NOTE TO USERS

The original manuscript received by UMI contains broken, slanted and or light print. All efforts were made to acquire the highest quality manuscript from the author or school. Pages were microfilmed as received.

This reproduction is the best copy available

UMI
CREATING TEAM-BASED PAY: CURRENT ISSUES IN COMPENSATION DESIGN

by

Victor Rosochalsky

A thesis submitted in conformity with the requirements for the degree of Master of Arts
Department of Adult Education, Community Development, and Counselling Psychology
Ontario Institute for Studies in Education of the University of Toronto

© Copyright by Victor Rosochalsky 1998
The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author’s permission.

L’auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L’auteur conserve la propriété du droit d’auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-33998-X
ABSTRACT

Creating Team-based Pay: Current Issues in Compensation Design

Master of Arts, 1998

Victor Rosochalsky,

Department of Adult Education, Community Development and Counselling Psychology

Ontario Institute of Education of the University of Toronto

The wage relation has historically been controlled by organizational managers in that they have designed the terms of how much and under what circumstances employees will be paid. This situation has created a source of contention between employees and managers. Self-managing teams represent an opportunity to change the balance of the wage relation and thus help to reduce this source of conflict.

Using research from the fields of reward theory and organizational development, the study proposes that organizations design team-based compensation plans with the input of team members. By providing team members this opportunity, the controlling nature of extrinsic incentives and rewards will be minimized.
ACKNOWLEDGMENTS

I’d like to thank Dr. Marilyn Laiken for her thoughts, opinions, and supervision in the creation of this thesis. It simply would not exist without her assistance and guidance. I’d also like to thank Dr. Jack Quarter for reviewing the thesis and adding his valued insights. I’d be remiss in not mentioning the patience of my partner in life, Valerie Sheppard, who, no doubt, heard once too often: “I’m almost finished”, and that of my parents, Lisa and Peter Rosochalsky who, in large measure, funded my adventure in graduate education.

Victor Rosochalsky,

Ontario Institute of Education at the University of Toronto,
1998
# TABLE OF CONTENTS

## INTRODUCTION

P. 1

## THE ROLE OF THE WAGE RELATION: A BRIEF HISTORY

P. 6

- The Factory System
  P. 7
- Scientific Management
  P. 10
- Human Relations
  P. 12
- Human Resource Management
  P. 14

## IN THE ERA OF THE TEAM

P. 17

## ALIGNMENT OF TEAMS AND PAY

P. 22

- Internal Team Characteristics
  P. 24
- Team Type and Function
  P. 27
- Team Types: Strengths and Weaknesses
  P. 32
- Organizational Environment
  P. 36
- Pay Based on Cooperative Interdependence
  P. 38

## FORMS OF TEAM-BASED PAY

P. 43

- Paying the Parallel Team
  P. 45
- Paying the Project Team
  P. 46
- Paying the Process Team
  P. 47

## REWARDS, INCENTIVES, AND PRODUCTIVITY

P. 51

- Rewards
  P. 54
- The Characteristics of Incentives and their Effects on Motivation
  P. 56
- Research Findings: Mixed Results
  P. 62
INFORMATION FOR EMPOWERMENT  
P. 69

TOWARDS A MODEL OF SELF-DETERMINED TEAM-BASED PAY  
P. 79

BIBLIOGRAPHY  
P. 93
Introduction

While a number of pivotal studies (Deming, 1953, Herzberg et al., 1966) indicate that more money does not lead to higher motivation, pay has been, and still remains, one of the major sources of potential strife for employee and employer alike. A basic necessity to most employees, it is viewed as a major cost by organizational managers. Control over the determination and distribution of pay within most companies has traditionally remained in the hands of those who hold power, and is expressed in a wage relation whose terms are usually decreed by the employer. Employees therefore, “are in the (unequal) position of permanent subordinates” and “the final ‘prerogative’ of decision-making rests with the permanent superiors, with management” (Pateman, 1970, p. 68). The difficulty in altering the balance of that relationship is poignantly revealed in a history of compensation practices that contain very few changes from those of two hundred years ago. While great strides have been made in increasing employee participation in decision making and self-determination about the performance of their daily jobs, the control of pay remains firmly in the hands of management. That management normally controls pay is, of course, a truism of the wage relation, but in and of itself, not necessarily an unsatisfactory situation. However, history does show that the way in which owners and managers use that control has a profound impact on the quality of workplace dynamics.

The self-managing team represents a major step forward in the realization of employee control
over daily work processes. A "key feature" of these work units "is a high degree of self-determination by employees in the management of their day-to-day work" (Wall, Kemp, Jackson, & Clegg, 1986, p. 280). Self-managing teams are often responsible for decision-making and problem solving in situations where team members, "working as a group, take on scheduling, job allocation, and other tasks traditionally done by supervisors" (Case, 1994, p. 88). Despite the fact that many of our organizations have realized the benefits of teams, the wage relation for employees who are members of self-managing teams has remained essentially the same since the factory system established the employee/employer relationship as the foundation for organizing the workplace. That relationship, of which the wage relation is an important subset, was created during the early phases of the Industrial Revolution on the premise that employees did not have the necessary intellectual and moral abilities to offer meaningful input on their own pay and work conditions. As our society moved into the Post-industrial era, or what is often referred to as the Information Age, our workplaces are characterized by increasing organizational dependence on work groups and teams. The majority of compensation systems are, however, still designed with an overall structure that reflect and promote individual performance. While that situation may not necessarily always be detrimental in terms of productivity to the organization and satisfaction to the employee, there is a growing interest in designing compensation systems that reflect the increasing collectiveness of work. Drawing from motivational and organizational theory, I examine the issues that organizations face in the design and implementation of team-based pay.
This paper will first provide a brief history of wages since the Industrial Revolution with a focus on changes in organizational development that have had an impact on wages since the creation of the factory system. The intent of the review is meant to provide an insight into the development of the group as a key feature of modern organizations, and the implications this development has for compensation practices. The historical review will also demonstrate that the ways in which organizations pay their employees, while holding enormous potential for creating an empowered workforce, remain among the most thorniest issues organizations and their employees face.

The study will next examine the various forms teams take in organizations and the types of work they do. It will become clear that not all work units designated with the term 'team' have the appropriate design, type of work, or organizational environment that easily accommodate team-based pay. In the instances where team structure, tasks, and organizational support do provide a workable basis for a team-based pay system, the method of allocating and distributing pay within the team assumes a place of critical importance, since these factors are intimately connected with team members’ sense of fairness and overall group cohesion. Moreover, there exists in the literature a difficulty in defining, with useable precision, the terms and conditions of a team-based pay package. Key features of compensation practices such as rewards, incentives, and various forms of group pay are lumped, sometimes loosely, under the category of “team-based pay” even though their use does not, in certain situations, play to the strength of the team.
Indeed, the ambiguity of the term "team-based pay" is such that it may mean something completely different in one context than it does in another. As a result, a comparison between various applications of team-based pay is a tenuous process at best. With few exceptions, the research examined in the literature refers to general and broad issues such as 'alignment', and 'clear line of sight', as goals that team-based pay should reach, rather than what form such pay should take and under what specific circumstances its use would be appropriate. There also seems to be a general tendency in the literature that implies that when in doubt, the first thing managers should do is to create a team and then find a way to pay the team members as a group, even though there exists the probability, that at least in some situations, that arrangement would be counterproductive. Consequently, this paper attempts to analyze the various issues in team-based pay in a manner that would allow an organization to qualify a given team's viability as a candidate for team-based pay. Unfortunately, the term 'viability' as defined within this paper does not imply that a categorical "yes" or "no" can be provided to the question as to whether or not an organization should institute team-based pay. Rather, the analysis attempts to provide the organizational manager with knowledge about the key features of team-based pay plans in order for her to be able to critically evaluate the relevant issues when asked to consider team-based pay as a compensation strategy. The model used within this paper, against which team-based plans in the literature will be compared, assumes an 'ideal' work environment in which the team's pay is completely based on Deutsch's (1949) concept of cooperative interdependence. The philosophical underpinning of the model is the view that interdependence of team members
along four dimensions is necessary for team-based pay to be an appropriate compensation method. The four dimensions are understood to be the internal dynamics of the team, the type of function the team has within the organization, the organizational environment in which the team works, and the integration of the team’s pay structure with the other three dimensions. Viability of team-based pay is therefore seen as resting somewhere along a continuum ranging from low to high depending on the level of interdependence.

Since team-based pay systems described in the literature commonly have a group reward or incentive as part of the plan, this paper also reviews the opposing viewpoints held by various researchers regarding the motivational qualities any incentive or reward program such as team-based bonuses may have on team performance. A related issue also discussed is the affect that team autonomy and self-determination in the decision about the structure or presence of the bonus and/or pay method may have on productivity. There is evidence in the literature to support the notion that self-managing teams may experience gains in performance and productivity when they are allowed to have substantial input into the design of their compensation package.

Finally the paper contains a discussion about the direction future research into team-based pay should take, given that there are large changes taking place in the workplace as a result of increased competition and technological advances.
The Role of Pay in the Wage Relation: A Brief History

At the outset of this discussion I defined the wage relation as one in which the terms of employment and the setting of pay rates is in the control of the employer. Pay, to the vast majority of workers, whatever their job, education, or organizational position, represents an economic lifeline; they and their families are fed, housed and educated because of pay. It is difficult to envision our economic infrastructure, based as it is on the employer/employee relationship, operating without pay as the prime reason why many people go to work in the first place. Rodgers (1978) wryly points out that “Few cultures have presumed to call it [work] anything more than a poor bargain in an imperfect world” and that most people work because of the “goad of necessity” (p. xi). Pay is the mechanism by which that necessity is met and pay’s central place in the operation of our organizations cannot be regulated to a place of secondary importance. Pay, to be sure, is but one of the axles upon which our organizations ride, but without it most organizations’ journeys would be short indeed. If pay is a basic necessity then the history of pay is that of a struggle between employers and employees striving to come to terms on a fair and agreeable arrangement of compensation. This struggle has taken place within a wage relation that emphasizes the power of the employer. It is a history of organizations using pay as a prime method of rewarding, motivating, and, at times, punishing employees in a push to increase productivity in the pursuit of organizational goals. Ultimately pay is a reflection of the view organizations have about human nature.
The Factory System

To a great degree, the current employer/employee system of wages is a result of the developments which took place primarily in the Northeastern United States during the latter part (1850-1920) of the Industrial Revolution. Commenting on the factory system’s early development in Britain during the 1830s (whose tenets were transported to North America), Emery (1982) states that “The governing principle of the system of manufacture was the subjective division of labor, within a master-servant relation” (p. 1099). People were assigned to certain types of work by foremen or owners who subjectively, and with little regard for the workers’ needs, skills or wants, decided which roles these usually desperate workers should perform. Emery notes that the spectacular rise of the machine to dominance in the workplace during the Industrial Revolution had a major impact on the way work was organized and should therefore be differentiated from the system of work commonly known as manufacture. Under the new system which he calls “machinofacture”, jobs became “atomized” and specialized as increasingly more sophisticated machines and attendant processes demanded more discrete and singular types of skills and knowledge. An “objective division of labor” developed as “People had to be allocated to whatever tasks were needed to keep the machines producing” (p. 1101) and the process of allocation had little, if any, consideration for any past skills the individual may have acquired. Against this rising tide of technology, the workplace reflected the influences of Puritanism and the Protestant work ethic as the centerpiece of social and therefore workplace values (Rodgers, 1978). To work hard was the pathway to Heaven, and independence
and success were signs of God’s favor. The workplace was an arena which
fused transcendent values with the concepts of ownership, a hierarchical division of
labor, and the competitive individualism of the free market. These were each considered
to be part of God’s natural order. Businesses operating according to these principles of
economic organization were thus conforming to a divine plan (Zuboff, 1988, p. 225).

Nightingale (1982) observes that the factory system reflected a sociological ideology that
provided those who owned the means of production with a moral basis for unlimited and
unilateral control over their property, including employees. According to this
ideology, the success of the few and the powerful was a reflection of personal virtue and
natural superiority (p. 36).

In the years following the Civil War, American society wrestled with the entire notion of
working for wages and that class of people known as “hirelings” (Rodgers, 1978, p. 33).
Rodgers notes that “It was the thought of a man who spent his whole life working for others that
troubled Northerners and seemed so little different from slavery” (p. 33). To them it seemed that
“there was not a great deal of difference between bond slavery and slavery of wages” (p.32). As
industrialism at an ever accelerating pace continued to destroy the need for craftspeople and
artisans, these individuals, in their growing numbers, represented a “worrisome affront” to the
American “free labor ideal” . . . “the belief that work was still, on the whole, something one did
for oneself, a test of one’s initiative that gave it its direct economic reward” (Rodgers, 1978, p.
34). Zuboff (1988) writes that

The correct wage. . . was that of a competitive market, which worked according to the
‘grand law’ which we all believe to be of divine origin, by which everyone who promotes
his own true interest necessarily promotes, at the same time, the interests of society at
large (p. 226).
The workplace, with its poor conditions, low wages and dim prospects for the ordinary worker, turned into a battleground. There were growing periods of unrest in which workers started to unionize in their pursuit of better working conditions and wages. Weisbord (1987) notes that during those times

Mass production meant enormous wealth for the owners of capital. Workers, in comparison received only a trickle... The widely discussed labor problem - increasing conflict between owners and workers - sparked the rise of unionism. Employers had unprecedented problems: inefficiencies, careless safety, arbitrary supervision. One obvious symptom was soldiering- worker foot dragging on the job (p. 31).

In the hope that ordinary employees would be able to gain some profits from the investment of their work, the Co-operative movement made its first appearance. Indeed the movement arose "largely as a reaction to the domination of capital" (Quarter, 1992, p.16) which all too often pursued profits before the welfare of the common worker. Experiments in profit-sharing were also tried in an attempt to "forge an effective union between masters and men and rebind the interests that the scale of industry seemed to have torn apart so disastrously" (Rodgers, 1987, p. 47). Piecework became a common practice in the hope that the ordinary worker would become "an entrepreneur in overalls" (Rodgers, 1978, p. 52). Pay was delivered in the form of a "straight, unbending daily wage" (Rodgers, 1982. p. 33) and the amount was totally at the whim of the owner.

Whether these experiments, in some cases, represented honest attempts to improve the wage earner's lot or a desperate and grudging retreat from owners' beliefs in their Divine Right to rule,
they failed to quiet the growing number of strikes, boycotts, and poor relations in the workplace. Rodgers (1978) notes that by 1900, organized labor had concluded that profit-sharing, at least in the forms offered then, was a “bribe for docility and substandard wages” (p. 48). The issues of “wages and hours, work rules, and working conditions began to replace the crafts workers’ culturally embedded practices of regulation” (Zuboff, 1988 p. 46). Against this background of “competing visions” of the workplace (Zuboff, 1988 p. 46), Frederick Taylor developed the system of work known as Scientific Management to implement his beliefs about pay and its role in motivating workers in the workplace.

**Scientific Management**

Weisbord (1987) observes that Taylor’s theories are indelibly and mistakenly identified with “dehumanized, inefficient, and conflictual work methods” (p. 25), whereas Taylor’s self-described purpose was to create an environment in which “workers could produce more with less stress, achieve greater equity in their output, and cooperate with management for the good of society” (p.25). Taylor “opposed group tasks and group incentives” (Weisbord, p. 65) as he believed, that they reduced accountability. The “cornerstone of Taylorism” writes Weisbord “was a novel incentive wage system” (p.34), based on individual pay for individual performance.

Taylor believed that workers were motivated by self-interest and money and that if employers subscribed to the plan of stimulating each workman’s ambition by paying him according to his individual worth, and without limiting him to the rate of work or pay of the average of his class, collective bargaining as expressed in the form of unionism would be unnecessary (Copley, 1923, in Weisbord, 1987, p. 39).
Rodgers (1978) considers that Taylorism was, in fact, "part of a larger search for more precise means of payment", ... "more precise jobs", and "increased economic incentives with narrower responsibilities" (p. 55). Industry embraced Scientific Management with a passion. When combined with technology, it resulted in organizational levels of productivity and efficiency never before reached. The pay rates, based on detailed time studies, provided the organization and the worker with objective measures of worker performance. It was a system, as its name suggests, based on Science, and therefore its "principles existed outside any subjective notions" (Zuboff, 1988, p.46) workers may have had about their work. Taylor believed that

the transcendent logic of science, together with easier work and better, more fairly determined wages... could integrate the worker into the organization and inspire a zest for production (Zuboff, 1988, p.46).

The integration Taylor hoped to achieve was not based on any notion of worker participation in the design of the job or formulation of organizational goals. These areas were the exclusive dominion of the professional manager and/or owner. The worker's sole responsibility was performing the job assigned to him or her as efficiently and profitably as possible. In a seemingly contrasting arrangement to the present day's emphasis on teams and shared work responsibilities, Taylorism contained

the germ of a great idea: separate consideration of every job, separate observation of every man; standards and records -- the beginnings of the restoration of individuality (Copley 1923, in Weisbord, 1987, p. 56).

Zuboff (1988) notes that while Taylorism emphasized individual performance, it did so with "a
minimal connection between the organization and the individual in terms of skill, training, and the centrality of the workers's ambition" (p. 46). Clearly the worker was asked to cooperate, but only to the extent that she or he could satisfy the demands and rate structures of her or his particular job. In retrospect, Taylorism provides a clear picture of the terms of the relationship that existed between employers and employees and the use of pay as the defining characteristic of management's view of workers' motivation. The job was to be designed by the manager and money was the chief incentive for doing the job. The employer was the prime decider of the amount of incentive dispensed and individual worker performance would dictate the amount of incentive earned. It is a philosophy of pay, if not work structure or process, that, in the majority of organizations has remained with us to this day.

**Human Relations**

The Human Relations school of thought started about 1930 and reached its apex of influence on organizational theory and practice during the late 1950s and early 1960s. The movement made a clear break with the Factory System and Scientific Management, in that the nature and quality of the relationships among members of the organization, rather than individual performance, constituted its prime focus. Closely identified with Elton Mayo (1954, in Nightingale 1982), its methods were developed as a result of findings from the Hawthorne Studies at the Western Electric Company during the 1930s.

Mayo believed that smooth social relations in the workplace would be the best bulwark against
conflict, that conflict was destructive, and that the organization could achieve its aims best by allowing workers to air their problems and concerns to motivated and compassionate supervisors. As in Taylor's view of human nature, Mayo believed that divisions in modern society were the product of the 'rabble hypothesis' (society consists of a horde of unorganized individuals; every individual acts in a manner calculated to secure his own self-interest; and every individual thinks logically in the pursuit of his self-interest) (in Nightingale, 1982, p. 44).

Mayo was more interested in providing workers an outlet for their concerns and frustrations than in promoting worker participation in empowered groups. He proposed that the prime method of reducing the effects of this individualism while satisfying workers' "desires for meaningful activity and for prestige among their fellows" (Zuboff, 1988, p. 234) was through the use of employee counseling. Employees would be able to discuss their problems with either special counselors or their superiors, who according to Mayo, should receive "training that must include knowledge of relevant technical skills, of the systematic ordering of operations, and of the organization of cooperation" (in Zuboff, 1988, p. 235).

Pay was still largely measured by individual performance, and the organization determined the rate of pay, its division, and the basis of any increase or distribution. The organization was the central source of authority. Workers in an union environment looked to their contract as the prime method of ensuring that they won the best terms possible. The Human Relations movement diminished in popularity as organizations found that "while such training often
improved workers' morale, the results in terms of increased productivity were not clear” (Schein, 1980, p. 68).

Human Relations represented a critical change in the way organizations looked at motivating employees to reach higher levels of productivity. Mayo's work led to the acceptance that "The work group was the basic social unit for integrating the interests of the individual and the interests of the of organization" (Nightingale, 1982, p. 44) and the power of the group as a source of motivation for the individual was beginning to become the focus of organizational theory and practice. Pay was beginning to be viewed, unlike within the Factory System and Scientific Management, as a secondary motivator for increased employee performance. Schein (1982) notes that a growing number of organizational researchers began to study the "nature of work itself" as they agreed with Mayo's "basic proposition" that work had become "meaningless" (p. 68). From that change in focus came the organizational philosophy known as Human Resource Management.

**Human Resource Management**

The Human Resources school, which can be considered the dominant organizational paradigm of work practice in current times, owes many of its premises to organizational researchers such as Likert, McGregor, Maslow, and Argyris. One of its key philosophical foundations is the view that "employees were considered to have the capacity for self-direction and self-control,
and participative management was the key to releasing the productive capacity of the employee” (Nightingale, 1982, p. 48). Its early period was characterized by sensitivity training in T groups concurrently developed at the Tavistock Institute and the National Training Laboratories. Human needs theories as proposed in Maslow’s (1954) Hierarchy of Needs and theories of human motivation such as McGregor’s (1965) Theory X and Theory Y, made issues of employee empowerment, organizational openness, and the primacy of group processes the subjects of detailed study and experimentation. We see in this period the rise of the team to its current status, and the view that organizational theorists and practitioners
deal not so much with the behavior of individuals as with the behavior of groups, subsystems, and even the total organization in response to internal and external stimuli
and
[that] the relationship between the group and the organization is interactive, unfolding through mutual influence and mutual bargaining to establish and re-establish a workable psychological contract (Schein, 1982, p. 7).

Nightingale (1982) is of the opinion that the crucial difference between Human Relations and Human Resources is that

Participation [under the Human Resources Movement] was no longer practiced because it improved satisfaction and morale. Rather, it was practiced because it produced better decisions and more effectively utilized the human resources of the organization (p. 48).

Emery (1982) is of the opinion that we are entering a new paradigm of work practices and that the prior period of Industrialism consisted of two phases delineated more by methods of organizing work than by specific technologies. Emery believes that the new paradigm of industry
will center on "the general adoption of the principle of 'self-managing production
groups' (semiautonomous groups) [which] would domesticate industrialism" (p.1103).
Furthermore, he notes that "Recovery from the deep crises of industrialism has always depended
upon the emergence of a more effective social form for eliciting productivity. No technology
was sufficient in itself to create such a growth in productivity" (p. 1103). Thus Emery's new
paradigm of work

    presupposes relations that are more nearly those of symmetrical dependence as the
    production goals and membership of the self-managing groups become the subject of
    negotiation and the concept of managerial prerogatives becomes secularized (p. 1104).

He observes that through the process of the democratization of the workplace a "system" change
in the nature of the "wage relation" (p. 1105) has occurred. However, as the preceding sections
demonstrate, while the structuring of work processes has certainly changed, compensation
practices have basically retained a design based on individual effort whether under the Factory
System, Taylorism, Human Relations or Human Resource Management. I do not imply that pay
based on individual effort is always inappropriate, but rather that there increasingly exist those
situations where pay, based on the collective effort of the team, may be much more constructive
in reflecting the strength and effectiveness of that group.
In the Era of the Team

As has been noted by numerous observers, the typical organization competes in a complex environment wherein expected 'performance demands' have largely moved beyond the capabilities of individuals acting independently. These performance demands occur within the entire spectrum of organizational functions from product design to sales, from providing customer service to developing corporate strategy. To manage the unprecedented complexity, organizations have increasingly turned to the team. French and Bell (1995) observe that "teams and workgroups are considered to be the fundamental units of an organization" (p. 171). Case (1994) notes that "more than two-thirds of Fortune 1000 companies were using teams in 1994, according to a University of Southern California study" (p. 87). The team is now so widely accepted as a basic organizational structure that it has become the "corporate equivalent of apple pie and motherhood" (Gross, 1995, p.23).

The attraction to teams as a fundamental work structure stems from the strengths teams offer. Sundstrom, Meuse, and Futrell (1990) define a team as "interdependent collections of individuals who share responsibility for specific outcomes for their organizations" (p. 120). French and Bell observe that effective teams display "informality, good listening, civilized disagreement, consensus decision-making, open communications, shared leadership, style diversity and self-assessment" (p.170). Laikeu (1994) states that an effective team has the
"ability to set goals, establish priorities and resolve task-related problems" (p. 1). In addition to the strengths the team has as a collective body, Laiken also points out that a "high performing team unleashes the creative potential in each of its individual members" (p.1). Wall, Kemp, Jackson, and Clegg (1986), noting the growth of teams and autonomous work groups in industry, suggest that the underlying assumptions have been that this way of organizing work is intrinsically motivating and enhances employee satisfaction; from these reactions follow improved group performance and reduced labor turnover (p. 281).

Kohn (1993) observes that

By now, enough has been written about teamwork that it is probably unnecessary to construct an elaborate defense of the importance of helping employees work together. On most tasks, especially those that involve some degree of complexity and require some degree of ingenuity, people are able to do a better job in well-functioning groups than they can on their own. They are also more likely to be excited about their work. Both effects are due to the exchange of talent and resources that occurs as a result of cooperation — and also to the emotional sustenance provided by social support. People will typically be more enthusiastic where they feel a sense of belonging and see themselves as part of a community than they will in a workplace in which each person is left to his own devices (p. 188).

While there is broad consensus on the overall benefits of teamwork, growing numbers of compensation consultants, organizational theorists and practitioners find themselves in opposing camps regarding the effectiveness of team-based pay as a motivator in increasing team performance. There is disagreement in the literature on the usefulness of any type of incentive or reward system, be it individually or group based, in motivating any employee or group of employees to achieve higher levels of performance.
The general argument against team-based pay in this context is well summarized by Beer (1992) who comments that

A prevailing mythology today holds that pay can be redesigned to motivate individuals to work differently. That's simply not true. Pay is not the right tool to effect change. Telling people you are going to change the compensation system rallies them around compensation when what you want them to do is rally around making teams work... Pay’s function is to create equity and fairness. It should attract people to an organization and keep them there. Pay should not be an active ingredient in promoting teamwork and motivating performance (p. 22).

Herzberg (1987) is of the view that “Motivation [in the workplace] is a function of growth from getting intrinsic rewards out of interesting and challenging work” (p. 118). Hygiene factors such as pay will keep the employee from becoming too dissatisfied, but will do little in making sure that employees feel happy and fulfilled. As Herzberg notes:

If the major rewards in our society are hygienic, if conditions not related to the actual conduct of work are the major sources of satisfaction, there is little motivation for the fulfillment of the highest potentiality in the work of each individual (p. 131)

In a similar vein of thought, Kohn (1993) describes incentives as “Programs intended to motivate employees by tying compensation to one index of performance or another” (p. 54). Given that team members will have significant portions of their pay (bonus, reward, or portion of base pay) allocated on the basis of overall group performance, the argument is that team-based pay is an elaborate incentive program. Moreover, Kohn (1993) states that “a growing collection of evidence” based on “numerous studies in laboratories, workplaces, classrooms, and other settings”, indicate that “rewards typically undermine the very processes they are intended to
enhance” (p. 54). Furthermore, he goes on to say that “As a rule, the more salient the extrinsic motivator, the more intrinsic motivation evaporates” and as such “fiddling with compensation schemes”... is not the road to quality” (p. 49).

On the other hand is that camp of researchers who believe that changes must be made to compensation systems of which most, they suggest, are rooted in the past and based on a system of individual effort and reward (Saunier and Hawk, 1994). These systems do little to ensure that the “group works together toward a common goal”, neither do they reflect the proposition that “people tend to behave the way they’re measured and paid” (Gross, 1995, p. 5). As teams are given broader latitude to manage their daily activities, organizations are, in turn, looking for ways to reward team members that recognize and reinforce the “collectiveness” (Hackman, 1986, p. 42) of that group effort. Team-based pay, they argue, reflects a move toward aligning people with the way they work and how they are paid. As such, team-based pay provides a direct connection or “a clear and achievable line of sight between an employee’s behavior and the receipt of important amounts of pay” (Lawler, 1995 p. 16). Laiken (1997) points out that team-based pay “provides team members with a concrete incentive to give each other tangible feedback on their team member performance” (M. Laiken, personal communication, August, 1997).

The debate, as such, is continually focused on the motivating powers of pay. Even though “Year
after year we validate the finding that employee perceptions of underpay result in decreased productivity, while increased pay doesn’t result in increased productivity” (Lebby, 1993, p. 42), solutions offered to end this state of affairs remain frustratingly similar, and consistently fall short of promised results. What emerges from the two viewpoints on pay and motivation are opposing arguments that attempt to provide, using very different philosophies, a unifying framework of compensation that incorporate the often disparate dynamics of managerial power, team autonomy, and employee motivation. Those in the first camp would have us forget about pay as a motivator altogether, while those in the latter camp advocate the adoption of pay systems that increase pay’s visibility, and impact, through an emphasis on collectiveness.

Given the complexity of the arguments surrounding team-based pay, organizations considering the use of such compensation programs should be aware that there are four separate dynamics that need to be examined, in the light of current organizational theory and practice, before any team-based pay program is put into effect. First is the issue of whether the team under consideration for team-based pay has the appropriate make-up and organizational functions to benefit from a group-based pay system. Second is the issue of whether team-based pay of any kind, whether it be a group bonus, reward, or part of base pay, will indeed motivate team members to increase team performance. Third, the allocation (how much money) as well as the internal distribution of wages paid to team members for team performance needs to be structured in a manner that allows for individual team member ‘buy-in’ as well as representing a reflection
of group effort. Finally, there is the issue of who decides how team members are paid. Should the organization or the team make this decision, and what are the assumptions and implications behind that decision?

Alignment of Teams and Pay

As discussed in the preceding sections, the workplace has witnessed a large scale transition from a focus on individual effort to one incorporating the widespread use of teams. Teams are employed to perform a rapidly increasing variety of tasks, and, as a result of this profusion, there exist literally dozens of definitions attempting to concisely describe what one kind of team does that differentiates it from another team. The definitions provided in this section, though by no means exhaustive, are, however, illustrative of the complexity beginning to appear in the design of teams and the breadth of work in which they are engaged. Given the wide scope of work that various teams perform, and the opposing viewpoints on the effectiveness of team-based pay, an analysis of various team types, tasks, and associated pay systems will be provided in this and the following sections. The overall purpose of the analysis is to assist organizational managers and other interested parties to identify those situations where there exists, or not, a sufficient level of interdependence among team members, team function, organizational context, and pay, in order to make team-based pay an appropriate compensation strategy.
The analysis of the viability of team-based pay begins with the perspective that a team is a group of people engaged simultaneously in four levels of operation, and the quality of the functioning of the team within each level has a reciprocal effect on the other three. The levels can therefore be described as mutually necessary, interconnected, and interdependent. The first level consists of those processes that define the internal character of the team, that is, the degree of team member interdependence, if any, and the members' individual and collective capacity to maximize that interdependence. The second level consists of the actual function, that is the work the team actually does in the organization, and the associated design of the team to perform that work. The third level consists of the team's response to the organizational environment in which it operates, as well as the organization's impact upon the team's effectiveness in performing its task. The fourth level consists of the structure of the wages paid to team members - how much, and in what manner, the pay is delivered to team members. The four levels of process interact in the manner shown in the figure 1.

Figure 1: Reciprocal Processes Affecting Viability of Team-Based Pay
Internal Team Character

Johnson and Johnson (1994) define a team as a “set of interpersonal interactions structured to
achieve established goals” in which the members “are aware of their positive interdependence
as they strive to achieve mutual goals” (p. 503), know who are and who are not members of the
team, and have specific tasks within their organization. Hackman (1990) notes that “real groups
are intact social systems, complete with boundaries, interdependence among members, and
differentiated member roles” (p. 4). French and Bell (1995) make a distinction between a work
group and a team by noting that a “work group is a number of persons, usually reporting to a
common superior and having some face-to-face interaction, who have some degree of
interdependence in carrying out tasks for the purpose of achieving organizational goals” (p. 169).
Whereas a team, though a group, displays a “higher commitment to common goals and a higher
degree of interdependency and interaction” (p. 169).

Katzenbach and Smith (1993) too, differentiate between working groups, real teams, high
performance teams and pseudo teams. They define a working group as a group of people “for
which there is no significant incremental performance need or opportunity that would require it
to become a team” (p. 91). The group exists in order that its members can share differing
viewpoints and items of information that will promote the effectiveness of each member’s
individual effort, as there is no real common and unifying purpose other than the implicit one of
promoting the overall effectiveness of the organization for which they work. Whereas real teams,
Katzenbach and Smith comment, consist of

a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable (p. 45).

Pseudo teams are more like work groups in that they “rely on the sum of individual bests for their performance... and... pursue no collective work products requiring joint effort” (p. 85). A real team, on the other hand, consists of members who “commit to take the risks of conflict, joint work products, and collective action necessary to build a common purpose, set of goals, approach, and mutual accountability” (p. 85). Perhaps the essential difference between a work group and a real team can be understood in Katzenbach and Smith’s observation that in a real team “It is not just that the monkey is on the back of every individual member, but that the same monkey is on all their backs together” (p.44). Senge (1990) refers to this unity within a team as a “commonality of purpose” (p. 234) and notes that team members do not just “sacrifice their personal interests to the larger team vision; rather the shared vision becomes an extension of their personal vision” (p. 235).

There is also an important distinction to be made between the internal dynamics of real teams as opposed to those found in work groups and pseudo teams that is often clouded by the use of the term “teamwork”. Katzenbach and Smith define teamwork as a set of values such as listening, constructive feedback, supportive behavior, and recognition of others’ efforts. It is not necessary to be a team to share these values. Teams, on the other hand, “are discrete units of performance.
not a positive set of values”... usually organized into groups of fewer than twenty people and members are committed to working with each other to achieve the team’s purpose and hold each other fully and jointly accountable for the team’s results” (p. 21).

Katzenbach and Smith observe that high performance teams, in addition to having the attributes of a real team, display a level of team member commitment to one another that “goes well beyond civility and teamwork”. Each [team member] genuinely helps the others to achieve both personal and professional goals” (p. 65). The extraordinary commitment results in team purposes that are “nobler, performance goals that become more urgent, and [a] team approach [which becomes] more powerful.” The notion, for example, that ‘if one us fails, we all fail’ pervades high performance teams” (p. 66). Other attributes of high performance teams are the development of interchangeable skills, greater team flexibility, shared leadership, a greater sense of enjoyment of team membership and expression of humor. Given the extremely high performance characteristics of these types of teams, their formation is an attractive goal for organizations though Katzenbach and Smith acknowledge that their development is a rare occurrence.

Based on characteristics of a team as described within this section, it becomes clear that one of the key determinants of a ‘real’ team is the high level of interdependence in purpose, commitment, results, and shared risk that exists among team members. Indeed, it would be
difficult to envision a group of people as a ‘real’ team without that interdependence.

Team type and function

A common approach found in the literature used to identify different types of teams is to provide some kind of descriptive label to the function the team has within the organization. Thus, Sundstrom, De Meuse, and Futrell (1990) identify teams by creating the four general functional categories of “Advice/Involvement, Production/Services, Project/Development, and Action/Negotiating” (p. 125). An Advice/Involvement team is commonly seen in committees, advisory councils, review teams, and quality control circles (of which the latter are often functioned as active problem-solving teams). The Production/Services team is seen in assembly teams, manufacturing crews, maintenance crews, flight attendant crews, and data processing groups. The Project/Development team is normally used in research groups, architectural projects, engineering teams, and task forces. Examples of the final team type, the Action/Negotiating structure is seen in sports teams, entertainment groups, expeditions, negotiating teams, surgery teams and cockpit crews (p. 125).

Hackman (1990) identifies different types of teams by placing them in one of seven functions: top management teams which set organizational directions; task forces which are usually involved with “one-shot projects” (p. ix); professional sport teams; performing groups that play to audiences; human service teams that are involved with taking care of people (i.e., health and
medical services, correctional services, and social services); customer service teams involved with the selling of products and services; and production teams that manufacture products.

Gross (1995) categorizes four types of teams commonly found in organizations by the use of functional descriptions: the parallel team, the process team, the project team, and the hybrid team. The parallel team is made up of members whose membership on the team represents a part-time investment of the members’ time. Membership on the team is usually in addition to the other permanent job the member has in the organization. Each team member usually has two supervisors; the parallel team leader, and the manager of the unit the member belongs to in the course of performing her or his normal duties. Examples of the functions of such a team are the addressing of safety issues on the job, making recommendations on new quality improvements, or developing some new work process.

The process team is considered by Gross to be the “workhorse of corporate teamwork.” He notes that it may be self-managed, though that is “still more an ideal than a reality; probably it has limited authority” (p. 29). The team is a permanent unit whose function is to carry out a given task by its members working together. The task may be a process, such as handling a claim in an insurance company, or it may be a task or group of related tasks such as building a component for a piece of machinery. Gross notes that process team membership usually consists of members who share similar education, training, and have a set of goals that are more uniform than other
types of teams. He notes that these teams "are working to maximize productivity and customer satisfaction" (p. 29). Measurement of team performance "must be built around group results, such as units produced or transactions processed by the team as a whole per day, and not around individual counts" (p. 29).

Another type of team within the 'process' category is the self-managed process team. Usually requiring in-depth training, these teams have a high degree of autonomy in that they may deal directly with customers and suppliers, set team goals and priorities, prepare and manage work budgets and schedules, develop and choose work methods, assign tasks to team members, hire and fire members, appraise team member performance, and schedule vacations. (Gross, p. 33).

The project team's work, according to Gross, is closely involved with time, as the organization normally wishes the project team to complete its work as rapidly as possible in order to gain a competitive advantage, or to minimize the funds and human resources devoted to the team's work. Membership on the team can be permanent, but is heavily influenced by the length of the project and the skill sets of the team member. A team member may belong to the team for the entire duration of the project or only for some portion. Core team members usually are with the team for the length of project, though that is not always necessarily the case. The project may be anything from creating a new work process to building a new manufacturing plant. Flannery,
Hofrichter, & Platten (1996) note that when a project team is involved in a process type environment, members often have to “learn new skills, be more flexible, assume new roles, and take on some of the management roles – scheduling and coordinating work activities, for example” (p. 119). Gross (1995) considers the varying levels of member skills and competencies that the project necessitates as a potential source of problems to the team. He notes that the provision of proper training, especially when individuals have widely differing levels of team competencies, may assist the project group in becoming a real team.

Hybrid teams, as the name suggests, is a team that often combines the characteristics of parallel, project or process teams. Hybrid teams can be composed of full-time and part-time members and/or rotating membership with team members representing a number of organizational departments and skills. These teams can even include members who are not part of the host organization, such as in the case of a manufacturer asking a supplier to assign one of its employees to become a member of a team examining ways to improve the supplier-manufacturer transportation arrangement.

In contrast to identifying teams by the function they perform, Saunier and Hawk (1994) use the categories of “permanent, temporary, dedicated, non-dedicated” to describe the relationship team members have with the team and the team’s task. Thus, a permanent, dedicated team is usually responsible for a “common core process, customer base, or product of the organization”
Order entry, customer service, long-term project development, and core manufacturing are examples of the types of work in which this category of team is usually engaged. Permanent, non-dedicated teams are involved with tasks such as quality improvement, a safety program, or a cross-department team that is formed to serve a common customer. Membership on this type of team does not normally require full-time commitment. The temporary-dedicated team is usually formed to solve a specific problem that is of an urgent and short-term nature. Saunier and Hawk provide the examples of skunk works, product enhancement and short-cycle product development as situations where this type of team is commonly used. The temporary, non-dedicated team is often formed for a special purpose or on an ad hoc basis. Task forces, work redesign teams and ad hoc committees are examples of this type of team.

While there are minor differences in the descriptions of the functions and associated labels used by researchers for different kinds of teams, the similarities far outweigh the differences and therefore allows them to be grouped under common headings. For instance Saunier and Hawk’s (1994) concept of the permanent non-dedicated team is similar to Gross’s (1995) parallel team in that they each are characterized by membership that is not necessarily permanent. Saunier & Hawk’s ‘temporary non-dedicated’ team could accurately describe a project team as well as a parallel team, in that membership characteristics could be similar, though there might be substantial differences in the teams’ purposes. There are also such similarities among the various descriptions of Sundstrom’s et al, Production/Service team, in that the various definitions reflect
this type of team’s focus on core processes and the permanence of membership. Hackman’s ‘task force’ could, with the probable exception of Process Team, also fall under all categories, in that the team’s task could be a long term project requiring stable membership or a short term task requiring one-time input from a variety of organizational departments. Table 1 illustrates how the various types of teams would be organized using Gross’s definitions as the basis of comparison. The decision to use Gross’s categories is a mainly a matter of convenience and is not meant to imply that his categories are the most accurate or appropriate. Sports teams and entertainment teams have not been included within the table, as the focus of this paper is on those teams commonly found in industry.

Team Types: Strengths and Weaknesses

Each type of team described in Table 1 has a set of characteristics that, depending on the perspective from which it is analyzed, may be considered strengths or weaknesses. The focus within this paper is the identification of those weaknesses which may inhibit the formation of team member interdependence which, in turn, would have an adverse affect on the implementation of team-based pay.
<table>
<thead>
<tr>
<th>Parallel Teams</th>
<th>Project Teams</th>
<th>Process Teams</th>
<th>Hybrid Teams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice/Involvement (Sundstrom et al)</td>
<td>- project development (Sundstrom et al)</td>
<td>Production/Service (Sundstrom et al)</td>
<td>- can be parallel, project or process team,</td>
</tr>
<tr>
<td>- temp non-dedicated</td>
<td>- task forces (Hackman)</td>
<td>- Permanent-dedicated (Saunier &amp; Hawk)</td>
<td></td>
</tr>
<tr>
<td>- perm. non-dedicated</td>
<td>- temp non-dedicated (Saunier &amp; Hawk)</td>
<td>- Human service, customer service &amp; production (Hackman)</td>
<td></td>
</tr>
<tr>
<td>- task forces (Hackman)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership Characteristics</td>
<td>Membership Characteristics</td>
<td>Membership Characteristics</td>
<td>Membership Characteristics</td>
</tr>
<tr>
<td>- often dual membership</td>
<td>- project length and skill sets needed determines membership</td>
<td>- membership is usually permanent or long-term</td>
<td>- rotating membership</td>
</tr>
<tr>
<td>- part-time commitment</td>
<td></td>
<td></td>
<td>- membership can be from various organizational departments</td>
</tr>
<tr>
<td>Usual Tasks</td>
<td>Usual Tasks</td>
<td>Usual Tasks</td>
<td>Usual Tasks</td>
</tr>
<tr>
<td>- safety issues, task forces, ad-hoc committees, advisory committees</td>
<td>- anything from creating new work process to building a factory</td>
<td>- core work processes</td>
<td>- team’s work may be anything from one-time project to multi-year advisory role</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- long-term projects with constant core membership</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Team Functions

The parallel team, often used in an advisory capacity, may experience significant membership turnover as well as a change in task. Hackman (1990) notes that “the team task [for the parallel team] almost always is novel, and members often are working together for the first time ever. If
they are unable to structure adequately the unfamiliar work or to develop quickly the capability to work interdependently, problems are likely to develop” (p. 490). Gross (1995) observes that members of a parallel team face an “inherent conflict” because of their being “pulled in two opposing directions – toward their regular job and toward their team job” (p. 28). As a result, the team’s task may not have the same priority to a parallel team member as her or his regular job, and team leadership, team goal setting and commitment to the team may suffer accordingly. Sundstrom et al. (1990) observe that this type of team often has a “short group life span and/or limited working time” (p. 125) which results in the team having low levels of differentiation as a team within the organization.

The Hybrid team’s structure, with its possible combination of parallel, process or project team characteristics has a transient, loose, membership pattern. It shares the potential weaknesses of the parallel team and certain project teams: rotating membership and varying priorities of team member loyalties and commitments. Additionally, the primary goals of the team may be of secondary importance to all or some of the individual members because of workloads within their regular jobs. The presence of team rewards, issued for reaching the team’s goals, may cause the team’s efforts to be in potential conflict with the goals of the members’ regular jobs, and or work units to which they may belong. Though this type of team is commonly found in organizations, Wageman (1997) comments that

Hybrid task designs create difficulties for teams because they send mixed signals to the group about whether or not this really is a team. The pull in both directions— to operate alone and to operate as a team—leaves these groups floundering, as some members
attend more to their solo tasks than to collective activities (p. 36).

The Process team can be subdivided into two sub-categories: a production team and a service team. While both sub-categories of teams may be involved in a process as part of their ordinary responsibilities, the production team is usually associated with the production of some article within a manufacturing environment, whereas the process team, while also common in manufacturing, is usually associated with handling some set of procedures that, as the name suggests, makes up a process. A team handling an insurance claim is an example of this type of operation. However, whether of the production or service category, "instilling a sense of accountability to the team rather than individual accomplishment among team members is a priority and one of the more difficult objectives to reach" (Gross, 1995, p. 32). Hackman (1990) notes that production teams "risk becoming insulated and isolated by excessive involvement in the technology that is so central to their work" (p. 492). He warns that process team members may become so focused on their own team task that they may see the requests of the team's clients and non-team co-workers as disruptions rather than necessary interaction.

The Project team is characterized by a number of potential weaknesses similar to those found in the Parallel team. Depending on the project, team membership may represent a number of departments, or conversely, may be made up of individuals predominantly from just one department. Skill levels of various team members may vary widely, or be of a similar range. Team membership by any one member, or all the members, may be intermittent, permanent,
short-term, or somewhere in between. Consequently, loyalty and commitment to the team and team goals may substantially differ from one member to another as a result of differing levels of involvement in the project. Another consideration is that if there exists a core group of team members whose membership is more or less permanent, other project members not of that core group may not share the same sense of team identity as does the core group. Issues of inclusion, team norms, and team cohesion may be difficult to address in a situation where the successful completion of the project requires varying membership patterns.

Organizational Environment

The organizational environments in which teams work may not only vary tremendously from organization to organization, but from department to department within a single organization. Consequently, Sundstrom et al. (1990) propose that teams in the workplace can "best be understood in relation to external surroundings and internal processes" (p. 121). They observe that the main external surroundings are comprised of the organizational context, boundaries, and team development. The organizational context consists of relevant features external to the team such as reward systems and training resources available to the team. The authors observe that the adequate provision of these organizational inputs strengthens team effectiveness, whereas team effectiveness suffers when these inputs are inadequate.

Sundstrom et al. (1990) define boundaries as features which "a) differentiate a work unit from
others, b) may form real or symbolic barriers to communication, transfer of goods, products, and services, or c) act as “points of external exchange with other teams, customers, peers, competitors, or other entities” (p. 121). Hirschhorn and Gilmore (1992) identify four types of boundaries that must be managed successfully for organizations to compete in the modern world: the authority boundary, the task boundary, the political boundary, and the identity boundary. While all four boundaries have an impact on the functioning of a team, Hirschhorn and Gilmore observe that “In order for teams to work” (p. 108) the task boundary (the identification of who does what within the team) must be made very clear to team members, while also ensuring that they remain aware of their reliance on the work and skills of their organizational colleagues who are external to the team. While the emphasis by Hirschhorn and Gilmore is on the issue of clarification of team members’ individual task responsibilities as they relate to the team’s internal division of work, the task boundaries a team as a unit has to negotiate with the organization can be as important as those issues impacting individual team member responsibilities to the team. The management of these boundaries highlights the dependence of the team on the organization for a clear demarcation of the team’s overall task parameters. This issue becomes critical when some or all of the team members’ pay is based on overall team performance. Hirschhorn and Gilmore note that “when a group has problems defining the task, dividing up the responsibilities, and apportioning resources, individual members begin to feel incompetent, unable to accomplish their work, and sometimes even ashamed of the job they’ve done” (p. 108). Sunstrom et al. (1990) note that when team boundaries in relation to the
organization are too vague, the team risks losing its identity or may become overwhelmed by a constant effort to determine its responsibilities.

Team development refers to internal team processes such as the formation of team norms, roles, and other processes the team uses to adapt to, and work within, its environment. Team development takes place over time and with organizational input. If team development is incomplete, team effectiveness will be adversely affected. There is a large body of literature (Laiken, 1994, Johnson & Johnson, 1994, Hackman 1985, 1980) demonstrating the necessity of providing team members with the training and knowledge needed for the development of team skills such as conflict resolution, norms creation and shared vision. The level of organizational involvement and commitment to team development has significant implications for the quality of a team's internal character as well as for task performance, in that a deficiency in team development can be both a symptom and a cause of poor performance.

Pay based on Cooperative Interdependence

If team-based pay is to be defined as a compensation system that is aligned with the way teams work then the compensation system must be designed and administered on the basis of recognizing and reinforcing the collective effort of team members. As team member interdependence is a fundamental characteristic of the way a team functions, there must exist a workable interdependence of team effort, team task, and team member pay. Shea and Guzzo
remark upon the importance of the connection between task interdependence and outcome interdependence in trying to determine the constituents of effective group performance. Defining task interdependence as the “degree of interaction among group members” (p. 26), they note that different teams operate under varying conditions of task interdependence. Some teams need a great deal of interaction to complete their tasks while others may need less interaction. Outcome interdependence “exists when task accomplishment by a group yields consequences that are important to and shared by some or all group members” (p. 26). Within this discussion, a team is defined as having high task interdependence and high outcome interdependence. The receipt of pay is obviously an important outcome of team effort, and, as is the case with task interdependence, the ways of paying team members vary widely from group to group. However, as Shea and Guzzo emphasize, “No group will sustain effective performance in the absence of group interdependence” (p. 27).

Establishing a team-based pay plan that aligns task and outcome interdependence necessitates that the reward system not be competitively structured. A reward system that creates competition among team members detracts from group unity and cohesion and results in poor team performance. Johnson & Johnson (1994) comment that a competitive goal structure exists when there is a negative correlation among group members’ goal attainments — that is, when group members perceive that they can obtain their goals if and only if the other members with whom they are competitively linked fail to obtain their goal (p. 94).
Pearce and Ravlin (1987) report that “competitive rewards lower productivity on interdependent tasks as compared to individual and cooperative rewards” (p. 768). A group reward structure, on the other hand, creates a “superordinate goal system” (p. 775) which assists group members in making decisions about their own behavior in relation to the achievement of group goals. The authors also point out that a group reward system aids in the coordination of group member activities as well as decreasing potential sources of conflict.

Coleman (1959) in his study of the role competition has on academic performance makes the point that many workplaces, as well as schools, fall under the class of institutions that contain a group of administrators and a larger group of people who are subject to that administration. The relationship between the two groups in the workplace is straightforward: management (the administrators) demands that employees work and produce, in return for which they receive pay. However, Coleman notes that there is a collective response on the part of workers to these management demands that determines group norms about how much work is appropriate under the circumstances in which they find themselves. Furthermore, groups develop methods of reinforcing these norms. These methods of reinforcing and protecting group norms may be as broad as the creation of a union, or as specific as a small work team applying pressure on a fellow worker who breaks the group average of worker output. Coleman argues that the adherence to these norms allows workers to hold to a level of production that can be maintained by all workers, not just a few in that “work rates are necessarily relative, and cannot be judged
except in relation to the rates of other men" and as such, "one man's gain is another's loss" (p. 343). If management sees that a few workers are capable of very high levels of production, then it would be normal for management to expect the same level of performance from all workers. Thus norms that hold down the fastest men and women "act as a collective protection, to keep within reasonable bounds the effort each worker must expend on his job" (p. 343). Coleman suggests that much benefit would be gained by workplaces (and schools) if a way could be found to reduce the conflict that such a system generates, that is, to create a system where the "group's informal norms positively reinforce (or at least are not in conflict with)" (p. 345) goals of exceptional performance.

The concept of "cooperative interdependence" developed by Deutsch (1949) describes a system whereby group goals satisfy the needs of an individual as well as the needs of the group, and that the individuals in the group "perceive that they can reach their goals if and only if the other group members also do so" (in Johnson & Johnson, 1994, p. 94). It is essentially the environment that exists in a team if it is functioning well. Deutsch structured an experiment where a number of university students were given the same assignment but were graded using two different methods. In one group of classes, each student was told that she or he would be ranked from 1 to 5 according to her or his contribution to the class discussion and resolution of the assignment. The student's final grade would be based on the average of his or her rankings through the semester. The other group of classes were told that their grades would be based on
the ranking averages their class obtained. That is, each student in this group of classes would have a grade that would be based on the efforts of the class rather than on her or his individual effort as was the case in the first group. Deutsch found that the second group (the classes ranked on a class basis), provided better quality solutions, displayed substantially more cooperation in group discussions and higher levels of mutual member assistance, than did those students who were ranked by individual effort. Coleman (1959) suggests that the results of Deutsch’s experiment show that when competition between individuals within a group was eliminated, it is possible to create a situation wherein “a group’s informal rewards” reinforce the “formal rewards from outside [the group] (p. 316). Coleman concludes that “motivations may be sharply altered by altering the reward structure” (p. 350).

Cartwright and Zander (1968) suggest that under the system of cooperative interdependence a group’s performance should reflect “more coordination of efforts, less homogeneity with respect to amount of participation, more specialization, more rapid decisions, more achievement pressure, more effective communication, better productivity, and more positive interpersonal relations” (p. 414). The reason for this outcome, the authors note, is that “each member benefits whenever any member makes a contribution to the group’s output. And since a members’s individual score [quantitative or qualitative amount of individual effort] has no bearing upon his earnings, he should be willing to sacrifice his score in the interest of group performance” (p. 413).
Observing that the “condition or ‘rules’ that govern the awarding of payoffs within a group will have important motivational consequences for the members and for the functioning of the group as a whole” Cartwright and Zander (p. 412) propose four possible pay “rules” for a group:

i) Each member’s pay is independent of group output and her/his ‘score’ on the team task;

ii) Each member’s pay is independent of group output but contingent on her/his ‘score’
   a) total payoff to group is fixed
   b) total payoff is not fixed;

iii) Each member’s pay is contingent upon group output but independent of her/his score;

iv) Each member’s pay is contingent upon both group’s output and her/his score.

The third rule, the authors state, best reflects the “pay-off” in an environment of Cooperative Interdependence. The rule creates a situation in which the magnitude of each member’s payoff depends directly upon the quality of the group’s performance, [and] we should expect the members to want to engage in whatever behaviors they believe will contribute to this end (such as working hard, helping others, making suggestions about ways to improve the group’s efficiency, or even playing second fiddle) (Cartwright and Zander, 1968, p. 412).

**Forms of Team-based Pay**

The preceding sections have outlined the interactions of the four levels of a model of team-based pay which impact team-based pay environments. The levels consist of 1) the internal character of teams, 2) the functional attributes of the four types of teams commonly found in organizations
and the kinds of tasks these teams are usually involved with, 3) the effects of the organizational context on team development and identity, and, 4) a system of pay which is based on cooperative interdependence. If these levels are understood to form an integrated working environment then the philosophical underpinning of that environment is that these levels are highly interdependent in their functioning. That is, no single level in the model can be in conflict with any of the other three levels in order to create a team-based pay system based on cooperative interdependence. Furthermore, the environment also incorporates the assumption that the processes within each level are in a reciprocal relationship with the processes in the remaining three levels. These reciprocally interdependent dynamics result in a work/compensation system in which the various parts of the system (the processes within each level) are reinforced by the collective actions of all four levels of team operation. The type of system created, therefore, is one whose central character is that of unified interdependency. While it is granted that the environment created may be considered an ideal, it would nevertheless be useful to employ it as a template for analyzing the various issues in team-based pay programs as described in the literature.

Each of the teams, as has been shown, has a set of unique characteristics in terms of task and membership that may cause the organization to create different pay systems which are deemed "team-based." Thus, team-based pay for members of a parallel team may have an entirely different form from team-based pay for members of a process team, which may be different again from the pay plan for members of a project team. Team-based pay may also vary
significantly from one team to another within the same organization, even though both may be thought of as being process teams. Though the compensation plans for all the teams usually fall under the umbrella category of ‘team-based pay’, that categorization, as will be illustrated, may be somewhat misleading. There are differences in the goals of the pay plans which are significant, and, in some cases, the structure of the proposed pay schemes have little, or nothing, to do with promoting cooperative interdependence.

---

**Paying the Parallel Team**

As noted, membership in the parallel team is often a part-time, temporary arrangement. Commitment to this type of team by its members may often be diluted because of dual loyalties and responsibilities to their regular jobs. Furthermore, members of a parallel team may find themselves in a situation where, even though they are asked to contribute to the efforts of the parallel team, their pay is based on their efforts in their regular jobs. However, if the organization decides to reward these individuals for their efforts as members of the parallel team, the amount of the reward must not be so large as to overshadow the pay of their regular jobs. Gross (1995) believes that because membership in the parallel team is usually temporary and part time, individuals on parallel teams should “bring their own compensation package to the team” (p.173), that is, their pay should not be changed from the form and amount the individuals receive for doing their regular jobs. Similarly, Flannery, Hofrichter, & Platten (1996)
are of the opinion that “Because the team assignment is parallel to the regular work assignment, it is critical that any reward not create conflict between [these] dual responsibilities” (p. 118). Therefore, they suggest that the rewards offered to parallel team members not be based solely on their efforts on the parallel team but “also on their overall job performance” (p. 118). This arrangement, they believe, would help to ensure that employees would not neglect their regular duties. As a further assurance that members of parallel teams remain focused on their regular jobs, Flannery et. al also suggest that such rewards should be given out on a one-time basis, and given out only after the completion of the team’s task. Gross (1995) advises that a member’s reward for working on the parallel team should be a recognition reward, optimally a non-cash reward such as a group dinner, held after the completion of the team’s task.

**Paying the Project Team**

Flannery et al. (1996) note that wages for members of a project team, in addition to having some sort of incentive or reward program in place (which is paid out for certain events taking place such as early and successful completion of the project), should also be “determined by the new skills and competencies that he or she needs in the team setting” (p. 119). However, they suggest that as “the roles [of team members] are defined and the skills and competencies necessary for success are acquired, the focus of the team strategies must broaden to include the ultimate purpose of the team – mutual accountability for its results” (p. 119). Thus, Flannery et al. recommend, that in addition to the individual pay strategies already in place, the team should
receive some sort of team reward as a “performance-based incentive, such as gainsharing, profit sharing, or stock options” (p. 119). Another issue of specific importance to the project team’s pay structure, according to Flannery et al. is the “long-term role of the team members” (p. 120). If an individual’s involvement in projects is the norm, as in the examples of a system expert and product development staff member, then these individuals “should continue to be rewarded primarily through the use of base salaries and merit increases” (p. 120). In the instance where the individual is pulled from his or her regular job and placed on a project team on a one-time basis, Flannery et al. recommend that an-incentive program for the work on that project “might be appropriate” (p. 120).

Paying the Process Team

Observing that process teams are “rarely cross-functional; they usually consist of people doing similar work with comparable training and education”, Gross (1995) notes that “To function effectively, the members of process teams typically must be able to do each other’s jobs and to work together well” (p. 177). As a result of these team tasks, individuals who are members of process teams often need to upgrade their own individual skills, as well as increase their competencies at being effective team members. This situation necessitates, Gross states, some form of individually structured pay plan as the basis for pay in process teams. As individual skill levels increase, and at some point reach an overall team level that allows the team to perform effectively, Gross advises that “companies need a pay-for-competency program that will help
maintain their teams at a performing stage" which he defines as a level where “all members [of the team] have at least an average level of competencies, and some have progressed to the excellent levels characteristic of leaders” (p. 178). Flannery et al. observe that within a process team, though individual jobs skills are important, there is also a need for “team skills and relationships” (p. 134). The pay strategy should therefore reflect team competencies which they define as “behaviors and characteristics that lead to effective team performance” (p. 134). The authors suggest that team members receive this pay on a team basis, that is “If a team is highly effective, then the pay is of everyone is raised” (p. 134). They also note that pay in a process team environment may also include “some reward for the development of individual competencies” (p. 134). Gross states that “at the end of the day, of course, companies aren’t really paying for the acquisition of skills or competencies by individuals: they’re paying for production, whether of goods or services, by the entire team” (p. 179). Teams, therefore, are ultimately created by organizations to produce more quickly, accurately, and efficiently than individuals, and as such “incentive compensation opportunities for those results is the lever most likely to motivate process teams” (p. 179).

There are some common themes to the team-based pay systems proposed by a number of well known and respected researchers in fields of compensation and reward theory. They all mix individually based pay with some element of group reward and/or incentive, regardless of the
type of team, team task, or internal team character. Furthermore the method of pay delivery is not one that consistently reflects, or promotes, cooperative interdependence. Bennett (1996), in reviewing some opinions of well known compensation analysts on team-based pay, notes that individual pay is still very much the focus of team-based pay:

There are some teams where you reward the individual’s contribution because the teams are multidisciplinary, you have steps in different areas, and you want to reward the individual’s contribution. On the other hand, you want to minimize the individual’s contribution when each team member is interchangeable with every other member. But there are not a whole lot of applications where the team members are not interchangeable, in my experience (p. 73).

This approach, of course, represents attempts to combine methods of individually based pay with some element of group-based recognition that, when given the name ‘team-based’, hopes to forge team members with a team identity and teamwork values in the name of greater productivity. Wageman, in her study of self-managing teams at Xerox (1997) comments that the use of mixed rewards — about half provided to individuals and half to the team—emerged as the most common error in reward system design. Leaders tend to provide mixed rewards for the same reason they create “hybrid” tasks — they assume that it is best to introduce team members gradually to the idea of being fully dependent on each other (p. 37).

While the benefits of teamwork and teams are certainly well documented, the comments of one compensation analyst, poignantly reveals the prevalent confusion in team-based pay plans and the true nature of the problem organizations are facing

There are places where team-based pay is appropriate, it’s just not as often as people like to think. The three primary criteria that I see are where the person’s dedicated — that’s all they do; where the work is truly interdependent; and where the decision making is interdependent. If they meet those criteria, it’s probably a candidate for some kind of team pay (Bennet, 1996, p. 75)
Accordingly, there is a tendency among some researchers to do the very thing that Bennet describes above: attempt to place various kinds of teams and individuals under 'some kind of team-based pay' without, however, considering whether there are sufficient interdependencies to justify team-based pay. The reality is that if cooperative interdependence were used as a benchmark for team-based pay, very few such pay systems as described in this paper would qualify. Neither the parallel team nor the hybrid team have the appropriate team structure, team task, or team design, that can be supported by cooperatively interdependent pay. Only very few project teams will have the permanency of membership that would allow for fair compensation for all team members during, or upon completion, of the project. The process team's goals have to be carefully thought through so that the team does not reach a competency or skill 'ceiling' with no further room for growth or increase in income. While it seems that organizations and consultants attempt to create pay systems that, for most part, have the name of "team-based", they neither embody the spirit nor the structure of cooperative interdependence as the basis of team-based pay design. In the instances of a seemingly strong candidate for team-based pay, such as the process team (and some project teams), there is an ultimate reliance on individual rewards of some type. it is not the intent of this paper to imply that individually-based pay schemes are wrong or counterproductive, but that there exists a high probability that organizational expectations for team performance are, to a certain extent, artificially buoyed by the impression that team-based pay, wherever and however it is administered, should increase productivity. These expectations are present despite the fact that the team, considered to have a
true team-based pay plan, may contain compensation elements that are actually individually based and so do little to promote cooperative interdependence. Moreover, when pay systems such as those proposed by Gross (1995), and Flannery et al. 1996), are taken to their logical end points, incentives, as part of a variable compensation plan, are viewed as the optimal methods by which to motivate team performance. Within that approach, some portion of pay is contingent on the team performing at a level necessary to earn the incentive, and as such, the incentive is understood to act as a motivator. Yet, as the next section will illustrate, there are mixed findings on the effectiveness of these type of incentive programs, especially for the non-professional levels of the organization. Booth (1990) in a survey of employee attitudes toward variable pay (encompassing the responses of non-managerial, managerial, and executive levels) at 122 large Canadian firms, found that, regardless of the level within the organization, participants [of the survey] were unanimous in their conviction that maintenance of adequate base salaries for non-managerial employees was essential. They believe that firms won't be able to achieve organizational cohesiveness and productivity improvement if a large percentage of employee compensation is continually put at risk [emphasis is by Booth] (p. 6)

**Rewards, Incentives, and Productivity**

Since group rewards or incentives are common features of many compensation plans, there are two related concerns that need to be addressed. First, as discussed above, is the creation of pay systems whose structures reflect and reinforce group effort. The second concern is the more basic issue of whether rewards such as bonuses, or incentives, even though group-based, do, in
fact, act as motivators in increasing performance. If indeed they do, then the issue of who should
decide whether there should be such a program, the team or the organization, becomes an
important consideration. Furthermore, the question of who will administer the pay program also
needs to be addressed. Finally, research findings from applications in the field need to be
examined to determine the effects that group-based pay systems incorporating incentives have on
team performance.

The roots of conflict within the employer/employee relationship is a power equation favoring the
employer; a power relationship in which the owner enjoys the benefits and rights of ownership.
However ownership also implies the weight of responsibility and risk. Employers have tried to
instill the same feeling of ownership, if not the same rights, in some employees, since the late
nineteenth century. Wheatley (1992) notes that the concept of ownership has changed, in that it
no longer only describes shareholder equity but the "emotional investment that we want
employees to have in their work. Ownership describes personal links to the organization, the
charged, emotion-driven feeling that can inspire people" (p. 66). Echoing Lewin (1951), she
observes that "people support what they create" and "the best way to build ownership is to give
over the creation process to those who will be charged with its implementation" (p. 66). While it
is true that the type of ownership Wheatley refers to, is, for the vast majority of employees,
psychological rather than actual, the sense of having some measure of control over one's work
processes is a cornerstone of the team paradigm. The self-managing team is an organizational
structure that should reflect the principle of team ownership over team work, in that it gives its members a greater sense of autonomy, and therefore a higher level of commitment. A higher level of commitment would hopefully lead to greater productivity and it is the issue of productivity that has captured the attention of organizations.

Organizations have tried to increase productivity through the use of various sorts of reward and incentive programs in an effort not only to recognize and reward employee contributions but also as methods by which to motivate employees to higher levels of performance. Common to the vast majority of these plans are two conspicuous features: they incorporate an understanding that rewards and incentives will be paid in addition to regular salaries or hourly rates, (though increasingly, variable pay plans are replacing regular salaries and hourly wages) and, they are designed and implemented by the managers of the organization. Team-based pay plans in these instances are, quite clearly, examples of extrinsic rewards being used in an attempt to enhance team performance. Furthermore, pay programs designed and implemented solely by management are a powerful statement about who truly controls the terms of the wage relation; employees either work under the terms of the plan or they may not work at all. While a lack of choice in pay structure does not necessarily mean that employees will be unproductive, the research does show that both reward and incentive programs, especially when controlled and administered by an agent external to the person(s) performing the task to be rewarded, provide indeterminate and troublesome results at best. As Vroom (1964) noted: "Starting with William
James, psychologists have speculated that man's [and woman's] affective responses to the level of reward which he receives is dependent on the level which he expects" (p. 166). The history of pay has shown that it is a clash of differing expectations.

Rewards

In Herzberg, Mausner, and Snyderman's (1967) well-known study on the job attitudes of 1,382 employees and 200 managers, they developed the notion of job 'motivator' versus 'hygiene' factors. The authors found that when people expressed feelings of happiness and fulfillment with their jobs they "described factors related to their tasks, to events that indicated to them that they were successful in the performance of their work, and the possibility of professional growth" (p. 113). These factors, such as advancement, achievement and the work itself, were found to be essential in providing the employee with a sense of high job satisfaction and were therefore considered to be intrinsic motivators. However "when feelings of unhappiness were reported, they were not associated with the job itself, but with conditions that surround the job" (p. 113). These hygiene factors included recognition, company policy, supervision, and pay. Thus, while pay, and the earning of other rewards such as bonuses and awards, may result in preventing employees from becoming overly dissatisfied with their jobs, they do not, in and of themselves, create the conditions for job satisfaction in that they are not intrinsically motivating. In considering the effects of rewards and incentives on employee motivation, Herzberg et al. (1967) asked
are good job attitudes and company loyalty engendered by these incentive plans? The surface answer often seems to be yes. Employees in such companies will report that they like working for their companies but their ‘liking’ seems to be little more than the absence of disliking, their satisfaction little more than the absence of dissatisfaction (p. 118).

Herzberg (1987) points out that “The opposite of job satisfaction is not job dissatisfaction but, rather, no job satisfaction; and similarly, the opposite of job dissatisfaction is not job satisfaction, but no job dissatisfaction (p. 112). Herzberg (1987) also points out that the findings of his original 1959 study have been validated in “at least 16 other investigations” . . . making the original research one of the most replicated studies in the field of job attitudes” (p. 112). The utilization of rewards, bonuses, and incentives is, of course, a primary tool employers use in an attempt to increase employee satisfaction in the hopes that increased satisfaction will result in increased productivity.

The terms ‘reward’, and ‘incentive’ are used interchangeably in literature focused on compensation and motivation in the workplace. Faller and Darou (1994) observe “there is a general rule of thumb that any reward of less than fifteen per cent of salary is not large enough to be an incentive” (p. 58, in Natcom Papers). Moreover, if an organization decides upon a reward system it is assumed that the reward will be distributed in addition [italics added] to team members’ regular salaries. Taking into account Faller and Darou’s definitions the following section is meant to be understood as an analysis of rewards being defined as an amount greater than fifteen percent of salary, or more generically, the means used to promote greater
The Characteristics of Incentives and their Effects on Motivation

Deci and Porac (1978) comment that

People need to feel effective, to feel like they can bring about desired outcomes. This need for competence and self-determination is the psychological basis of intrinsic motivation (p. 151).

They note that an "activity is generally said to be intrinsically motivated if there is no apparent external reward associated with the activity" (p. 150). Harter (1981) proposes that intrinsic motivation should be understood as having three dimensions: "desire for challenge, curiosity/interest, and desire for independent mastery" (in Deci et al. 1981, p. 3). Amabile (1993) describes intrinsic motivation as the process of "being motivated by challenge" and that "enjoyment" when engaged in a task that is intrinsically motivated "is essential to creativity" (p. 43). While organizations hope to create more intrinsically motivating jobs, the reality is that too many jobs are based on a system weighted toward extrinsic rewards, chief among them, pay, and as an extrinsic motivator it "produces strong but short-lived improvements in motivation" (Faller and Darou, 1994, p. 58).

Deci, Nezlek, & Sheinman (1981) argue that intrinsic motivation can be affected by rewards through two psychological processes: "locus of causality", and, a "change in perceived competence" (p. 2). When people are engaged in a task that is intrinsically motivating, they
perceive that the activity they are engaged in is “self-determined”, that is, under their own control and direction. The motivation to do the activity comes from within. On the other hand, when people are engaged in an activity that is “constrained” (p. 3), that is, under the control of another agent, or the activity has a reward associated with it, individuals perceive that the locus of causality, or source of control, is external and they feel less self-determining. Intrinsic motivation in these circumstances decreases and the salience of the controlling properties of the reward increases. The authors also suggest that the sense of self-competence individuals have is very important in influencing levels of intrinsic motivation. If employees’ sense of competence is increased, their intrinsic motivation increases as well. Conversely, if their perception of competence is decreased, their intrinsic motivation also decreases.

Deci and Porac (1978) differentiate between two types of rewards that are commonly administered. The first is a task-contingent reward that is given for simply doing the task; successful completion of the task is not necessary for gaining of the reward. The second is a quality-contingent reward which requires a “certain level of proficiency” in order to do the task. The gaining of this type of reward has potential for increasing either the controlling or the informational aspect of rewards. Quality-contingent rewards emphasize “that the activity is instrumental for attaining rewards, but they also indicate that people have done well enough to receive them” (p. 164). Using the example of team-based pay, a team’s reward would only be gained in the event of the team successfully reaching its goals, but gaining the reward would also demonstrate to the team members that they did operate as a well functioning team. The
reward therefore has qualitative qualities and informational qualities. Deci and Porac further note that the critical factor in determining whether the reward will increase or decrease intrinsic motivation is “the way in which the performance-contingent rewards are administered” and whether that administration “emphasizes the controlling aspect or the informational aspect of the reward” (p. 165). They also suggest that “those extrinsic rewards that, when administered, increase people’s sense of competence and self-determination should increase their intrinsic motivation” (p. 159). Using piecework payments and bonuses as examples of quality contingent rewards, they note that the bonus is more informational while piecework is more controlling. They view the bonus paid for a “job well done” as an example of an extrinsic reward that allows people to “feel good about themselves” (p. 159) with minimal disruption of intrinsic motivation. Thus, Deci and Ryan (1987) contend that “Extrinsically motivated behavior is not necessarily either self-determined or controlled. One could willingly and freely pursue some extrinsic end (in which case it would be autonomous), or one could be pressured toward a goal (in which case it would be controlled)” (p. 1034). Of course, the latter statement supposedly carries with it the implication that an individual could only “willingly and freely” pursue such an extrinsic goal in an environment that allows for such freedom of behavior.

As an illustration of this process, Deci and Ryan offer the example of a person “who derives considerable aesthetic pleasure from having a clean house but who does not enjoy the process of cleaning” (p. 1034). If the person decides to clean the house, the choice would be self-deter-
mined, but "the behavior would be extrinsic because it is instrumental to having a clean house, and the satisfaction is in the outcome rather than in the behavior itself" (p. 1034). There is a sharp contrast in the same situation, however, if that person finds him or herself in the situation where the house is cleaned in order to "get the approval of a business associate who will be visiting, to avoid guilt, or to satisfy a compulsion" (p. 1034). In this instance, Deci and Ryan observe that "the extrinsically motivated behavior would be controlled" (p. 1034).

Deci et al (1981) found that, in addition to the informational or controlling nature of rewards, the behavioral characteristics of the rewarder also have clear and significant effects on the intrinsic motivation of the rewardee. Specifically, they note that

rewards will tend to undermine intrinsic motivation and self-esteem when controlled by someone with a controlling orientation, whereas they will tend to maintain intrinsic motivation and self-esteem when administered by someone who is autonomy oriented (p. 9).

Amabile (1993) reports in her study of professional artists that even though artists showed greater creativity under noncommissioned conditions than in commissioned conditions, "what mattered most" to the artists who had received commissions was the "degree to which the artist felt constrained by the terms of the commission: the more constraints, the lower the creativity" (p. 42). It is noteworthy, however, and a theme that will be returned to later in this discussion, that the artists in Amabile's study contracted out their services and negotiated the terms of their
commission on their own behalf. They operated with the autonomy of an owner in their decision to accept or decline the terms of the contract.

Faller and Darou (1994), in warning organizations to be aware of the limitations of reward programs, do note however, that the successful ones "are driven by more altruistic management values such as making employees feel they count" and as such, these programs "really attempt to change the management culture to one of valuing and recognizing employee effort" (p. 66). While the presence of care and concern for employees does not necessarily mean that a rewarer will always be autonomy oriented, it is difficult to envision a successfully operating self-managing team where management has not acknowledged that allowing autonomy is central to valuing the capabilities of employees organized in that manner. By definition, management who value the strengths of a self-managing team should value the autonomy that the team needs to do their job. It is no doubt true, however, that there are too many instances in industry where managers may not actually behave in ways that reflect those values.

What emerges from reward and incentive theory is that the effects of incentives and rewards are dependent on the interaction of a number of variables: the motives and goals of the employers and employees, the orientation towards control or autonomy of the rewarer, and the informational or control qualities of the reward. Furthermore, as Deci and Porac (1978) note "any behavior may be either intrinsically motivated or extrinsically motivated; that depends on
the person’s motive structure. The point is simply that a goal may be either the completion of a set of behaviors or an extrinsic reward" (p. 168). Consequently, what emerges in the decision to use or not use incentives, is the importance of determining whether the conditions and terms of a compensation program cause an intrinsic reward to take on the attributes of an extrinsic reward. It is a key issue and one that needs to be considered with care.

Amabile’s (1993) comment that “extrinsic motivation – being motivated by recognition and money – doesn’t necessarily hurt” (p. 42) is analogous to Deci and Porac’s allusion to the bonus that lets people “feel good about themselves.” While the authors seem to suggest that the effects of these rewards are somewhat pleasant and, in any event, innocuous, they, nevertheless, have little, if any, effect on intrinsic motivation. Saying that the presence of the bonus has little effect on intrinsic motivation is not the same as saying that its absence (in the form of an extrinsic reward) will also result in little if any increase in intrinsic motivation. The two conditions are not comparable in that there are considerable differences in the degree of autonomy given individuals. Of specific importance is the point they make that “establishing a group’s autonomy over decisions increases member’s commitment to decision implementation” (p. 775). They also note that “without commitment to a unified set of goals, activities by the group will lack motivation and a sense of direction” (p.776).

If autonomy is defined as a condition in which “people experience themselves as initiators of their own behavior” and “select desired outcomes and choose how to achieve them” (Deci &
Ryan, 1987, p.1025) then obviously people having meaningful input on the nature of their own bonus or reward program have substantially more autonomy then those who don’t. The question arises of whether increasingly greater levels of autonomy equate to a greater level of intrinsic motivation, self-determination, and self-perceptions of competence. The evidence presented seems to suggest that is indeed the case. If levels of autonomy can be said to lie along a continuum, then at one end of that continuum lies a condition of very little autonomy and high external control, while at the opposite end lies high autonomy and very little external control.

As the research illustrates, in a situation of low autonomy, persons feel they are controlled by either the reward, the terms of engagement or the orientation of the rewarder. Though these effects may vary depending upon the circumstances, they nevertheless remain noticeable, and therefore have an impact on team member performance. When a team is given the autonomy to assist in the design of its own pay structure, the issue of whether or not the terms of that pay plan (including a justified bonus) constitute an extrinsic or intrinsic reward is largely irrelevant, as the decision is made from an internal locus of causality within the team. It is the team’s decision, and as such team members will experience higher levels of self-competence, self-mastery, and presumably will be more productive in helping to achieve organizational goals.

Research Findings: Mixed Results

Much of the pertinent research literature examines the effects of group based rewards and
incentives on groups that are larger than that of the twelve to fifteen members considered to be of optimum size (Katzenbach & Smith, 1993, p. 275). However, these studies do provide insights on the role of group incentives that are applicable to a smaller unit such as a team. As will be illustrated, changes in compensation systems from an individual basis to a group basis can be very effective in terms of group dynamics such as communication and cooperation. On the other hand, the role of group pay as an incentive for increased productivity presents a rather more muddled picture.

In a review of 134 implementations of socio-technical design, Pasmore, Francis, and Haldeman (1982) report that of the twenty-seven organizations who altered their pay systems to make them “consistent with sociotechnical system philosophy, (for example, paying employees on a group basis)” (p. 1191), ninety-five percent of those organizations reported increases in productivity (p. 1193). The authors caution that the results in the study were based on organization reports that varied from the provision of “detailed figures” to general statements such as “productivity increased” (p. 1194). Furthermore, the introduction of group based rewards was not the sole change in work processes that might have been responsible for the increase in productivity. Organizations encompassed by the study usually introduced changes in the compensation system along with other sociotechnical practices such as “facilitative leadership, peer review, and self-inspection” (p. 1193). The authors point out that one major significance of their findings lies in the fact that no organizations reported productivity decreasing as a result of group-based rewards
or other implementations of sociotechnical philosophy.

Pritchard, Jones, Roth, Stuebing, & Ekeberg (1988) studied the effects of group feedback, goal setting and group-based incentives over a two year period with five maintenance units at an air force base in the United States. Attempting to test the reliability of a productivity measure they designed, the authors introduced group interventions consisting of feedback, goal setting and incentive programs. The monthly feedback reports displayed group performance on a number of measures such as quality of repairs and the time taken to complete repairs. The feedback reports also provided data which allowed a group to compare its performance to other groups with similar jobs at other units outside the study. Goal setting consisted of the group determining its own targets of monthly repairs and other services it offered. The group incentive was time off from work. The use of 'time off' as an incentive was decided on the basis of input from "samples of incumbents up to senior management" (p. 345) and the authors felt that "This incentive seemed powerful for the personnel involved and was feasible to implement" (p. 345).

In their analysis of the effectiveness of the program, the authors found that feedback increased productivity fifty percent over baseline (baseline is the productivity measure before introduction of feedback, goal setting, and incentives), goal setting increased productivity seventy-five percent over baseline, and group incentives increased productivity seventy-six percent over baseline. The isolated and direct effects of incentives on productivity were very much lower than
the seventy-six percent would indicate, however. In their analysis of the project’s research findings, the authors point out that the incentive program was instituted ten months after feedback reports and five months after goal setting programs. The increase in productivity due to the introduction of incentives was very low when compared to the increase due to goal setting and feedback. Noting that the units may have been performing at near maximum levels of productivity before the introduction of incentives, the authors suggest that either a ceiling effect may have been operating or more likely, “goal setting added somewhat to feedback [in terms of productivity gains] but not a great deal, and that incentives did not add further. The authors also make mention of the fact that “there was no identifiable pattern to the goals in relation to the incentive levels” (p. 350). The members of the maintenance units, even though they found the incentive of time off to be “indeed attractive” (p. 352) set production targets that did not ensure they would earn the incentive. Pritchard et al conclude that “Goal setting seemed to add to productivity, but incentives did not add [to productivity] beyond feedback and goal setting” (p. 355).

Guzzo & Shea (1987) report that corporate management at a large national U.S. based retail organization with more than 800 outlets decided to implement group incentives in the sales force. The sales force was organized into teams ranging from four to twenty-five members with the average being nine. The firm’s management believed that a group incentive would increase both sales and service due to the increased cooperation among the sales persons. Sales people
went from an hourly wage to an hourly wage plus a bonus based on group performance as measured by increases in sales. The authors created a survey which measured the internal evaluations of salespeople on task interdependence, outcome interdependence and potency. The authors define potency as the “collective belief of group members that the group can be effective” (p. 26). Sales people were surveyed one month before the introduction of the bonus system and six months later. Though overall sales of the firm went up “approximately 28%” (p. 29) during the seven months of the study, team member evaluation of the correlation between increased sales and outcome interdependence was low. However, team members evaluated the level of customer service as being significantly higher than was the case before implementation of the team incentive plan. The authors explain that the low correlation between increased sales and a higher level of customer service may have occurred because the “impact of systemic change in outcome interdependence [team-based pay] may have overwhelmed adjustments made by individual groups” (p. 29), or that “at the group level changes in customer-service behaviors and not in sales figures may be a more appropriate measure of group performance” (p. 29).

Guzzo and Shea do conclude, however, that “rewarding whole groups for focusing on sales coincided with some decrease in group members’ blocking or hindering each other’s work, as well as an increase in mutual assistance and producing/selling” (p. 29).

Hanlon & Taylor (1991) comment that “gainsharing is the fastest growing nontraditional pay-
for-performance reward system with 26% of companies in the United States currently using gainsharing plans" (p. 238). They define a gainsharing program as "an organization-wide approach to enhancing organizational effectiveness through a formal system of employee involvement and a group financial bonus based upon productivity gains" (p. 238). The authors argue that the productivity gains made under gainsharing programs are not directly or mainly the result of the motivational properties of the bonus, but rather are the result of the increased communication levels that become necessary among and between employees and management in order for them to earn the bonus associated with increases in productivity. In a study of a gainsharing program at a Fortune 500 organization in the priority package delivery industry, the authors found that during the first six months of the plan, the "average monthly bonus of $46.60 represented a 36.5% increase in earnings per employee" (p. 258). While the researchers did not survey or measure the direct, if any, effects of the incentive on employee productivity, they note that the firm did realize a "10.6% savings in labor costs" (p. 258). The authors conclude that "it appears that when a reward system that focused on varying pay was implemented, it caused employees and management to think more explicitly and talk to each other more about the task-related problems that needed to be solved in order for a bonus to be realized" (p. 258).

The findings of the research discussed within this section indicate that group level incentives have somewhat marginal and inconsistent effects on productivity, though some increase does occur in each instance. In addition to the aforementioned increases in productivity, the main
benefits of such plans are the significant increases they promote in communication, coordination, and cooperation among team members. It appears therefore, that incentives, given the findings from the literature, may have a secondary effect on group productivity but a primary effect on the quality and effectiveness of group dynamics. These findings suggest that putting significant amounts of employee pay at risk without employee agreement and buy-in, as is the practise in some variable pay programs, may be counterproductive. Addressing this point more specifically, the results imply that it is not the size of the incentive or reward that is of primary importance to the group as much as it is the decision making powers the group has about the terms of the incentive program. A relatively high level of autonomy in decision making powers is clearly important. Seaman (1997) observes that when “building effective teams, it’s helpful to envision each team as having its own box. Each team decides everything within its box without asking for help and decides nothing outside its box without asking for help” (p. 27). Yet the shape of the box depends on the team type, the nature of the team’s task, and the organizational environment in which the team operates. To introduce team-based pay in a manner that supports and enhances the team’s operation, it is necessary that the team’s operational box includes, as a minimum, the information necessary to see how their actions account, and do not account, for the pay they receive. More importantly, if organizations, and employees, are genuinely interested in increasing the size of that box, employees should be given the opportunity to have input on the terms of their pay plans, especially if the use of incentives is being considered. In order for employee input to be meaningful, in addition to the information impacting their immediate work
activities, employees also need organization-wide information.

Information for Empowerment

The message organizations consistently give their employees seems to be that though the organization trusts its employees to earn the organization money, the organization does not trust those same employees as having the judgement necessary to fairly and objectively evaluate the operational factors impacting the wages they earn. That situation is made all the more perplexing because, as the following sections within this discussion will show, employees, when given the freedom and responsibility to assist in the design of their jobs and pay, may very well decide that a bonus, raise, or other type of reward is not appropriate given the circumstances of the organization. As about “one-third of employees in Canada work under union agreements” (J. Quarter, personal communication, September 1997), the majority of employees usually have little choice other than to accept the compensation plan offered them unless they have the protection of a contract. Even with contract protection, unionized employees often find that they face no alternative but to turn to strikes, work to rule tactics, and other forms of protest as a result of contention about overly arduous job conditions and unfair pay. As a last resort, employees can, of course, look for work elsewhere. While leaving an organization may be the ultimate expression of freedom of choice, it may be a choice that is needlessly final, and
expensive, to the organization and employee alike. There arises the obvious question of whether or not employee actions such as quitting or striking would be as necessary in some circumstances if information relevant to their jobs were made freely available to them. As important as the availability of that information, is the organizational managers’ acknowledgment that employees themselves may be the best judges of what information is needed. In light of these facts, it becomes apparent that many of the arguments surrounding team-based pay are short sighted to the extent that they limit their concepts of team autonomy and use erroneous assumptions about the effectiveness of employee judgement.

Case (1994) calls “empowerment” the “trend that never happened” and says that the “trouble with empowerment as it’s usually conceived as this: It’s like empowering a guy to drive a truck without telling him where he’s going” (p. 88). Similarly, Seaman (1997) makes the observation that “Most line workers detest the word ‘empowerment’”, mainly because empowerment often means that employees are put in the no-win situation where they are accountable for their decisions but “do not have the knowledge or information required to make good decisions, or, have the knowledge to make decisions but do not act for a variety of reasons, such as fear they will lose pay if they slow down production to make a change” (p. 27). Case (1994) notes that teams, including self-managing ones, do not get financial information, instruction in the meaning of the financial data and information on “how their work contributes (or detracts from) the bottom line” (p. 88). Seaman states that for organizations to have employees who are truly
empowered “an organization needs to build knowledge and provide information regarding goals, measures, decision making boundaries, and pay” (p.28). In this vein, Case suggests that “employees have to be empowered to make money, not just to hit operational targets” (p.89), that is, they need to know how their jobs contribute to the financial position of the organization for which they work. He states that empowerment based on an “open” style of managing means that employees take “ownership of the numbers — forecasting them, tracking them, making them behave. It’s like owning your own business. Like an entrepreneur, you can’t pass the buck” (p. 90).

Case and Seaman make a splendid argument for empowering employees, but perhaps they should be reminded that usually owners unilaterally decide what their businesses will pay those ‘empowered employees’. By proposing that employees forecast, track, and make these financial numbers “behave” (p. 90), Case and Seaman are essentially proposing that they, at a minimum, take control of the finances that are immediately impacted by their jobs. Yet they fall short of suggesting that by controlling those numbers (presumably to the benefit of the organization they work for), employees are also demonstrating that they can exert effective and reasonable control over their own pay, which in reality is but another series of financial numbers affected by the jobs they perform.

In supporting the need for a more open style of managing an organization, Case notes that
“Business information – financial data – is particularly powerful because it shows people the reasons for doing something” (p. 64). Observing that “when people see a reason, they’re likely to act” (p. 64), he provides an account of Commercial Casework, an office furniture manufacturing company in California. Most of Commercial’s business consisted of project based business where every project had detailed labor, time and material costs attached to it, but the budget details were kept from the actual employees who built the furniture. Jobs typically “were running about 6 per cent over budget” (p. 64.) until employees were given each job’s costs, including labor. When employees were given access to the detailed budgets, Case reports that jobs averaged “2 per cent under budget” (p. 64).

Case also advises that employees who are business literate, that is who understand the financial aspects of a business, are in a better position to make good decisions. He notes that employees can see whether there’s money in the bank or not. If profits have been growing, if labor costs have been dropping, if revenue per employee is rising, well maybe they can reasonably expect a raise, or better benefits, or some other reward” (p. 76).

Case also makes the point that “People make better decisions when they understand the stakes. And in a business, the ultimate stakes are financial” (p. 77). Seaman argues that “Finance and accounting are the rules of business. In fact, the rules of finance often determine what constitutes a good decision” (p. 27). The implication for teams and their “line of sight” regarding their wages is evident. Without financial knowledge, employees’ line of sight is very short indeed.
To create a system wherein employees could have input on their wage structure would require mutual trust and openness. At Semco, a large manufacturing company based in São Paulo, Brazil, top management employees wrestled with six various performance based bonus plans but found "nothing worked" in satisfying the needs of the employees, the demands of the shareholders and the "vagaries of the business environment" (Semler, 1993, p. 198). Semco's executive management decided that they themselves "shouldn't be doing anything to solve this problem" (p. 198). In 1989 executive management decided to institute a compensation plan in which management employees would determine their own salaries. The rationale for allowing these employees to do so was that top management was committed to introducing worker participation into Semco's corporate culture. They therefore believed that managers, with input from executive management, should be allowed to set their own goals and, when the year was over, decide the extent to which they met them. Awarding themselves an appropriate amount of bonus would be "a relatively simple matter" and "no one would dare complain about the fairness of the system, since the managers would determine their own reward" (p. 198). Ricardo Semler, the President of Semco, notes that management wanted to institute a salary system that would "give our employees a role in a process that is always one-sided" (p. 199). They created a process in which an employee and his or her manager would "come to a meeting of minds" (p. 200) regarding agreement on perceived values and competencies required for the job and only then talk about money. Before an employee was asked what his or her salary should be, the employee was asked to consider four issues:
what they thought they could make elsewhere;
what others with similar responsibilities and skills made at Semco;
what friends with similar backgrounds made;
and how much money they needed to live on (p. 200).

The employees were given national salary surveys "compiled by such consultants as Price
Waterhouse and Coopers Lybrand" to assist them with the first two issues and "for the second
two, they had to look inside themselves" (p. 200). Semler reports that except for six individuals,
five of whom set salaries lower than what management had projected, "every one set salaries
that were in line with our expectations" (p. 201).

Semler, in reflecting on the benefits of this plan, observes that Semco's employees show a
concern for Semco's welfare by keeping their salaries "in check" and that "In good times or bad,
self-set salaries have encouraged our workers to take that rarest of corporate perspectives, a
long-term view. And they have the added virtue of eliminating complaints about pay, which are
always among a company's most contentious issues" (p. 202). The salaries of all employees at
Semco were of public record and Semco tried to pay their top executives no more than ten times
that of an entry level salary, a situation far different from typical executive salaries in North
America. Rifkin (1995) reports that in 1988 "CEO's in the United States made 29 times the
income of the average manufacturing worker" (p. 173) and that the average executive income in
1992 had risen to (in American dollars) "$1.2 Million" (p. 173). Of course, Semco achieved this state of affairs by creating an atmosphere that allowed for the development of trust and respect needed to implement this type of plan. Establishing trust is after all an "iterative process — implementing such a plan builds trust, and employees' response to that is to be more trustworthy" (M. Laiken, personal communication, August, 1997).

Compensation plans such as the one in place at Semco seem the exception rather than the rule. A plan that provides employees such a high degree of autonomy (and therefore responsibility and accountability for their actions) is seen to be too extreme to implement in our North American organizations. Our culture, and as illustrated, most of our team-based pay plans, are still largely based on individual effort and reward. Therefore the relevance to this paper of the experience at Semco, as well as the examples provided by Case, is that they demonstrate that when open management, availability of information, and trust in employee decision-making ability are part of the organizational context, they can be instrumental in increasing the size of the "box" in which teams operate. As the size of the box increases, the form of the box may also undergo a metamorphosis. Perhaps organizational researchers such as Seaman will begin to use new, potentially more empowering analogies such as webs, or, networks of interdependencies, rather than boxes, to describe the organizational context in which empowered teams operate.

That the argument in support of employee input into work conditions and pay has been detailed
at some length is warranted by findings in recent well publicized research. In a 1993 employee attitudes survey of over 500 companies, the Hay Group, a large compensation consulting firm, found that while “close to half” of employees surveyed were “satisfied with their pay in absolute dollars, a sizable majority do not perceive their pay as linked to their performance” (Gross, 1995, p.15). Given the current history of organizational downsizing and reengineering, Gross makes the point that employees have experienced “a continuing decline in confidence, commitment, and loyalty to their corporate management” (p. 15).

An article in the November 25, 1995 edition of the Globe and Mail may serve as warning that the perceived advantages of the team structure as seemingly practiced in many organizations may only be apparent to theoreticians and managers. Team based pay in these environments may only aggravate what is an already tense situation and would represent a very large straw on a very tired camel. Captioned “Empowerment a joke, employees say”, the article states that in a survey of more than 1500 American workers by the Princeton, New Jersey firm of Kepner-Tregoe (and corroborated by Yankelovich Partners, a well-respected polling firm):

* “The latest business trend, team projects, are often a burden. Forty-one per cent of workers say their team assignments are ‘unrealistic or unfair’. Eighty per cent of their managers disagree.”

* 60 per cent of workers say they are not rewarded or recognized for good job performance. Fifty-one per cent of managers agreed. Both sides (63 per cent of workers and 58 per cent of managers) say poor work, on the other hand, draws immediate attention.
* Empowerment is a joke in many companies. Workers still feel their input is not valued. Thirty-three per cent said their employers “never” valued their ideas. Asked to rank the company’s priorities, both managers and workers said “employee morale” came last.

* Kepner-Tregoe President T. Quinn Spitzer offered that “They [workers] see companies putting lots of money into new initiatives that benefit the company but nothing is put toward employee development,” . . . “Then workers hear the verbiage about how ‘our people are the most important asset we have,’ and they want to throw up.”

While the results of this survey as reported in the newspaper do not support a blanket indictment of management practices, they do indicate that a reassessment is in order of the organizational expectations for team productivity, and the manner in which they are paid for their efforts. Organizational researchers such as Beer (1992) and Kohn (1993) who advocate the removal of pay as a contingency to performance, forget that most employees are reminded of the strength of that contingency, as well as who decides its terms, every time they receive their pay cheque. Yet given the evidence about the dubious effectiveness of company enforced incentives, their viewpoints certainly cannot be passed over lightly. Kohn, who so strongly opposes the use of rewards in the workplace as a method of motivation, recommends that all incentives be abolished. His advice to policy makers in organizations is to “Pay people generously and equitably. Do your best to make sure they don’t feel exploited. Then do everything in your power to help them put money out of their minds” (p. 182). Kohn admits that he works for himself and
so attempts to “decouple the task from the compensation” by determining how he thinks about his work. He states that in negotiating for the amount of money he is to be paid for a lecture or the writing of an article, he considers the “maximum amount that seems fair and that the organization can afford to pay” (p. 183). Then, based on the assumption that he and the organization have come to an agreement, he does his “best not to think about the money again” (p. 183). He states, however, that “for people who do not work for themselves, it is imperative that the act of decoupling be facilitated by the organization” (p. 183). He recommends that “This is done mostly by avoiding certain practices — specifically, anything that encourages people to become preoccupied with what they will get for what they are doing” (p. 183). He cites the aforementioned use of incentives, the reevaluation of performance appraisals, and the creation of “conditions for authentic motivation” (p. 186) as the practices that need to be changed. While the issue of performance appraisals is beyond the scope of this discussion, the use of incentives is certainly not. As we have seen, incentives take on a chameleon-type quality and it is not the presence of incentives as much as the conditions surrounding them that have an affect on employee motivation and commitment to the organization. Given control over the terms of their own compensation, employees will act in a self-determined, and reasonable manner. Kohn, as is the case with a number of organizational researchers, does not seem to attribute to employees the same powers of reasoning that he does to himself. If he can negotiate reasonably and successfully, then, with enough of the right information, so can employees. Herzberg (1966) offers the notion that

a brief historical review of some of the prevailing ideas about the nature of man seems to
indicate that dominant societal bodies have capitalized, in an opportunistic manner, on convenient definitions of human nature in order to serve their organizational needs (p. 12)

It is well past the time that our organizations change their definitions of the nature of employees and offer employees the opportunity to assist in the design of the terms and conditions of their own compensation plans.

TOWARDS A MODEL OF INTEGRATED TEAM-BASED PAY WORK SYSTEMS

Much of the research in reward theory has been attached to an exploration of the factors involved in attempts by the organization to increase the motivation of employees. That is, the focus of that research has either been specifically on the motivational qualities of the job and the structure of the work unit doing the job as in the case of teams, or on the reward for doing that job. The notion that pay is a distinct entity to be separated from the job is replicated in the view that team-based jobs and team-based pay are separate categories of study rather than comprising a single work environment where the implementation of one may be rather meaningless without the presence of the other. The habit of disassociating the two fields of study perhaps has been the result of the practice of team-based work processes being developed in isolation from the findings of reward theory. While there are repeated calls in the name of teamwork to 'align people's pay with the way they work', there is scant attention paid to the fact that not all work
processes can achieve that alignment. This omission creates a potential for more harm than good when expectations for performance are decided by virtue of a pay system whose strongest asset may, at times, very well be that it contains the term 'team'. Adding to the compartmentalization apparent within this field of study, is the fact that employee input on a number of the key issues on either the job, or the pay, has been, with a few notable exceptions, rarely part of either research process. What occurs as a result is a disassociation of the very factors that need to be merged in order to form the foundation of cooperative interdependence: a shared task completed by a true team being paid on a mutually reinforcing collective basis.

This paper has examined team-based pay within the context of an 'ideal' work environment in which there are four levels of team processes that are interdependent, and because they are interdependent, constitute a necessary and positive environment for the implementation of team-based pay. Deutsch's (1949) concept of cooperative interdependence is both the framework, and the goal, of the environment. As has been illustrated, the literature contains proposed methods of paying teams that have, in some instances, very little similarity to the cooperatively interdependent pay system described by Cartwright and Zander (1968). Adding to the muddle within compensation practices is the fact that, when faced with the prospect of designing pay systems which are "performance oriented", the fall back position of a number of consultants is to attempt to motivate and unify team effort around team incentives. This unifying feature of a team-based incentive plan is a well accepted fact. As a result though, some employers and
researchers apparently, and erroneously, believe that it matters not so much who designs, controls, and administers the incentive as much as that the incentive is present in at least some form. Little thought seems to be given as to why the incentive is important and what effects the limitations of incentives may have on productivity. Furthermore, the widespread and largely unquestioned practice of designing team-based compensation plans without meaningful input and buy-in by team members is instrumental in maintaining an unwieldy and outdated status quo wherein organizational management retains control of a rigid wage relation that has outlived its usefulness, if indeed it ever had any. As discussed in this paper, the terms of the wage relation, as historically managed, have been a constant source of contention between employers and employees. Perhaps more troubling is that in maintaining that control, organizations deny themselves the very benefits they hope to achieve in using team-based incentives: increased productivity and commitment of their employees. The research findings are unequivocal in that they consistently show that when increased self-determination and autonomy is provided in the choice of a 'pay-off' for a given task, the result is that the reward loses its much of its controlling, and detrimental, characteristics. Additionally, the research shows that the whole question of whether an incentive is intrinsically or extrinsically motivational is mainly a function of who decides, and who controls, the terms of that incentive. On the other hand, compensation plans that are designed with employee involvement and choice would, as the research indicates, create a greater potential for the growth of employee commitment, and therefore, productivity.
Furthermore, the research articles discussed within this paper demonstrate that the motivational qualities of rewards and incentives, when used as the primary tools to increase productivity, are variable in their direct effect on that productivity. The results of these incentive programs are all too often far from what was hoped for, yet organizations persist in not taking the very action that could make the incentive more effective: asking their employees what would work. As has been also discussed, organizations err in realizing the true value of an incentive. They equate increasing levels of performance with increasing levels of incentive. However, the main benefits of a team-based incentive lie not in its size but in the positive effects the incentive has, as a group goal, on the internal functioning of a group, especially when the incentive is used in conjunction with other interventions such as feedback and goal setting. Under these circumstances, the presence of a group reward can significantly contribute to increased team member commitment, communication, and coordination which, while not guaranteeing higher productivity, would certainly improve the conditions needed to attain it. The evidence therefore suggests that any productivity gains may be attributable to the better internal functioning of the team rather than to the motivational qualities inherent in the reward. When accompanied by a management philosophy that supports a culture of true and real empowerment, which includes team member input on the terms of the incentive, it appears that incentives can be, in some circumstances, beneficial features of team-based compensation plans. However, once organizational managers accept that empowered teams are autonomous teams, they must also accept the fact that not all teams may choose to employ incentives as part of their pay plan.
Management's loss of total control over the terms of the wage relation is, of course, at the heart of the matter within this discussion. The boundaries of managerial control can become uncomfortably ambiguous when the issue is allowing employees to assist in the creation of their own pay systems. There are, obviously, potentially serious repercussions inherent in experimenting with self-determined pay systems that need to be considered. Responsible ownership is the acceptance that the terms of that ownership are constrained by financial, organizational, and market realities. However, as Case (1994), and Semler (1994) convincingly argue, the details of those constraints are not usually made available to employees, but when they are, the results are unequivocal in terms of heightened employee performance. Peters and Austin (1985) relate the telling comments of a small business owner that decry an outdated philosophy of management: "We make people responsible for all that's important, then we treat them like children, and then we're utterly dismayed when they turn around and behave and respond like children" (p. 287).

Of more basic concern is that there also appears to exist disagreement, if not confusion, as to what team-based pay is, where it is applicable, and where it is clearly inappropriate. The field of compensation research seems to have adopted a philosophy that says 'when in doubt, call it team-based pay". There are a number of plausible reasons as to why this state of affairs should exist. No doubt, one of the biggest factors may be that the potential of teams is viewed to be so great that an overly optimistic evaluation of the benefits of team-based pay, no matter the form,
has added to the confusion. Overlooked in this groundswell of optimism is an oversight that the development of pay systems have usually and consistently been one of the last considerations of organizational managers and consultants. This perhaps is due to the influence of a host of studies by well respected researchers such as Deming, Herzig, and McGregor that have caused wages to be perceived as taking a place secondary to that of job satisfaction and job content in the priorities of employees, managers, and researchers alike. Though the job and the work conditions surrounding a job are almost always important, as is the amount of pay, what seems to have been forgotten is that the various intricacies of ‘how’ that money is paid may be just as important as the amount, especially in the case of teams. Work systems, due to advancements in organizational development theory and technology, are once again going through a period of rapid and major redesign. Large segments of work processes that were once completed by individuals are now being completed by teams. Pay systems, however, have lagged behind these developments. A situation has therefore been maintained in which organizations change individually-based work processes into team-based processes but hold on to practices and beliefs which do not allow the true powers of self-managing teams to come to the fore. As a result, organizational expectations about team performance are not met and the organization then tinkers with ill-planned interventions such as company imposed incentives, pay at risk plans, and inappropriate rewards. The compensation system is treated as a separate element in the design of work to be added on only after the team process has been created, rather than viewed as an integral, and interdependent subsystem of the work process. Specifically, the critical importance
of the intertwined and interdependent relationships of team type, task, and pay are too often neglected. In fact, there may have been an overly zealous focus on building team skills and competencies, such as conflict resolution, goal setting, and communication ability in the hopes that individuals well trained in team-like behaviour will advance the cause of team productivity. Though these skills are crucial to well functioning teams, they cannot overcome or be a substitute for a comprehensive team design which includes the integration of team task and team pay. This may be especially true for those teams that are considered to be self-managing. As organizations wrestle with the reality that they will have to provide teams, particularly self-managing teams, with more authority to make decisions, more and better information about the factors impacting their jobs, and greater input into their pay structures, the necessity of understanding how these issues fit together becomes critically important. There exists the need for focused research into the development of team-based models that address the various interdependencies inherent in self-managing teams. Wageman (1977) notes that the central principle behind self-managing teams is that the teams themselves, rather than managers, take responsibility for their work, monitor their own performance, and alter their performance strategies as needed to solve problems and adapt to changing conditions (p. 31).

In her study of 43 high performance, self-managing Customer Service teams at Xerox, Wageman came to the conclusion that the “quality of the team design . . . had a larger effect on [the team’s] level of self-management than coaching [i.e., mentoring, timely feedback, and provision of team-relevant information] — by a wide margin” (p. 34). As a result of the study at Xerox, Wageman developed the following seven critical success factors which she felt were essential in
the design of effective self-managing teams:

1) a clear, engaging direction which essentially describes what the team’s objectives are;

2) a real team task, that is work that “is designed to be done by a team. That is, basic elements of the work should require members to work together to complete significant tasks” (p. 36);

3) rewards for team excellence where “teams were considered to have team rewards if at least 80% of the available rewards were distributed equally among team members”;

4) the team had ready and easy access to the basic material resources needed to do their jobs;

5) the team, not the leader or manager, has the authority “over basic work strategies” (p. 37);

6) the team has performance goals that are “congruent with the organization’s objectives” (p. 38);

7) the team has norms that “promote strategic thinking” that incorporates “an outward focus on the part of team members” so that the team members remain “aware of their environment” are “able to detect problems” and become “accustomed to developing novel ways of working” (p. 38).

Wageman’s notion of a team design addressing critical success factors supports the notion advanced within this paper that the integration of internal team character, team type, team task, and team pay should be integral components of the overall design of teams. Further research is needed, however, into development of models that integrate the pay component more completely than that of Wageman’s model. As organizations undergo a sea change in the restructuring of
work processes and move from individually based work systems to process based systems initiated by advances in technology and growth of global competition, the overall philosophy of how, and on what basis, wages are to be paid is also changing. Booth (1990) describes the current changes in compensation systems as a movement from traditional pay plans to modern pay plans. Traditional pay plans were usually 100% base salary, increases were entitlement based, and there were few incentive/bonus plans which were usually “restricted to executives” (p. 2). Modern pay plans, however, usually have a “variable component added”, with “performance-driven gains” (p. 2) as the basis of most pay increases. Also, there are now usually many different kinds of pay plans within the same organization. The changes in attitude toward compensation practices accompanies the changes occurring in work design. Hammer & Champy (1993), as two of the better known advocates of business reengineering, state that “when a company reengines its business processes . . . work units change — from functional departments to process teams” (p. 65). They provide a comparison of the differences in handling a new product or process such as an insurance claim by traditional methods to reengineered methods. In the traditional work environment, “these items get handled by numerous individuals in different departments resulting in fractionation . . . which causes numerous problems, but in particular it promotes incongruent goals among the different people involved. One person might care about inventory turns while another is focused on delivery time” (p. 66). In the reengineered approach, the people, whether handling a product or an insurance claim would be put together in a team, usually a process team which is “a unit that naturally falls together to complete a whole
piece of work — a process” (p. 66). Hammer and Champy also note that the new reengineered work environment “forces companies to reconsider some basic assumptions about compensation” (p. 73). Compensation in the traditional work environment, according to Hammer and Champy, was relatively straightforward in that the organization paid people for their time, since it was difficult to assign a quantifiable value on an individual employee’s work. They use the examples of trying to determine the dollar value of a soldered joint or the dollar value of a verification of the employment data on an insurance form. In the new work environment however, employees, of which a majority will work in process teams, according to Hammer and Champy, will be paid for the value of a completed process or product that has intrinsic value. They note that a “new camera, for instance, has value; a shutter mechanism does not” (p. 73). While it is clear that Hammer and Champy’s arguments about the value of an individual’s work leave considerable room for debate, it is also clear that business process engineering is being very widely implemented. As increasing numbers of organizations institute team-based work processes to reach their reengineering goals, the need for employee input on fair and workable compensation methods also increases, as does the need for a rethinking of compensation’s contribution to the overall functioning of teams.

Specifically, research presented in this paper suggests that higher levels of autonomy may be instrumental in creating the conditions necessary for higher team productivity. Therefore a well researched study comparing team productivity under conditions of company imposed incentives
versus productivity under team-decided incentives would be warranted. A very important corollary to this study would be the investigation of employee attitudes toward incentives, and more generally, toward the whole issue of team-based pay. Evidence as presented in the Kepner-Tregoe survey indicates that employees may have severe reservations about the well publicized benefits of teams. Furthermore more research is needed to understand the issues of peer pressure on weaker members within a team, especially given that variable pay plans are increasingly being introduced within organizations.

Another area that needs to be addressed is the growing dominance of technology in the workplace and the ramifications that this development will have on teams and their pay. Work processes being completed by the instruments of technology may become difficult to differentiate from work processes completed by the team. The measurement of individual team member contribution towards the attainment of the team’s goals may become a difficult issue to address. Technology, while making some tasks easier to complete, is also creating a situation where some teams are physically separated from one another, in some instances, by great distances. Project team members therefore communicate by new technologies such as the Internet and E-Mail. Software packages are developed and maintained by teams in different countries and different time zones. Customer service team members may be spread across continents. In these situations, separated by time and distance, team-based pay may be the glue that binds the members together.
Team-based pay within a union environment is also an area that warrants further research. An article in the December 19, 1997 issue of the Globe and Mail notes that 32% of men and 30% of women in the Canadian workforce are currently under union contract. With nearly one-third of the Canadian workforce having their pay plans negotiated by union representatives, it is important to understand the dynamics of team member interaction within a union environment compared to those within non-union environment. As employee pay rates within a union environment are contractually agreed to by union negotiators and management, and then either ratified or rejected by the rest of the union membership, issues of employee autonomy in the determination of pay rates with respect to team-based pay may be different from those within a non-union environment. Consequently the design and impact of variable pay plans, incentives, and the rewarding of teams who reach team goals may be altered significantly from the impact experienced in the non-union sector. Though the position taken in this paper is to allow all employees, whether part of a union or not, to have a greater say in the design of their jobs and pay plans, the intent has been to primarily address pay issues within the non-union sector where two-thirds of Canadian employees work without the benefit of union representation.

Finally, research into new work models which incorporate team-based pay as an integral part of the team design is also warranted. The borrowing of some of the principles of Sociotechnical Design may have promise in acting as a template to deal with the thorny issue of team-based pay. Pasmore, Francis, and Haldeman (1982) observe that “joint optimization is the goal of
sociotechnical system intervention” which states “that an organization will function optimally only if the social and technological systems of the organization are designed to fit the demands of each other and the environment” (p. 1182).

The authors note that “even the technique of job enrichment... which is closely related to the sociotechnical system approach, assumes that the answer to increased organization effectiveness lies primarily in increasing employee motivation” (p.1182). Pasmore et al. suggest that this view, while useful, “is too narrow to explain or predict much of organizational performance” (p.1182). They argue instead that

sociotechnical system interventions differ from socially focused methods in that they do not accept technology as given. Instead arrangements of people and technology are examined to find ways to redesign each system for the benefit of the other in the context of the organizational mission and needs for survival (p. 1182).

I suggest that the design assumptions implied by Pasmore et al. provide a powerful model for research into the design of team-based pay systems. The design steps for these types of models would begin first with the design of a team-based pay plan based on all team members sharing equally in the amount of wages being paid, or, at least all members reaching agreement on wages to be paid, and only then would the next step be the design of the actual work processes that would reflect this pay strategy. Of course, employee input on the pay system would have a bearing on the work design. This type of inclusive design methodology which integrates the various processes constituting team environments may offer organizations and teams the opportunity to truly create cooperatively interdependent work environments. Research into these
areas would ultimately accelerate the actualization of Emery's (1982) observation that a "system" change in the nature of the "wage relation" (p. 1105) has occurred.
BIBLIOGRAPHY


IMAGE EVALUATION
TEST TARGET (QA-3)

150mm
6"