measured, a set of values about how employees, colleagues, and customers ought to be treated, a set of principles that make the organization unique and distinctive." Leaders also need to "stand up for their beliefs" and "practice what they preach. . . . They show others by their own example that they live by the values that they profess."[58] Leaders who "model the way" give their members a feeling or sense of meaningfulness, which in turn contributes to intrinsically motivating them.

Encouraging the Heart. "Leaders encourage others to continue the quest [and] they inspire others with courage and hope. . . . Leaders give heart by visibly recognizing people's contributions to the common vision. Leaders express pride in the accomplishment of their teams."[59] Leaders who "encourage the heart" give their members a feeling or sense of competence and progress, which in turn contributes to intrinsically motivating them.

Handy also proposes competencies he believes are necessary for leaders; these include vision, communication, trust, and self-knowledge. Of these, only self-knowledge isn't explicitly included among Kouzes and Posner's set of competencies.

Self-Knowledge. To develop this competency, leaders need

> to build on their strengths and compensate for their weaknesses . . . and they consciously look for the fit between who they are and what the organization needs. . . . What they were universally good at was getting others to feel good at what they were doing, to be proud in *their* self-knowledge. Self-knowledge and the "emotional wisdom" it brings allow one to trust others to do what they are good at, to do without the constant approval of others, to accept people as they are instead of judging them.[60]

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[57] Ibid., p. 131.
[58] Ibid., p. 187.
[59] Ibid., p. 239.
[60] Handy, p. 117.

TRW has a list of 10 key human-resource competencies that it applies to leadership and managing change. Proactivity, professionalism, risk-taking, communication skills, and integrity are similar to the leadership practices recommended by Kouzes and Posner.

- **Proactivity:** Initiating action to avoid potential problems and anticipating change.
- **Professionalism:** Maintaining a sensitivity and consciousness about one's professional image.
- **Risk-Taking:** Expressing opinions and taking action under conditions of uncertainty.
- **Communication Skills:** Communicating information through appropriate organizational channels and effectively using written material, oral presentations, verbal interchanges and nonverbal cues.
- **Integrity:** Eliciting the trust and respect of others by being reasonably open and candid about opinions and attitudes, keeping sensitive organizational information confidential, behaving in a fair and ethical manner, and demonstrating a sense of corporate responsibility.[61]

Leadership Must Support and Sustain Organizational Values

It is critically important for all levels of leadership to support and sustain organizational values in order to intrinsically motivate the organization's members.

It is critically important for all levels of leadership to support and sustain organizational values in order to intrinsically motivate the organization's members. If leadership can get members to share in its organizational values and goals, this will go a long way toward intrinsically motivating members, regardless of what task they perform. This what Chapter 3 described as intrinsic nontask motivation, and without it the likelihood of organizational efforts failing increases. "Basic values strongly influence and shape the nature of work at every level of any company. . . . Managers of many companies are beginning to understand that the ethical and nonmonetary needs of employees are a legitimate business issue."[62]

As Thomas Chappell expresses this point:

> Work life must provide a set of values that affirms employees' respect for life, family, community, and the environment. . . . Employees and [leaders] alike, after all, seek to harmonize their personnel beliefs and attitudes with what is expected of them on the job. People learn through the course of their lives such fundamental principles as trust, caring, and respect. When business strategy calls for actions that either ignore or violate those beliefs, an employee's integrity is conflicted, torn, and sometimes broken. . . . Corporate beliefs that affirm personnel attitudes

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[61] Ainslie.

[62] Antina Roddick, Group Managing Director for The Body Shop International, letter to the editor in *Harvard Business Review*, (May-June 1994), p. 146.

> provide the harmony and trust needed for creative problem solving. . . . If the hearts and minds of our managers are not held accountable for the standards and expectations of our corporate mission, I find that we do not get beyond the task of building market share and profits by the end of the day. [63]

In Covey's opinion, world-class companies like GE, AT&T, and Saturn have built cultures of trust through individual trustworthiness. These companies are learning that they are not in control; principles are. They realize that their "leaders must create conditions that foster trust and empowerment" in order to "allow the unique capacities and talents of their employees to rise to the challenges that they face." [64]

Leadership: The Key to Organizational Commitment

According to Martin and Hafer, "It is important to get employees feeling positively about the organization that employs them so they identify with particular organizational goals, values, and culture, and want to maintain membership in it. This is defined as organizational commitment." [65] An individual's organizational commitment is influenced by his or her levels of both intrinsic task and nontask motivation.

One way to build organizational commitment is to determine what leadership actions are likely to increase an individual's intrinsic task motivation. This can be accomplished by establishing different leader-employee relationships. For instance, Martin and Haffer suggest that employees who receive greater attention and resources would be more likely to exhibit a greater desire to retain membership in that organization.

> Furthermore, employees who receive more inside information and discretion would develop a stronger belief in the organization's goals and values. Finally, employees who receive greater autonomy and support would be willing to work harder on the organization's behalf. Managers secure greater commitments by partnering with employees. These "close" partners . . . have higher job satisfaction, less role conflict, role ambiguity, and job stress, and are more satisfied with their managers than are the "distant" employees. [66]

If leaders are "interested in reducing their turnover propensity," they need to devote more effort to enhancing their subordinates' "organizational commitment attitudes. [67] Many employees' involvement and commitment attitude could be strengthened by a little extra attention from management. [68] "[H]aving more opportunities for participation, autonomy and/or empowerment" are other intrinsic factors or building blocks that help "create a positive organizational commitment attitude." [69]

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[63] Thomas Chappell, President of Tom's of Maine, letter to the editor in *Harvard Business Review* (May-June 1994), p. 146.
[64] Stephen R. Covey, Founder and Chairman of Covey Leadership Center, letter to the editor in *Harvard Business Review* (May-June 1994), p. 148.
[65] Thomas Martin and John C. Hafer, "Turnover is Linked to Job Involvement and Organizational Commitment," *Telemarketing*, Vol. 13, No. 12, p. 106.
[66] Ibid., p. 36.
[67] Ibid., p. 36.
[68] Ibid., p. 37.
[69] Ibid., p. 34.

"Trust, leadership, participation, interdependence, communication, nonroutine activity, and family are [other] intrinsic factors."[70]

Organizational commitment is an *attitude* that military leaders can and must influence. Posner's five practices may help generate greater organizational commitment.

Principle-centered Leadership

In Wisley's view,

> Management must avoid causing goal-incongruent responses. Unfortunately, a less ethical or less principled leadership approach is common in the workplace. Coercion and forced noncompliance to regulations at any cost to morale are typical tactics in performance-oriented organizations. Such unprincipled leadership, which is an aversive stimulus, has a psychological as well as fiscal effect. When employees perceive such tactics to be outside of the parameters of their belief systems, as are the top-down directive systems of the past, these stimuli elicit negative, goal-incongruent responses such as fear or anxiety.[71]

Wisley adds, "A cognitive component that produces anxiety is fear of losing control. If employees feel that they are unable to respond, for example, to performance-oriented tactics of coercion or reward manipulation, anxiety develops."[72] This is intrinsically demotivating, because an individual's feeling of choice is significantly reduced.

Principle-centered leadership helps an organization to reach its vision. "For today's companies to realize their visions, the evidence seems to bear out that effectiveness is greatest when principle-centered leadership (referent power) is exercised. This elicits goal-congruent emotions and meets employees' basic needs to contribute, be informed, participate, serve, reciprocate, and be happy as they take themselves and the company forward."[73] Wisely defines *referent power* as being derived through respect; it is related to acceptance, affection, and others' willingness to follow.

Implementing Principle-centered Leadership

The United States Military Academy (USMA), West Point, already has a process for developing principle-centered leaders. It is "a carefully orchestrated progression that all cadets must undergo, with every experience designed to move cadets through a step-by-step model."[74] Their leadership development process consists of the following four phases:

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[70] Michael D. Wisley, "Leadership and Human Motivation in the Workplace," *Quality Process*, Vol. 28, No. 11 (November 1995), p. 88.
[71] Ibid., p. 87.
[72] Ibid.
[73] Ibid., p. 88.
[74] Alan M. Webber, "Surviving in the New Economy," *Harvard Business Review* (September-October 1994), p. 80.

First phase. Emphasizing moral principles, the first phase "is about defining and adhering to the organization's value system to forge the bonds that tie the organization together. In other words, it is about creating trust to build teamwork. Honor is the value that all cadets share. . . . This common value creates trust, and it is trust that holds a team together."[75]

Second phase. This phase "[t]eaches independence of mind and personal consciousness. . . . It is a lesson of singular importance" for future military leaders in an environment "marked by rising ambiguity and blurring boundaries. . . . It is the lesson that comes after you've accepted the values of the organization: the lesson of learning to think for yourself by learning from those who are different from you or even from those who profoundly disagree with you."[76]

Third phase. The third phase helps cadets learn to think for themselves and then "have the courage to question decisions that they believe violate moral values. Cadets learn to overcome fear in the most extreme situations and, in the process, demonstrate the depth and strength of their characters. [Leaders] must be prepared to live their instincts, listen to their values. They must become 'doers' who think."[77]

Fourth phase. The final phases ties the "leadership process together; fear plus trust equals character, and character plus time equals leadership. The ultimate test of the leader is the ability to act in the organization's best interests." This may be the most difficult challenge, particularly for senior leadership, since it requires them to "redefine the essence of their work, to become the eyes and ears of the organization – seeing, sensing, and thinking rather than actually doing."[78]

Webber concludes, "The West Point model is about the 'soft stuff:' values, morals, mindfulness, and feeling. It downplays charisma in favor of teamwork, issuing orders in favor of honoring subordinates' emotions, obedience in favor of consciousness and personal responsibility. . . . It is hard to look at the line of leaders the academy has produced over so many decades and come to the conclusion that soft stuff doesn't matter."[79]

Redefining Leadership Development

Understanding the Need for Redefining Leadership Development

Senior leaders have great insight into what is critical to successfully motivating troops. General Shalikashvili, in a speech at the George C. Marshall ROTC Award Seminar, emphasized that the "love and care for soldiers" is one of three pillars of Army leadership. He stated that "leaders place the welfare of their people above their own, that they are responsible for the welfare of their troops."[80]

[75] Ibid., p. 80.
[76] Ibid., p. 82.
[77] Ibid.
[78] Ibid.
[79] Ibid.
[80] General John M. Shalikashvili, "The Three Pillars of Leadership," *Defense Issues*, Vol. 10, No. 42.

What Can Be Done?

Future military leaders need to understand the intrinsic and extrinsic aspects of individual motivation.

Future military leaders need to understand the intrinsic and extrinsic aspects of individual motivation. "Unless a [leader] understands employee motivation, then he or she can not succeed."[81] They must also understand that their subordinates' intrinsic motivation is highly responsive to their individual style of leadership. We must equip our leaders to examine the impact of their particular leadership style on subordinates and to adjust it accordingly. They must realize that intrinsic motivation is not so much a tool to make people do things as it is one for building on self-management that is already present. Of course, the particular work environment or type of unit will influence and influence the degree of self-management that is feasible. However, regardless of the circumstance, some degree of self-management will be necessary. Therefore, leaders must understand that self-management is about applied judgment, not about working harder.

. . . leaders must understand that self-management is about applied judgment, not about working harder.

Self-management involves an adult-to-adult relationship versus a parent-to-child relationship. Making the transition will involve a shift in leader power bases. It requires a move to *personal power* (information, expertise, goodwill) from *position power* (authority, reward, discipline). The relationship involves collaboration versus dominance and submission (or competing and accommodating). Sharing information, expertise, and goodwill brings about commitment.

Without a shift in power, the behavior leaders use to persuade other people will remain coercive. "If the behaviors are coercive, the relationship becomes one of authority or power. . . ." However, if power is relinquished or shifted to subordinates, the relationship becomes one of mutual influence, where "followers persuade leaders and other followers, as do leaders."[82] Better put, the relationship will be based on influence that is two-way. Leadership's role becomes an external management (command and control) process which influences self-management and self-management in turn influences leadership, as shown in Figure 5-1, developed by Thomas and Jansen.

Thomas and Jansen's model implies that excessive command and control can cause a downward spiral in self-management. Increased micromanagement, discipline, and pressure lead to less self-management (or less individual responsibility), which in turn leads to reduced leader trust. Ultimately excessive command and control may increase costs, because it may lead to lost self-management efficiencies, reduced individual development, and reduced intrinsic motivation, which in turn leads to burnout, increased attrition, and reduced retention.[83]

Applying the Thomas-Jansen model, some officers and noncommissioned officers will have to learn a new way of leading. It might be useful for the military to adopt and teach some guiding principles that get at helping leaders intrinsically motivate subordinates. The following guiding principles may be useful:

- Collect systematic information as to what service members want from their jobs.

[81] Steininger, p. 603.
[82] Joseph C. Rost, *Leadership for the Twenty-First Century* (New York, NY: Praeger, 1991), p. 105.
[83] Ken Thomas and Erik Jansen, "Intrinsic Motivation and the Military: Second Briefing." Briefing to the 8th Quadrennial Review of Military Compensation (8th QRMC), Arlington, VA, January 23, 1996.

- Make sure that service members understand the role description for their jobs so that efforts are not misdirected and thus wasted.
- Continually measure and monitor service member attitudes. [84]
- Encourage and facilitate a "full release of the human competence at their disposal."
- Help subordinates "connect that competence to the work that needs to be done." [85]

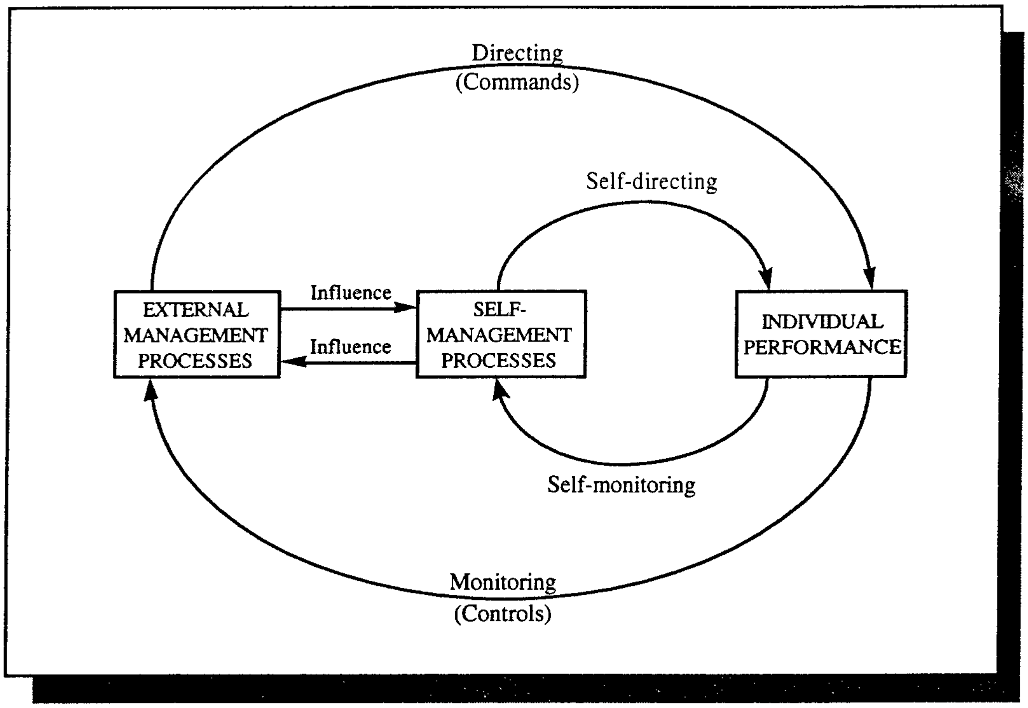

Figure 5-1. Self-management Supplemented by Command and Control [86]

It may be beneficial for military leaders to "find ways to harness soul-searching on the job, not just gloss over or merely avoid it. . . . Creating meaning may be the true [leadership] task of the future. . . . Common values, a shared sense of purpose, can turn [an organization] into a community where daily work takes on a deeper meaning and satisfaction." [87] Thomas and Jansen recognize that the presence of both purpose and meaning aids in intrinsically motivating workers.

Circumstances that tend to favor self-management include those characterized by task uncertainty, complexity and a requirement for quick response.

Circumstances that tend to favor self-management include those characterized by task uncertainty, complexity and a requirement for quick response. These conditions force an organization to delegate. The military's changing environment may also require leaders to rely more on self-managing subordinates.

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[84] John B. Miner, *Theories of Organizational Behavior* (Hinsdale, IL: Dryden Press, 1980), p. 159; Porter and Lawler, Expectancy Theory-Based Compensation and Reward, 1968, referenced in Hay Group, Extrinsic and Intrinsic Motivation. Briefing to the 8th QRMC, Arlington, VA, February 13, 1996.

[85] Hall, referenced in Hay Group, Extrinsic and Intrinsic Motivation. Briefing to the 8th QRMC, Arlington, VA, February 13, 1996.

[86] Ken Thomas and Erik Jansen, Intrinsic Motivation and the Military. Briefing to the 8th Quadrennial Review of Military Compensation, Arlington, VA, January 23, 1996.

[87] Nichols, p. 52-53.

Leadership Redefined in the Military

The key ingredient in this view of leadership is *influence.*

Many leadership writers view a leader as someone who effectively influences another individual. The key ingredient in this view of leadership is *influence*. How well a leader influences an individual will determine that person's feeling or sense of meaningfulness, progress, competence, and choice. The Thomas and Jansen model implies that if a leader can positively influence these feelings, an individual is likely to be more intrinsically motivated.

The military might benefit by considering Rost's definition of leadership: "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes." There are four essential elements in his definition:

1. The relationship is based on influence.
2. Leaders and followers are the people in this relationship
3. Leaders and followers intend real change.
4. Leaders and followers develop mutual purposes. [88]

McClelland also views leadership as an "influence game." He comments that "management seem[s] to have forgotten this fact, urging managers to be more concerned with people's personal needs than with helping them to get things done." McClelland believes "[m]anagers must be interested in playing the influence game in a controlled way. That does not necessarily mean that they are or should be authoritarian in action. On the contrary, it appears that power motivated managers make their subordinates feel strong rather than weak. The true authoritarian in action would have the reverse effect, making people feel weak and powerless." [89]

In his article "Leadership: Perspectives in Theory and Research," Arthur G. Jago addresses the question: How does one define leadership, and from what source is leadership's power derived? He defines leadership as "both a process and a property. As a process, leadership is the use of noncoercive influence to direct and coordinate the activities of group members toward goal accomplishments. As a property, . . . [leadership is a] characteristic attributed to those who are perceived to employ such influence successfully." [90]

Max DePree, former CEO of Herman Miller, presents another leadership perspective worth considering: "The art of leadership is liberating people to do what is required of them in the most effective and humane way possible." Thus, the goal of leadership is to serve others, in that obstacles are removed that prevent subordinates from doing their jobs. "In short, the true leader enables his or her followers to realize their full potential. . . . This is consistent with the underlying assumption that leaders do not motivate, rather, they help create the conditions that allow intrinsically motivated employees to succeed." [91]

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[88] Rost, p. 102

[89] David C. McClelland and David H. Burnham, "Power is the Great Motivator," *Harvard Business Review*, (Jan-Feb 1995), p. 130.

[90] Arthur G. Jago, "Leadership: Perspectives in Theory and Research," *Management Science*, Vol. 28, pp. 315-316, referenced in Wisley, pp. 86-87.

[91] Steininger, p. 611.

Initiatives That Intrinsically Motivate

Leaders can better learn from the employees themselves what it is that motivates them by first understanding intrinsic motivation. Once leaders have this understanding, they can take many initiatives to intrinsically motivate individuals. The initiatives shown in Table 5-3 use the Thomas and Jansen building blocks to enhance feelings of choice, competence, meaningfulness and progress.

Table 5-3. Initiatives that Create Intrinsic Motivation [92]

INITIATIVE	BUILDING BLOCK	FEELING
Give employees the information they need to do a good job. Bob Nelson, author of *1,001 Ways to Reward Employees*, says that open communication helps employees feel they are in on key decisions about the business and helps them to understand the whys and wherefores of business initiatives.	Information	Choice
Provide regular feedback. As Ken Blanchard, author of *The One Minute Manager*, stresses: "Feedback is the breakfast of champions." It gives employees a way to measure their own performances.	Positive Feedback	Competence
Personally congratulate employees for a job well done. These congratulations should be offered immediately and should be specific as to why the work was so exceptional.	Skill Recognition	Competence
Write personal notes to them about their performance. This demonstrates that the manager not only recognized they did a good job, but that their work was so good that he or she felt it necessary to take the time to tell them so in writing.	Skill Recognition	Competence
Give them a good job to do. It makes sense that people who enjoy their work and who believe in the importance of their contribution are going to be more highly motivated than people who don't care. Managers shouldn't let employees stagnate but should show them how they can grow with their jobs and give them opportunities to learn new skills.	Growth Opportunities	Competence
Publicly recognize employees for good work.	Skill Recognition	Competence
Ask employees for their input. Involve them in decisions that affect their jobs. "People have to feel like a part of their environment," Mr. Nelson says, and nothing is more flattering or generates greater buy-in than being asked for opinions.	Positive Climate	Meaningfulness
Managers should recognize the power of their physical presence. Employees like frequent contact with their managers.	Positive Climate	Meaningfulness
Include morale-building meetings that celebrate group success.	Celebrations	Progress

[92] Shari Caudron, "The Top 20 Ways To Motivate Employees," *Industry Week*, April 3, 1995.

Human Resource Management System Attributes

The following attributes of a human resource management system would enhance military leadership's ability to influence service members intrinsically.

Flexibility. Give leaders the flexibility "to design their organizations so that employees can be challenged, gain control of their work, and take ownership of it."[93] Unduly restrictive rules are possible intrinsic demotivators.[94]

Rely More on Intrinsic Rewards. In many organizations, members "view their [supervisors] as figures who control their lives . . . [and] administer punishment and rewards – much like a parent."[95] Additionally, they depend on their supervisor to give them incentives to work, since their commitment and motivation are externally dependent.[96] "A leader eliminates fear in the workplace, and relies more on intrinsic rewards and less on extrinsic ones to drive performance."[97]

Expect Partner-manager Relationships versus Parent-manager Relationships. In partner-manager relationships, leaders use an implicit work contract, which is a very different from the contract associated with the parent model. The implicit contract assumes that work is a natural and fulfilling part of life and that employees want to do a good job. Here leaders in effect say, "We are giving up considerable control, but we need something in return. We need you to promise to act in the best interests of the organization." This employment contract is based on interdependence.[98] "In a high involvement, partnering organization, you can not afford to carry people who do not pull their weight or who look out for number one. The partner model is . . . a contract which requires that both sides live up to their responsibilities."[99]

Value Leaders Who Empower. Organizations that value the use of empowerment and rely on self-directed individuals are based on a totally different set of assumptions. These organizations assume people are their most valued, dynamic resource, that their minds are keys which unlock the organization's future possibilities. "Self-direction is not anarchy . . ., [it] is management sharing control and employees accepting the responsibility to act in the best interests of the organization." Leaders must help employees "understand their new responsibilities along with their new rights."[100]

Trust. These organizations treat people truthfully and with respect. They must also "eliminate . . . all symbols that denote lack of trust."[101] Employees in this system

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[93] Steininger, p. 610

[94] Fein, 1980, referenced in Hay Group, Extrinsic and Intrinsic Motivation. Briefing to the 8th QRMC, Arlington, VA, 13 February 1996.

[95] Steininger, p. 610.

[96] Chris Argyris, "Good Communication That Blocks Learning," *Harvard Business Review* (July-August 1994), p. 84.

[97] Steininger, p. 611.

[98] D. Hitchcock, "Are You Parents to or Partners With Your Employees?" *Journal for Quality & Participation*, Vol. 17, No. 7 (December 1994), p. 7.

[99] Ibid., p. 10.

[100] Ibid.

[101] Steininger, p. 611.

must be trustworthy as well. Good-faith mistakes should always be forgiven, but malicious acts should still be grounds for firing. [102]

Work to Reduce Stress: Relationships within organizations are potentially stressful. "Most studies have concluded that mistrust of co-workers is associated with high role ambiguity, poor communication, low job satisfaction, and poor psychological well-being." [103] Furthermore, "Sources of stress which may be described as relating to the organizational structure and climate are frequently the outcome of organizational culture and management style." [104]

Potential Obstacles

The following are potential obstacles to implementing a human resource management system that is designed to enhance leadership's ability to intrinsically motivate service members.

Managers Not "Walking Their Talk." They may still rely on using "behaviors and beliefs (associated with the old system) of parents to create partners. This rarely works. It is usually more effective to begin acting as a partner. If you assume that employees have a right to be involved in decisions which will affect them and that they have relevant knowledge, you will choose education and dialog instead of coercion to instigate change." [105] Argyris makes a similar point: "Managers embrace the language of intrinsic motivation but fail to see how firmly mired in the old extrinsic world their communications actually are." [106]

Subordinates Who Want Us To Be Parents. Employees who are well-indoctrinated into check-your-brain-at-the-door-no-worries employment contracts will undoubtedly resist the change. They'll ask, are you going to pay me more to do your job? Don't get seduced back into your comfortable parental assumptions. Give them information, take them on site visits, send them to workshops, and engage them in the decision making process.

When Abdicating Responsibility Many Organizations Go from Parental Control into Chaos. Managers abdicate their responsibilities to lead. They tell employees that they are empowered but do not ensure that they understand what they are empowered to do and what the new boundaries are. . . . And they forget to ensure employees have all the skills and knowledge to perform their new responsibilities. [107] Depending on the type of military organization, the leader will need to set boundaries accordingly. For example, an infantry unit will probably have more boundaries than an acquisition organization. Training and development will play a major role in any new human resource management system the military adopts.

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[102] Hitchcock, p. 10.
[103] J. R. French and R. D. Caplan, "Organizational Stress and Individual Strain." In A. Marlow (Ed.), *The Failure of Success*, 1970, referenced in C. L. Cooper and S. Cartwright, "Healthy Mind, Healthy Organization – A Proactive Approach to Occupational Stress," *Human Relations*, Vol. 47, No. 4 (April 1994), pp. 462-463.
[104] Cooper, pp. 462-463.
[105] Hitchcock, p. 10.
[106] Argyris, p. 83.
[107] Ibid.

"Band-Aid" Fix. The emphasis of most workplace intervention strategies is to improve the "adaptability" of the individual to the environment. With this "band-aid" or inoculation approach, there is an implicit assumption that the organization will not change but continue to be stressful; therefore, the individual has to develop and strengthen his or her resistance to that stress. There appears to be markedly less organizational concern with adapting the environment to "fit" the individual. [108]

Summary

Handy writes, "Leadership . . . within organizations is always going to be a vital ingredient in the effectiveness of organizations." [109] Leadership is an "element that can synergize the energies and talents of a work force, leading it toward the realization of the company's vision." [110]

. . . the military should explore in great detail the role its leaders play in intrinsically motivating service members.

Since leadership is so vital to organizations, the military should explore in great detail the role its leaders play in intrinsically motivating service members. First, this may require redefining what the military recognizes as effective leadership and leadership practices, then incorporating these changes into its leadership development programs. It is also critical that changes to the human resource management system be aligned to enhance any changes in leadership philosophy and practices.

Finally, any change effort is sure to encounter obstacles. Those involved in implementing a system that relies more on leaders who intrinsically motivate their followers must realize that their efforts will be circumvented if obstacles to changes in leadership philosophy and practices are not identified and eliminated.

[108] Cooper, pp. 456-457.
[109] Handy, p. 118.
[110] Wisley, p. 86.

Chapter 6
An Economic Framework for Analyzing Individual and Organizational Choices About Intrinsic and Extrinsic Rewards

Introduction

. . . a worker's job satisfaction depends on the utility or disutility he or she derives from a variety of characteristics of the job.

The basic economic model of consumer choice provides useful insights about individual and organizational choices among both intrinsic and extrinsic rewards. It is important to recognize that intrinsic rewards are not necessarily "free," or even inexpensive. They often involve opportunity costs to either the organization, the individual worker, or both. These costs may be monetary, nonmonetary, or some combination of the two. For example, the organization must incur costs to design jobs that some workers will find intrinsically rewarding and to screen, train, and acculturate workers for those positions.[1] Workers may be able to obtain increased amounts of some intrinsic rewards only by trading off some of their pay or other extrinsic rewards, by incurring higher personal expenses for education or training to qualify for more intrinsically rewarding jobs, or by giving up opportunities for other intrinsic rewards.[2] If they are attempting to behave rationally[3] and have adequate information about the costs and benefits of potential intrinsic rewards, organizations will voluntarily offer the conditions that can lead to such rewards and workers will voluntarily take advantage of them only when each party's expected benefits at least equal its expected opportunity costs.

The Basic Rational-choice Model[4]

Choices Among Job Characteristics

In economic terms, a worker's job satisfaction depends on the utility or disutility he or she derives from a variety of characteristics of the job. These characteristics include both the wage rate and nonwage aspects of the job, like discounts on goods

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[1] Job-design expenses would usually be fixed costs, while expenses for screening, training, and acculturation would be quasi-fixed costs.

[2] As discussed in previous chapters, the nature of intrinsic rewards means that organizations can't provide them directly to workers, although sometimes for brevity we may talk as though they do. Rather, the organization can only design jobs, provide training, and so on in order to provide an opportunity for workers to derive intrinsic rewards from their jobs. In economic terms, intrinsic rewards are part of a worker's total satisfaction or utility.

[3] For the purposes of this analysis, an organization behaves "rationally" if it consistently acts as if it were attempting to optimize some objective function (for example, maximizing profit or productivity, or minimizing costs). A worker behaves rationally if he (she) consistently acts as if he were attempting to maximize individual satisfaction (utility).

[4] Campbell R. McConnell and Stanley L. Brue, *Contemporary Labor Economics*, 3d ed. (New York, NY: McGraw-Hill, 1992), pp. 400-406. McConnell and Brue's discussion of the hedonic theory of wages heavily influenced the basic economic model for this chapter. However, responsibility for specific applications to compensation policy for the uniformed services rests with the 8th QRMC.

and services, health and educational benefits, prospects for wage growth, regularity of earnings, job security, and so on. Other nonwage aspects of the job that might influence the worker's job satisfaction include job safety, geographic location, and other factors related to general working conditions that haven't been classified elsewhere (for example, adequacy of facilities and equipment, attractiveness of the work facility and its surroundings, comfortableness of climate control, and convenience of commuting and parking). We can also think of all the nonwage extrinsic rewards and potential sources of intrinsic rewards discussed in the preceding chapters of this report as influencing the worker's job satisfaction. For example, the style and quality of leadership or supervision, organizational structure, degree of job autonomy, sense of the job's meaningfulness, etc., could all be variables in the worker's utility function.[5]

The differences in characteristics associated with various jobs or job designs suggest that a worker would be willing to make trade-offs among these characteristics in order to increase his or her level of job satisfaction. That is, he or she would choose among alternative possible combinations of extrinsic rewards, intrinsic rewards, and other aspects of a job, exchanging characteristics that yield relatively less satisfaction for those yielding relatively more. For example, he or she might be willing to accept a lower wage rate in return for an increase in the amount of another job characteristic like health benefits, job safety, task autonomy, or quality of leadership that he or she values more highly than the forgone wages. In some cases, the worker may have the opportunity to choose among various potential changes in the characteristics of his or her current job. In other situations, he or she might have the choice among several new jobs, each with a different mix of job characteristics that he or she considers significant.

Indifference Curves

Figure 6-1 illustrates the economic model of an individual's choice among alternative combinations of two aspects of his or her job. On the axes, we could show any combination of the job characteristics discussed above, two at a time. This illustration shows various possible combinations of the wage rate (an extrinsic reward) and task autonomy (a potential source of intrinsic reward). Let the worker initially be at point *a*, receiving a wage rate of $20 per hour and 14 "units" of task autonomy.[6] If the

[5] Note that these job aspects are similar to the context satisfactions in the Job Characteristics Model (Hackman and Oldham 1980, p. 86). McConnell and Brue refer to all nonwage characteristics of a job as nonwage amenities. There are also a number of other ways to categorize various job characteristics or attributes, for example, extrinsic and intrinsic rewards, the Job Characteristics Model's core job-design characteristics (skill variety, task identity, etc.), the Thomas-Jansen categories of intrinsic rewards (sense of choice, competence, meaningfulness, and progress), etc. Although these various classification schemes overlap in many respects, each looks at job characteristics from a different perspective that provides useful insights. (Each one also has certain disadvantages or omits certain types of characteristics.) In addition to the examples already cited, a job's nonwage attributes may also include the Job Characteristics Model's critical psychological states (like experienced meaningfulness or responsibility from the work), outcomes (for example, internal work motivation, growth satisfaction), and context satisfactions (like job security, supervisors, and co-workers; wages are treated separately in this discussion). Graphically, we can only analyze two or three of these job attributes at a time, but the mathematical formulation shown in the appendix accommodates any number of attributes.

[6] The horizontal axis is scaled only for purposes of illustration. The worker does not need to be able to objectively measure either the level of the given job characteristic or his total level of satisfaction. He need only be able to determine introspectively whether he prefers one combination of characteristics (in this case, a wage of $20 and the level of task autonomy we've arbitrarily labeled "14") to another combination. However, for purposes of illustration, we could think of measuring task autonomy using one of the standard job-analysis techniques.

individual places a *positive value* on both money income and task autonomy, then he or she would feel better off with combination *x* than with combination *a*, because *x* represents both a higher wage rate and a higher level of task autonomy.

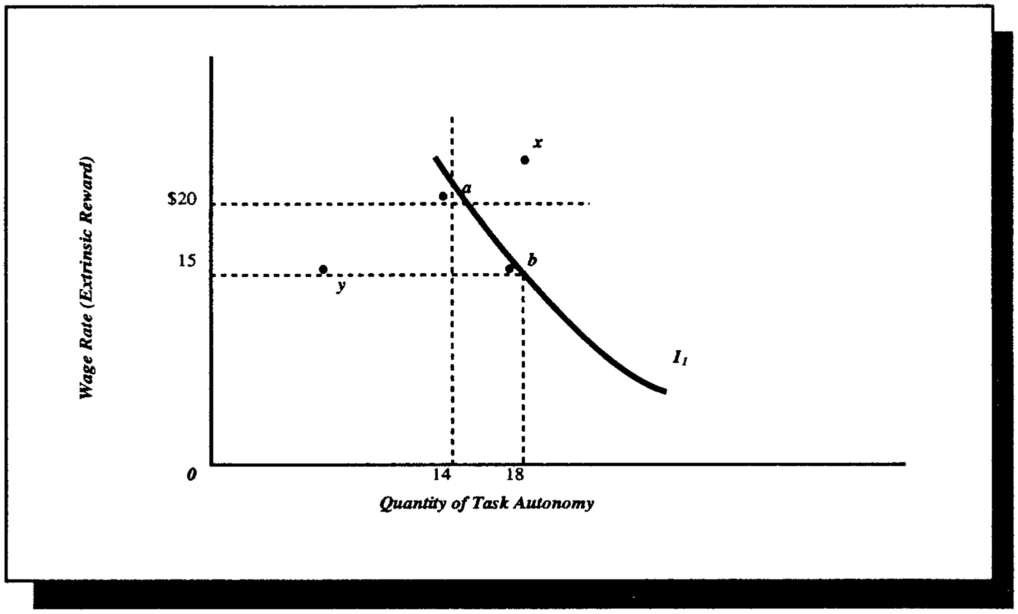

Figure 6-1. An Indifference Curve

In general, the worker clearly would prefer any combination of wage rate and task autonomy that contains more of at least one form of compensation and no decrease in the amount of the other. That is, compared to combination *a*, the worker would prefer any combination on or between the dashed lines forming the quadrant to the northeast of that point. Similarly, the worker would prefer point *a* to any combination in the set formed by the quadrant to the southwest of point *a*, like point *y*, because such a combination contains less of at least one form of reward.

Let point *b* in Figure 6-1 (namely, the combination 18 units of task autonomy and a wage rate of $15) represent a combination that yields the same amount of satisfaction to this worker as combination *a*. That is, the worker literally doesn't care which of these two combinations he or she has. Although point *b* entails a lower wage rate than point *a*, the increase in task autonomy represented by *b* is enough to exactly compensate the worker for the lower wage. The curve labeled I_1 in Figure 6-1 connects all the combinations of wage rates and task autonomy levels that make the worker just as satisfied as he or she is with combinations a and *b*. Because the worker is *indifferent* among all combinations like *a* and *b* along I_1, we call I_1 an indifference curve.[7]

[7] If we asked the worker whether he preferred combination a or combination b, he would respond that he didn't care – he would be equally satisfied at any point along this indifference curve.

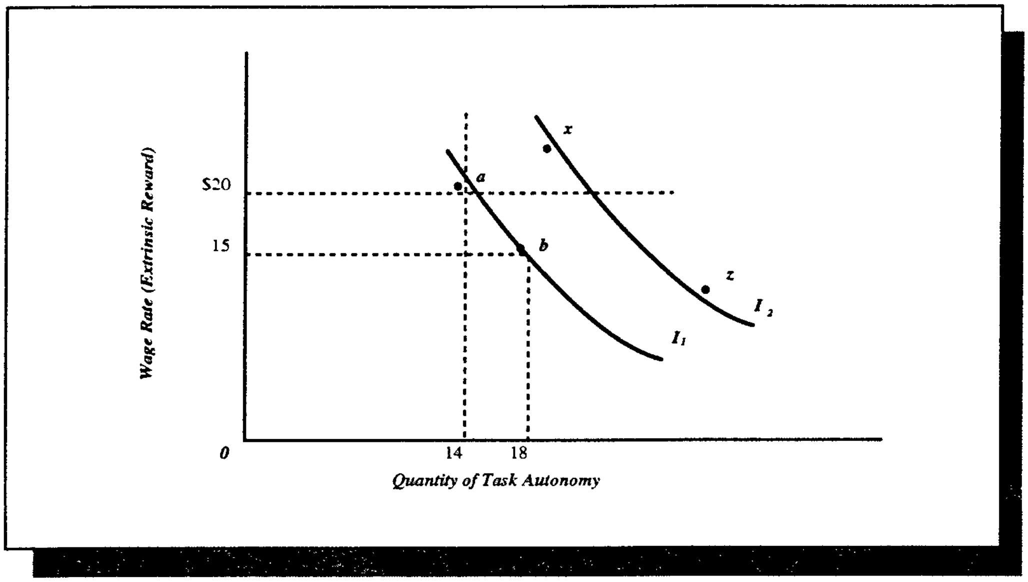

Figure 6-2. Comparing Combinations on Two Indifference Curves

Now consider an indifference curve like I_2, as shown in Figure 6-2. Because combinations *x* and *z* both lie on I_2, the worker would be equally satisfied at either point. Furthermore, as explained above, this worker would clearly prefer combination *x* to combination *a* on I_1, because *x* represents both a higher wage and a higher level of task autonomy than *a*. If the worker's preferences are consistent, we can generalize to conclude that he or she would prefer combination *x* to *any* combination on I_1, because all combinations along I_1 yield the same level of satisfaction as *a*. That is, if the worker prefers *x* to *a*, then consistent preferences mean he or she must prefer *x* to any combination that is equivalent to *a*. Hence, he or she must prefer *x* to any combination on I_1.[8]

But would the worker prefer a combination like *z* to combination *a*, or vice versa? Combination *z* represents a lower wage than *a* but a higher level of task autonomy. Here again, consistency of the worker's preferences implies that, because *x* and *z* are equally satisfactory to him or her (namely, they're on the same indifference curve) and because he or she prefers *x* to *a*, he or she would also prefer *z* to *a*. It follows that, because *any* combination on I_2 is equivalent to *x* in his or her preferences, he or she would prefer any combination on I_2 to *a*. Furthermore, he or she would prefer *any* combination on I_2 to *any* combination on I_1. *In general, the worker would prefer* any *combination on a higher indifference curve to* any *combination on a lower indifference curve.* Appendix A discusses the general properties of indifference curves.

The preceding discussion implies that we can conceptually draw an indifference curve for a worker through *any* combination of the two job characteristics shown on the axes. The set of all possible such indifference curves for these two job characteristics is called the worker's *indifference map*; the indifference map graphically describes the worker's *tastes and preferences* for the job characteristics shown on the axes. Figure 6-3 shows three curves from such an indifference map.

[8] Consistency of preferences means they are transitive.

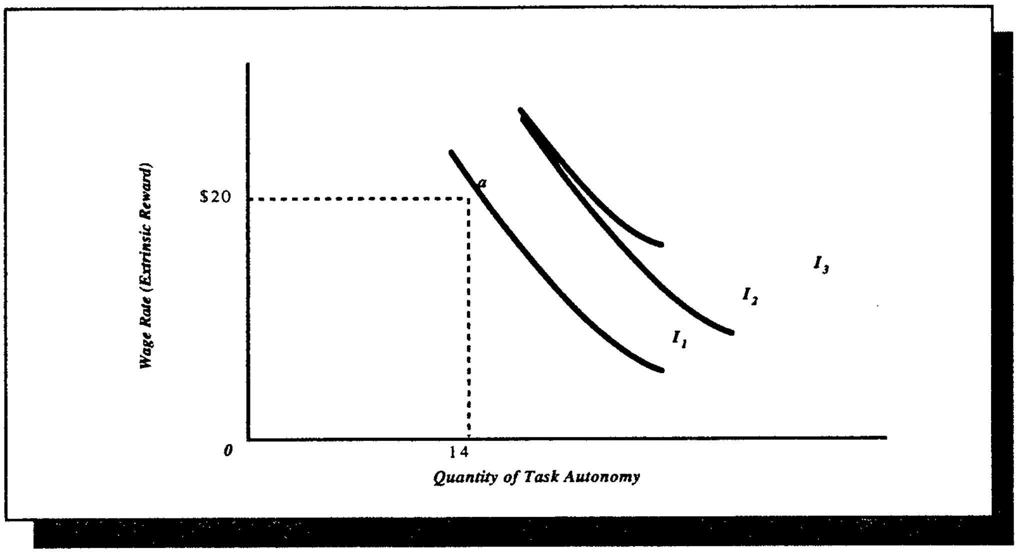

Figure 6-3. An Indifference Map

Diminishing Marginal Utility and the Mix of Rewards

Individual behavior in choosing among available combinations of job characteristics, or of goods and services in general, typically exhibits a fundamental characteristic or "law." *Holding constant the amount of all other goods and services consumed, as a person increases the amount of a certain good or service he or she consumes during a given time period, eventually his or her total satisfaction will increase at a decreasing rate. That is, his or her marginal utility (the rate of increase in total utility) will eventually diminish.* This principle is called the *law of diminishing marginal utility.*[9] Intuitively, it helps explain why a typical, rational worker wouldn't be willing to continue accepting progressively lower wage rates in return for constant increments of a particular type of intrinsically rewarding job characteristic (like task autonomy), or vice versa. Eventually, the additional satisfaction gained from an incremental unit of the task autonomy would diminish relative to its opportunity cost. That opportunity cost is the forgone satisfaction from consuming the other goods and services he or she could have bought if he or she hadn't accepted a lower wage in return for the additional task autonomy.

In general, were it not for the law of diminishing marginal utility, consumers would spend all their income on the single good or service they enjoyed most instead of consuming a variety of goods and services! Similarly, this characteristic of individual behavior has an important compensation policy implication.

[9] It is essential to note that this principle applies only to marginal utility, or increases in total satisfaction. In particular, it does not say that total satisfaction necessarily decreases. For some goods, marginal utility may at first increase. The law of diminishing marginal utility doesn't address this possibility. It asserts only that, under the conditions specified above, marginal utility will eventually decrease. It's possible that the marginal utility of some goods may eventually become negative, so that consuming an additional unit makes the person feel worse off than before, although still better off than not consuming any of the good at all. (Anyone who has ever eaten or drunk "a little too much" of something is familiar with this feeling.) In the extreme, even total utility from some activities may become negative. (Namely, the person may even feel ill after eating or drinking to excess.) However, the law of diminishing marginal utility makes no predictions about these phenomena, either. It says only that, all other things held constant, marginal utility will eventually decrease. The law doesn't address whether marginal utility becomes asymptotic to zero or becomes negative.

Policy Implication

We should expect to find a limit to how much workers would be willing to trade, for example, lower wages for higher levels of other extrinsic rewards (like recognition) or of intrinsically rewarding job characteristics (like task autonomy), and vice versa. That is, we should normally expect workers to seek a *variety* of intrinsic and extrinsic rewards from their jobs.

A Worker's Economic Benefit from a Flexible Reward System[10]

Figure 6-4 demonstrates that, in general, allowing a worker to choose among alternative combinations of various types of rewards permits him or her to increase his or her level of satisfaction, *even holding constant the organization's cost for the various combinations*. For example, let the worker initially be at point *a* on indifference curve I_1, receiving a wage of $20 and 14 units of task autonomy. Further, let the cost of additional units of intrinsic reward be equal to the absolute value of the slope of the straight line connecting combination *a* with point *c* (that is, treat the numerical value of the slope as a positive number). It can easily be shown that reward combinations *a* and *c* both have the *same* total cost to the organization, so the organization would be indifferent between them if its only criterion were cost.[11] On the other hand, the worker would have an incentive to trade reward combination *a* for combination *c*, which represents a higher level of satisfaction. *Note that if he or she can not engage in such a voluntary exchange, perhaps because some of his or her benefits aren't transferable,*

. . . allowing a worker to choose among alternative combinations of various types of rewards permits him or her to increase his or her level of satisfaction . . .

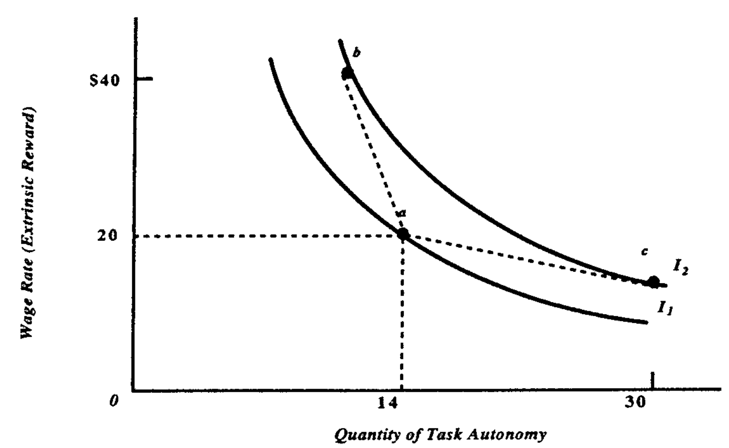

Figure 6-4. Increasing Job Satisfaction Through Trade-Offs

[10] This section is an application of the standard income-in-kind analysis. As this discussion demonstrates, in-kind rewards, whether extrinsic or intrinsic, may reduce the utility of some workers compared to paying them the cash equivalent or allowing them to exchange in-kind rewards in the market.

[11] For a formal proof of this property, see the technical appendix to this chapter.

the worker is confined to the lower satisfaction level, represented by indifference curve I_I. Similar reasoning would apply in comparing combinations *a* and *b*, if the slope of line segment *ab* indicates the cost for each additional unit of the intrinsic reward. [12]

Applications to Current Uniformed Services Human Resource Management Systems

The uniformed services' current human resource management system provides very little opportunity for individual service members to improve their level of satisfaction by making changes in the characteristics of their jobs or the combination of components in their compensation package.

- Work tasks are typically designed to a standard that may be independent of their capacity to provide intrinsic rewards to service members assigned to them, especially if any service member's tastes for performing a task are atypically positive or negative. This virtually ensures that individual service members could reach a higher satisfaction level if they were given more choice in selecting the composition of their compensation package, including its intrinsically rewarding aspects, like job design.
- In addition, while military organizations often engage extensively in a variety of motivational activities to build organizational pride, identity, esprit de corps, sense of membership, etc., individual service members must often participate in these activities regardless of the expected *individual* benefits. [13] The indivisible nature of such activities limits the flexibility of both the individual and the organization to use them as discretionary variables in influencing the individual's total satisfaction from these sources.

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[12] However, note that the slope of *ab* is steeper than *ac*, representing a higher price of task autonomy, as demonstrated in the technical appendix. This means that although combinations *a* and *b* would both cost the same, their cost would be greater than that of combinations *a* and *c* when the price of task autonomy is given by the slope of *ac*, which represents a lower price than *ab* does.

[13] On the other hand, such activities may provide external benefits, namely, they may have a higher value to the unit (group) as a whole than they do to some individual service members. (This is the same as the principle that it is to the advantage of everyone in a group for each member to be inoculated against a contagious disease, regardless of individual preferences, or for every household in a neighborhood to maintain their homes' exterior appearance.) In this case, if service members had the flexibility to choose their individual levels of participation in these activities, individual incentives might lead some of them to choose a level of the participation below the level that would be optimal for the unit as a whole. As a result, from the perspective of the unit as a whole, some degree of compulsory participation would actually increase the level of intrinsic reward from such sources as unit affiliation, esprit de corps, and so on. For example, given the choice, some basic trainees might opt not to participate in what are now compulsory intramural sports activities. But, to the extent that these activities contribute to such intrinsic rewards as unit pride or affiliation for the group as a whole, they make the unit as a whole feel better off than they otherwise would feel. Even those trainees who were reluctant to participate may feel an increased level of intrinsic reward after the fact. Note that some morale-building group activities, like purely voluntary intramural sports, organizational social functions, etc., do provide service members opportunities to make individual choices that are likely to increase their personal levels of satisfaction. (Otherwise, they wouldn't voluntarily participate.) However, the opposite case could also occur under some circumstances: certain activities might have a lower value to the organization than to some individuals, and flexible participation would result in individual over-participation relative to the optimal amount.

Policy Implications

Allowing service members to choose among alternative combinations of various types of rewards would increase their satisfaction level. Potential areas for increasing their scope for choice include:

- Increased flexibility in the components of the uniformed services compensations system;
- More flexibility in choosing among career fields and tracks within career fields; and
- Greater attention to the role of intrinsic rewards, including redesigning jobs to increase their potential for providing such rewards.

As the discussion in the previous section demonstrated, a worker's lack of flexibility in choosing among equally costly combinations of compensation elements may confine him or her to a lower level of satisfaction than he or she could otherwise reach.

Bounded Rationality

The literature on decision-making with incomplete information demonstrates that "when information is costly to gather, and cognitive processing ability is limited, it is not even rational to make fully informed choices of the sort portrayed in simple models [like the one described above]. Paradoxically, it is irrational to be completely well informed!"[14] That is, our ability to act rationally is often limited by the cost, time, and level of knowledge required to gather and analyze information. As a result,

> [W]e rarely reach a solution in a neat, linear fashion. Rather, we search in a haphazard way for potentially relevant facts and information, and usually quit once our understanding reaches a certain threshold. Our conclusions are often inconsistent, even flatly incorrect. But much of the time, we come up with serviceable, if imperfect, solutions.[15]

That is, we often act as "satisficers" rather than maximizers. In cases like these, casual observation of individual behavior when information is incomplete may *seem* to indicate that such behavior violates the predictions of the rational-choice model. Nevertheless, closer examination reveals that the expected cost of searching for and analyzing additional information in these cases exceeds the expected benefits from the search and analysis. Hence, taking those costs into account, satisficing is a rational response to incomplete information.

. . . a worker's lack of flexibility in choosing among equally costly combinations of compensation elements may confine him or her to a lower level of satisfaction than he or she could otherwise reach.

[14] Frank, Robert, *Microeconomics and Behavior*, (New York, NY: McGraw Hill, 1994), p. 283.

[15] Ibid.

Policy Implications

Bounded rationality reinforces the potential advantages to both the organization and its workers for the organization to (1) avoid unnecessary complexity in its compensation system, including the role of intrinsic rewards, and (2) provide workers with adequate, well-designed information and training on the compensation system, while avoiding overwhelming them with details. Depending on the complexity of some of the system's features (for example, 401(k) and other retirement plans), the level of financial sophistication of individual workers will influence the type and extent of information and training required.[16]

The Asymmetric Value Function

. . . Kahneman and Tversky have demonstrated that people often behave in ways that are inconsistent with rational choice . . .

Quite apart from the bounded-rationality problem, cognitive psychologists Kahneman and Tversky have demonstrated that people often behave in ways that are inconsistent with rational choice, even in certain types of transparently simple situations. This class of situations involves how a person evaluates the effect of a collection of two or more events on his or her total satisfaction or wealth.

A Reexamination of the Rational-choice Model

The rational-choice model assumes that a person evaluates events or collections of events in terms of their *net, or overall, effect on total wealth or satisfaction.*[17] For example, consider a situation in which a person simultaneously experiences two events, *A* and *B*. In event *A* the person receives a gift or wins a cash prize of $100. In *B* the person incurs an unplanned, unavoidable cash loss or expense of $80 for something like an unanticipated car repair. The rational-choice model assumes the person would consider the *net value of the combination* of these two events, which increases his or her total wealth by $20. As a result, he or she would feel better off after this combination of events than before it and would behave accordingly.

Figure 6-5 illustrates this outcome for a standard utility function, in which the person's total satisfaction increases with the level of his or her wealth, subject to the law of diminishing marginal utility.[18] Let this person's initial level of wealth be W_0 and his or her corresponding satisfaction level U_0. The combined effect of events *A* and *B* above is to increase this person's total wealth to $W_0 + 20$ and his or her satisfaction level to U_1.

[16] Citing experimental results found by Tversky that reinforce this point, Frank concludes, "[P]eople simply have difficulty choosing between alternatives that are hard to compare. . . . [I]n practice, it often seems to require a great deal of effort for us to decide how we feel about even very simple alternatives" (300-302, 304). (The "irrelevant alternative" problem is one example.) Greater complexity in alternatives seem likely to make such choices even more difficult.

[17] Ibid., pp. 283-284. This section relies heavily on Frank's discussion.

[18] Based on an example from Frank (ibid.). For purposes of illustration, we assume neither event involves any further benefit, expense, or inconvenience to the person (from, say, taxes, reimbursement from insurance, etc.), so that the person is truly $20 wealthier than before.

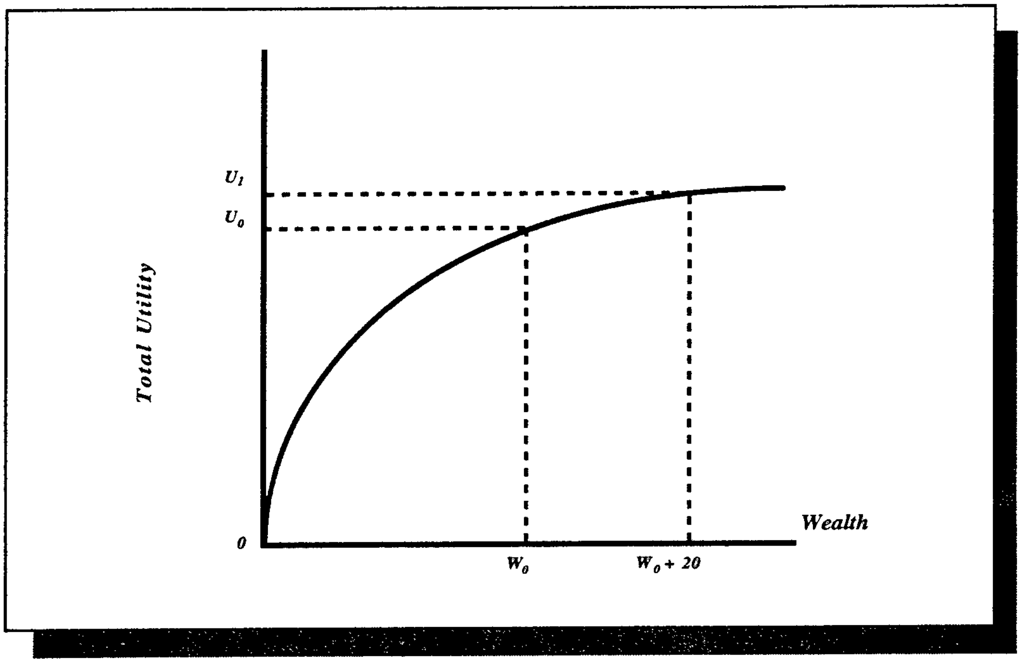

Figure 6-5. A Standard Total Utility Function

The Kahneman-Tversky Asymmetric Value Function

In contrast to the behavior implied by the rational-choice model, Kahneman and Tversky found that, in both controlled experiments and a significant variety of actual situations, some people did *not* behave as though such a combination of events increased their total wealth. In fact, they behaved as though the combination decreased their wealth! To help explain this "irrational" behavior, Kahneman and Tversky propose that some people evaluate alternatives based on a *value function* defined over *perceived changes* in wealth instead of on the alternatives' *net* effect on wealth, as the conventional utility model assumes. Specifically, their model makes three *assumptions* about this type of behavior: [19]

- People first evaluate each separate event individually, then add those separate values together, instead of evaluating just the net wealth effect of the combination of events. That is, their value functions are defined over *changes* in wealth instead of over levels of wealth, as the rational-choice model assumes.

[19] Amos Tversky and Daniel Kahneman (1981), "The Framing of Decisions and the Psychology of Choice," *Science*, Vol. 211, pp. 453-458, cited in Frank, p. 283, fn. 1. Frank emphasizes that this behavioral model has no normative significance. Namely, just because such models predict that people will behave in a certain way, or attempt to explain why they do so, doesn't mean that people should behave in that way. The rational-choice model guides us toward decisions that are "better" according to its criteria, and people tend to agree on the whole with those criteria, at least on reflection. Frank concludes, "In this respect, behavioral models of choice [like the Kahneman-Tversky model] are an important tool for helping us avoid common pitfalls in decision making" (p. 304).

- People weight losses much more heavily in their decisions than they do gains; that is, they treat gains and losses *asymmetrically*.[20] This means their value functions are much steeper in losses than they are in gains.
- Their value functions are concave from below in gains and convex from below in losses. Namely, analogous to the law of diminishing marginal utility, ". . . the impact of incremental gains or losses diminishes as the gains or losses become larger,"[21] at least beyond some point.

People weight losses much more heavily in their decisions than they do gains . . .

Figure 6-6 shows a value function that fits these assumptions. In this example function, the person assigns a significantly larger value to the \$80 loss than to the \$100 gain, so he or she evaluates the net value of the two events, *V(100) + V(-80)*, as making him or her *worse* off, rather than better off, despite the \$20 increase in total wealth. Under the rational-choice model, he or she would instead evaluate the net *gain* in value as *V(20)*.

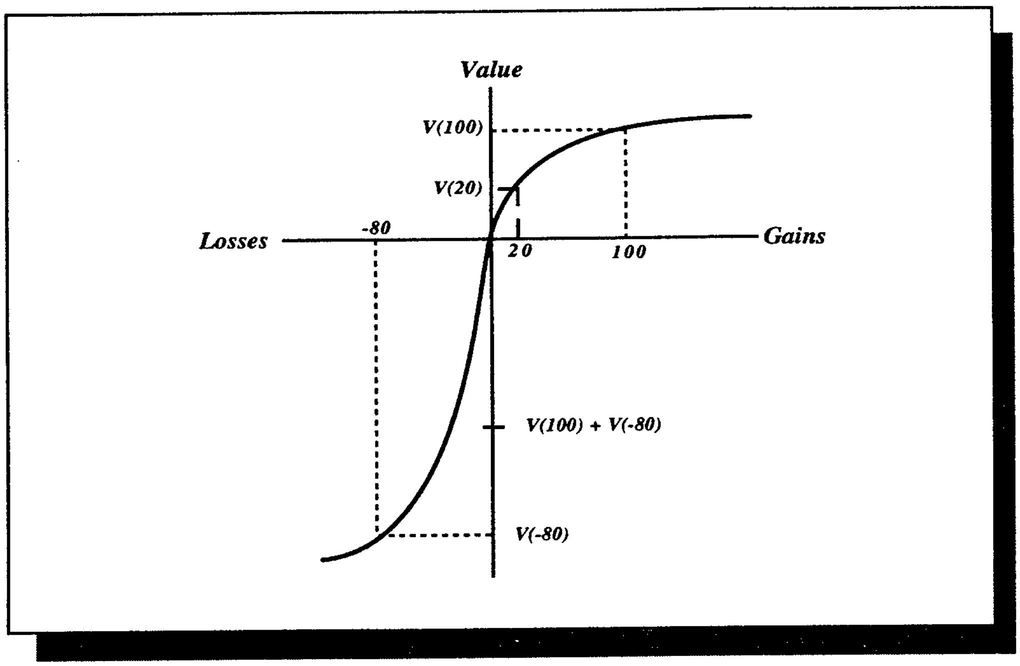

Figure 6-6. A Kahneman-Tversky Value Function

Note that the contrast in these two results essentially depends on how a person chooses to frame the events – that is, whether the person first combines the monetary value of the two events, then evaluates the effect of the *net change in wealth* on his or her level of satisfaction as a single event; or whether he or she first evaluates the

[20] As Frank points out, this assumption doesn't necessarily imply irrational behavior. "There is nothing inconsistent, after all, about feeling that a loss causes more pain than the happiness caused by a gain of the same magnitude. What does often appear irrational is the second step – treating each event separately, rather than considering their combined effect" (ibid., pp. 285-286).

[21] Ibid., p. 284.

separate impact of each event on his or her level of satisfaction, then evaluates the *net change in satisfaction*. Hence, "[S]ubtle differences in the framing of the problem can shift the mental reference point used for reckoning gains and losses, which, in turn, can produce radically different patterns of choice." If someone pointed out to this person that the combined result of events *A* and *B* was clearly a $20 increase in wealth, he or she might well behave as the rational-choice model predicts.[22]

A Case Study[23]

Frank's example of employees' actual choices between two corporate medical insurance plans illustrates the type of behavior predicted by the Kahneman-Tversky value function. The *original plan* had the following features:

- It paid 100 percent of all covered medical expenses.
- The premium was about $500/year per family.

Under the *new plan*:

- There was a $200 deductible; above that level of expenses, the insurance paid 100 percent.[24]
- The premium for the new plan was $250/year per family (half the original plan's premium).

Finally, employees could choose to stay with the original plan or switch to the alternative at no cost, other than those already described.

According to the rational-choice model, the new plan was clearly more beneficial financially:

- The $250 saving in premiums alone would more than compensate an employee for the $200 deductible.
- Beyond that deductible, the new plan paid for all covered expenses.
- Families that incurred less than $200/year in medical expenses would be even better off under the new plan, because they'd have the balance to spend in anyway they chose.

Nevertheless, according to Frank, *many employees preferred to remain on the original plan*. This behavior is consistent with the Kahneman-Tversky model, if their value functions were sufficiently asymmetric (like the one in Figure 6-6) and if they framed the $250 decrease (saving) in their premium separately from the potential $200 out-of-pocket cost for the new deductible if they had any claims.

[22] Ibid., p. 286.
[23] Ibid., p. 286.
[24] Although Frank doesn't address the point, presumably both plans covered the same types of medical expenses.

Implications for Compensation Strategy

Subsequent research and experiments conducted by economist Richard Thaler suggest four specific strategies that take advantage of the properties of an asymmetric value function to enhance the appeal of gifts, sales packages, and so on, or to reduce the perceived impact of losses.[25] These strategies apply directly to influencing how employees may perceive changes in compensation policy that affect extrinsic rewards, intrinsic rewards, and (or) other job characteristics.

Policy Implications

- **Segregate gains.** As Frank points out, "Because the value function is concave in gains, a higher total value results when we decompose a large gain into two (or more) smaller ones."[26] This is the same principle that leads us to wrap presents in separate boxes, not in a single one.
- **Combine losses or costs.** "The convexity of the value function [for losses] implies that two separate losses will appear less painful if they are combined into a single, larger loss."[27] In other words, "Don't cut off the dog's tail one inch at a time."[28]
- **Offset a small loss with a larger gain, presented as a combined package.** By offsetting a small loss with a larger gain, and *emphasizing the net increase* in total wealth, combining the two events avoids the steepest section of the loss function.
- **Segregate small gains from large losses.** The separate small gain acts as a "silver lining,"[29] leaving the person feeling better off than would be the case if he or she instead evaluated the loss based on the net decrease in his or her wealth.

[25] Richard Thaler, "Mental Accounting and Consumer Choice," *Marketing Science*, Vol. 4, 1985; cited in Frank, p. 288, fn. 3.
[26] Frank, pp. 288-289.
[27] Ibid., pp. 289-290. This recommendation is also consistent with many common marketing practices. In new-home construction, it is common to include the cost of many construction add-ons or upgrades in the purchase price. Similarly, in new-car sales, factory-installed "options" and dealer add-ons are usually included in the purchase price. In terms of the asymmetric value function model, these practices are consistent with the likelihood that the buyer is already so far out on the (flatter) loss part of the value function that the additional cost of the add-ons adds comparatively little to his sense of the total cost (loss). This consideration reinforces any incentives for these practices that might result from the more-favorable financing terms usually available for the total "package," or from any tax advantage or greater convenience these practices might offer.
[28] Norman R. Augustine, President and CEO, Lockheed Martin Corp., remarks to the Forum on Strategic Human Resources Management in the Department of Defense, February 14, 1996.
[29] Thaler (1985), cited in Frank, p. 291.

APPENDIX A
TECHNICAL APPENDIX

Properties of Indifference Curves

Except in special cases, indifference curves have the following properties: [1]

- *They are negatively sloping.* This reflects our basic assumption that the worker places a positive value on both types of job characteristics. (This is the fundamental characteristic of a *good.*) Hence, if the worker gets more of one good, he or she must give up some amount of the other in order to remain on the same indifference curve, and vice versa.
- *They do not touch or intersect another indifference curve.* If they did, it would imply a logical contradiction in the worker's behavior. For example, consider the two indifference curves shown in Figure A-1. These curves imply that the worker is indifferent between combinations *a* and *b*, and between *a* and *x*. Hence, transitivity of choices requires that he or she be indifferent between *x* and *b*. However, observe that *x* contains more of both job characteristics than *b* does. Therefore, the worker must prefer *x* to *b*, contradicting our previous conclusion that he or she is indifferent between them. Because it is logically impossible for the worker to simultaneously prefer *x* to *b* and be indifferent between them, we must rule out the possibility that indifference curves may touch or intersect each other.

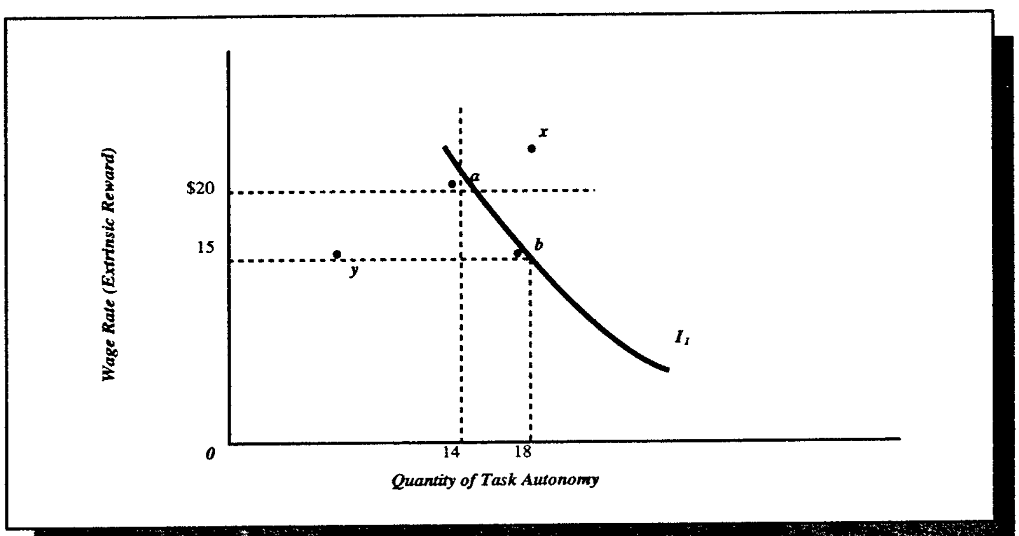

Figure A-1. Intersecting Indifference Curves

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[1] Example special cases include negatively sloped, straight-line indifference curves (namely, the two goods are perfect substitutes), L-shaped curves (perfect complements), and perfectly horizontal or vertical indifference curves (one good or the other has zero marginal utility).

- *They are convex to the origin.*[2] Think of the worker as moving (voluntarily) from combination *a* to combination *b* along indifference curve I_1 in Figure A-1. As he or she does so, the greater task autonomy he or she receives increases the amount of task autonomy he or she enjoys from this source. Recall that the law of diminishing marginal utility implies that, other things held constant, equal increments of task autonomy will yield smaller and smaller increases in total satisfaction. At the same time, the worker is (voluntarily) accepting a lower wage rate. As the wage rate falls, and with it his or her ability to buy other goods and services, the marginal utility of wages would increase. Combining these two observations implies that, as the worker moves from upper left to lower right along an indifference curve, the amount of wages he or she would voluntarily give up in exchange for an additional unit of task autonomy would decrease. That is, moving from upper left to lower right, the slope of the indifference curve must get smaller and smaller (in absolute value). This requires that the indifference curve be convex to the origin.

The Budget Line

Geometric Interpretation

Denote the quantity of task autonomy at any point by R, the wage rate by W, the constant price of an additional unit of task autonomy by p_R, and the constant price of an additional "unit" of wages by p_W. Assume that the worker's compensation budget is fixed at CB_I. If the individual were to take his or her entire compensation budget in the form of wages, and use none of it to "buy" more job autonomy, he or she would receive a money income equal to CB_I / p_W. This is the vertical intercept of the budget line, as shown in Figure A-2. Similarly, if the worker were to "spend" his or her entire compensation budget on job autonomy (and, hence, receive no money income), he or she could buy a number of "units" of job autonomy equal to CB_I / p_R. This is the budget line's horizontal intercept. As demonstrated below, the slope of this isocost line is $-(p_R / p_W)$. By noting that p_W, the "price" of an additional "unit" of wages, is \$1, we can simplify the slope to $-p_R$, which is just the price of an additional unit of task autonomy. Similarly, the vertical intercept becomes just CB, the value of the compensation budget.

For the budget CB_I, the worker could afford any combination of wage rates and job autonomy along the straight line connecting these two end-points, as shown in Figure A-2. Note that the higher the compensation budget CB, the farther from the origin the budget line will be.

---

[2] This economic property is known as the law of diminishing marginal rate of substitution (MRS). At any point on an indifference curve, the MRS is defined as the absolute value of the slope of the indifference curve at that point. A full explanation of this property requires some differential calculus and is beyond the scope of this paper. For a more advanced treatment, see Miltiades Chacholiades, *Microeconomics* (New York, NY: Macmillan, 1986), pp. 93-96, 555-557; and Alpha C. Chiang, *Fundamental Methods of Mathematical Economics*, 3d ed. (New York, NY: McGraw-Hill, 1984), pp. 400–404.

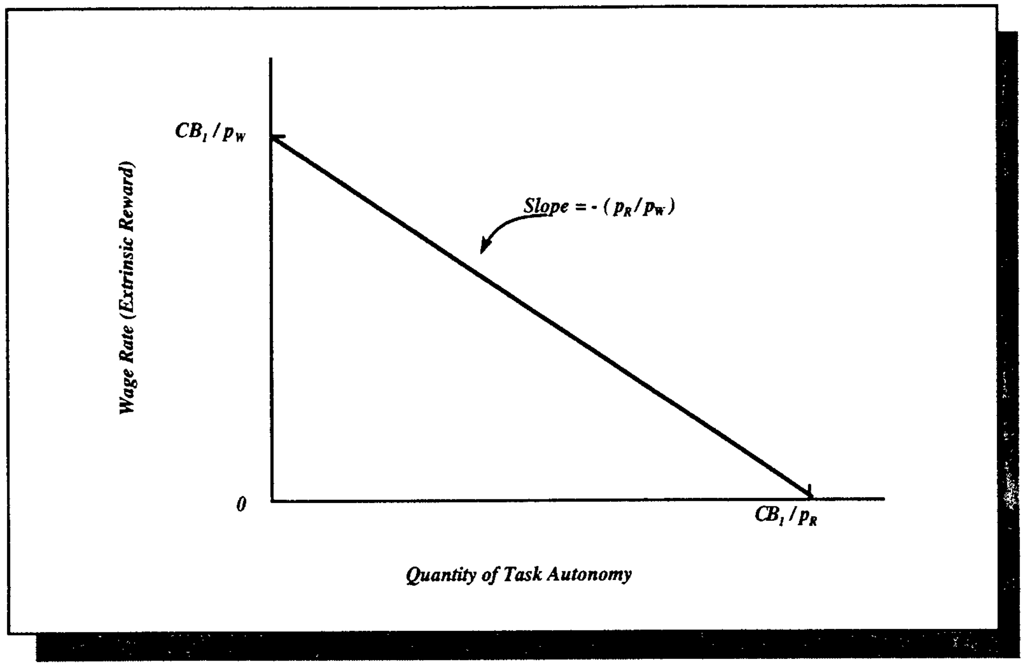

Figure A-2. A Compensation Budget Constraint

Algebraic Derivation

In general, the compensation budget *CB* required to buy any combination of task autonomy and wages is given by

$$CB = p_R \bullet R + p_W \bullet W.$$

Solving for W gives the equation of any straight line passing through any point, like point *a* in Figure 6-4:

$$W = -(p_R / p_W) \bullet R + (CB / p_W).$$

The slope of this line is $-(p_R / p_W)$, the coefficient of the *R* term, and the vertical intercept is (CB / p_W). (Its horizontal intercept is (CB / p_R), as shown in Figure A-2.) Again, by noting that the "price" of an additional "unit" of wages is $1, we can simplify the slope to $-p_R$, which is just the price of an additional unit of task autonomy. Similarly, the vertical intercept becomes just *CB*, the value of the compensation budget at any point along this straight line.

Note that from the organization's perspective, the value of the worker's compensation budget is the organization's total cost of providing this combination of wages and task autonomy. This demonstrates that any combination of these two job characteristics lying on a straight line would have the same total cost *CB*, given p_R, as asserted in the discussion of Figure 6-4.[3]

Nonlinear Budget Constraints

To simplify the illustration above, we have assumed that the price of an additional "unit" of task autonomy is constant. This might not be the case. In some instances, the process of producing the job characteristics (like task autonomy) that provide the basis for intrinsic rewards may be subject to the law of diminishing marginal productivity. For example, in redesigning jobs to provide greater potential for intrinsic rewards for workers, an organization that is acting rationally would first make those changes that are likely to have the greatest effect per dollar spent on them. Hence, subsequent changes would probably yield fewer benefits per dollar expended on them than the initial redesigns did. As a result, the marginal cost of producing additional units of nonwage job characteristics would increase. Given the fixed compensation budget associated with any compensation budget line, this means that wages would have to fall by larger and larger amounts to offset the higher cost of producing additional units of nonwage job characteristics. Hence, the marginal cost of an additional unit of such job characteristics would increase, and the budget line would be concave to the origin, as shown in Figure A-3.

[3] Hence, from the organization's perspective, this line would be called an isocost, or equal-cost, line. Economics texts normally use the term isocost line in the context of an organization's resource-allocation decisions, for example, buying combinations of inputs for its production process. In the context of a person's decisions about choosing among alternative combinations of goods and services, or among alternative combinations of compensation elements, the analogous concept is the budget line. Algebraically, the two are identical; all the properties discussed above apply to both. Nevertheless, there is a significant conceptual distinction between the two. Given his income from all sources, we can treat a person's total budget for any given period of time as fixed. (It is fairly easy to adapt the model to include apparent exceptions to this general conclusion. "Income from all sources" includes monetary gifts. We can also consider it to include any borrowing or dissaving, which would be limited by the person's credit limit, accumulated wealth, and his other financial characteristics.) We can think of the person's objective as attempting to maximize his satisfaction (namely, to reach the highest indifference curve possible), subject to his income or budget constraint.

On the other hand, if an organization is deciding which level of output to produce (thus, which combination of inputs to hire to produce that output), its total cost budget is one of the results of the decision process, not a given parameter. That is, the firm must incur the cost necessary to buy the combination of inputs required to produce its desired level of output, and the cost will vary with the level of output. If the organization wants to increase its output level, it must hire more inputs and incur the correspondingly higher costs, other things being equal. Using budget line to refer to individuals and isocost for organizations recognizes this practical distinction, even though the two are mathematically equivalent.

The discussion in the preceding paragraph gives the constrained minimization form of the production problem: given the desired level of output to be produced, the organization should choose the combination of inputs that minimizes the total cost of producing that level of output. The mathematical dual of this form is the constrained maximization problem: given a total cost budget, the organization seeks the combination of inputs that will maximize the quantity of output it can produce with that budget. Mathematically, the two problems are equivalent to each other.

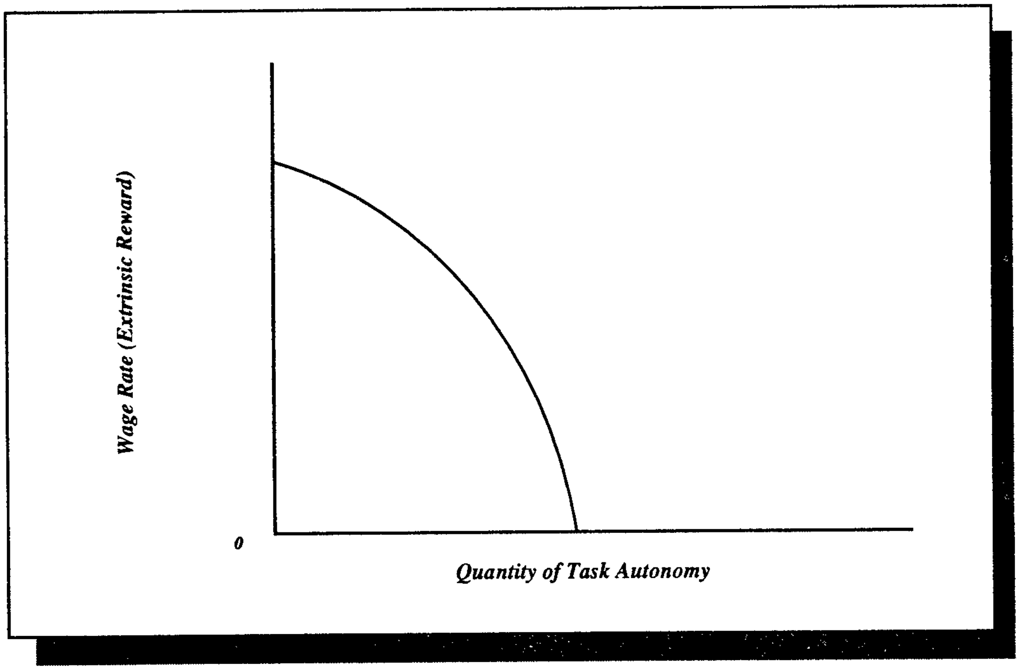

Figure A-3. Nonlinear Compensation Budget Constraint

The Optimal Compensation Package

Graphical Solution

Recall that a worker's budget line shows the various combinations of job characteristics he or she can afford, given his or her compensation budget, while his or her indifference map shows the amount of satisfaction that any combination of job characteristics gives him or her. We can think of a combination of these job characteristics as being the components of a compensation package. Figure A-4 combines one of the worker's possible budget lines with his or her indifference map to demonstrate his or her *optimal compensation package*, namely, the combination of compensation elements that gives him or her the *maximum* satisfaction possible from his or her compensation budget.

To maximize his or her satisfaction, the worker must choose the combination of compensation elements that puts him or her on the highest indifference curve he or she can reach, given the size of his or her compensation budget. Graphically, his or her optimal combination is shown by point *a*, where the budget line is tangent to the highest possible indifference curve, I_2 in this case.[4] By selecting the combination represented by wage rate W_1 and task autonomy level R_1, the worker maximizes the satisfaction he or she receives from his or her given compensation budget.

[4] It is purely coincidental that point a lies at approximately the midpoint of the budget line. The location of the tangency point will depend on the slopes of the budget line and indifference curves.

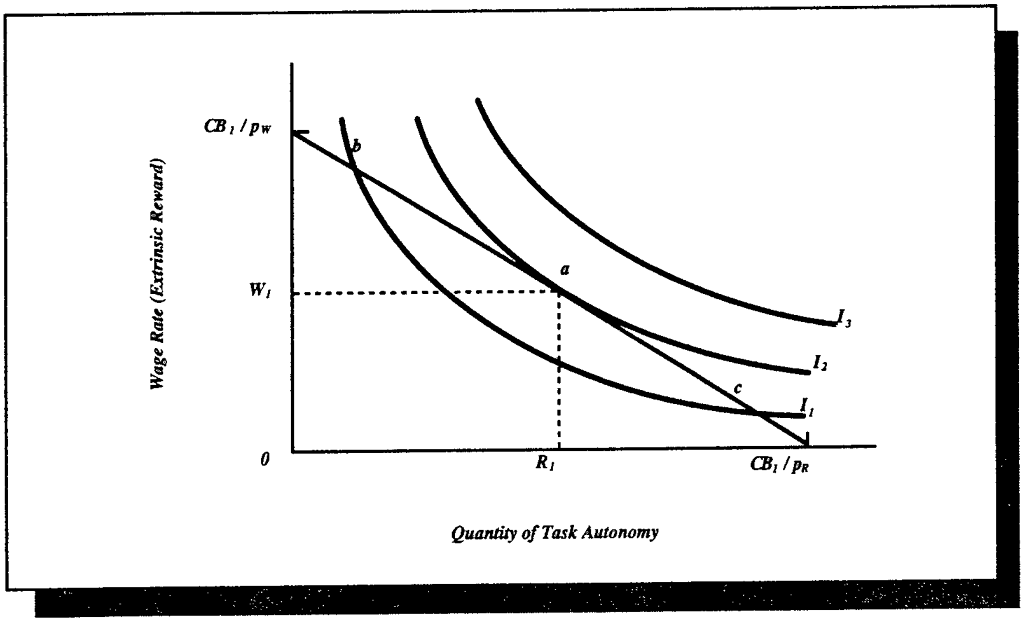

Figure A-4. The Worker's Optimal Compensation Package (Linear Budget Constraint)

Note that the worker could also afford the combinations represented by points *b* and *c*, because they both lie on the same budget line as *a*. However, combination *a* is on a higher indifference curve than any other combination on this budget line. Hence, the worker would prefer combination *a* to all the other combinations he or she could afford, like *b* and *c*. In addition, note that the worker would clearly prefer to be able to reach an even higher indifference curve than I_2, but he or she can't afford to do so, given compensation budget CB_1.[5]

Mathematical Solution

In general, the worker's optimal compensation package is given by the solution to a constrained optimization problem, in which we seek to maximize the worker's satisfaction subject to his or her budget constraint. Let $U = U(W, R)$ describe the worker's utility, or preference, function.[6] We want to maximize this objective function subject to the compensation budget constraint

$$CB = p_W \cdot W + p_R \cdot R,$$

where p_W and p_R are constants.[7]

[5] Because individual workers are likely to differ in their tastes for wages and nonwage job characteristics, their indifference maps would differ from the one shown in Figure A-4. Hence, their tangency points, representing their respective optimal compensation packages, would likely occur at a different combination of compensation elements than point *a*.

[6] The utility function and the subsequent first- and second-order conditions can be extended to include any number of variables.

[7] As discussed previously, if providing workers with job autonomy and other intrinsically rewarding aspects of the job is subject to the law of diminishing returns, the price the organization "charges" for additional units of such intrinsically rewarding job characteristics isn't likely to be constant over wide ranges. As explained above, this price would increase as the quantity provided increases. In this case, $p_R = f(R)$, with $df(R)/dR > 0$. In the first- and second-order conditions below, the constant p_R term should be replaced with $df(R)/dR$.

The first-order conditions for maximizing $U = U(W, R)$ are given by:

$$\frac{LU/LW}{p_W} = \frac{LU/LR}{p_R}$$

The values of W and R that satisfy the first-order conditions correspond to the tangency point in Figure A-4.

The second-order conditions require that the following bordered Hessian determinant be positive:

$$\begin{matrix} 0 & p_W & p_R \\ p_W & U_{WW} & U_{WR} \\ p_R & U_{RW} & U_{RR} \end{matrix}$$

$$= 2p_W p_R U_{WR} - p_R^2 U_{WW} - p_W^2 U_{RR} > 0,$$

with all the derivatives evaluated at the values of W and R that satisfy the first-order conditions, for example, W_1 and R_1 in Figure A-4. Geometrically, the second-order conditions mean that the indifference curves must be convex to the origin at the optimal combination of compensation elements. Together, the first- and second-order conditions constitute the necessary and sufficient conditions for a local maximum of the utility function, $U = U(W, R)$.

Changes in the Compensation Package

As mentioned in the preceding discussion, increases in the level of the worker's compensation budget shift the budget line outward; decreases shift it inward. Because the slope of the budget line is determined by the price ratio $-(p_R / p_W)$, the new budget lines would be parallel to the original one as long as the relative prices of the two compensation components remain constant. Figure A-5 shows three possible budget lines, CB_1, CB_2, and CB_3, drawn so they are tangent to three of the worker's indifference curves. Given this worker's preference map, note that he or she responds to increases in his or her compensation budget by increasing the amount he or she "consumes" of both types of job characteristics. [8]

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[8] It is theoretically possible that, beyond a certain level of income, he might decrease his consumption of one of the job characteristics if his income increases. For a normal good, consumption increases with income, while it decreases for an inferior good. (Example inferior goods include used clothes and cars, hamburger meat, canned processed meat parts, and generic products.)

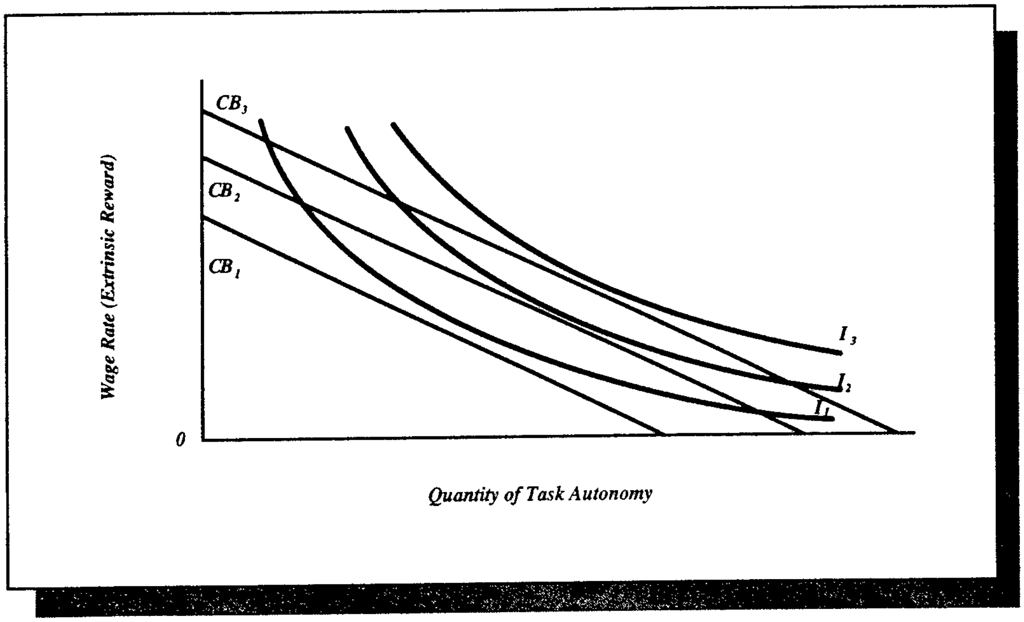

Figure A-5. Isoquant and Budget Constraint Maps (Linear Budget Constraints)

The organization that employs the worker typically determines the compensation budget constraint the worker faces.[9] *If the organization is already operating as efficiently as possible*, increases in the total value of compensation increase the organization's operating costs, other things being equal. From the organization's perspective, the worker's compensation budget line is a compensation *isocost* line. Hence, the organization's operating budget will constrain the level of compensation it can offer its workers. (In a for-profit firm, compensation increases would decrease the firm's profits, other things being equal, and the firm's target profit level would constrain the compensation it offered.)[10]

[9] Even in those team-based pay schemes that allow team members to determine the compensation of each team member, we can think of the decision as being made by team "organization," subject to the compensation budget it is given by the parent organization.

[10] The compensation budget lines can also be viewed as isoprofit, or same-profit, lines. Because higher compensation budget lines represent higher total compensation costs, they also represent lower profit levels for the firm.

BIBLIOGRAPHY

Algera, Jen A. "'Objective' and Perceived Task Characteristics as a Determinant of Reactions by Task Performers." *Journal of Occupational Psychology,* Vol. 56, No. 2, pp. 95-107. Cited in Ivan T. Robertson and Mike Smith. *Motivation and Job Design: Theory, Research and Practice.* Bradford on Avon, Great Britain: Dotesios, 1985.

Ainslie, Kenneth. *Variable Compensation Design and Utilization.* Briefing by TRW to the Council for Excellence in Government, Washington, DC, February 5, 1996.

Anthony, William P., Pamela L. Perrewe and K. Michele Kacmar. *Strategic Human Resource Management.* Orlando, FL: Harcourt Brace Johanovich, 1993.

Argyris, Chris. "Good Communication That Blocks Learning." *Harvard Business Review* (July-August 1994), pp. 77-85.

Augustine, Norman R. (President and CEO, Lockheed Martin Corp.). Remarks to the Forum on Strategic Human Resources Management in the Department of Defense, February 14, 1996.

Barth, Thomas J. "Career Anchor Theory." *Review of Public Administration* (Fall 1993), pp. 27-42.

Barton, R. and W. L. Chappell, Jr. *Public Administration: The Work of Government.* Glenview, IL: Scott, Foresman and Company, 1985.

Baytos, Kimberly and Brian H. Kleiner. "New Developments in Job Design." *Business Credit* (February 1995), pp. 22-25.

Bennis, W. G. "Transformative Power and Leadership," in T. J. Sergiovanni and J. E. Corbally (Eds.), *Leadership and Organizational Culture*, Urbana, IL: University of Illinois Press, 1984, pp. 64-67.

Bennis, W. G. and B. Nanus. *Leaders: The Strategies for Taking Charge.* New York, NY: Harper & Row, 1985.

Brockner, Joel, Robert Houser, Gregg Birnbaum, Kathy Lloyd, Janet Deitcher, Sinaia Nathanson, and Jeffrey Z. Rubin. "Escalation of Commitment to an Ineffective Course of Action: The Effect of Feedback Having Negative Implications for Self-Identity." *Administrative Science Quarterly,* Vol. 31, 1986, pp. 109-126.

Campbell, J. P. "Modeling the Performance Prediction Problem in Industrial and Organizational Psychology," in *Handbook of Industrial and Organizational Psychology,* M. Dunnette and L. Hough, (eds.), Palo Alto, CA: Consulting Psychologists Press, 1990, pp. 687-732.

Carlisle, Ysanne M. and David J. Manning. "The Concept of Ideology and Work Motivation." *Organization Studies,* Vol. 15, No. 5 (1994), pp. 683-703.

Caudron, Shari. "The Top 20 Ways To Motivate Employees." *Industry Week*, (April 3, 1995).

Caudron, Shari. "Motivating Creative Employees Calls for New Strategies." From the Internet.

Chacholiades, Miltiades. *Microeconomics.* New York, NY: Macmillan, 1986.

Chappell, Thomas. President of Tom's of Maine, letter to the editor in *Harvard Business Review* (May-June 1994), p. 146.

Chiang, Alpha C. *Fundamental Methods of Mathematical Economics.* 3d ed. New York, NY: McGraw-Hill, 1984.

Conger, Jay A. and Rabindra N. Kanungo. "The Empowerment Process: Integrating Theory and Practice." *Academy of Management Review*, Vol. 13 (1988), pp. 471-482.

Cooper, C. L. and S. Cartwright. "Healthy Mind, Healthy Organization – A Proactive Approach to Occupational Stress." *Human Relations*, Vol. 47, No. 4 (April 1994), pp. 455-471.

Covey, Stephen R. Founder and Chairman of Covey Leadership Center, letter to the editor in *Harvard Business Review* (May-June 1994), p. 148.

Csikszentmihalyi, Mihaly. *Flow: The Psychology of Optimal Experience.* New York, NY: Harper and Row Publishers, 1990.

Davis, John H. "Why Rewards Undermine Performance: An Exclusive Interview with Alfie Kohn." *ACA Journal*, (Summer 1995), pp. 6-17.

Deci, Edward L. and Richard M. Ryan. *Intrinsic Motivation and Self-Determination in Human Behavior.* New York, NY: Plenum Press, 1985.

Deci, Edward L. *Why We Do What We Do: The Dynamics of Personal Autonomy.* New York, NY: G. P. Putnam's Sons, 1995.

Department of Defense (1), *Military Compensation Background Papers,* Washington, DC: U.S. Government Printing Office, 1991.

Department of Defense (2), *Modernizing Military Pay: The Report of the First Quadrennial Review of Military Compensation* (Vol. II, Appendix VI, Tab D), Washington, DC: U.S. Government Printing Office, 1967.

Department of Defense (3), "Report of the Third Quadrennial Review of Military Compensation" in *Military Compensation: A Modernized System. The Report and Staff Studies of the Third Quadrennial Review of Military Compensation* (Vol. 1, Tab A), Washington, DC: U.S. Government Printing Office, 1976.

Department of Defense (4), "The Military Factor," in *Military Compensation: A Modernized System. The Report and Staff Studies of the Third Quadrennial Review of Military Compensation* (Vol. III, Tab H), Washington, DC: U.S. Government Printing Office, 1976.

Derr, C. Brooklyn. "More on Career Anchor Concepts: The Case of U.S. Naval Officers." Monterey, CA: Naval Postgraduate School (NPS54-79-007), 1979.

Fein, 1980, referenced in Hay Group, *Extrinsic and Intrinsic Motivation.* Briefing to the 8th QRMC, Arlington, VA, February 13, 1996.

Fielder, F. E. "The Contingency Model: A Theory of Leadership Effectiveness," in C. W. Backman and P. F. Secord (Eds.), *Problems in Social Psychology.* New York, NY: McGraw-Hill, 1966.

Fielder, F. E. and M. M. Chemers. *Leadership Style and Effective Management.* Glenview, IL: Scott, Foresman and Company, 1974.

Fincham, Robin and Peter S. Rhodes. *The Individual, Work and Organizations.* London: Weidenfeld and Nicolson, 1988.

Frank, Robert. *Microeconomics and Behavior.* New York, NY: McGraw Hill, 1994.

French, J. R. and R. D. Caplan. "Organizational Stress and Individual Strain." In A. Marlow (Ed.), *The Failure of Success*, 1970.

Gilbert, Harold, and Meredith Cash to Hannah Robinson, who in turn released their comments in a collection titled "Summary: Leadership and Management," July 6, 1995.

Gilbert, Harold, to Hannah Robinson, who in turn released Gilbert's comments in a collection titled "Summary: Leadership and Management," July 6, 1995.

Griffin, Ricky W. "Toward an Integrated Theory of Task Design," in *Research in Organizational Behavior,* ed. L.L. Cummings and Barry M. Straw, Greenwich, CT: JAI, 1987, pp. 79-120.

Griffin, Ricky W. and Gary C. McMahan. "Job Design, A Contemporary Review and Future Prospects." *CEO Publication* T 93-12 (232). October 1993.

Griffin, Ricky W., T. Bateman, S. Wayne and T. Head. "Objective and Social Factors as Determinants of Task Perceptions and Responses: An Integrated Perspective and Empirical Investigation." *Academy of Management Journal,* Vol. 30, pp. 501-523. Cited in Griffin and McMahan.

Hackman, J. Richard and Greg R. Oldham. *Work Redesign.* Reading, MA: Addison-Wesley, 1980.

Hackman, J. Richard, Greg Oldham, Robert Janson, and Kenneth Purdy. "A New Strategy for Job Enrichment." *The California Management Review* (Summer 1975), pp. 57-71.

Hall, Jay. "Americans Know How to be Productive if Managers Will Let Them." *Organizational Dynamics*, Vol. 22, No. 3 (Winter 1994), pp. 33-46.

Hall, referenced in Hay Group, *Extrinsic and Intrinsic Motivation.* Briefing to the 8th QRMC, Arlington, VA, February 13, 1996.

Handy, Charles. *Understanding Organizations.* New York, NY: Oxford University Press, 1993.

Hersey, P. and K. H. Blanchard. "Life Cycle Theory of Leadership." *Training and Development Journal*, (May 1969), pp. 26-34; referenced in Ott, p. 247.

Hitchcock, D. "Are You Parents to or Partners With Your Employees?" *Journal for Quality & Participation*, Vol. 17, No. 7 (December 1994), pp. 6-10.

Jago, Arthur G. "Leadership: Perspectives in Theory and Research." *Management Science*, Vol. 28, pp. 315–316, referenced in Michael D. Wisely, "Leadership and Human Motivation in the Workplace." *Quality Process*, Vol. 28, No. 11 (November 1995), pp. 86-87.

Karasek, R. and T. Thorell. *Healthy Work Stress, Productivity, and the Reconstruction of Working Life.* New York, NY: Basic Books, 1990. Cited in Daniel J. Steininger, "Why Quality Initiatives Are Failing: The Need to Address the Foundation of Human Motivation," *Human Resource Management* (Winter 1994), p. 609.

Kouzes, James M. and Barry Z. Posner. *The Leadership Challenge: How to Get Extraordinary Things Done in Organizations.* San Francisco: Jossey-Bass Publishers, 1991.

Lazear, Edward P. "Labor Economics and the Psychology of Organizations." *Journal of Economic Perspectives,* Vol. 5 (Spring 1991), pp. 89-110.

Leonard, Nancy H., Laura L. Beauvais and Richard W. Scholl. "A Self-Concept Based Model of Work Motivation." *Academy of Management Journal* (Iss. Best Paper Proceedings), 1995, pp. 322-326.

Lepper, Mark R. and Greene, David. *The Hidden Costs of Reward: New Perspectives on the Psychology of Human Motivation.* Hillsdale, N J: Lawrence Erlbaum Associates, Publishers, 1978.

Malin, Shlomo, to Hannah Robinson, who in turn released Malin's comments in a collection titled "Summary: Leadership and Management," July 6, 1995.

Martin, Thomas, and John C. Hafer. "Turnover is Linked to Job Involvement and Organizational Commitment." *Telemarketing*, Vol. 13, No. 12, pp. 106-111.

Mastering Global Leadership. Hay/McBer International, 1995.

McClelland, David C. and David H. Burnham. "Power is the Great Motivator." *Harvard Business Review* (January-February 1995), p. 130.

McConnell, Campbell R., and Stanley L. Brue. *Contemporary Labor Economics.* 3d ed. New York, NY: McGraw-Hill, 1992.

McCoy, Thomas J. *Compensation and Motivation.* New York, NY: American Management Association, 1992.

McGregor, D. M. *The Human Side of Enterprise.* New York, NY: McGraw-Hill, 1960, p. 180; quoted in Ott, p. 248.

Milgrom, Paul, and John Roberts. *Economics, Organization and Management.* Englewood Cliffs, NJ: Prentice Hall, 1992.

Miner, John B. *Theories of Organizational Behavior*, Hinsdale, IL: Dryden Press, 1980, p. 159; referenced in Hay Group, *Extrinsic and Intrinsic Motivation.* Briefing to the 8th QRMC, Arlington, VA, February 13, 1996.

Ministry of Defence (1), *Review Body on Armed Forces Pay: Twenty-Fourth Report,* United Kingdom: HMSO, 1995.

Ministry of Defence (2), "Managing People in Tomorrow's Armed Forces," *Independent Review of the Armed Forces' Manpower, Career and Remuneration Structures,* London: HMSO, 1995.

Motowidlo, Stephan J. and James R. Van Scotter. "Evidence That Task Performance Should Be Distinguished From Contextual Performance." *Journal of Applied Psychology,* Vol. 79 No. 4 (1994), pp. 001-006.

"New Marines Illustrate Growing Gap Between Military and Society." *The Wall Street Journal* (Wednesday, July 26, 1995).

Nichols, Martha. "Does New Age Business Have a Message for Managers?" *Harvard Business Review* (March-April 1994), pp. 52-60.

Organ, Dennis W. and Thomas S. Bateman. *Organizational Behavior.* Homewood, IL: Irwin, 1991.

Ott, J. Steven. *Classics Readings in Organizational Behavior.* Belmount, CA: Wadsworth Publishing, 1989.

Ott, J. Steven. *The Organizational Culture Perspective.* Chicago, IL: The Dorsey Press, 1989; referenced in Ott, p. 250.

Petri, Herbert L. *Motivation: Theory and Research.* Belmont, CA: Wadsworth Publishing Co., 1986.

Pindar, Craig C. *Work Motivation. Theory, Issues, and Applications.* London: Scott, Foresman & Co., 1984.

Porter and Lawler, *Expectancy Theory-Based Compensation and Reward,* 1968, referenced in Hay Group, *Extrinsic and Intrinsic Motivation.* Briefing to the 8th QRMC, Arlington, VA, February 13, 1996.

Princess, Donna, to Hannah Robinson, who in turn released Princess' comments in a collection titled "Summary: Leadership and Management," July 6, 1995.

Robbins, Stephen P. *Essentials of Organizational Behavior.* 3rd Ed. Englewood Cliffs, NJ: Prentice Hall, 1992.

Roberts, Karlene and William Glick. "The Job Characteristics Approach to Task Design: A Critical Review." *Journal of Applied Psychology,* Vol. 66, No. 2, pp. 193-217. Cited in Ivan T. Robertson and Mike Smith. *Motivation and Job Design: Theory, Research and Practice.* Bradford on Avon, Great Britain: Dotesios, 1985.

Robertson, Ivan T. and Mike Smith. *Motivation and Job Design: Theory, Research and Practice.* Bradford on Avon, Great Britain: Dotesios, 1985.

Roddick, Anita. Group Managing Director for The Body Shop International, letter to the editor in *Harvard Business Review* (May-June 1994), p. 146.

Rost, Joseph C. *Leadership for the Twenty-First Century.* New York, NY: Praeger, 1991.

Salancik, Gerald R. and Jeffrey Pfeffer. "A Social Information Processing Approach to Job Attitudes and Task Design." *Administrative Science Quarterly,* Vol. 23, No. 2 (June 1978), pp. 224-253.

Schein, Edgar H. *Organizational Psychology*, 3d Ed., Englewood Cliffs, NJ: Prentice Hall, 1980.

Schein, Edgar H. "Individuals and Careers" in *Handbook of Organizational Behavior,* Jay W. Lorsch (ed.), Englewood Cliffs, NJ: Prentice-Hall, 1987, pp. 155-171.

Schwartz, Howard S. "A Theory of Deontic Work Motivation." *Journal of Applied Behavioral Science* Vol. 14 (1983), pp. 204-214.

Sergiovanni, T. J. "Leadership as Cultural Expression," in T. J. Sergiovanni and J. E. Corbally (Eds.), *Leadership and Organizational Culture.* Urbana, IL: University of Illinois Press, 1984, pp. 105-144; quoted in Ott, p. 250.

Shafriz, J. M. *The Dorsey Dictionary of Politics and Government.* Chicago, IL: The Dorsey Press, 1988.

Shafriz, J. M. and J. S. Ott. *Classics of Organizational Theory* (2d ed., rev. and expanded), Chicago, IL: Dorsey Press, 1987.

Shalikashvili, General John M. "The Three Pillars of Leadership," *Defense Issues*: Vol. 10, No. 42.

Shamir, Boas. "Meaning, Self, and Motivation in Organizations." *Organization Studies,* Vol. 12, No. 3 (1991), pp. 405-424.

Skaggs, Kelli J., Alyce M. Dickinson and Kimberly A. O'Connor. *Pay for Performance: History, Controversy, and Evidence.* New York, NY: Haworth Press, Inc., 1992.

Steininger, Daniel J. "Why Quality Initiatives Are Failing: The Need to Address the Foundation of Human Motivation." *Human Resource Management*, Vol. 33, No. 4 (Winter 1994), pp. 601-616.

Stogdill, R. M. *Handbook of Leadership: A Study of Theory and Research.* New York, NY: Free Press, 1974.

Sullivan, Jerry J. "Self Theories and Employee Motivation." *Journal of Management,* Vol. 15, No. 2 (1989), pp. 345-363.

Thaler, Richard. "Mental Accounting and Consumer Choice." *Marketing Science,* Vol. 4 (1985). Cited in Frank, p. 288 fn. 3.

Thomas, Kenneth, and Erik Jansen. "Intrinsic Motivation in the Military, Part I: Models and Strategic Importance." Draft paper for the Eighth Quadrennial Review of Military Compensation, December 1995.

Thomas, Ken and Erik Jansen. *Intrinsic Motivation and the Military: Second Briefing.* Briefing to the 8th Quadrennial Review of Military Compensation (8th QRMC), Arlington, VA, January 23, 1996.

Thomas, Ken. *Intrinsic Motivation and the Military: An Initial Briefing.* Briefing to the 8th Quadrennial Review of Military Compensation (8th QRMC), Arlington, VA, October 19,1995.

Tichy, N. M. and M. A. Devanna. *The Transformational Leader.* New York, NY: John Wiley & Sons, 1986; referenced in Ott, p. 244.

Tichy, N. M. and D. O. Ulrich. "The Leadership Challenge-A Call for the Transformational Leader." *Sloan Management Review*, Vol. 26, pp. 59-68.

Tversky, Amos, and Daniel Kahneman. "The Framing of Decisions and the Psychology of Choice." *Science,* Vol. 211 (1981), pp. 453-458. Cited in Frank, 83 fn. 1.

Webber, Alan M. "Surviving in the New Economy." *Harvard Business Review*, (September-October 1994), pp. 76-92.

Wiersma, Uco J. "The Effects of Extrinsic Rewards in Intrinsic Motivation: A Meta Analysis." *Journal of Occupational and Organizational Psychology* (1992), pp. 101-114.

Wisley, Michael D. "Leadership and Human Motivation in the Workplace." *Quality Process*, Vol. 28, No. 11 (November 1995), p. 88

Working Paper on

Quantifying the Benefits of Changing the Way Organizations Reward, Organize and Manage People

June 30, 1997

Maj Tracy Urman, USAF

Chapter 1
Introduction

The discussion in the "Working Paper on Accounting for the Value of People: A Necessary Step in Implementing Strategic Human Resource Management" suggests how the department might approach the task of budgeting for human resources in a way that better captures, first, the value of those resources to the organization and, second, the benefit of alternative policies and practices that influence the value of people. The costs of alternative policies and practices are, if not trivial to calculate, much easier to calculate than the costs of benefits. As noted, the costs generally occur in the time frame in which the policies and practices are changed, while the benefits are not only often intangible but occur following, often by lengthy periods, the costs. This working paper describes how other organizations have captured the benefits of changes to human resource management policies and practices.

This perspective is important because the data that exist strongly suggest that strategic human resource management can make a substantial difference in organizational performance. In organizations that have been studied, significant improvements were observed in such broad-based measures as profit, market value, and market share, as well as in other, more limited – but equally important – measures, such as turnover, absenteeism and productivity. Although not all of these measures of performance are directly relevant to the department, these studies can serve to indicate the potential benefits of employing a strategic approach to human resource management – something quantifiable to offset the cost of change.

. . . if the human resource management system in the Department of Defense generated even half of the beneficial effects . . . evaluated in a recent study, . . . [it] could result in a 15 percent increase in productivity . . .

As outlined in greater detail below, if the human resource management system in the Department of Defense generated even half of the beneficial effects associated with the type of changes evaluated in a recent study of innovative private sector organizations – and assuming these changes were applicable to a total of 500,000 people and individuals cost $40,000 on average – these different policies and practices could result in a 15 percent increase in productivity; as a result, the workforce could be reduced by 75,000 for a total savings of $15 billion over a period of five years and still maintain the same level of output.

To apply the benefits of strategic human resource management in the context of a new way of budgeting for human resources, the department will have to develop and quantify measures more suitable to its environment and mission. This paper provides a framework and some specific data to begin that journey.

Chapter 2
A Taxonomy

In order to organize the available data from a sampling of the research available, the 8th Quadrennial Review of Military Compensation developed a two dimensional taxonomy, seen in Figure 1.

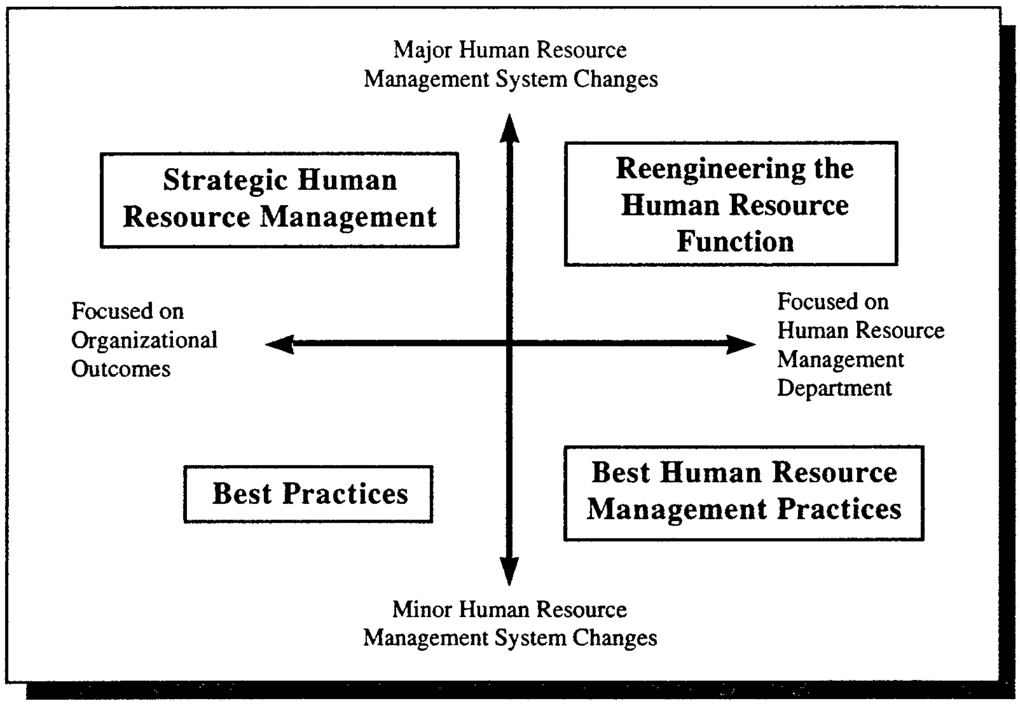

Figure 1 – Framework to Organize Data

The vertical axis denotes the range over which the magnitude of the change varies: whether the change to the human resource management policies and practices being studied was major – a change to the entire system or multiple integrated practices relatively simultaneously – or minor – a change to or examination of a single human resource management policy or practice.

The horizontal axis denotes where the effects of the change are realized. The effectiveness of the practice being examined could be measured in terms of the organization's outcomes or it could be measured as improving a human resource management function output (an improvement in internal human resource management department processes).

A description of the type of information resulting from studies within each quadrant follows:

- Strategic human resource management – The studies in this quadrant produce evidence linking employment of strategic human resource management or a major human resource management system change (multiple policy and practice changes) to organizational outcomes. A statement such as "Company X aligned and redesigned its human resource management system and productivity increased by 13.5 percent, profits rose 4.75 percent per year, etc." would be typical in studies in this quadrant. Although primarily affecting the human resource management function, some studies of changes in the policies and practices to support a major shift in the direction of that function fall into this quadrant because of their impact on the organization as a whole. Another category focuses on the policies and practices needed to support new roles that the human resource management department might take on in the future; such roles might include strategic partner and the center of excellence for outsourcing (human resource management activities as well as all other kinds of activities).

- Reengineering the human resource management department – The studies in this quadrant produce information about the effect of employing strategic human resource management or a major human resource management system change (multiple policy and practice changes) on the human resource management department. The number of studies in this category is small because changes of this magnitude are generally employed across the entire organization with the aim of improving overall company performance. Taking a leadership role, the human resource management function could choose to employ strategic human resource management to itself in order to demonstrate the efficacy of such an approach, in effect becoming a de facto pilot study. Because the uniformed services are so large, pilot studies of this nature would be prudent before undertaking a major restructuring of the human resource management system – and the human resource management function would be an ideal candidate. [1]

- Best practices – The studies in this quadrant generally examine one human resource management practice (or a limited set of related practices) and the correlation between it and organizational outcomes. A statement such as "changing to a team environment (one practice) increased organizational productivity by 20.2 percent" would be typical in studies in this quadrant. Although studies in this quadrant can support the claim that human resource policies and practices can improve organizational outcomes, the magnitude of the effects can be misleading for several reasons. First, if only one part of the human resource management system was changed (that which is being observed), the rest of the system could continue to send messages that are counter to the desired effect of the intervention. In this case, the potential effects of the intervention may be significantly understated. Second, several

[1] Favoring the selection of the human resource management department as a pilot program would be its organizational independence since several services have major, somewhat autonomous commands (such as a personnel command, a recruiting command, and/or a training command). In addition, presumably, it would also have a more informed and positive attitude toward the change.

changes might have been made in the human resource management system (as well as in other processes and systems), but other than the policy or practice of interest, these might go unreported. Although the impact might be high in the organization studied, when only the policy or practice of interest is implemented in another organization, the reported effects may appear overstated. Finally, practices are neither good nor bad, effective or ineffective, useful or a hindrance in and of themselves. They can only be characterized in terms of how well they help an organization achieve its strategy in the environment it faces with the resources it possesses, etc. If the practices are applied in different circumstances, they may not be "best" in any sense of the word.

- Best human resource management practices – The studies in this quadrant are the least generalizable. Fortunately, they are also the least interesting. They deal with single or limited sets of policies and practices specifically directed to improving the efficiency or effectiveness of the human resource management function in terms, perhaps, of better ways of carrying out the staffing, rewarding, training, etc. These policies and practices would be tailored to the specific function of human resource management. A statement such as "a cross-functional team of human resource management specialists increased satisfaction indices of line managers they served by 17.3 percent" would be typical in studies in this part of the quadrant. The cause and effect link is much tighter for studies included in this quadrant, but the overall benefit to the organization tends to be small as the human resource management department itself is typically a small portion of any organization. However, some improvements in human resource management policies and practices do permeate into the rest of the organization (particularly, perhaps, other functional areas).

We are *most* interested in data showing how human resource management system redesign impacts organizational results (strategic human resource management). Though data from the other quadrants, particularly best practices, is generally more available and also very useful.

We are *most* interested in data showing how human resource management system redesign impacts organizational results . . .

Information from reengineering and process improvement in the human resource management department are less useful, because the effect of any improvement (even some major improvements) in the human resource management department would have a small effect on the organization as a whole simply because typically in most organizations only a small fraction of the organization's resources are allocated to the human resource management department. Some improvements, however, such as ability to quickly fill positions can translate into positive impacts on building the organization's competencies and capabilities.

The data presented fall primarily in the strategic human resource management and best practice quadrants because we focused on research that dealt with organizational outcomes. Though we present limited data for the reengineering and best human resource management practices quadrants, more exists and could be very beneficial to an human resource management department wishing to re-engineer its processes.

Chapter 3
Some Caveats

. . . multiple studies all point to the same or similar conclusions – that a relationship exists between human resource management policies and practices and desirable organizational outcomes.

Many large-scale analyses, individual case studies and anecdotal reports have examined the impact of human resource management policies and practices on organizational outcomes. Though the research is formal, it is done in actual organizations; therefore, the studies lack the normal scientific rigor derived from controlling intervening or exogenous variables. [2] However, multiple studies all point to the same or similar conclusions – that a relationship exists between human resource management policies and practices and desirable organizational outcomes. Therefore, what is lacking in scientific rigor is, to some extent, overcome by the volume of studies with similar conclusions. An article comparing the results of 16 formal econometric studies on profit sharing versus productivity expressed the strength of the evidence this way: "It is fair to say that no one study yielded convincing evidence on the relation between profit sharing and productivity. However, the similar conclusions that emerge from all 16 studies taken together provide fairly strong evidence of a consistent pattern." [3]

The studies, at best, suggest a correlation between human resource management policies and practices and organizational outcomes. Even when limited to examining one policy or practice or one change in policies and practices (often referred to as "Best Practices"), these studies can not explain why particular results occur, only that a human resource management policy or practice and a particular organizational outcome tend to occur together. It can not say if the organizational outcome is the result of the human resource management policy or if the policy developed because the organization habitually exhibits that outcome. [4] These studies often appear to carry more statistical significance, but again, the lack of an experimental design that controls for the direction of cause and effect leaves the conclusion more tenuous than desired.

In assessing the impact of the changes described in the studies below, it should be kept prominently in mind that some practices may work better under certain strategies than others. The taxonomy does not capture the strategy underlying the selection of the practices described. Any practice or set of practices that has been seen to improve organizations should not be adopted by another organization without

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[2] In other words, if an organization changes four human resource management practices and has increased profits, can you prove that the four changes "caused" the increased profits? Or, was it one of the four changes? Or, was it an increased demand by consumers, so the entire industry benefited? Etc.

[3] Martin L. Weitzman and Douglas L. Kruse, "Profit Sharing and Productivity," in *Paying for Productivity: A Look at the Evidence,* Alan S. Blinder, ed. (Washington, DC: Brookings Institution, 1990), p. 127.

[4] For example, a study may show that profitable companies often have a profit sharing plan. Was the plan instituted because they were profitable or are they profitable (or more profitable) because they have a motivating human resource management practice?

considering its own environment, goals and strategy (alignment). Potentially, strategy needs to be added as another dimension. [5] Benchmarking is useful in deciding how to implement a practice in a particular organization; it is less useful in deciding what practice to implement.

Second, policies and practices interact with and influence each other – whether these relationships were specifically investigated or not. If only one policy or practice is described by a source, the observer can not be sure that the organization employing that policy or practice did not alter other related (and unrelated) policies and practices, as well.

[5] Note: many "best practices" types of studies may not explicitly consider strategy within the analysis. They implicitly believe that certain practices are "good" under all circumstances. Our beliefs are consistent with the contingency school of thought – that practices in themselves are neither "good nor bad" but only become good or bad depending on how well they align with the organization's strategy and other human resource management practices.

Chapter 4
The Evidence

Strategically and properly applied, the human resource management system can greatly improve an organization's performance.

The information gathered from over three dozen sources is organized and discussed according to the above taxonomy. Together this information builds a strong case for the conclusion that human resource management policies and practices effect desired organizational results. Strategically and properly applied, the human resource management system can greatly improve an organization's performance. Keeping in mind that an organization should align its human resource management system with its organizational strategies and that each organization is different (different levels of efficiencies already attained; different environment; mission, etc.), applying one new practice is not guaranteed to obtain the same results the organizations described below obtained. These data, however, do provide an estimate of the potential magnitude of improvements.

Strategic Human Resource Management

Several studies have attempted to identify the impact of applying strategic human resource management or making major changes to a human resource management system on various measures of organizational performance.
The results are summarized below.

- A 1993 study of over 700 publicly held firms found that the top 25 percent of firms – those having the largest number of best human resource management policies and practices – had an annual shareholder return of 9.4 percent versus 6.5 percent for firms in the bottom 25 percent. Firms in the top 25 percent had an 11.3 percent gross rate of return on capital, more than twice as high as that of the remaining firms. [6]
- A 1995 study of 968 large and medium-sized firms in thirty-five U.S. industries found that a one standard deviation increase in the deployment of high performance work practices reduced turnover by 7 percent and increased sales per employee by more than $27,000 per year. It also found that a one standard deviation improvement in the use of high performance work practices enhanced profitability by more than $4,000 per employee

[6] Mark A. Huselid, "Human Resource Management Practices and Firm Performance," Working Paper, Institute of Management and Labor Relations (New Brunswick, NJ: Rutgers University, 1993); cited in The Hay Group, "Research on the Effects of Changing the Way People are Managed," report prepared for the 8th QRMC, February 5, 1997.

and increased market value by more than $18,000 per employee, and it related these improvements to the influence of these work practices on turnover and productivity. [7]

- Another study [8] focused on the five companies whose common stocks had the highest returns between 1972 and 1992: Southwest Airlines (21,775 percent), Wal-Mart (19,807 percent), Tyson Foods (18,118 percent), Circuit City (16,410 percent), and Plenum Publishing (15,689 percent). It concluded that these companies accomplished this growth without any of the competitive advantages usually cited as being essential – advantageous positions relative to their competitors, customers or suppliers – but excelled because they were able to utilize the power of their workforce.
  - For example, compared to the U.S. airline industry, according to 1991 statistics, Southwest had fewer employees per aircraft (79 versus 131); flew more passengers per employee (2,318 versus 848); and had more available seat miles per employee (1,891,082 versus 1,339,995). It turned around some 80 percent of its flights in 15 minutes or less, while other airlines on average needed 45 minutes, giving it an enormous productivity advantage in terms of equipment utilization. It also provided an exceptional level of passenger service. Southwest won the airlines' so-called triple crown (best on-time performance, fewest lost bags, and fewest passenger complaints – in the same month) nine times; no competitor had achieved that even once.
- A 1995 study [9] cites the efforts of several companies to achieve their goals using a strategic human resource management approach. Examples of results cited include:
  - Komatsu (a leading heavy equipment manufacturer in Japan) devoted considerable energy to overhauling its human resource policies to ensure they reinforced the new corporate goals aimed at overtaking Caterpillar. One outcome of these efforts was a 10 percent increase in sales in just four years.
  - Focusing on the international sales element of its market, Becton Dickinson and Company (a healthcare products firm) used revised human resource management techniques to expand its international sales from 30 percent to 50 percent of total sales in six years.

[7] Mark A. Huselid, "The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance," *Academy of Management Journal,* Vol. 38, No. 3 (June 1995); cited in The Hay Group, "Research on the Effects of Changing the Way People are Managed," report prepared for the 8th QRMC, February 5, 1997.

[8] J. Pfeffer, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York, NY: Free Press, 1994); cited in The Hay Group, "Research on the Effects of Changing the Way People are Managed," report prepared for the 8th QRMC, February 5, 1997.

[9] C. A. Barlett and S. Ghoshal, "Changing the Role of Top Management: Beyond Systems to People," *Harvard Business Review* (May-June 1995), p. 137; cited in The Hay Group, "Research on the Effects of Changing the Way People are Managed," report prepared for the 8th QRMC, February 5, 1997.

- A 1993 study [10] noted that several Baldrige Award winners have emphasized strategic human resource management in improving overall quality of services and organizational performance. Among these are:
  - Cadillac Motor Division, a 1990 winner, cited a number of human resource management activities directed at warranty-related costs – the company's primary quality measure. The 29 percent reduction in warranty costs was linked to human resource management activities.
  - IBM's Rochester facility, a 1989 applicant, was able to link human resource management initiatives to a 50 percent reduction in the development time for new computers.
- At Holmes Regional Medical Center, a combination of personnel management, compensation and goal setting changes increased measures of patient satisfaction from the 37th percentile to the 91st percentile. The "new performance evaluation system held individuals accountable for the performance of their departments by making 35 percent of each merit increase dependent on departmental benchmarking." [11]
- PIMS Associates claims that "HR strategy drives 15 percent of profit performance." [12]
- MacDuffie [13] hypothesized that "bundles" of interrelated and internally consistent human resource management practices, rather than individual practices, are the appropriate grouping for studying the link to performance. Implicit in the notion of a "bundle" is the idea that the "bundles" create the multiple, mutually reinforcing conditions that support employee motivation and skill acquisition. The more interrelated and internally consistent practices are, the greater the impact on performance. To test this theory, MacDuffie studied 62 automobile assembly plants. He constructed several bundles (each containing its own elements): buffers (a measure of flexibility of the production system), work systems (organizational structures, team environment, etc.), and human resource management policies. He correlated these bundles and the individual elements within a bundle with performance indicators of productivity and quality measures. Each of the elements within the bundles individually showed fair to strong correlation with the performance measures. But more importantly, the correlation between the bundles as a whole and the performance measures were in all cases higher (ranging

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[10] H. John Bernadin and Joyce E. A. Russell, *Human Resource Management: An Experiential Approach* (New York, NY: McGraw-Hill, 1993); cited in The Hay Group, "Research on the Effects of Changing the Way People are Managed," report prepared for the 8th QRMC, February 5, 1997.

[11] Elizabeth Sheley, "$hare Your Worth: Talking Numbers with the CEO," *HRMagazine*, Vol. 41, No. 6 (June 1996), p. 90.

[12] People Management, February 9, 1995; cited in Mary Dalmahoy, "Putting a Value on People," *Management Accounting*, February 1996, p. 27.

[13] John Paul MacDuffie, "Human Resource Bundles and Manufacturing Performance: Organizational Logic and Flexible Production systems in the World Auto Industry," *Industrial and Labor Relations Review*, Vol. 48, No 2 (January 1995), p. 204.

from 0.4 to nearly 0.7) than the correlation between each individual element in the three bundles and the performance measures. This result, he argues, confirms the value of combining individual practices into bundles and the reinforcing nature of policies and practices. [14]

- Despite the ability to attract equal numbers of men and women as new hires, Deloitte & Touche experienced a problem retaining women long enough to be promoted to partner. The organization invested $3 million to enhance the work environment providing such features as flexible work arrangements, company-sponsored networking, and formal career planning. Additionally, all partners and above attended a two-day workshop on "Men and Women as Colleagues." The retention for women rose at all levels in the organization, women experienced lower turnover rates than men at senior manager level and the company also attracted more talented women. [15]

- Motorola employs a strong strategic approach to human resource management. Their policies and practices in different elements (namely, staffing, recruiting, training, etc.) all work together to reinforce their culture and improve performance. A sample of their results follows:
  - "One study of a Motorola business unit in the mid-1980's indicated a greater than $30 return-on-investment for each dollar invested in employee training and education." [16]
  - "There are numerous ad hoc teams throughout the company that temporarily exist to solve specific quality problems and work with vendors. Motorola estimates that in 1994, the improvements and suggestions of the various teams resulted in over $2 billion in documented savings for the company." [17]
  - "At a Motorola cellular telephone factory in the Chicago suburbs, teams of associates helped reduce the cycle time involved in producing a telephone from 4.5 weeks to one hour and improved quality ten times." [18]
  - "At still another Motorola facility, a team of empowered associates reduced production costs by $340,000 per year." [19]
  - "With respect to safety performance, Motorola officials point out that accident frequency and severity rates at most of its business units run at 50 percent of national industry averages. The company points to its active participation in the Occupational Safety and Health Administration's Voluntary Protection Program (VPP) as a major impetus for getting every one at every level of the company to assume responsibility for the company's safety performance." [20]

[14] MacDuffie, pp. 211-212.
[15] Gillian Flynn, "Attracting the Right Employees – and Keeping Them," *Personnel Journal* Vol. 73, No. 12 (December 1994), pp. 48-49.
[16] <http://www.fed.org.uscompanies/labor/a_m/Motoroloa.html>, February 27, 1995, January 31, 1997, p. 3.
[17] <http://www.fed.org.uscompanies/labor/a_m/Motoroloa.html>, p. 3.
[18] <http://www.fed.org.uscompanies/labor/a_m/Motoroloa.html>, p. 7.
[19] <http://www.fed.org.uscompanies/labor/a_m/Motoroloa.html>, p. 7.
[20] <http://www.fed.org.uscompanies/labor/a_m/Motoroloa.html>, p. 4.

- "After initiating the six-sigma quality thrust in 1986, total productivity increased 126 percent in seven years, producing $4.6 billion in savings. In 1993 alone, Motorola estimates that it saved over $1.4 billion in manufacturing costs as a direct result of the quality improvements initiated since 1986." [21]
- "Company officials believe that this incentive program [variable pay bonus based on return on net assets] has contributed to an increased focus on making the most effective use of company assets." [22]

- Research at 3M, Procter & Gamble, and Donnelly Mirrors, has shown that the use of innovative human resource management programs were the primary reasons for the firms' financial successes. [23]

Best Practices

A practice in and of itself is not "best" – it is only best if it fits with the strategy, environment, task, and other context in which it is applied.

The organizations discussed below implemented some innovative ideas in the human resource management field. Each of these organizations chose best practices that met its own needs. A practice in and of itself is not "best" – it is only best if it fits with the strategy, environment, task, and other context in which it is applied. However, these following examples do show the potential impact of human resource policies and practices. Related best practice studies are discussed together below.

Compensation

Compensation is both a powerful motivator and communicator. It communicates to employees what outcomes and behaviors the organization seeks. Many different pay schemes can be used.

Profit-Sharing. These plans give each employee a piece of corporate profits (sometimes set at profits above a particular standard). The higher the profit, the higher the amount shared among the employees.

- Of the 28 managers surveyed by the National Commission on Productivity and Work Quality [24] in 1975, after adopting Scanlon profit sharing plan:
  - 100 percent reported better cooperation.
  - 93 percent reported that communication improved.
  - 77 percent reported that participation increased.
- O'Dell and McAdams (1987) [25] surveyed 1,598 companies of which 74 percent reported that profit sharing had a positive effect on performance, 65 percent on productivity, 70 percent on quality and 56 percent on turnover. "Almost without exception . . . profit sharing companies

[21] <http://www.fed.org.uscompanies/labor/a_m/Motoroloa.html>, pp. 5-6.
[22] <http://www.fed.org.uscompanies/labor/a_m/Motoroloa.html>, p. 6.
[23] Bernadin and Russell, p. 37.
[24] Martin L. Weitzman and Douglas L. Kruse, "Profit Sharing and Productivity" in *Paying for Productivity: A Look at the Evidence*, Alan S. Blinder, ed. (Washington, DC: Brookings Institution, 1990), p. 121.
[25] Weitzman and Kruse, p. 121.

have higher mean or median values for performance indices than non-profit sharing companies do." [26]

- Bell and Hanson (1987) [27] compared 414 United Kingdom companies from 1977-1985. For nine measures of performance, profit-sharing firms were superior in 90 percent of the cases. Before and after comparisons showed relative improvements in 7 of 9 measures.
- Howard and Dietz (1969) [28] compared 175 U.S. firms in 9 industries using 16 indexes of performance. Profit sharing firms were superior in 58 percent of the cases and inferior in only 19 percent.
- Metzger (1978), [29] examining 33 U.S. firms, found that profit-sharing firms were always superior by comparing return-on-sales and equities for 1973-1976.
- "Consistent with these five studies, a British study by Bell and Hanson (1989) found higher growth, profitability, and investor returns among 113 profit sharing companies than among 301 non-profit-sharing companies. Over the 1977-85 period, the cumulative difference in sales growth was 20.3 percent, and the difference in profit growth was 52.8 percent." [30]
- Based on 16 formal econometric studies on profit sharing versus productivity "the general picture that emerges from the econometric studies is that profit sharing and productivity are positively related." [31]
- "The [Cherry Point Naval Aviation] Depot shares with all employees half of total saving resulting from productivity gains. Since the productivity gain sharing program began in 1988, the depot has realized over $50 million in documented savings from productivity gains, half of which has been shared with employees." [32]

Broadbanding. Broadbanding is a base pay structure distinguished by multiple-pay levels or groupings that are based on an employee's assigned role or competency level. Each pay level contains a salary range ("a broad band") within which employees at that level may be paid. The salary any particular individual receives is based upon his or her performance and progression through the band.

- "ACA's 1994 study, conducted by Hewitt Associates, looked at 116 organizations that had done broadbanding. The study found that broadbanding was successful in delivering greater flexibility, promoting lateral development, supporting business goals, developing skills, encouraging a team focus, and focusing employee attention away from vertical advancement." [33]

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[26] Weitzman and Kruse, p. 123.
[27] Weitzman and Kruse, p. 124.
[28] Weitzman and Kruse, p. 124.
[29] Weitzman and Kruse, p. 125.
[30] Weitzman and Kruse, p. 126.
[31] Weitzman and Kruse, p. 127.
[32] Office of Personnel Management, "Lessons learned from high-performing Organizations in the Federal Government, (Section 2)," February 1994, <http://www.dtic.dla.mil/c3i/bprcd/5556s2.htm>, p. 16.
[33] Brigette W. Schay, "Broadbanding in the Federal Government: A 16-year experiment" *ACA Journal* (Autumn 1996), p. 34.

- A Navy demonstration project at China Lake, a demonstration project at the National Institute of Standards and Technology (NIST) and an Air Force demonstration project (Pacer Share) found thatbroadbanding did result in higher average salary costs, but these costs have been partly offset by the following benefits: [34]
  - "Reduced turnover of high performers. Turnover among high performers was reduced by 50 percent in the Navy demonstration labs. Between 1984 and 1992 turnover of top-rated scientists averaged 3.5 percent compared to 5.5 percent at the comparison sites."
  - "Increased turnover of low performers. During a 10 year period, turnover of marginal and unacceptable performers ranged from 20 to 50 percent. Those who were not separated improved their performance."
  - "Increased pay satisfaction. Satisfaction with pay was significantly higher under broadbanding and pay for performance. In the most recent survey, 60 percent of Navy employees and 56 percent of NIST employees under banding reported being satisfied with their pay. This compares to 32 percent and 42 percent respectively, under the government-wide system of grades and longevity-based step increases."
  - "Improved organizational performance. Broadbanding and pay for performance have helped the two original Navy labs become a model for other Department of Defense research labs and have given them a competitive edge. While other research labs have been downsized or eliminated in recent years, the two demonstration labs have prospered and expanded along with their personnel systems."

Pay for performance (Variable Pay). This pay is in addition to base pay. It is given for meeting or exceeding set goals or standards. It is not guaranteed; receipt and amount are dependent entirely upon performance.

- "In 1991 Rosenbluth initiated a pay program for the reservation agents called 'pay for quality' in which associates receive a monthly bonus based upon the percentage of error free reservations. The average pay for reservation agents increased 32 percent, and as a result of the program, it raised some agents' pay to levels higher than their leader's. The program was a financial success because costs dropped 4 percent as a result of fewer errors and lower employee turnover." [35]

Performance Management Plans

Some organizations establish performance goals for their employees and units within the organizations. Performance evaluation helps track progress toward the goals.

[34] Schay, p.41.

[35] <http://www.fed.org.uscompanies/labor/n_z/Rosenbluth_International.html>, December 1994, January 31, 1997, p. 5.

- A study on 437 publicly held companies from 1990 to 1994 strongly suggests that companies that use performance management plans perform better financially than companies that don't. [36] Companies with performance management plans had an average:
  - Stock-return-to-market-index ratio of 1.435 compared with 1.023 for companies without performance management plans – a difference of 40.27 percent. [37]
  - Price-to-book-total-capital ratio of 1.64 compared with 1.34 for companies in the same industry that were not using performance management plans – a difference of 22.39 percent. [38]
  - Real-value-to-cost ratio of 1.67 compared with 1.31 for companies that did not use performance management plans – a difference of 27.48 percent. [39]
- The system at Cherry Point Naval Aviation Depot includes on-the-spot awards by management; a Beneficial Suggestion Program awards for individual efforts toward productivity improvement; and individual and small team awards presented by the commanding officer at awards ceremonies. Over the past two years, 850 suggestions were submitted, with an approval rate of over 36 percent. Savings of $8 million were recorded, and awards granted to individuals totaled $190,000. [40]

Training

Training helps reinforce skills and competencies important to the organization and provides a means for the employee to improve those skills and competencies. In the past, training mainly focused on technical skills. Today, in addition to technical skills, many organizations are also training employees in "people skills" (for example, communication, team building, etc.) and total quality management statistical skills to analyze and improve their processes.

- A study concluded, based on a subjective measure, that employer-provided training raises productivity by almost 16 percent. [41]
- "The estimated coefficient . . . implies that a 10-percent increase in average education in the establishment (approximately one more year of school) will lead to an 8.5 percent increase in productivity in manufacturing and a 12.7 percent increase in non-manufacturing." [42]

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[36] Helen Rheem, Briefings from the Editors, "Performance Management Programs: Do they Make a Difference?" *Harvard Business Review*, Vol. 75. No. 4 (September-October 1996), pp. 8-9.

[37] Rheem, pp. 8-9.

[38] Rheem, pp. 8-9.

[39] Rheem, pp. 8-9.

[40] Office of Personnel Management, "Lessons learned from high-performing Organizations in the Federal Government, (Appendix B)," February 1994, <http://www.dtic.dla.mil/c3i/bprcd/5556ab.htm>, February 7, 1997, p. 9.

[41] Bishop (1994) cited in Sandra E. Black and Lisa M. Lynch "Human-Capital Investments and Productivity," *Technology, Human Capital, and the Wage Structure*, Vol. 86, No. 2 (May 1996), p. 263.

[42] Sandra E. Black and Lisa M. Lynch, "Human-Capital Investments and Productivity," *Technology, Human Capital, and the Wage Structure*, Vol. 86, No. 2 (May 1996), p. 264.

- Bell Helicopter ran a massive training program. Results: [43]
  - Turnover declined to 25 percent in 1987 to 17.5 percent in 1988, then down to 3.3 percent by 1992.
  - Productivity increased by 181 percent.
  - Sales increased by 280 percent and market share has increased from 27 percent in 1988 to 37.7 percent in 1992.

  The cost was $3.6 million for the four years, but the estimated return on investment was $2.5 million.

Job Design

The way work is divided among employees, the means (tools, etc.) used to complete work and the way employees interact with other employees is all part of job design. The traditional assembly line work was broken into small discrete tasks that would be repetitively done by one individual who would then pass the work to the next person for the next task in the process. Many jobs have changed into roles where the distinct line of responsibilities between employees is blurred and the tasks are broader and no longer discrete with well-defined boundaries.

- "The cycle time of the 20 departments with broadened jobs (jobs with responsibility for about 10 to 25 different activities in the process) were, on average, 7.4 times faster than the cycle times of departments that did not have broad jobs (jobs with fewer than 7 activities)." [44]
- "Similarly, the cycle times of the 10 departments with few job titles (departments in which about 8 or more people had the same title) were, on average, 5.8 times faster than the cycle times of departments with many titles (those in which fewer than five people had the same title.)" [45]
- "In our sample, 12 of the process-complete departments rewarded their members for meeting or exceeding unit-wide targets or standards. The cycle times of the 12 departments were, on average, 2.7 times faster than those of the department that based rewards on individual performance alone." [46]
- "Process-complete departments with layouts that permitted people to see others' work had cycle times 4.4 times faster than those with layouts that didn't." [47]

[43] Jennifer J. Laabs, "HR Initiatives Support Bell Helicopter's New Plant Operations," <http://www.hrhq.com/members/archive/2490.html>, January 23, 1997, p. 9.
[44] Ann Majchrzak and Qianwei Wang, "Breaking the Functional Mind-Set in Process Organizations," *Harvard Business Review* (September-October 1996), p. 96.
[45] Majchrzak and Wang, p. 96.
[46] Majchrzak and Wang, p. 97.
[47] Majchrzak and Wang, p. 97.

Teams

Teams are becoming a more popular means of accomplishing work. Many jobs traditionally accomplished by an assembly line process have been restructured so that the group working together completes the project as opposed to each minute task being assigned to one person within the group. This allows team members to learn more skills and eliminate repetition in their jobs and allows the team to schedule work more efficiently.

- "Since 1985 when Ashton originated the team-based management structure, worker productivity has increased 60 percent and continues to rise an average of 7.5 to 8 percent per year." [48]
- "Since the introduction of the team-based system [at the AT&T Atlanta Service Center], the first-level supervisory level has been eliminated. Leaders and coordinators now perform the tasks once carried out by supervisors." [49]
- At Chrysler, additional responsibilities have been taken on by teams which eliminated formal management, both corporate and union. There are now 24 supervisors, which is approximately 1/3 of the original number. [50]
- The New York Regional Office Department of Veterans Affairs reports that "[m]ature teams in the Prototype Unit (those established in May 1993) had backlogs that were 26 percent smaller, processed claims 15 percent faster, and at a 7 percent lower cost than teams that processed claims in the traditional way, despite having to spend a significant amount of time learning new skills." [51]
- At Texas Instruments Defense Systems and Electronics Group, "cross-functional teams, from manager-led to self-managed . . ." caused ". . . product development times and production costs [to] decrease dramatically, while productivity soared. All of this has been accomplished with four levels of managerial hierarchy and 13,000 employees, compared to seven levels and a workforce of 25,000 people." [52]
- At the Cherry Point Naval Aviation Depot, "Because employees have assumed increased responsibility for their work, the depot has increased the number of employees reporting to a supervisor from about six or eight employees to 15 or more." [53]

[48] <http://www.fed.org/uscompanies/labor/a_m/ashton.html>, January 31, 1997, p. 4.

[49] <http://www.fed.org/uscompanies/labor/a_m/att.html>, January 31, 1997, p. 4.

[50] <http://www.fed.org/uscompanies/labor/a_m/chrylser_corporation.html>, January 31, 1997, p. 5.

[51] 8th Quadrennial Review of Military Compensation, "Demonstration Projects and Pilot programs, 2nd draft," p. 17.

[52] Audio-Tech Business Book Summaries, Summary on *Agile Competitors and Virtual Organizations: Strategies for Enriching the Customer* by Seven L. Goldman, Roger N. Nagel and Kenneth Priess, p. 3.

[53] Office of Personnel Management, "Lessons learned from high-performing Organizations in the Federal Government, (Section 2)," February 1994, <http://www.dtic.dla.mil/c3i/bprcd/5556s2.htm>, p. 16.

- The 653d Communications-Computer Systems Group ". . . has eliminated three layers of supervision, leaving only two. All organizations below the top layer are now expected to operate as self-managed teams." [54]

Employee Involvement Practices

Some organizations are encouraging employees at lower levels in the organization to take a much more active role in how the company is run. This may include easy means to express ideas to higher level management and involvement in setting work schedules and goals.

- Huselid estimated the impact of a one standard deviation improvement in the use of high performance work practices on firm profits and market value. He found that such an increase enhanced profitability by more than $4,000 per employee and increased market value by more than $18,000 per employee. [55]
- A 1995 survey of the Fortune 1000 firms by the Center for Effective Organizations discovered that those companies that emphasized employee involvement and total quality management had better financial rates and productivity than those companies that were low users of these practices. For example, these companies averaged return on equity of 22.8 percent and return on sales of 10.3 percent; low user companies averaged 16.6 percent and 6.3 percent respectively. [56]
- Two surveys, in 1987 and 1990, on the impact of employee involvement on performance measures [57] found companies reporting positive improvements in productivity ranging from 61-69 percent, in quality ranging from 70-72 percent, in customer service ranging from 67-68 percent, in quality of life ranging from 63-68 percent, in profitability ranged from 45-47 percent, and in competitiveness ranging from 43-50 percent.
- First Tennessee National Corporation empowered work teams to set hours. "Another clerical group opted to work hours in the middle of each month to balance the overtime they put in when month-end account statements went in the mail. Turnaround time on statements was cut in half." [58]

Assessment Testing

Some organizations have begun to test prospective employees for organizational and job fit. This goes far beyond the traditional checking references and interviewing candidates. It may allow candidates to actually experience the job or may create

[54] Office of Personnel Management, "Lessons learned from high-performing Organizations in the Federal Government, (Section 2)," February 1994, <http://www.dtic.dla.mil/c3i/bprcd/5556s2.htm>, p. 18.

[55] The Hay Group, "Research on the Effects of Changing the Way People are Managed," report prepared for the 8th QRMC, February 5, 1997.

[56] Edward E. Lawler III, *From the Ground Up: Six Principles for Building the New Logic Corporation* (San Francisco, CA: Jossey-Bass Publishers, 1996), p. 26.

[57] Edward E. Lawler III, Susan Albers Mohrman and Gerald E. Ledford, Jr., *Employee Involvement and Total Quality Management* (San Francisco, CA: Jossey-Bass Publishers, 1992), p. 60.

[58] Keith Hammonds, "Balancing Work and Family," *Business Week*, September 16, 1996, p. 76.

situations to assess how the candidates react to elements associated with the job such as repetitive tasks or stress.

- ServiceMaster instituted employment screening to assess better job fit and reduced turnover rates from about 180 percent a year to about 14 percent after testing. [59] Attitudes about safety were a special concern for them also because 90 percent of workplace injuries are due to people's behavior and attitudes, rather than any sort of malfunction. By screening out candidates who ignore safety considerations, ServiceMaster enjoyed a 44 percent reduction of injuries in those employees hired by testing. [60]
- Even instituting a single best practice could create major cost benefits. For example, "[b]etter screening of potential recruits, including earlier drug testing and closer reviews of medical records, could save the Defense Department millions of dollars each year, according to the General Accounting Office" [61]

Quality of Work Life

Demographic changes – in particular, more working women and couples – have driven a renewal of concern on how to integrate working life with home life. The time-consuming demands of both family and career often create conflict. This conflict, in turn, causes one or the other to suffer. Many organizations are finding that mitigating this conflict increases productivity, motivation, and loyalty and reduces turnover and absenteeism.

- Fel-Pro Inc. "found that workers who took advantage of family-friendly programs were more likely to participate in team problem-solving, and nearly twice as likely to suggest product or process improvements." [62]
- "Aetna Life & Casualty Co. halved the rate of resignations among new mothers by extending its unpaid parental leave to six months, saving it $1 million a year in hiring and training expenses." [63]
- A 1991 survey at Chubb Group of Insurance Companies of their 7,800 U.S. employees found: 60 percent were in dual-career families; 50 percent had child or elder care responsibilities; an additional 20 percent expected these responsibilities within 3 years; and 1/3 of employees who left thought their decision would help them balance work and family lives. Substantial organization monetary and non-monetary costs were associated with this loss of employees: it costs 97 percent of salary to replace the average insurance industry employee; the average replacement cost for exempt employees is 150 percent of salary; unhappy employees are less productive and likely to be absent more often; the loss of key staff members may impede customer

[59] Flynn, p. 46.
[60] Flynn, p. 46.
[61] Andrew Compart, "Tougher Recruit Screening? Changes could save the Pentagon Millions," *Air Force Times*, January 27, 1997, p. 6.
[62] Hammonds, p. 78.
[63] Hammonds, p. 78.

relationships; and 47 percent of workers took off an average of eight days per year to attend to dependent-care responsibilities which equals more than $500,000 per day. Chubb spent more than $3 million to replace 50 exempt employees who left the company in 1992 and 1993 for child-care reasons. Chubb instituted several QOL programs such as a flexible work schedule. Productivity is up and absenteeism has decreased. [64]

- "Evidence is mounting that ... loyalty [generated by work/life plans] has a tangible effect on profitability." [65]
- "Reductions in absenteeism and turnover [at Aetna Life & Casualty Co. and others] are even more manifest." [66]
- At the First Tennessee National Corporation, "Supervisors rated by their subordinates as supportive of work-family balance retained employees twice as long as the bank average and kept 7 percent more retail customers. Higher retention rates, First Tennessee says, contributed to a 55 percent profit gain over two years, to $106 million." [67]

Ergonomics

Ergonomics is the "science that seeks to adapt work or working conditions to suit the worker." [68] In recent years, much attention has been focused on the office environment and the worker/computer physical interaction. This attention has been caused by a rise in problems such as carpal tunnel syndrome. Many organizations have changed their working environment, often in an effort to hold down medical expenses. In some cases, additional (and perhaps unexpected) benefits such as increased productivity have also occurred.

- West Bend Mutual Insurance Company documented a 16 percent increase in productivity among more than 400 employees ". . . when it moved into a new, ergonomically correct building in 1991. Since then, carpal tunnel complaints have dropped from about 14 a year in the early 1990s to a single case last year." [69]
- "The combination of proper equipment, training and education about potential injuries has contributed to a significant drop in BNA's costs for workers' compensation claims related to repetitive stress injuries. In fiscal year 1991, BNA had more than 1000 employees and a dozen claims that cost $132,000. By fiscal year 1995, 10 claims among the company's 1,600 employees cost less than $30,000." [70]

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[64] Baxter W. Graham, "The Business Argument for Flexibility." *HR Magazine*, Vol. 41, No. 5 (May 1996), pp. 104-110.
[65] Hammonds, p. 78.
[66] Hammonds, p. 78.
[67] Hammonds, p. 74.
[68] Webster's New World Dictionary, 3rd College Edition, (Cleveland, OH: Webster's New World, 1988), p. 461.
[69] Dominic Bencivenga, "The Economics of Ergonomics: Finding the Right Fit," *HR Magazine* Vol. 41, No. 8 (August 1996), p. 71.
[70] Bencivenga, p. 70.

- "The U.S. Postal Service estimates workers' compensation claims from carpal tunnel syndrome alone cost between $18 million and $29.5 million from 1992 through 1995; costs for individual cases ranged from $13,000 to $33,000." A new ergonomics program implemented ". . . in its automated mail sorting sites has resulted in savings of more than $10 million." [71]
- At the Rocky Mountain Institute, "lighting has been a factor in increasing productivity from 6 to 16 percent. 'Each 1 percent of increased productivity is equivalent to getting rid of the entire energy bill – not just the bill for lighting – for a year.'" [72]
- "Pitney Bowes' Newhard said productivity increased 10 to 15 percent in mail sorting facilities when the company placed lighting of 80 to 100 foot-candles . . . with special lens covers, directly over work-stations." [73]
- By reducing expenses and improving employees' health-related behavior, ERTL now has an annual health-care expenditure of $2,456 per employee, compared to the regional average of $3,600. This saves approximately $1 million annually. [74]

Telecommuting

Telecommuting is a work option that has recently become available due to the advances in technology, particularly information technology and communications. Telecommuting is the practice of an employee doing work at home and communicating with his or her office primarily through technologies such as the Internet, modems, and cellular telephones. Most telecommuting employees will still physically go to their office, but only on a periodic basis such as once or twice a week or as necessary. Because these employees no longer need full-time space (for example, office, desk, etc.) in the organization's building, this has led to some innovative practices involving sharing space between employees. Telecommuting has also impacted productivity and costs for the organization and lifestyle (particularly, commuting and work situation) for the employee.

- "[I]t is now possible – at this moment – to:
  - increase worker productivity by as much as 15 to 20 percent
  - cut business costs $2 for every dollar invested in technologies
  - cut corporate real estate costs by 25 to 90 percent
  - increase free time for many workers, leading to improved family life, an increase in social, religious and volunteer activity and improved neighborhood quality" [75]

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[71] Bencivenga, p. 71.
[72] Bencivenga, p. 73.
[73] Bencivenga, p. 73.
[74] Sheley, p. 88.
[75] "On Telecommuting: a PS Enterprises Research Paper," <http://www.well.com/user/pse/telecom.htm>, January 31, 1997, p. 2.

- "[P]roductivity studies consistently find that telecommuters outperform their peers at the traditional office by about 16 percent." [76]
- "At the Antelope Valley Health net telecommuting center, productivity is 15 percent higher for telecommuters than for non-telecommuting employees." [77]
- "The City of Los Angeles found a 12.5 percent increase in productivity, for an economic impact of $6100 per telecommuter." [78]
- "Chiat-Day a Venice based advertising agency added $30 million in new billings since the first of 1994 while cutting its real estate holdings by 40 percent." [79]
- "AT&T in New Jersey realized 50 percent savings on real estate costs, the result of consolidating office space when AT&T sent home 35 percent of one sales force in April 1994." [80]
- An interesting tidbit for organizations that build and provide a parking garage: "the cost of an elevated parking-lot space is in the range of $12,000 to $20,000 per spot." [81] *Saving just three or four spaces due to telecommuting could pay the salary for one of those employees for an entire year.*

Reengineering the Human Resource Management Department

Process improvement is a means to increase efficiency or effectiveness. Though most process improvement activities are directed at production processes, it can also equally be applied to processes within the human resource management department.

- In 1991 at ERTL, Inc., recruiting firms would identify qualified candidates, sell them on a specific job, and then loose 50 percent of them when the individuals learned where the company was located. The result was an unacceptable 128-day lag between the time an exempt position became open and the day a new employee started work. A new $100,000 recruitment video provided candidates more insight into the company and its location. ERTL is now able to fill exempt jobs in an average of 31 days. The percent of candidates dropping out due to the company's location has fallen to 10 percent. [82]

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[76] *Training Magazine,* November 1994; cited in "On Telecommuting: a PS Enterprises Research Paper," <http://www.well.com/user/pse/telecom.htm>, January 31, 1997, p. 4.
[77] "On Telecommuting: a PS Enterprises Research Paper," p. 4.
[78] "On Telecommuting: a PS Enterprises Research Paper," p. 4.
[79] "On Telecommuting: a PS Enterprises Research Paper," p. 5.
[80] "On Telecommuting: a PS Enterprises Research Paper," p. 5.
[81] "On Telecommuting: a PS Enterprises Research Paper," p. 5.
[82] Sheley, p. 88.

Federal Government Examples

Agencies within the Federal government are also trying some of these innovative ideas. Many of these are either pilot programs or very new programs so long term (and often short term results) are not yet available. However, they provide an opportunity to gather information in the future. Those described below can be considered as examples of strategic human resource management.

Federal Aviation Administration

In 1996, the Federal Aviation Administration took the first steps toward moving from a rule-based, compliance-oriented, internally focused organization to an incentive-based, results-oriented, customer-driven organization. Some of the major changes are described below.

Reorganization. The Federal Aviation Administration delineated and reorganized into "lines of business" that have their own distinct strategies and are based on the customers they served. For example, once a cell in every sub-organization, administrative services (including human resources) became a separate line of business. Acquisition and research, air traffic services, and security did likewise.

Compensation. The Federal Aviation Administration reform has developed a compensation framework but has not yet implemented it. Generally, it proposes a core compensation system applicable throughout the Federal Aviation Administration; but it also recognizes that a core system may not meet the needs of unique "lines of business." Therefore, it allows those lines of business to develop supplemental compensation plans. In general, the pay proposals parallel private sector trends, including competency-based pay in some lines of business.

Performance management. The Federal Aviation Administration is developing a far more structured performance management system that associates specific metrics with everything they do – a radical departure from the past. The system measures the value-added of all activities in terms of achieving the mission. In staffing, for example, this translates into reduced cycle time to fill a position as well as reduced staff hours or FTEs.

Defense Mapping Agency

In 1995, after being designated a reinvention lab, the Defense Mapping Agency (now the National Imagery and Mapping Agency) established a Reinvention Task Force. After examining their situation, they decided that the Defense Mapping Agency needed to become faster, more flexible, adaptable and accountable. In order to meet these needs, an explicit strategy of customer service was adopted. [83]

[83] Material in this section is based on Defense Mapping Agency, *Application for the President's Award for Quality, 1996* (Fairfax, VA: Defense Mapping Agency, 1996).

Reorganization. Originally, the Defense Mapping Agency was organized geographically, with each regional production center operating relatively autonomously. The Defense Mapping Agency decided to shift the focus and reorganize based on "core business processes." The result was three business units: an operations unit, an acquisition and technology unit, and an installations management unit.

Under its old structure, the Defense Mapping Agency had 11 layers of management between customer and producer. The Defense Mapping Agency also reorganized into customer service teams. By closing the gap between the customer and the producer to as few as three management layers, they achieved greater alignment with customer needs. Also, as a result of this shift to self-managed teams, the supervisor to employee ratio increased from about 1:7 to about 1:16.

Compensation. In 1992, they chartered a team to examine the compensation and reward system. They found that the system did not promote process improvement or teamwork. As a result, the Defense Mapping Agency implemented a reward system that separates cash awards from annual performance ratings and provides numerous opportunities for recognition. For example, awards are given for exceptional team and individual accomplishment, exceptional customer service, innovation and creativity and risk taking. Recently, the National Imagery and Mapping Agency has announced more changes planned for late 1998. The new ideas include a shift to a "person-based" system that focuses on broad career capabilities, as well as a simplified pay structure that focuses on skills and capabilities.

Performance Management. In addition, the Defense Mapping Agency developed a multi-dimensional performance appraisal system. The new process, being implemented now, links career competencies to core values, is automated, includes multiple raters (including the customer) and focuses on development (it is more of a feedback system than a report card. In addition, peers take part in the selection of the recipients of some of the awards.

Chapter 5
Application to the Uniformed Services

... if similar changes in the human resource management policies and practices are employed in the department, similar impacts will result, though in different, more relevant measures of performance.

As described above, few data exist that directly bear on the value of taking a strategic approach to human resource management in the Department of Defense. However, data from outside the department give rise to the following hypothesis: if similar changes in the human resource management policies and practices are employed in the department, similar impacts will result, though in different, more relevant measures of performance. The hypothesis is not directed so much to the precise amount of the impact, but rather to the range or order of magnitude. If changes in the human resource management system result in only marginal improvements in the measures used by other organizations, then the data (even if statistically significant) provide little support for a similar change in an organization as different as the Department of Defense. However, if improvements are substantial (as the limited studies suggest they are), then pursuing a similar course seems only prudent – complemented with well designed pilot programs and demonstration projects.

The specific measures of improvement have varying degrees of applicability to the Department of Defense; on the other hand, it does not require much imagination to translate the following experiences into something more meaningful to the department: Southwest Airlines (sortie generation rates), Cadillac Motor Division (equipment maintenance), IBM and Texas Instruments (weapon system development time), and Holmes Regional Medical Center (patient satisfaction in military treatment facilities). And the impacts have considerable implications. As delineated above, studies that focus on changes to the policies and practices of the human resource management system have shown significant positive effects. One study of innovative organizations suggested that "job redesign has the potential to increase worker productivity by about nine percent; goal setting could increase productivity by about 16 percent; and pay for performance compensation systems have the potential to increase productivity by about 30 percent." [84] If changes to the human resource management system generated these kinds of effects in the Department of Defense, assuming they were applicable to a total of 500,000 people, resulted in only a 15 percent increase in productivity and individuals cost $40,000 on average, the workforce could be reduced by 75,000 for a total savings of $15 billion over a period of five years and still maintain the same level of output.

[84] "Organization Loyalty is not the Answer," *Managing Office Technology* (January 1996), p. 33.

BIBLIOGRAPHY

8th Quadrennial Review of Military Compensation. "Demonstration Projects and Pilot programs, 2nd draft."

Audio-Tech Business Book Summaries. Summary on *Agile Competitors and Virtual Organizations: Strategies for Enriching the Customer* by Seven L. Goldman, Roger N. Nagel and Kenneth Priess, p. 3.

Barlett, C. A. and S. Ghoshal. "Changing the Role of Top Management: Beyond Systems to People." *Harvard Business Review.* May-June 1995, pp. 132-142. Cited in The Hay Group. "Research on the Effects of Changing the Way People are Managed," Report prepared for the 8th QRMC, February 1997.

Bencivenga, Dominic. "The Economics of Ergonomics: Finding the Right Fit." *HR Magazine* Vol. 41, No. 8 (August 1996), pp. 68-75.

Bernadin, H. John, and Joyce E. A. Russell. *Human Resource Management: An Experiential Approach.* New York, NY: McGraw-Hill, 1993. Cited in The Hay Group. "Research on the Effects of Changing the Way People are Managed," Report prepared for the 8th QRMC, February 5, 1997.

Bishop (1994). Cited in Black, Sandra E., and Lisa M. Lynch "Human-Capital Investments and Productivity." *Technology, Human Capital, and the Wage Structure,* Vol. 86, No. 2 (May 1996), pp. 263-267.

Black, Sandra E., and Lisa M. Lynch. "Human-Capital Investments and Productivity." *Technology, Human Capital, and the Wage Structure,* Vol. 86, No. 2 (May 1996), pp. 263-267.

Chesbrough, Henry W. and David J. Teece. "When is Virtual Virtuous? Organizing for Innovation." Harvard Business Review, January-February 1996, pp. 65-73.

Compart, Andrew. "Tougher Recruit Screening? Changes could save the Pentagon Millions." *AF Times,* January 27, 1997, p. 6.

Dalmahoy, Mary. "Putting a Value on People." Management Accounting, February 1996, pp. 27-28.

Defense Mapping Agency. *Application for the President's Award for Quality, 1996.* Fairfax, VA: Defense Mapping Agency, 1996.

Flynn, Gillian. "Attracting the Right Employees – and Keeping Them." *Personnel Journal* Vol. 73, No. 12 (December 1994), pp. 44-49.

Graham, Baxter W. "The Business Argument for Flexibility." *HR Magazine,* Vol. 41, No. 5 (May 1996), pp. 104-110.

Hammonds, Keith. "Balancing Work and Family." *Business Week,* September 16, 1996, pp. 74-80.

The Hay Group. "Research on the Effects of Changing the Way People are Managed," Report prepared for the 8th QRMC, February 5, 1997.

<http://www.fed.org/uscompanies/labor/a_m/ashton.html>, January 31, 1997.

<http://www.fed.org/uscompanies/labor/a_m/att.html>, January 31, 1997.

<http://www.fed.org/uscompanies/labor/a_m/chrylser_corporation.html>, January 31, 1997.

<http://www.fed.org.uscompanies/labor/a_m/Motoroloa.html>, February 27, 1995, January 31, 1997.

<http://www.fed.org.uscompanies/labor/n_z/Rosenbluth_International.html>, December 1994, January 31, 1997.

Huselid, Mark A. "Human Resource Management Practices and Firm Performance," Working Paper, Institute of Management and Labor Relations. New Brunswick, NJ: Rutgers University, 1993 cited in The Hay Group. "Research on the Effects of Changing the Way People are Managed," Report prepared for the 8th QRMC, February 5, 1997.

Huselid, Mark A. "The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance." *Academy of Management Journal,* Vol. 38, No. 3 (June 1995); cited in The Hay Group. "Research on the Effects of Changing the Way People are Managed," Report prepared for the 8th QRMC, February 5, 1997.

Keltner, Brent and David Finegold. "Adding Value in Banking: Human Resources Innovations for Service Firms." *Sloan Management Review.* Fall 1996, pp. 57-68.

Laabs, Jennifer J. "HR Initiatives Support Bell Helicopter's New Plant Operations." <http://www.hrhq.com/members/archive/2490.html>, January 23, 1997.

Lawler III, Edward E. *From the Ground Up: Six Principles for Building the New Logic Corporation.* San Francisco, CA: Jossey-Bass Publishers, 1996.

Lawler III, Edward E., Susan Albers Mohrman and Gerald E. Ledford, Jr. *Employee Involvement and Total Quality Management.* San Francisco, CA: Jossey-Bass Publishers, 1992.

MacDuffie, John Paul. "Human Resource Bundles and Manufacturing Performance: Organizational Logic and Flexible Production systems in the World Auto Industry." *Industrial and Labor Relations Review,* Vol. 48, No 2 (January 1995), pp. 197-221.

Majchrzak, Ann and Qianwei Wang. "Breaking the Functional Mind-Set in Process Organizations." *Harvard Business Review.* September-October 1996, pp. 93-99.

Office of Personnel Management. "Lessons learned from high-performing Organizations in the Federal Government, (Appendix B)." February 1994, <http://www.dtic.dla.mil/c3i/bprcd/5556ab.htm>, February 7, 1997.

Office of Personnel Management. "Lessons learned from high-performing Organizations in the Federal Government, (Section 2)." February 1994, <http://www.dtic.dla.mil/c3i/bprcd/5556s2.htm>, February 7, 1997.

"On Telecommuting: a PS Enterprises Research Paper." <http://www.well.com/user/pse/telecom.htm>, January 31, 1997.

"Organization Loyalty is not the Answer." Managing Office Technology (January 1996), pp. 30-33.

People Management, February 9, 1995. Cited in Dalmahoy, Mary. "Putting a Value on People." *Management Accounting,* February 1996, pp. 27-28.

Pfeffer, J. *Competitive Advantage: Creating and Sustaining Superior Performance.* New York, NY: Free Press, 1994. Cited in The Hay Group. "Research on the Effects of Changing the Way People are Managed," Report prepared for the 8th QRMC, February 5, 1997.

Pine, Art. "Military Gears Up, Haltingly, for the Future." *Los Angeles Times,* December 30, 1996, p. 1 in Early Bird, January 2, 1997, pp. 18-19.

Rheem, Helen. Briefings from the Editors. "Performance Management Programs: Do they Make a Difference?" *Harvard Business Review,* Vol. 75. No. 4 (September-October 1996), pp. 8-9.

Schay, Brigette W. "Broadbanding in the Federal Government: A 16-year experiment" *ACA Journal* (Autumn 1996), pp. 32-43.

Sheley, Elizabeth. "$hare Your Worth: Talking Numbers with the CEO." *HRMagazine,* Vol. 41, No. 6 (June 1996), pp. 86-95.

Training Magazine. November 1994. Cited in "On Telecommuting: a PS Enterprises Research Paper." <http://www.well.com/user/pse/telecom.htm>, January 31, 1997.

Webster's New World Dictionary, 3rd College Edition. Cleveland, OH: Webster's New World, 1988, p. 461.

Weitzman, Martin L. and Douglas L. Kruse. "Profit Sharing and Productivity." *In Paying for Productivity: A Look at the Evidence,* Alan S. Blinder, ed. Washington, DC: Brookings Institution, 1990, pp. 95-141.

Working Paper on

Accounting for the Value of People: A Necessary Step in Implementing Strategic Human Resource Management

June 30, 1997

LTC James Woodard, USA

Chapter 1
Introduction

In the course of conducting its first Quadrennial Defense Review (QDR), the Department of Defense explored fundamental questions about how it will do business in the future. [1] The Quadrennial Defense Review anticipates some parts of the department doing business in revolutionary new ways – using revolutionary new business practices.

In line with the intent of the Quadrennial Defense Review, the 8th Quadrennial Review of Military Compensation argues that in order to maximize effectiveness in those areas desiring to do business in revolutionary new ways, the department must align its support systems, especially the human resource management system, to its strategic plans. To align the human resource management system in this manner requires human resource management leaders to assume a new, more strategic role; this role focuses them on achieving the outcomes desired by the organization and its subunits. [2] Human resource leaders must become full partners with commanders and other line leaders in achieving results and must actively help shape the behaviors of people as the organization transitions to doing business in new ways.

Improving the "quality" of decisions... requires a greater focus on the *value* created by human resources (and the policies and practices that influence them), rather than simply on the *cost* – as it is today.

However, making the right decisions regarding policies and practices will be hampered unless the resource allocation process is changed as well. "Good decisions" may be difficult or impossible to make if the analysis of their cost and effectiveness is not accurately reflected in the Planning, Programming and Budgeting System. [3] Improving the "quality" of decisions made in the context of this system requires a greater focus on the *value* created by human resources (and the policies and practices that influence them), rather than simply on the *cost* – as it is today. This paper suggests that the concepts and practices of "human value management" offer a useful framework for the department to make its words about how much it values its people reality.

Human Value Management: Achieving Desired Outcomes Through People

The Quadrennial Defense Review faced the issue of defining the business of the department as it will exist in the uncertain environment of the post-cold war era. Externally, the threat is no longer clearly defined, the National Security Strategy is

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[1] The results of this review form the foundation of the department's strategic plan – satisfying a major portion of the Government Performance and Results Act (GPRA).

[2] The National Academy of Public Administration published a strategy for changing the role of human resource management professionals, *A Competency Model for Human Resource Professionals, Implementing Real Change in Human Resource Management, Phase II: Practical Applications*, 1996. It "focuses on how federal human resources (HR) professionals can prepare to meet the challenges and assume the roles that are required for them to become a strategic partner in the management of federal human resources – people." p. xi.

[3] Appendix I provides a brief summary of this system.

evolving, the mission spectrum is expanding, technology is advancing rapidly and budget pressures are increasing; internally, the individual services are busy setting their courses for the future. As part of the planning process, the department must sort through this maze of uncertainty. Certainly, however, one of the bedrocks of this process will be a continuing dependence on the department's people for success.

On the other hand, a downward trend in the defense budget and the need to find funds for modernization in the department is expected to require increased accountability for the utilization of all resources. People-related expenditures account for about 50 percent of the defense budget. Consequently, greater interest in what the department is getting for these funds is valid and necessary. Leaders must seek a basis for making sound investment decisions related to human resources.

In the private sector, leaders are turning to human resource management professionals, as strategic partners, to help formulate and make these investment decisions. In this context, the *raison d'être* of human resource management is to maximize the value of an organization's human resources. If the department accepts this as true, "then task (work) design, selection, role assignment, development, performance appraisal, and compensation are not merely a set of service functions to be performed; rather, they are a set of strategies that can be adopted to change the value of human assets and, in turn, the value of the organization as a whole." [4]

Human value management establishes a perspective for considering the design and modification of human resource management policies and practices. Its objective is to increase the worth of an organization by creating value through and with people. [5] It views human resources as valuable organizational resources. It challenges leaders to make decisions affecting people based not only on their cost to the organization but on both their cost and the expected value of their contribution to achieving the strategy of the organization.

Human value management establishes a perspective for considering the design and modification of human resource management policies and practices. Its objective is to increase the worth of an organization by creating value through and with people.

This, in turn, requires some type of human resource accounting (a technique that can be used in human value management). Human resource accounting can be used to: [6]

- Provide a framework to facilitate human resource decision making (pointing out the long-term impact and hidden cost of certain decisions).
- Quantify information about cost and value of people as organizational resources.
- Motivate commanders and other line leaders to adopt a human resource (value) perspective in their decisions involving people.

The challenge, then, for the human resource management community – the function responsible for designing policies and practices to support the business of the department as it will exist in the 21st century – is apparent. It must find a way to demonstrate that changes to the policies and practices it designs and implements add value to the organization – in terms of measures established by, and important to, the organization. This paper, developed in the context of human value management and

[4] Eric G. Flamholtz, *Human Resource Accounting* (San Francisco, CA: Jossey-Bass Publishers, 1985), p. 15.
[5] Jac Fitz-enz, *Human Value Management: The Value-Adding Human Resource Management Strategy for the 1990's* (San Francisco, CA: Jossey-Bass Publishers, 1990), p. 45.
[6] Flamholtz (1985), p. 10.

building on human resource accounting, proposes a journey designed to improve the way an organization allocates resources to its human resources. Figure 1 provides a map of the journey. The journey is joined in progress.

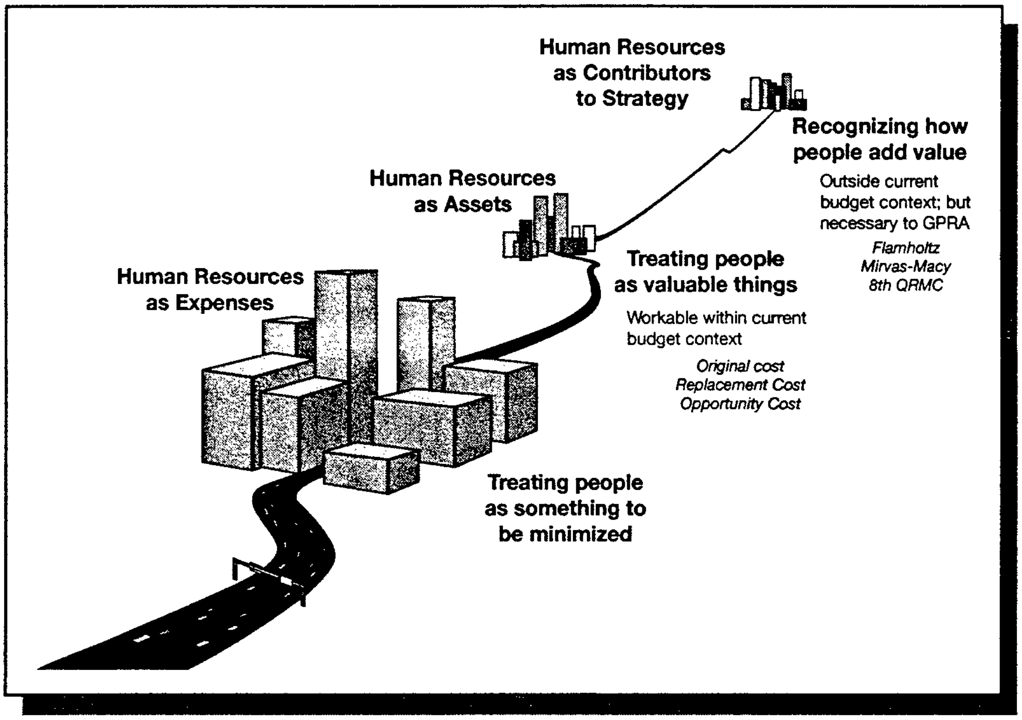

Figure 1– Overview of the Journey

In the past, and largely today, human resources have been viewed in the budget process primarily as **expenses**. This is familiar territory, very congruent with standard accounting techniques. Modest forays have been taken into a second area. This territory, though less familiar, is not located, conceptually, too far from the first. This second perspective views human resources as **assets** to the organization and, in line with the field of physical capital, attempts to place a value on these human assets. The second perspective extends the first by bringing a time dimension to bear that is clearly useful in more accurately portraying the costs and value of human assets [7] and permitting the calculation of a return on investment, for example. The quantitative techniques (historical cost, replacement cost, future compensation, etc.) to perform this calculation are fairly well developed, though infrequently employed in the department to make decisions. These two perspectives are predominately input-focused, understandably, because the current budget process [8] is, itself, predominately input-focused.

Even less exploration has been undertaken with regard to a third perspective – the human resource **contribution to organizational outcomes**. Despite the difficulty of

[7] To the extent that the benefit is considered, it usually falls in the category of the ability of the organization to attract quality personnel or to retain individuals with the requisite skills. Other behaviors – affected by changes in human resource management policies and practices or by allocation of resources to existing programs – although sometimes considered, are rarely quantified in terms of their effects on desired organizational outcomes.

[8] Indeed, most budget processes.

employing even the relatively developed second perspective within the current budget process, the "real" value of an asset – whether human or other, whether owned or unowned, whether quantitative or qualitative – is more accurately characterized by this third perspective. The third perspective is relatively unfamiliar country, but it holds out the promise of an explicit linkage in the budget process between the human resources input and the value it contributes to the organization's strategy. It relies on conceptual frameworks developed by Flamholtz, Mirvas and Macy, and the 8th Quadrennial Review of Military Compensation. This perspective is outcome-focused.

Overall the journey takes us from treating people as something to be minimized (expenses), to treating them as valuable "things" (assets), to recognizing how people add value and managing those resources accordingly. The third perspective is not simply desirable, it is also necessary in the broader context required by the Government Performance and Results Act. Here inputs need to be explicitly tied to the desired outcomes of the organization, and the human resources represent in most cases a significant, if not the most significant, input affecting the outcomes. The ability to do this in the context of the current budget framework is limited, at best.

Overall the journey takes us from treating people as something to be minimized (expenses), to treating them as valuable "things" (assets), to recognizing how people add value and managing those resources accordingly.

CHAPTER 2
MEASURING THE VALUE OF HUMAN CAPITAL

The primary objective of the current investigation, therefore, is to move to a better understanding of "value" as it relates to human resources. What does this mean? The department declares without reservation, "People are our most valued asset." But what do we mean by "valued" in that context, and is that a useful context for this investigation? Initially, this statement brings to mind issues related to how we treat service members and quality of life. However, what if we think of value as the worth of the capabilities the people contribute to the organization? In other words, as if people were *valuable* as well as valued, particularly in terms related to the organization's strategic intent.

Expenses

In the current resource allocation process, the department treats all expenditures related to people as costs. In economic terms, this implies that the department does not expect to reap benefits of these expenditures beyond the year in which the expenditures are made. Most would agree this is a distorted view – even though it is a fundamental premise of the way most organizations account for human resources. The department does, and should, expect expenditures for certain aspects of recruiting, accessing, and training, for example, to produce benefits in the future – over the useful life of the effects of programs in each of these processes. [9] To the extent benefits are expected beyond the current budget period (usually one or two years), these expenditures should be viewed as investments. This implies that methods other than expensing would be valuable to decision makers. Investments in capital assets (including human capital) are expressed in monetary terms (capitalized) and spread over the useful life of such expenditures (amortized). This allows a more accurate comparison of costs and benefits over time.

This characterization highlights two features of human resources: that they have a "value" and that investments in them can change that value.

Assets – Valuing People

Accepting that people are assets implies that they are a part of the value of an organization. Human resources are a part of the capital of an organization – its human capital. This characterization highlights two features of human resources: that they have a "value" and that investments in them can change that value. [10] The questions then become how to measure the value and how to capture the impact of investment.

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[9] Fitz-enz (1990), p. 224.

[10] Value as used here is the present worth of the set of future services the individual or group is expected to provide during the anticipated time they will remain in an organization. Flamholtz (1995), p. 172.

Regarding the first question, a variety of techniques can help an organization assess value in its move from an expense-based to an asset-based view of human resources. Some of these techniques are summarized in Appendix II. Although the most popular techniques derive monetary measures of asset value, they serve, to a greater or lesser extent, as stepping stones (with some modifications) on the path to a more accurate assessment. This paper suggests moving beyond the monetary measures by identifying and assessing the contributions of human resources to an organization's strategy (the third perspective); it is in the application of the techniques to the third perspective where further research is most needed.

This paper suggests moving beyond the monetary measures by identifying and assessing the contributions of human resources to an organization's strategy . . .

Regarding the second, and related question, some of the costs associated with these resources are really investments [11] that seek to increase the value of the asset to the organization. Investments in human capital produce long term benefits – they build additional capacity. And they contribute to such desirable organizational characteristics as cohesion, collaboration, risk-taking, adaptability, reliability, and productivity. Some of these characteristics are more valuable, in terms of mission accomplishment, to certain parts of a large organization; consequently, where they need to be developed (and paid for) will depend on how much value they add to the desired outcome of that part of the organization.

Information technology provides a good analogy. Certain parts of the organization may require the most sophisticated, state-of-the-art computers to produce high quality graphics; other parts of the organization may need powerful mainframes to manage large data bases; still other parts require reasonably modern desktop PCs. The organization is not well served by providing the most powerful technology throughout the organization (because the overdesigned system is underutilized and not cost-effective where only desktop PCs are needed), nor by providing desktop PCs throughout the organization (because in certain parts of the organization, the additional cost provides the resources needed to accomplish the mission).

The wisdom of investment in new equipment or facilities can be assessed by calculating a return on investment, return on net assets, etc. A decision with no or negative return is dropped; even a positive return may not be enough to merit investment, depending on the opportunity cost of capital. Unfortunately, the department does not have such a convenient measure. In some areas, however, a similar calculation can be made – for example, acquiring a new management information system may be more "cost effective" than maintaining the old one. Although this calculation may not entirely show up in the budget, an informed decision can be made that takes into account the "return on the investment." Armed with this information, decision makers can assess whether to acquire the new system or live with the consequences of not modernizing. These types of calculations are not routinely made for the human capital side of the enterprise.

[11] For the purpose of this discussion, investments are funds spent which provide a potential economic (service) benefit in the future. In this context, these benefits include the skills, knowledge and experience that people possess. Expenses, on the other hand, are funds spent in the period in which benefits are expected to occur.

. . . when organizations see human resources as assets, they are perceived as capabilities that support what the organization is trying to accomplish – capabilities that can be enhanced as necessary through investment.

The impact of changing the perspective of decision makers from viewing human resources only as expenses to viewing them as assets is significant. When organizations see human resources primarily as expenses, they are perceived as something to be minimized, especially when overall resource availability is declining. However, when organizations see human resources as assets, they are perceived as capabilities that support what the organization is trying to accomplish – capabilities that can be enhanced as necessary through investment. Investment in human resources through human resource management policies and practices is one of the most effective ways to influence this capability.

Although not all the information requires quantification, numerical information lends credibility to recommendations when such information is available. "There is no escaping numbers. . . . Top management cannot run a modern large corporation if it does not have numbers to work with." [12] Information about human resources in monetary terms allows the development of more meaningful measures of the value of these resources to the organization. It puts this information in well-understood and accepted terms – on a par with other capital resources.

For example, a strategy of a particular organization may call for a reduction in the cycle time for handling requests for service in order to improve customer satisfaction (say, in an intermediate maintenance facility). Greater collaboration among the customer service team might be required to accomplish that outcome. The cost of training to develop the requisite interpersonal skills, the cost (or savings) of reorganizing to eliminate several levels of hierarchy, and the cost of implementing a new performance management system and variable pay program based on team performance could be assessed in the context of its expected effect on reductions in cycle time. This approach could be compared to other approaches for achieving the same ends (say, a new information management system, a reengineered process, or an improved technology – together with the changes required to make *these* approaches fully effective). In all cases, the question would be whether the cost of the change is worth the benefit in terms of reduced cycle time and, consequently, customer satisfaction. Such a comparison is impossible unless both the costs and the value of the investment is calculated for each option.

Considering human resources as assets is a necessary first step for the department if it is to use the value, as well as the costs, of its people in decision making.

In cross-functional alternatives such as these, the value is likely to be characterized in different measures. The department could benefit from enhancing its ability to use information about the value of its human resources as opposed to continuing to use just the cost of people. Considering human resources as assets is a necessary first step for the department if it is to use the value, as well as the costs, of its people in decision making.

[12] Jac Fitz-enz, *How to Measure Human Resources Management* (New York, NY: McGraw-Hill, Inc., 1995), p. 15.

Human Value Management: Valuing the Contribution People Make

The third perspective, one that seeks to capture the contribution human resources makes to the organization's strategic ends, benefits from three frameworks: a transformational model developed by Flamholtz, an enconomic-behavioral construct proposed by Mirvas and Macy, and the integrating process developed by the 8th Quadrennial Review of Military Compensation.

Transformational Model

Different perspectives can be used to describe elements or processes that comprise human resource management within an organization and through which investments in human assets operate. The Von Glinow *et al.* model, [13] as described in the report of the 8th Quadrennial Review of Military Compensation, [14] is one such approach. This model's strength lies in the articulation of the relationships between the elements of an integrated human resource management system. The Von Glinow model indicates that the relationship flow starts with strategic intent. Flamholtz provides an alternative perspective. The appeal of the Flamholtz model, portrayed in Figure 2, is its elementary conceptual depiction of how human resources move through an organization and are transformed from an input into a valued output. The model also provides visibility into how decision makers can influence this transformation through the resource allocation process. It provides a framework for identifying and articulating the information needed to support resource allocation decisions. The model further supports the idea that both cost and value calculations for human resources are important.

> Human resource management is a system designed to transform inputs (human resources) into outputs (human services). The inputs are people: individuals, groups, and the total "human organization." The *transformational* processes are managerial subsystems for acquiring, developing, allocating, conserving, utilizing, evaluating, and rewarding people. The output are the services provided by individuals and groups. These services constitute the value of people to an organization. Thus, the model suggests that the ultimate purpose of human resource management is to contribute to the value of an enterprise by *transforming* raw human inputs into valuable human outputs. [15]

[13] Mary Ann Von Glinow, Michael J. Driver, Kenneth Brousseau and J. Bruce Prince, "The Design of a Career Oriented Human Resource System," *Academy of Management Review,* Vol. 8, No. 1 (January 1983), pp. 23-31.

[14] 8th Quadrennial Review of Military Compensation, *Rewarding, Managing and Organizing People for the 21st Century: Time for a Strategic Approach – Part I: A Strategic Perspective* (Washington, DC: 8th QRMC, June 30, 1997), pp. 35-39.

[15] Flamholtz (1985), pp. 11-12.

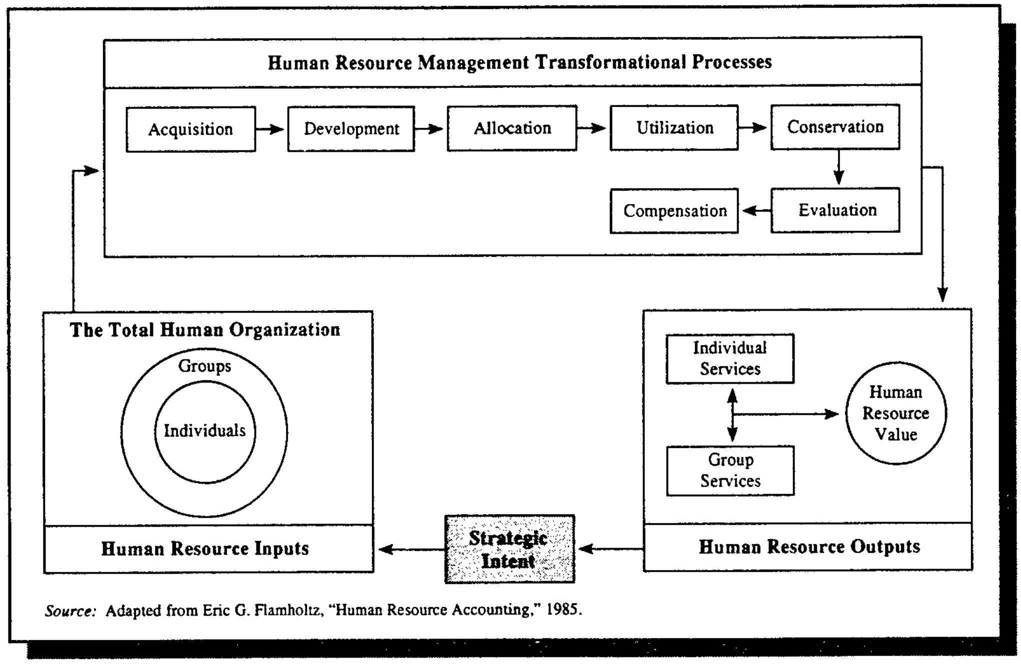

Figure 2 – An Input-Output Model of the Human Resource Management System

The Flamholtz model, with its focus on the human resource management system as a transformational process, brings a useful perspective to bear on human resource management decisions. Relationships among the elements of the transformational process imply a need for information that will enable leaders to make decisions about how to allocate resources among them and to measure their contribution toward building human capital. Within this framework, questions can be formulated in terms of how the allocation of resources to a particular element of the transformational process can improve organizational performance (in other words, how human resource inputs can more effectively be transformed into organizational outcomes). The transformational process is effected through policies and practices. So the allocation of resources to implement or modify policies and practices is, in effect, changing the transformational process. [16] Human value management and human resource accounting are steps toward providing this information in terms that present the decision maker clear options to achieve desired outcomes.

Another convenient aspect of the Flamholtz model is its similarity to the life cycle models used by the military services; in effect, the services currently think in terms of a framework that is easily translatable into a transformational process. Each of the elements of the transformational process of the Flamholtz model is discussed in Appendix III.

Every organization engages in two types of processes to accomplish its mission. First, the organization engages in a process that adds value to its inputs (human resources); the Flamholtz model describes this process for the human resource management function. Second, the organization uses these more capable human resources

[16] Said yet another way, the transformational process manifests itself in the organization's set of policies and practices.

as inputs to contribute to its mission. These processes are shown in Figure 3. In many organizations – and in the uniformed services, in particular – the process of adding value to human resources is a core process, and perhaps even a core competency. In effect, the organization's "human resource improvement" process may be the single-most important component to accomplishing the desired end. On the other hand, even if an organization excels at "human resource improvement," if these efforts are not effectively aligned with the organization's strategy, human resources will not add as much potential value as they otherwise might. In addition if the link to strategy is not explicitly established, determination of the "value" of human resource interventions (in terms of their contribution to strategic ends) will be impossible. Linking the policies and practices affecting the transformation of human resources to the strategy of the organization is essential.

. . . even if an organization excels at "human resource improvement," if these efforts are not effectively aligned with the organization's strategy, human resources will not add as much potential value as they otherwise might.

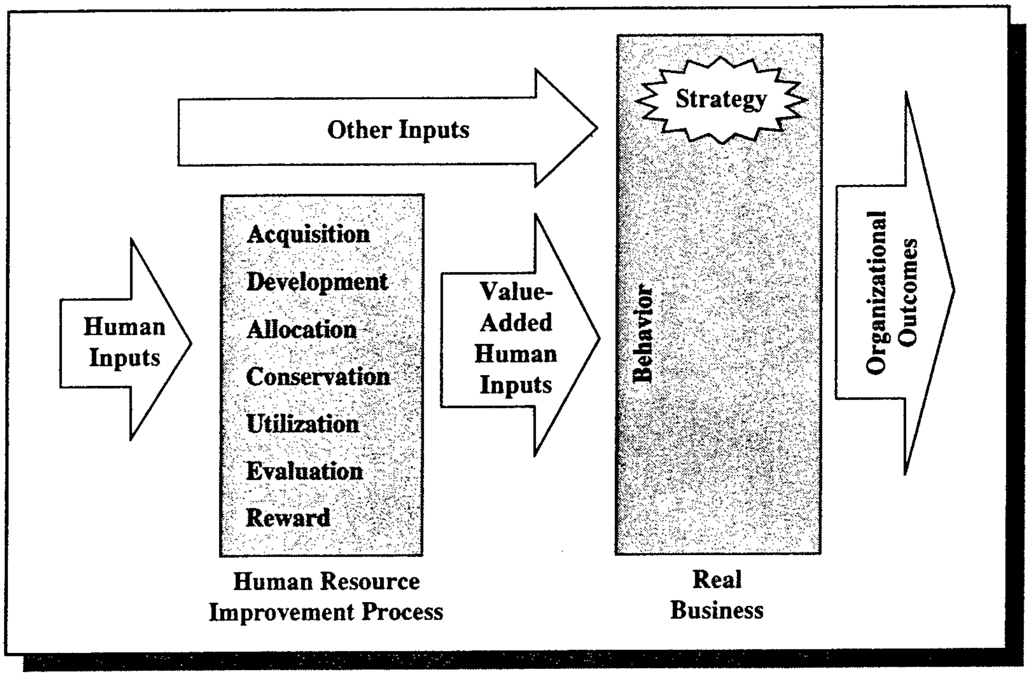

Figure 3 – The Value Trail

Connecting Behaviors To Outcomes

As Figure 3 suggests, and as the 8th Quadrennial Review of Military Compensation emphasizes, behaviors are key to linking policies and practices to organizational outcomes. A hybrid **behavior-economic** human value technique, developed by Macy and Mirvis, [17] provides a means of measuring behaviors in economic terms; it lends a framework for linking behaviors to the organization's budget. The premise of this technique is that certain behaviors produce performance outcomes that can be measured

[17] P. H. Mirvis and B. A. Macy, "Human Resource Accounting: A Measurement Perspective," *Academy of Management Review* (April 1976), p. 79.

and valued in economic terms. Macy and Mirvis identified two sets of behaviors: [18] (a) those that reflect member participation in terms of membership and attendance at work [19] and (b) those that reflect performance on the job. For example, behaviors associated with participation include:

- Absenteeism.
- Turnover.
- Strikes.
- Tardiness.

Behaviors associated with performance include:

- Production under standard.
- Quality under standard.
- Grievances.
- Accidents.
- Unscheduled downtime and machine repairs.

Three criteria determine when to include a behavior in an organizational assessment:

- The behavior must be significantly affected by the work environment.
- The behavior must be measurable in terms meaningful to the outcomes desired by the organization.
- The behaviors must be mutually exclusive.

Application of this technique involves measuring the frequency of occurrence of the behavior in the organization and converting the rate of occurrence into a cost to the organization. Although the behaviors considered by Mirvis and Macy are inversely related to organizational effectiveness and efficiency, the role behaviors identified in the report of the 8th Quadrennial Review of Military Compensation [20] are directly related to organizational outcomes. The framework proposed by Mirvis and Macy can easily be extended to include this broader category. [21]

Within this framework, then, the budgeting process can account for investments in human assets that produce both current and future effects in two areas:

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[18] In this discussion, value for the organization is created in two ways. First, human resource management policies and practices are used to reduce the occurrence – and, therefore, the costs – of behaviors that are inversely related to organizational effectiveness and efficiency. Second, human resource management policies and practices are used to increase the occurrence of behaviors that are positively related to organizational effectiveness and efficiency – thereby, increasing the value of the organization to its customers and the consumers of it services.

[19] A recent RAND study, conducted for the 8th Quadrennial Review of Military Compensation, focused on a variety of behaviors including "joining" and "staying." See Al Robbert, Brent Keltner, Ken Reynolds, Mark Spranca, and Beth Benjamin, *Differentiation in Military Human Resource Management* (RAND, MR-838-OSD), 1997, pre-edit copy, publication forthcoming.

[20] Some examples of role behaviors include: collaboration, adaptability, risk-taking, team work, etc.

[21] For a discussion of the empirical data bearing on the effect of human resource management policies and practices and a strategic approach to human resource management on organizational performance, see the working paper "Quantifying the Benefits of Changing the Way Organizations Reward, Organize and Manage People" in this volume.

- Reducing the occurrence of behaviors that are inversely related to organizational outcomes (increase efficiency).
- Increasing the occurrence of behaviors that are directly related to organizational behaviors (increase effectiveness).

For example, an organization might consider offering incentives (making an investment) directed at rewarding people for creativity, innovation and risk-taking. In effect, the incentives would be designed to align behavior with the strategy of the organization. However, because the line of sight between performance and reward would become more visible, these same people would be less likely to turnover, exhibit tardiness or be absent from work. Thus, the incentives would also reduce behaviors that work counter to desired organizational outcomes. Ideally, both of these results should be captured in the analytic framework of the budget process to ensure that decisions makers can effectively allocate resources. This is how human value management and human resource accounting can began to demonstrate that changes to human resource management policies and practices can add value to the organization.

...changes to human resource management policies and practices can add value to the organization.

Linking Behaviors to Strategies

The third framework addresses the need to identify the explicit behavior needed to support particular strategies and aligning those behaviors to achieve desired organizational outcomes. The report of the 8th Quadrennial Review of Military Compensation provides the operational means of establishing and sustaining the alignment required. This alignment is accomplished by specifying the set of behaviors and outcomes needed to bring about a chosen strategy and, then, making strategic choices along dimensions that characterize the human resource management system. [22] The choices are evaluated iteratively, with the aid of the human resource management strategic choice model, [23] to understand the trade-offs required to get the best match between strategic choices and desired outcomes. Based on the final set of strategic choices, the organization designs specific policies and practices unique to its work culture and environment. The result is a set of policies and practices vertically aligned with the strategy of the organization and horizontally aligned with each other. The policies and practices produce the set of desired behaviors which, in turn, bring about the outcomes.

It is likely that the mix of human resource policies and practices employed to increase effectiveness and efficiency is different for an organization using a strategy of innovation compared to one using a strategy of quality improvement. [24]

[22] These dimensions also underlie the elements that comprise Flamholtz' transformational process.

[23] Described in 8th Quadrennial Review of Military Compensation, *Rewarding, Managing and Organizing People for the 21st Century: Time for a Strategic Approach – Part II: A Strategic Approach* (Washington, DC: 8th QRMC, June 30, 1997), Chapter 6.

[24] Wayne F. Cascio, *Costing Human Resources: The Financial Impact of Behavior in Organizations* (Boston, MA: PWS-KENT Publishing Company, 1991), p. 293.

Table 1 – Outcomes and Behaviors for Different Organizational Strategies [25]

Organizational Strategy	Increase Effectiveness	Improve Efficiency
Innovation	Interdependent Creative (developing new ideas and applying innovative approaches) Self-developing Trial and error problem solving Seizing opportunity and taking responsibility without hesitation Adaptable (flexible to new circumstances) Risk-taking Openness (sincere and candid in discussions) Aggressive, long-term learning (especially about business)	Reduce controllable turnover Minimize absenteeism
Quality	Goal setting Self-improvement Meet and exceed standards Concern for production and delivery processes Commit to organizational goals	Minimize turnover Minimize absenteeism Minimize tardiness
Customer Service	Broad-mindness (accepting different viewpoints and opinions) Considerate (being caring and kind) Courteous (respect for individual dignity) Diligence Forgiving (understanding when errors occur) Well organized Moral integrity (honorable and following ethical principles) Initiative (seizing opportunity and taking responsibility without hesitation)	Remove barriers to attract repeat customers (avoids cost of finding a new customer) Participation in design process to reduce rework Exercise choice in benefits
Least Cost	Short-term focus Independent Diligence (working long and hard to achieve results) Cautiousness (minimizing exposure to risk) Obedient (comply with directions and conform to rules)	Minimize training and development requirements Reduce dysfunctional turn over Low absenteeism Low risk-taking Economic (thrifty and careful in business)
Military Effectiveness	Obedient (comply with directions and conform to rules) Diligence (working long and hard to achieve results) Moral integrity (honorable and following ethical principles Self-improvement Meet and exceed standards Moral and physical courage Adaptable (flexible to new circumstances) Build cohesion	Economic (thrifty and careful in business) Maintain fitness and vigor

[25] Table modified from Cascio, p. 293.

The 8th Quadrennial Review of Military Compensation considered five such organizational strategies. For each of these five strategies, the chart below suggests some of these different behaviors in the context of their primary impact on organizational effectiveness and efficiency.

Overall, this process (building on the Flamholtz and Mirvas and Macy frameworks) allows the organization to go beyond focusing on producing human resource management outputs to focusing explicitly on the contribution of these outputs to the achievement of organizational outcomes.

Overall, this process . . . allows the organization to go beyond focusing on producing human resource management outputs to focusing explicitly on the contribution of these outputs to the achievement of organizational outcomes.

CHAPTER 3
BUDGET TIED TO STRATEGY: A TOOL FOR BUILDING HUMAN RESOURCE VALUE

The overall cost of people is visible in the department's budgeting system – major budget categories are devoted to it. However, these costs, particularly the cost of military personnel, are, generally, not allocated to specific organizations. To the extent that the account displays of some major programs contain elements that reflect the direct cost and, to a lesser degree, the indirect cost of the people, the costs are so aggregated that there is no way to link them to the organization's desired outcomes. Finally, all of these costs are currently treated as expenses. However, some of those costs are related to developing the capability of people for the future and could, and should, properly be viewed as investments that are associated with an expectation of a future return. In addition, these investments are being made, largely if not solely, to achieve organizational outcomes. In that context, the question becomes whether the return – the benefit in terms of the organization's strategic ends – is worth the cost.

. . . the question becomes whether the return – the benefit in terms of the organization's strategic ends – is worth the cost.

If the budgeting process considered the effects of these investments, a more accurate picture of the relationship between the costs of a program and the expected benefits would emerge. This picture would better support management decisions aimed at selecting alternative designs or interventions for the human resource management system that fully develop the capability of service members – now and in the future. In addition, such an approach would provide a clearer line of sight between management decisions and the strategy of the organization by tying the decisions to desired organizational outcomes.

> **"When an organization integrates its strategic planning process with its budgeting process, it can increase efficiency and effectiveness even more."[26]**

To be effective, human value management must become part of the organization's decision-making process.

[26] Phillip Blackerby, "Strategic Planning: An Overview for Complying With GPRA," *Armed Forces Comptroller* (Winter 1994), p. 20.

APPENDICES

Appendix I
Overview of the Planning, Programming and Budgeting System

A brief description of activities in each phase of the planning, programming and budgeting system is included here to serve as a point of departure for what might be done in the future. Although the examples focus on human resource management, these considerations receive a relatively modest amount of attention in the overall process.

Planning establishes the mission, vision, and strategies for the department. The results of planning are published in the Defense Planning Guidance (DPG). The Defense Planning Guidance is a fairly large document that identifies the services' goals, performance targets, macro-resource limits and high-level policies. Examples include ceilings for total personnel and officers, training-related readiness requirements, quality goals for recruiting, and promotion objectives related to equal opportunity. Broad fiscal guidance allocates budget authority to the services over the planning horizon. Services participate in the development of the Defense Planning Guidance but do not have veto power. Fiscal guidance is formulated almost exclusively at the Department of Defense level.

Programming occurs primarily at the service level and specifies, within the Defense Planning Guidance and fiscal guidance, desired service programs and their associated resource requirements. Often, resource requirements exceed allocated budget authority and prompt a request for increases in planned resources. The result of this process is the Program Operating Memorandum (POM). To determine the human resource requirements, services compile personnel numbers based on systems and organizations to be manned in the force structure for each service. Average cost per personnel category (enlisted, officer, job specialties) are used to develop personnel accounts and to distribute costs across a number of program elements in appropriation accounts. Program Operating Memorandum schedules specifically show recruiting plans, training requirements, and other personnel-related information. The department reviews the Program Operating Memorandum to confirm that resource allocations are reasonable. The Department of Defense modifies the Program Operating Memorandum through Program Decision Memoranda (PDMs).

Budgeting focuses on the first two years of the Future Year Defense Plan and is compiled by the services in their Budget Estimate Submission. The budget expresses the resource requirements in manpower and dollars, classified by appropriation account. The budget is reviewed by the department which publishes Program Budget Decisions (PBDs), as required, to change service budgets. It is consolidated by the department and sent to the President for submission to Congress.

The budget can be a mechanism of effectiveness – achieving certain results (outcomes) in the organization – and/or efficiency – doing whatever is done at least cost or getting the most out of a given level of expenditures. [27] If the department wants to make its people more visible in the current process, it must treat its people (human resources) as an asset. This perspective will require the department to focus attention on both the cost and the value of its human resources to the department and to its subunits. As part of the transition to a more strategic approach to rewarding, managing and organizing human resources, the department might take some or all of the following actions related to selected personnel expenditures:

- Develop accurate cost of people and organizational interventions related to them.
- Amortize certain capital costs over the service life of its human resources.
- Show the costs and benefits of investing in people as assets to the organization.
- Measure performance of people at different levels of investment for the purpose of "performance budgeting."
- Use the budgeting process as a tool for investing in people to achieve organizational outcomes.

Budgeting is the final process in strategy formulation in an organization. It captures the financial implications of its decisions. If human resources are important to the successful prosecution of the department's strategy (which all would admit they are), they require the same rigorous consideration within the planning, programming and budgeting system as the other inputs to the organization.

[27] Idea modified from Aaron Waldavsky and Naomi Caiden, *The New Politics of the Budgetary Process* (New York, NY: Addison-Wesley Educational Publishers Inc., 1996), p. 264.

APPENDIX II
HUMAN RESOURCE ACCOUNTING

This appendix briefly describes several human resource accounting concepts and methods for computing cost and values, with the focus on how they might be applied to the value side of the ledger. Although these models or variations to them can help allocate resources within the planning, programming and budgeting system process, they do not provide the full answer to human value management. We found no model capable of doing that. The models described below provide pieces of the puzzle – a puzzle whose assembly requires further conceptual and operational development. We suggest this development will rely heavily on the techniques described in this appendix, extended and modified to apply to the third perspective described in the paper. [28]

Human Resource Costs: Concepts and Methods

Original Human Resource Cost Method

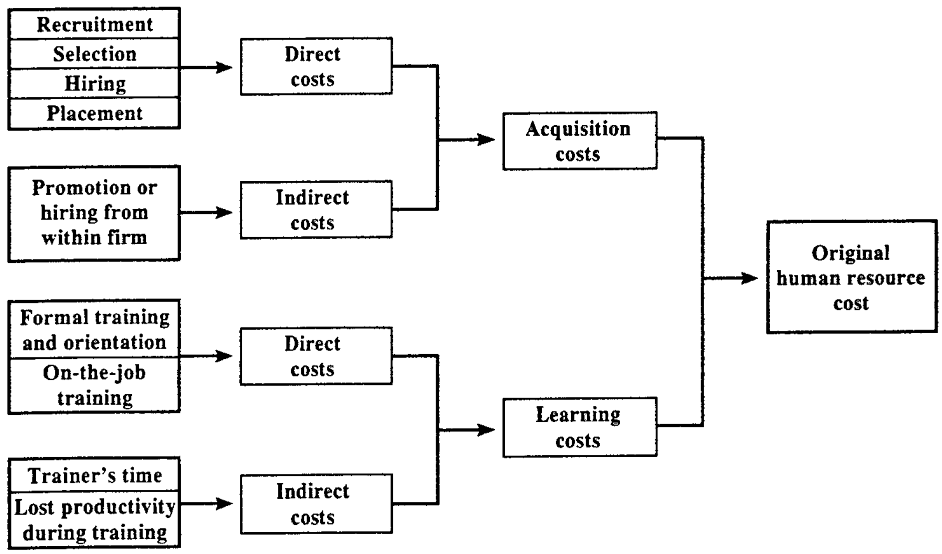
One of the more common methodologies, the Original Human Resource Cost Method (also called Historical Cost Model) centers around the amount expended to make a person a member and/or develop them from inside the organization. Figure 3 displays the categories of expenditures which include recruiting, selection, hiring, placement, orientation, on-the-job training, trainer's time costs, lost productivity during training, and development or learning. These categories represent two types of cost: acquisition costs which include the direct cost of recruitment, selection, hiring, and placement (or the indirect cost of promotion or hiring from within); and learning development costs which include the direct costs of formal training, orientation and on-the-job training; and the indirect costs for the time of trainers and lost productivity during training. [29]

There are two distinct advantages of this method. First, it is the same method used for other assets because it represents the cost to the purchaser. Second, it is simple and inexpensive, and it can be implemented in a short period of time.

The basic framework for developing historical costs is portrayed in Figure 4.

[28] The "value of human resources" discussed in this appendix refers primarily to a description in terms of something that can be monetarized. The techniques for calculating this value have not been (but could be) applied to quantifying the contribution (monetary and non-monetary) of human resources to strategic ends.

[29] Kenneth A. Klase, "Accounting for Human Resource Development In The Public Sector," *International Journal of Public Administration*, Vol. 19 No. 5 (1996), pp. 678-679.



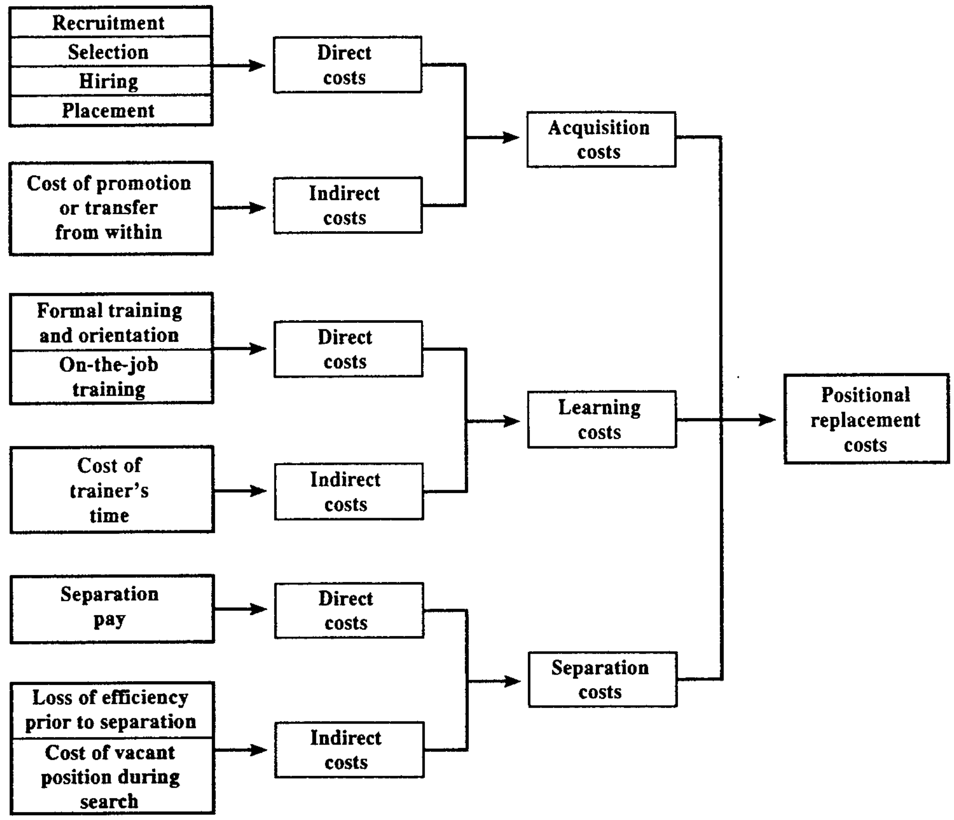
Source: Eric G. Flamholtz, "Human Resource Accounting," Jossey-Bass Publishers, 1985.

Figure 4 – Model for Measurement of Original Human Resource Cost

Replacement Cost Method

The Replacement Cost Method centers on what it would cost to replace people who are currently members of the organization. Included are both position replacement costs (those associated with a specific position) and the personal replacement cost (those associated with replacing a member with one who provides equivalent services). Replacement costs include acquisition costs (same as above), learning or development costs (cost to bring the replacement to the current level of competence) and separation or termination costs (separation pay and estimated monetary losses during the time the position is being filled).

The basic framework for developing replacement costs is portrayed in Figure 5.



Source: Eric G. Flamholtz, "Human Resource Accounting: Measuring Positional Replacement Costs," *Human Resource Management,* Spring 1973, p. 11.

Figure 5 – Model for Measurement of Human Resource Replacement Cost

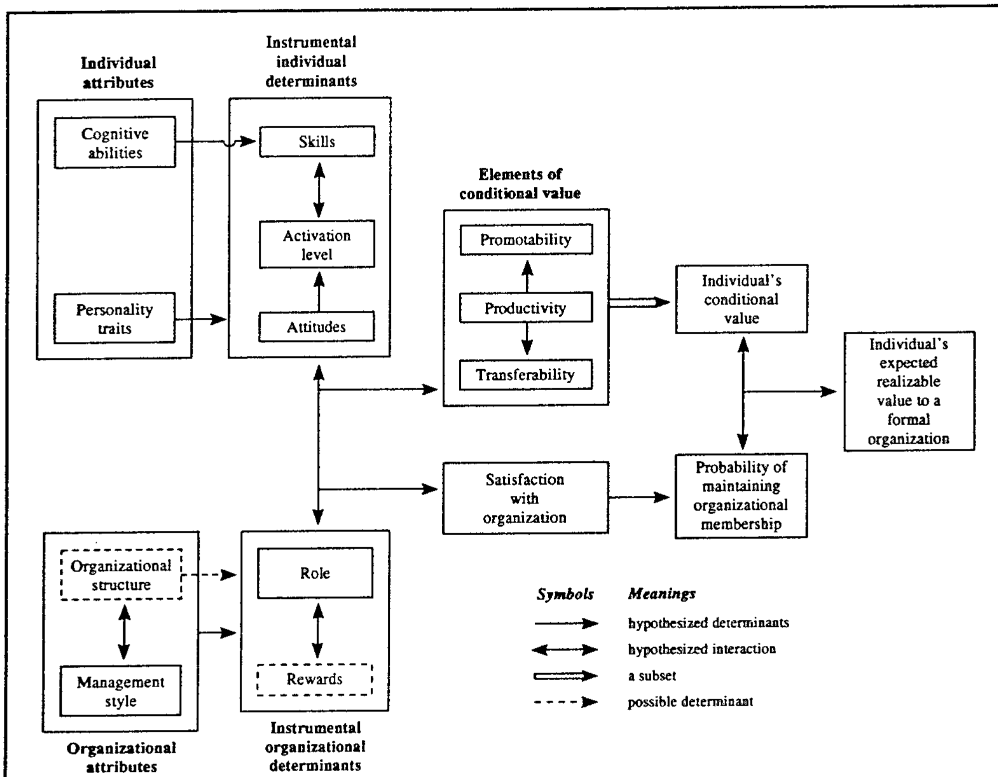
Human Resource *Value*: Concepts

The calculation of human resource value will require more tailoring and creativity than the calculation of human resource cost before it can be applied in the department. However, the potential for this information to contribute to decisions about people makes the effort worthwhile. Both monetary and nonmonetary methods of determining human resource value exist. This section discusses the theoretical framework for the nature and determinants of the value of people to organizations. The next section briefly discusses methods for calculating monetary and nonmonetary value.

The theoretical framework is called human resource value theory. Human resource value is defined as the present worth of a person's expected future service. The concept can be applied to individuals, groups and the total organization.

Flamholtz Model of Individual Value

The value of a person depends on whether they render or withhold their services. Therefore, from the organization's perspective, the likelihood of realizing a person's service is less than certain. This highlights two aspects of an individual's value: (1) the *expected conditional value* which is the amount the organization *could* realize if the person maintains membership in the organization throughout the period of his or her useful service life and (2) the *expected realizable value* is the amount of service actually expected after accounting for the person's probability of turnover. The second aspect is closest to the notion of economic value and is, therefore, most important for an organization to consider. This aspect, developed by Flamholtz, is portrayed in Figure 6.



Source: Eric G. Flamholtz, "Assessing the Validity of a Theory of Human Resource Value: A Field Study," *Journal of Accounting Research*, Empirical Research in Accounting: Selected Studies (1972): 257.

Figure 6 – Revised Model of the Determinants of an Individual's Value to an Organization

In the Flamholtz model of an individual's value to an organization, the individual brings certain attributes to the organization: cognitive abilities, such as aptitude; and personality traits, such as the need for achievement. These attributes are the source of work-related value determinants: the person's skills, activation level (motivation) and attitudes. However, an individual's value to the organization is in relation to the roles (the set of behaviors expected of a person who occupies a specified position) he or she can or will potentially occupy. Organizational attributes of structure and management style determine the roles and rewards available within the organization, and these organizational determinants [30] interact with the individual determinants to produce the elements of conditional value (productivity, promotability, and transferability) [31] and the person's satisfaction with the organization. Satisfaction and conditional value produce the person's realizable value. [32]

The model has a number of measurement implications. It shows that an organization should measure both a person's conditional (potential) value as well as the expected realizable value that accounts for the probability of turnover. People with the greatest realizable value are worth more to the organization. In effect, the difference between the potential value of an individual and his or her realizable value represents the amount the organization might want to invest to reduce turnover to zero. The model also shows that satisfaction is an important influence on whether a person remains in the organization and, therefore, should be measured and reported to leadership. Another measurement implication is that a person's worth is not solely a function of personal attributes. It is affected by a set of interacting economic, social, and psychological variables. As the framework shows, the value of a person is a function of personal attributes and the organizational role assignment. Lastly, the model includes in value the idea of transferability. This becomes very important if the department moves to flatter organizations where vertical promotions are limited.

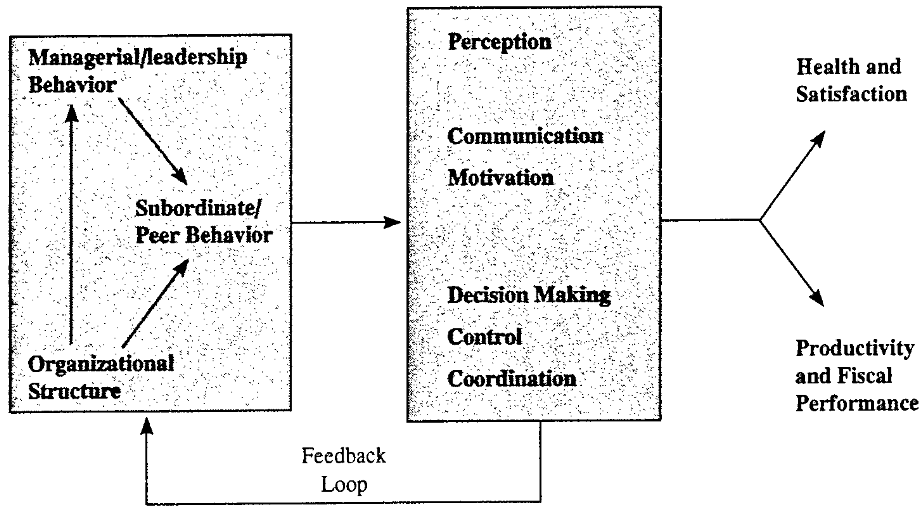
Likert and Bower Model of Group Value

The value of groups is an important consideration for organizations, especially as teams and team work take on greater prominence. The basis of this focus is that groups carry out the processes within an organization that produce products or services. The framework for group value, developed by Likert and Bower, is in shown in Figure 7.

[30] As documented in the 8th Quadrennial Review of Military Compensation, *Rewarding, Managing and Organizing People for the 21st Century: Time for a Strategic Approach* (Washington, DC: 8th QRMC, June 30, 1997), the human resource management system can or should communicate and deliver the organizational determinate to individuals through the policies and practices with its components of organizational structure, personnel management (management or leadership style) and compensation (rewards). Resource allocation effects the ability to implement policies and practices that are aligned to produce the desires outcomes of the organization.

[31] **Productivity** refers to a set of services an individual is expected to provide while occupying his present position. A synonym for productivity is performance. **Transferability** is the set of services an individual is expected to provide if and when he transfers to other positions at the same position level in a different promotion channel. **Promotability** represents the set of services the individual is expected to provide if and when he occupies higher level positions in his present or different promotion channels.

[32] Eric G. Flamholtz, "Assessing the Validity of a Theory of Human Resource Value: A Field Study," *Journal of Accounting Research, Empirical Research in Accounting: Selected Studies* (1972), p. 257.



Source: Adapted from Rensis Likert and David S. Bowers, "Organizational Theory and Human Resource Accounting," American Psychologist (June 1969): 586. Copyright 1969 by the American Psychological Association.

Figure 7 – Model of Determinants of a Group's Value to an Organization: Schematic Relationships among Causal, Intervening, and End-result Variables

The Likert and Bower model examined the determinants of group value. It is intended to represent the productive capability (value) of any enterprise or unit within it. The organizational outcomes that enable the department to achieve its missions are produced by units and task forces, not individuals. Understanding the determinants of the value of these groups should prove useful to the department.

The model depicts the relationship of three variables – causal, intervening, and end-result (similar to the term "outcomes" in the 8th QRMC report). The value of any group is the worth of the end-results that the group is expected to produce.

- **Causal variables** are independent variables that can be purposely altered by the management of an organization and that determine the course of events within the organization. A variable excluded, for example, is general business conditions. There are two types of causal variables: **organizational structure** – relationships among organizational roles – and **managerial/ leadership behavior**. Managerial/leadership behavior refers to the actions of leaders that influence group effectiveness. There are four components of managerial/leadership behavior.
  - Support involves behavior that improves another's feeling of personal worth and importance.
  - Team building involves behavior that encourages group members to develop close, mutually satisfying relationships.

  - Goal emphasis is behavior that motivates excitement for meeting the group's goals or achieving excellent performance.
  - Work facilitation involves behavior usually present as processes that enable the achievement of goals, including activities like scheduling, coordinating, and planning and allocation of resources such as tools, materials, and knowledge.

- **Intervening variables** reflect the internal state, health and performance capabilities of the organization, that is, the loyalties, attitudes, motivations, performance goals, and perceptions of all members and their collective capability for effective actions.
- **End-result variables** are the dependent variables which reflect the results achieved by that organization, such as productivity, cost, scrap loss (increased efficiency), growth, share of the market and earning.

The model simply links the causal variables through intervening variables to end-result variables. A key insight provided by the model is that an organization can influence the causal variables through an investment in its leadership/management structure (style, strategy) and in its organizational structure and its group processes (reengineering). These changes influence the internal work culture (way work is done) affecting loyalties, attitudes, motivations, performance goals and perception of all members and their collective capability for effective action, communication, interaction, and decision making. Through these intervening variables, work culture influences the desired end-results – workforce health and satisfaction, and productivity and mission performance. The human resource management strategic choice model developed by the 8th Quadrennial Review of Military Compensation, though significantly more elaborate, exhibits this same general form.

Empirical support for the model exists. Likert and Bowers showed that participative management yields more favorable attitudes as expressed in such intervening variables as confidence and trust in superiors, ease and accuracy of communication, and group loyalties. The correlation between performance cost and managerial behavior range from -0.48 to -0.58 showing that the better managerial behavior is perceived to be, the lower the performance costs. [33] Likert and Pyle showed association between performance cost and managerial behavior where managerial behavior was assessed by three indices: managerial support, managerial team building, and managerial work facilitation. [34]

[33] Rensis Likert and David S. Bowers, "Organization Theory and Human Resource Accounting," *American Psychologist* (June 1969), p. 586.

[34] Rensis Likert and William Pyle, "Human Resource Accounting: A Human Organizational Measurement Approach," *Financial Analysis Journal* (January/February 1971), pp. 75-84.

Robinson Participative Involvement Model

Robinson proposed a constructive participative involvement approach which relies on participative goal settings by departments and involves all levels of the organization in the decision making, performance appraisal, and goal achievement. [35] The development of human resources as assets is shown by:

- Continued concern by everyone for the attainment of profitable objectives.
- Increased confidence and trust in their own and their superior's attitude to perform effectively.
- Reduced turnover and grievance among rank and file.
- The self-imposition of higher quality and performance standards by subordinate departments, group and individuals.
- Increased pride of accomplishments in maintaining a competitive position in the industry over the long term (results in containing for security and increased earnings).
- Reduced need for permission, inspections and imposition of work standards with a corresponding reduction of overhead expenses.

Myers and Flowers Flow-Process

Another model proposed by Myers and Flowers, measures the conversion of human resources into job behaviors. [36] The dimensions of human assets follow a flow-process that leads to job performance as follows:

Knowledge ⇒ Skills ⇒ Health ⇒ Availability ⇒ Attitudes ⇒ Job Performance

Human Resource *Value*: Methods

Valuation Methods: Individual – Monetary

The first valuation method, the *stochastic rewards model,* is a very accurate way to compute the value of human resources and conceptually underlies all other methods. It measures a person's value to the organization by determining their value based on the probability they will transition through a defined set of service states in the hierarchy of the organization. The organization uses the following steps to develop the model.

- Define the mutually exclusive states an individual may occupy in the organization.
- Determine the value of each state to the organization.

[35] B. A. Robinson, "An Approach to Human Resource Accounting," *Cost Management* (May-June 1974), pp. 26-32.
[36] M. Scott Myers and V. S. Flowers, "A Framework for Measuring Human Assets," *California Management Review* (Summer 1974), pp. 5-16.

- Estimate a person's expected tenure in an organization.
- Find the probability that a person will occupy each possible state at specified future times.
- Discount the expected future cash flow to determine their present value.

The greatest challenge to using this model is defining and valuing the various states that an individual might pass through as a member of an organization.

Original cost of human resources as a surrogate for the value of people has the primary benefit of being consistent with the use of cost as a surrogate of value in conventional accounting. It is possible to get an accurate measure of a person's acquisition costs. Its primary failing is that the cost to acquire a person is not likely to be a good estimate of his or her value today or at any time after the acquisition date.

Replacement cost of human resources as a surrogate provides a value for people that is more relevant for input to investment decisions than original cost. It still, however, falls short of a complete assessment of value.

Compensation has been suggested as a surrogate for an individual's value. It is the price the organization is willing to pay to obtain the individual's service. However, compensation may not reflect an individual's actual value or his or her current or future productivity. Performance measures that are often used as a basis of compensation might not include all the dimensions of his or her value. The more accurate the performance measures, the more effective this surrogate becomes. This measure is particularly ineffective in an organization as large and diverse as the military when it employs a largely "one-size-fits-all" compensation system (with little variation in terms of how individuals with different skills move through the pay table) and in which less than half of pay increases are attributable to performance and annual increases are provided across the board. Such a system largely obviates any insight that would be gained by attempting to value different kinds of human resources (because everyone would have the same value).

Opportunity costs measure the value of a person in an alternative position or the value not realized by the organization because it assigned the individual to one job as opposed to another.

Valuation Methods: Group – Monetary

A group may be thought of as a collection of more than one person. However, this discussion focuses on a group as a collection of people who share an identify. This collection of people works together to produce performance results for an organization. The value of a group is not always the sum of the value of its individual members. One reason for the difference is caused by synergy – the cooperative action of individuals that result in total effects that are greater than the sum of the effects of the individuals acting independently. [37] Measuring the value of a group entails determining the net present value of the expected future contribution of the group to the organization.

[37] Flamholtz (1985), p. 172.

There are a number of ways to think about groups. Groups may reflect their organizational classifications such as divisions, departments, and plants. Another way to think of groups is as expense or profit centers depending on how an organization measures their inputs and outputs. In an **expense center**, inputs are measured in monetary terms, but there is no attempt to measure outputs in a similar manner. In **profit centers,** both inputs and outputs are measured in monetary terms. The valuation of groups in an organization is an area in which relative little research has been done. No normative model or framework exists. Approaches for valuing groups when they are viewed as profit centers and expense centers are discussed below.

The stochastic rewards model discussed earlier can be applied to profit centers. Three approaches exist for valuing profit centers: the economic value approach, the unpurchased goodwill method, and the human organizational dimensions.

- **The Economic Value Approach** involves calculating the value of a group by determining the present worth of the future services that it will provide in an organization. This requires forecasting the total future earnings of an organization, discounting the earnings to determine the present value, and allocating a portion to human resources based on their relative contribution. A relative measure of the contribution of human resources is the ratio of investments in human resources and total resources. As an example, suppose a privatized maintenance depot had $10 million in total assets including $5 million in human assets. The depot forecast that its future revenue, discounted to present worth, will be $24 million. Human resources constitute one-half of the depot's assets. One-half of its discounted future earnings will be allocated to human resources. This approach would conclude that the value of the depot's human assets is $12 million.
- **The Unpurchased Goodwill Method**[38] involves the argument that the best way to show the effects of unowned resources (including human resources) is to compare the income an enterprise earns to the average of income of enterprises within its industry and to allocate any differential to the unowned resources. Two types of assets are present in the enterprise, owned and operational. This method assumes that unowned resources (operational assets) are not reflected on the balance sheet of an enterprise. It can be argued that operational assets are primarily made up of human resources.[39] This method concludes that human assets are the source of differential earnings rates. The primary use envisioned for this method is external reporting. All calculations

[38] The developer of this method has a somewhat unique view of assets that might be useful when exploring how the department might apply this method. "Assets are scarce resources (defined as services grouped by and referred to as agents), operating within the entity, capable of being transferred by forces within the economy, and expressible in terms of money, which have been acquired as the result of some current or past transaction, and which have apparent ability to render future economic benefits." He distinguishes between owned assets – those scarce resources legally or constructively owned by the entity that have a separate determinable market value and could be directly used or converted for payment of a debt, and operational assets which are scarce resources operating in the entity that is not owned. This method is cited in Roger H. Henderson, *Accounting for Human Assets,* Occasional Paper No. 14 (East Lansing, MI: Bureau of Business and Economic Research, Michigan State University, 1964), pp. 4-5.

[39] Flamholtz (1985), pp. 214-215.

are based on earnings from the previous year. To apply this method, an average rate of income is established for an industry of interest using the ratio of net income to owned assets. An expected income is also established for each enterprise in the industry. The expected income is compared to actual income for the previous year and an income differential and rate differential (ratio of income differential to owned assets) are computed. The rate differential and the income differential are multiplied to yield the capitalized value of human assets in the enterprise. Table 2 and Table 3 illustrate the method.

Table 2 – The Medical Industry

FIRMS	A	B	C	TOTAL INDUSTRY
Total Owned Assets	100,000	200,000	300,000	600,000
Net Income	20,000	10,000	30,000	60,000
Ratio of net income to total owned assets	20%	5%	10%	10%

Table 3 – Calculation of Human Asset Value for Medical Firms

FIRMS	A	B	C
Total owned assets	$100,000	$200,000	$300,000
Normal net income at 10%	10,000	20,000	30,000
Actual net income	20,000	10,000	30,000
Variance	10,000	(10,000)	0
Human assets (capitalized at 10%)	100,000	(100,000)	0

This method has a number of notable limitations. First, it does not recognize a base value of human resources needed to carry out "normal" operations. Second, it only uses actual income from the previous year. The second limitation can be overcome using forecasts of future earnings which might be more relevant to management decisions. [40]

- **The Human Organizational Dimensions Method** operates on the premise that the value of human resources should be determined as it is for other resources. This involves calculating the values in terms of the present worth of their contribution to an enterprise's future earnings. This method does not require a forecast of the firm's future earnings but does take into account the contribution of human resources to those earnings. The Likert-Bowers model for group value discussed earlier is the basis of this method. The underlying

[40] Flamholtz (1985), p. 215.

relationships of that model indicate that certain causal variables such as organizational structure and leadership actions influence organizational processes (intervening variables) like motivation, communication, decision making, coordination, and control. Together the causal variables and intervening variables portray the internal health of the organization as a human system. These variables determine the **productive capability** of the organization. With this conceptualization in mind, Likert and Bowers recommend a five-step process [41] for computing a monetary estimate of the expected *change* in the value of a human organization.

- Measure the dimensions of the human organization on a scaled response (commonly called a Likert scale) questionnaire.
- Standardize the scores using statistical methods to account for the degree of variability of the set of responses.
- Calculate the difference between responses for two separate periods of time. The difference (delta) is the change in the specified dimensions of the human organization.
- Multiply the delta times the coefficient of correlation between the variables and an end result variable. This provides an estimate in standard scores of the anticipated change in the end-result variable attributable to a change in the human organizational dimension.
- Translate the standard scores into the measuring units of the end-result variables.

Table 4 illustrates these steps.

Table 4 – Computing a Monetary Estimate of the Expected Change in the Value of a Human Organization

Response Categories	Response Scale	First Response Period	Second Response Period
To a very great extent	5	0.20	0.25
To a great extent	4	0.50	0.55
To some extent	3	0.30	0.20
To a slight extent	2	0	0
To a very slight extent	1	0	0
Total		1.00	1.00
Weighted mean score *		3.90	4.05

**Weighted mean is the sum of the products of response scale and response period percent.*

[41] Flamholtz (1985), pp. 216-217; cited in Likert and Bowers "Improving the Accuracy of P/L Reports," p. 21.

The delta shown is this table is +0.15. The final step is to calculate an estimated change by multiplying the delta times the coefficient of correlation. Assume a coefficient of 0.6. The estimated change in the end-result variable of interest attributable to the change in the human dimension is 0.09. Assume that the end-variable is net profit. Also assume that a 0.10 change in the human dimension is worth $10,000 change in net profit, then the 0.09 change would be expected to increase net profit by $9,000.

Flamholtz describes a number of limitations of this model.

1. Use of the coefficient of correlation overestimates the relationship between an intervening variable and an end-results variable. The coefficient of determination provides a better representation of the relationship.
2. The validity of the method depends on the validity of performance measurements available.
3. This method only generates monetary measures when financial performance data is available.
4. A relationship must be established between changes in human organizational dimensions and changes in financial measures.

Although inputs are generally available for the valuation of expense centers, monetary measures of outputs are not. The methods for valuation of expense-center groups usually involve the use of a surrogate of the stochastic reward model. Surrogates for expense-center groups include the following.

- Salary Method involves estimating the value of an expense-center group by capitalizing (reflecting as an asset on a "balance sheet") the sum of the values of the salaries of the individual members of the group. Although this might provide an initial value or "rough estimate," it ignores the possible effects of synergy.
- Replacement Costs Method assesses the value of a group as the sacrifice an organization would incur today to recruit, select, hire, train, and develop a group that is capable of providing a set of services equivalent to a group that is presently employed in the organization. This method does capture the effects of synergy.
- Original Costs Method uses the initial cost to recruit, select, hire, train, and develop a firm's original human resource organization. A difficult aspect of this method is estimating the costs of developing an effectively functioning group. These costs include the development of effective communication, decision making, coordination, and other organization processes commonly called "teamwork." [42]

[42] Flamholtz (1985), p. 121.

Valuation Methods: Individual and Group – Nonmonetary

Several nonmonetary techniques exist for valuing human resources. They are important because some decisions do not require monetary measures, and because nonmonetary techniques may be used as surrogates for monetary techniques.

- Skill inventory. Depicts the capabilities of organizational members, to include their education, knowledge and experience.
- Performance evaluation methods. Measures worth of a person in accordance to a set scale or by arranging people in order against one or more dimensions, for example, leadership potential. Included are various rating and ranking schemes for human resources.
- Assessment of potential. Determines a person's capacity for development and promotion as the method of defining their potential service (value) to the organization.
- Attitude measurement. Captures the tendency of people to express feelings about some object. Attitude surveys are used to determine how people feel about their job, pay, working conditions, or the organization. From this information, the organization discovers the sources of satisfaction and dissatisfaction of its people.
- Subjective expected utility. The notion that an organization can estimate the likelihood of obtaining the value that it perceives a person has.

Appendix III
Elements of the Flamholtz Transformational Process

This appendix outlines elements of the Flamholtz transformational process in terms of the range of policies and practices that comprise the element, the types of costs that are likely to be considered and the characterization of the value of the asset that is affected by the policies and practices. [43] Many of the examples of information discussed have their basis in the private sector. However, with some tailoring, the department can adjust this information to be applicable in its unique environment.

Acquisition of Human Resources

The focus in this element involves the policies and practices associated with searching for, assessing, selecting, and hiring individuals needed to fill current and future requirements of the organization. The costs include advertising, hiring bonuses, moving individuals and their families, assessment testing, and overhead expenses involved in conducting this function (recruiters, facilities, supplies, etc.). This is the first step in human value management – acquisition of the asset. It creates the potential for adding further value. Fitz-enz [44] highlights the difference between human assets and other kinds of assets and their role in the process: "Everyone acknowledges that people are the key asset. . . . All other assets are nothing more than commodities that can be purchased at market prices. Once purchased and delivered, the others are inert, depreciation assets. Only the human asset has potential to learn, grow, and contribute."

Human resource accounting is capable of providing another vital piece of information – the *expected future value* to the organization of the acquired human resources in both quantitative and qualitative terms. Other types of capital have an expected value at the time it is purchased. The "purchase price" for an asset is normally less than its "value." However, in the case of human assets, the purchase price (the expenses incurred to hire the individual and perhaps initial entry training) would be far less than the value (say the salary paid over the term of initial service obligation). If the organization had to pay a purchase price more closely related to the value of the human assets, the organization might choose to engage in a more rigorous evaluation of prospects to ensure that the full value would be realized. As a case in point, attrition during the first term is approximately 30 percent – one third of those entering active duty fail to complete their obligation. The foregone value is not a cost to the organization, although it must incur additional expenses to hire a replacement. Within the

[43] Flamholtz (1985), pp. 12-18.

[44] Fitz-enz (1995), p. 45.

context of the current budget process, the cost of attrition does not bring as much pressure to bear on the policies and practices that affect it as a process that more accurately characterizes the value of the asset otherwise might.

In other words, changing the way an organization thinks about the asset may change the amount of assessment in which the organization invests (to determine characteristics that relate to behaviors and "fit with the organization" or "fit with the job," for example) during the acquisition stage; this will affect future attrition, which, in turn, will affect future acquisition investment (as well as the effectiveness of the development investment [45]). This example highlights the interconnected nature of the elements of the transformation process and the complexity of the investment decisions that must be made if the financial resources devoted to human resource management programs are to be allocated efficiently.

Other kinds of measures that an organizations might use to determine the "bang it is getting for its bucks" emerge. Determining the actual cost of acquiring the human resources required and their actual contribution to the organization can highlight the efficiency and effectiveness of this transformational process. For example, the ratio of the value of the assets acquired in a particular time period and the resources devoted to the acquisition of these human resources would permit a decision maker to track the effectiveness of the stage of the transformational process over time or the effective-ness of different mixes of policies and practices targeted to different types of human assets. Further, actual costs and value can be measured for comparison to estimates.

Development of Human Resources

The focus in this element involves the policies and practices associated with various training and educational activities that are designed to improve technical, leadership/ managerial (self or external) and interpersonal skills. Programs that support this process can be formal or informal; they can be provided internally or externally; they can be targeted at increasing firm-specific human capital or be more general. Expenditures for human resource development in public organizations are being viewed more as investments in human capital. [46] The costs include direct costs – personnel (training participants, trainers and other personnel, and total direct outside personnel costs); travel, per diem, accommodations, and incidental expenses; outside goods and services; and facilities – and indirect costs – overhead costs, facilities, and equipment.

The budget process is currently capable of capturing cost estimates for training, but is less adept at delineating the return on such investments (the increase in the value of the human capital). Again, the techniques of human resource accounting described below can help calculate the expected return on a proposed investment.

[45] Training provided to people who leave the organization is, in a sense, wasted and thereby reduces the efficiency of that training. This neglects, of course, externalities in the form, for example, of any social value that training may have.

[46] Klase, p. 665.

Questions might focus on the increase in value in terms of higher productivity or decreased turnover accruing from an investment in training. This value, in some cases, can be converted to dollars (for example, in terms of reduced manpower levels or reduced acquisition costs, or both) to calculate a return on the investment. In other cases, the value will remain more qualitative (for example, its contribution to increased creativity or adaptability); even in these cases, the value is important in efforts to compare different policies and practices for achieving the outcomes related to strategic ends or to compare other means (for example, process or technology) to those ends.

As noted above, the transformational processes are interrelated – change in one results in change in another, intended or unintended. For example, "make versus buy" is a classic decision: an organization can acquire persons with the desired skills or develop desired skills in persons already in the organization. An investment in acquiring the desired skills could produce significant savings in development costs. Not making the investment avoids acquisition costs but might increase development costs significantly. Not only do these alternatives have different costs (investments), they have different impacts on the value of the human assets, as well. The calculation of the return on investment can be particularly useful in capturing the full effect of policy changes when they cut across elements of the transformational process.

A possible result of making sound, strategic decisions to invest in the transformational processes is resource savings – some of which could show up in a time span encompassed by the current Future Year Defense Plan (FYDP). [47] Flamholtz cites an example of the Navy's use of the human resource accounting technique of replacement cost for evaluating policies affecting industrial engineers. An investment in the selection process to hire more experienced engineers was shown to be cost effective primarily as a result of its effect on reducing training costs. [48]

Allocation of Human Resources

The focus in this element involves the policies and practices associated with assigning people to various roles and tasks in the organization, including identifying positions and candidates, assessing, selecting, and moving individuals needed to fill current and future requirements of the organization. The costs include salaries for those identifying vacancies and managing fill processes for organizations, travel expenses of candidates and families from present to future location, and time not available for work due to movement (an opportunity costs). Three (often conflicting) objectives influence assignments: job productivity – the most qualified person is assigned; human resource development – incumbents are expected to develop skills through on-the-job learning; and individual satisfaction – the people assigned have their needs met by the job.

[47] A study conducted by the American Compensation Association of 217 firms using competency based human resource management plans showed positive results after 1 year.

[48] Flamholtz (1985), p. 144.

In the private sector, the focus of the allocation decision is often solely on job productivity. Focus on only one of these objectives can limit the amount of value that is generated by this element of the transformational process. Some might argue that the department uses assignments today primarily for human resource development. That leaves two objectives under which the department can improve the value of its human assets through its assignment process: matching qualifications better and providing more choice where appropriate. Even the objective of job satisfaction can increase the value of human assets, through appropriate policies and practices, by increasing retention (which, in effect, increases the useful life of the asset). All three objectives can increase the value of the human assets; the question is what mix of policies and practices increases that value the most. As another example, a perennial issue is permanent change of station moves. Some of these moves clearly increase the value of the human asset (moves for developmental purposes, for example), while some may not appear to have the same effect (rotational moves to the same type of position because someone else needs to come back from an overseas tour, for example). Different policies and practices for assigning will have different implications on the value of human assets and different returns on investments.

Conservation of Human Resources

The focus in this element involves the policies and practices associated with identifying, monitoring, managing, and planning to sustain the capabilities or competencies of individuals and groups/teams (human organizations like a functioning management team). The costs include salaries for those engaged in assessing capabilities that should be sustained, operational costs for the process or system that provides early warning that obsolesce of capabilities are occurring, mechanisms for practicing skills that must be maintained but are not part of a current assignment, retraining when early warning systems fail, and replacement if turnover occurs.

Like other types of assets, without systematic planning, monitoring, and maintenance, human capabilities decline. This deterioration ultimately leads to retraining or replacement costs. Human resource accounting can be used to show the cost of replacing individuals who leave the organization because their skills, experiences and knowledge have exceeded their useful life. As a preventative measure, human resource accounting can be used to monitor trends in indicators that track the likelihood of turnover. Qualitative techniques, for example, attitude surveys, can provide early warning of changes, allowing time for assessment and response before turnover occurs.

Utilization of Human Resources

The focus in this element involves the policies and practices associated with employing human assets to achieve organization outcomes. The costs include salaries for those involved in developing and maintaining work roles and relationships of individuals and teams, technology/tools/equipment that enable people to use their skills, experience, and knowledge to complete work tasks, process engineering/reengineering, and distribution of information/data. This stage of the transformation process is the most difficult to place a value on. Further work is required.

Evaluation and Reward of Human Resources

The focus in this element involves the policies and practices associated with measuring the productivity (performance in the current job or role), promotability (ability to perform at higher levels of the organization) of people, and the administration of rewards (compensation, promotion, and symbolic rewards like performance appraisals) to motivate and reinforce the desired performance of people. The costs include salaries of those involved in designing and implementing performance measurement and reward systems that match the strategic intent of the organization, investment and operating costs of technology/information systems to allow efficient reporting of performance to management and individuals, and of structure and processes required to administer measurement and reward systems.

Evaluation provides insight into the actual or perceived value of individuals or groups. It can lead to further development of the asset based on observed potential or to overcome observed deficiencies or erosion of capabilities. Evaluations also contribute to the accurate "pricing" of the asset through variable pay or increases in fixed pay.

BIBLIOGRAPHY

8th Quadrennial Review of Military Compensation. *Rewarding, Managing and Organizing People for the 21st Century: Time for a Strategic Approach – Part I: A Strategic Perspective.* Washington, DC: 8th QRMC, June 30, 1997.

Blackerby, Phillip. "Strategic Planning: An Overview for Complying With GPRA." *Armed Forces Comptroller* (Winter 1994).

Cascio, Wayne F. *Costing Human* Resources: *The Financial Impact of Behavior in Organizations.* Boston, MA: PWS-KENT Publishing Company, 1991.

Fitz-enz, Jac. *How to Measure Human Resources Management.* New York, NY: McGraw-Hill, Inc., 1995.

Fitz-enz, Jac. *Human Value Management, The Value-Adding Human Resource Management Strategy for the 1990's.* San Francisco, CA: Jossey-Bass Publishers, 1990.

Flamholtz, Eric G. (1985), pp. 216-217. Cited in Likert and Bowers "Improving the Accuracy of P/L Reports," p. 21.

Flamholtz, Eric G. "Assessing the Validity of a Theory of Human Resource Value: A Field Study." *Journal of Accounting Research, Empirical Research in Accounting: Selected Studies* (1972).

Flamholtz, Eric G. *Effective Management Control: Theory and Practice.* Norwell, MA: Kluwer Academic Publishers, 1996.

Flamholtz, Eric G. *Human Resource Accounting.* San Francisco, CA: Jossey-Bass Publishers, 1985.

Hax, Arnoldo C., and Nicholas S. Majluf. *The Strategy Concept and Process: A Pragmatic Approach.* Upper Saddle River, NJ: Prentice Hall, 1996.

Klase, Kenneth A. "Accounting for Human Resource Development In The Public Sector." *International Journal of Public Administration,* Vol. 19 No. 5, 1996.

Likert, Rensis, and David S. Bowers. "Organization Theory and Human Resource Accounting." *American Psychologist* (June 1969).

Likert, Rensis, and William Pyle. "Human Resource Accounting: A Human Organizational Measurement Approach." *Financial Analysis Journal* (January/February 1971), pp. 75-84.

Mirvis, P. H., and B. A. Macy. "Human Resource Accounting: A Measurement Perspective." *Academy of Management Review*, April 1976.

Myers, M. Scott, and V. S. Flowers. "A Framework for Measuring Human Assets." *California Management Review* (Summer 1974), pp. 5-16.

National Academy of Public Administration. *A Competency Model for Human Resource Professionals, Implementing Real Change in Human Resource Management, Phase II: Practical Applications*, 1996.

Robbert, Al, Brent Keltner, Ken Reynolds, Mark Spranca, and Beth Benjamin. *Differentiation in Military Human Resource Management* (RAND, MR-838-OSD), 1997, pre-edit copy, publication forthcoming.

Robinson, B. A. "An Approach to Human Resource Accounting." *Cost Management* (May-June 1974).

Von Glinow, Mary Ann, Michael J. Driver, Kenneth Brousseau and J. Bruce Prince. "The Design of a Career Oriented Human Resource System." *Academy of Management Review,* Vol. 8, No. 1 (January 1983), pp. 23-31.

Waldavsky, Aaron, and Naomi Caiden. *The New Politics of the Budgetary Process.* New York, NY: Addison-Wesley Educational Publishers Inc., 1996.