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**Abstract:** Employees are often an untapped source of new technical ideas and improvements for enhancing processes, equipment, and products. Ideas can come from a variety of people within organizations, but companies differ significantly in how they encourage and reward employees for such ideas and improvements. We deal with systems of reward for employees for innovative ideas which are of benefit to a company.

We include a literature investigation of the fundamentals of rewards and reward systems. Examples of how various companies reward their employees are included. A questionnaire dealing with reward systems was sent to 140 companies and the results were interpreted to see whether there was a correlation between creativity and the rewarding of creativity. The survey found that most companies utilize some sort of reward system. Visibility and awards were the most widely used rewards, with monetary rewards used to a lesser degree. Recommendations for a successful reward system are included.

REWARDING SYSTEMS FOR CREATIVITY  
AND INNOVATION

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**REWARDING SYSTEMS FOR CREATIVITY AND INNOVATION**

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## INTRODUCTION

At the heart of every successful organization are two basic characteristics:

(1) Its capacity to allocate resources to achieve short-term and long-term results, to control their use in an effective and efficient manner, and to motivate, inspire and reward (or sanction) appropriate actions in management and staff.

(2) Its capacity to innovate: to think up new ways of doing old things; to be unconventional; to approach problems in a creative, lateral fashion; to learn from experience when experience is not always the same.<sup>1</sup>

The importance of worker motivation and the need for innovation are near peaks today. New workable, marketable ideas are being sought and promoted in an effort to restore U.S. leadership in technology, in productivity growth, and in the ability to compete in the world marketplace.

Innovation is the creative process of applying new ideas to create a new process or product to satisfy an organizational or market need. It often requires an organization specifically designed for that purpose -- that is, such an organization's

structure, processes, rewards and people must be combined in such a way as to create an innovating organization.

This study deals with systems of rewarding employees for innovative ideas which are of benefit to a company. It will look at the psychological aspects of rewards, what types of ideas are rewarded, who is rewarded and by whom, types of rewards, the corporate culture and the corporate structures most conducive to innovation. Examples of several companies with successful innovation reward systems will be examined. In addition, survey results regarding the reward system used by a number of Oregon technology and manufacturing concerns will be reviewed to arrive at suggestions for implementing a successful reward system.

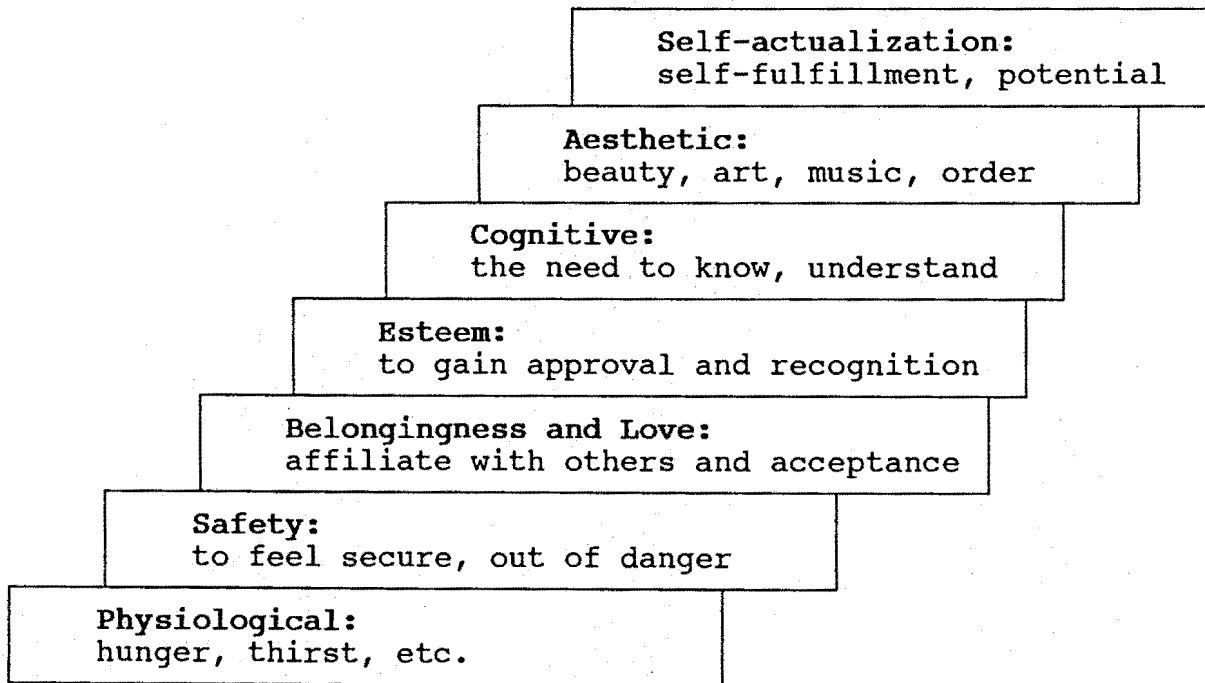
#### **FUNCTIONS OF REWARDS**

A reward system is one of the most challenging aspects in managing creativity and change. Rewards provide incentive and arouse action. They have the special capacity to interact and focus action on creativity.<sup>2</sup> Psychologists and especially behaviorists suggest that conditioning has made us what we are and has stemmed from the learning of skills, knowledge, and techniques for solving problems of life. Rewards provide a positive influence on behavior. People are more creative and more easily adapt to change when rewards are used to encourage creative behavior, since as they will learn creative behavior.

Since people are basically adverse to risks and since increasing creativity and change increases risk, why would these

people opt for increased change and creativity? The answer has to do with rewards: There must be something to offset the possible losses and emotional state by leaving an equilibrium state for one with more unknowns. The reward might bring increased satisfaction, attainment of a goal, or the avoidance of dissatisfaction.

For rewards to be successful in stimulating creativity and innovation, there must be an individual need. Under traditional motivation theory, Maslow developed a six-level hierarchy of individual needs as shown below:



According to Maslow, if lower needs (psychological, safety) are not filled, people concentrate exclusively on satisfying them. As lower needs are fulfilled to an acceptable level, they begin to put their energies into fulfilling our higher needs.<sup>3</sup>



In today's society, most of the lower level needs are met, and therefore, management needs to examine the higher level needs to determine what motivates employees to innovate. It has also been found that a lack of motivation and rewards will hinder innovation. Therefore, a manager must determine what motivates a particular employee or class of employees so that the company's and the employee's objectives can be met.

Employee desires are usually within these categories:<sup>4</sup>

- \* Wages, salaries, compensation
- \* Fringe benefits
- \* Job security
- \* Amount and type of supervision, control of own work
- \* Quality of working conditions
- \* Degree of interest in work
- \* Recognition of achievement
- \* Ease of job
- \* Opportunities for advancement
- \* Opportunities to learn or develop new ideas or talents

Potential reinforcers for employees include: (1) *Social*, which are events that give attention, approval, or recognition; (2) *Material*, which are tangible items like a letter of commendation for file, a free lunch, or special parking; (3) *Activities*, which may include trips to seminars or workshops, promotion to a better job, a new title; and (4) *Token*, which are tangible items which can be exchange for material, activity or social reinforcers and could

include: merit salary increase, a bonus or free tickets to an event.<sup>5</sup>

It is interesting to note that money is not always a good motivator. A study by Maier investigated sources of satisfaction that engineers had experienced within their companies. This select group mentioned: (1) achievement (41%); (2) recognition (33%); the work itself (26%); (4) responsibility (23%); (5) advancement (20%); and (6) salary (15%). This ordering places five satisfiers ahead of "salary" and indicates the importance of other, nonfinancial incentives.<sup>6</sup>

Because of constantly changing needs of employees, rewards that worked years ago are often no longer effective.<sup>7</sup> Many of these changes have occurred because of significant changes in social legislation, economic security, and labor organizations.<sup>8</sup> In recent years, industry has increased the number of fringe benefits, such as vacations and health benefits, given to its employees in an effort to maintain an edge of incentive value with competing employers.

An essential aspect of the reinforcement process is the reward-value.<sup>9</sup> Benefits such as retirement plans, life and health insurance and vacations are intended to influence satisfaction with working for a particular company rather than increase the satisfaction of the work itself. Employees are then motivated to finish work so they reach the desired incentives. These incentives often require time away from work to enjoy them and are extrinsic in nature. When employees find other companies offering desired

benefits that their company does not offer, they can be inclined to harbor strong feelings of dissatisfaction and discontentment.<sup>10</sup> Also, companies have not devised a system of rewards that match the risks of innovating and various forms of internal entrepreneuring known as intrapreneuring. Promotion does not always work well with intrapreneurs as they often desire and need the freedom to use their intuition, take risks and invest the company's money to build new products and services.<sup>11</sup>

Two general conditions exist when determining available awards:

1. The rewards must not completely satisfy the employee's desires or they will no longer tend to motivate.
2. Rewards must be tied to performance and not be negative in nature.<sup>12</sup>

The innovating organization, like an operating organization, needs an incentive system to motivate innovating behavior. The function of the reward system are threefold: First, the rewards must attract idea people to the company and retain them. Second, the reward must provide motivation for the extra effort needed to innovate. And finally, successful performance deserves some type of reward.<sup>13</sup> A balance must be also achieved between the needs of the individual and the needs of the company in formulating a successful reward system.

#### **WHAT IDEAS ARE REWARDED**

New ideas can be categorized into two groups: (1) ideas which

originate as a result of an innovation; and (2) ideas which originate as result of invention. Innovation is a result of creativity that results in improved products, services or methods by putting things together in a manner that has not been done before. Invention is the act or process of originating a new device or process from study and experimentation. Most employees with companies develop new ideas as a result of innovation.<sup>14</sup>

To help people develop new ideas and perform at high levels, organizations often offer a set of incentives and rewards to their employees.<sup>15</sup> The organization usually establishes the criteria for determining which ideas are rewarded and how these ideas are rewarded.

While an individual within the organization may have various reasons for introducing an idea (i.e., helping mankind), the organization for which the individual works may only be interested in the potential monetary aspect of the individual's new idea. The ultimate goal for companies is to have its employees develop new ideas which will either: (1) make a particular process within the organization more efficient, thereby saving the organization money; or (2) introduce a new product which will become profitable to the organization.

A reward for distinguished performance by an employee is in order as equity when an employee contributes in an extraordinary way to the company's profit or well-being. The award should be given for inventive or unusually ingenious solutions to a problem which result in profit, savings or other significant benefit to the

organization. Compensation in this manner also provides added incentives for employees to put their best efforts forward. Companies which effectively reward new ideas unleash innovation and help spawn invention within their employees.

To qualify for an award, the achievement should be clear, significant, worthy of special recognition, and reasonably consistent with other awards for similar achievements. Large team achievements require special care; and when an entire project team deserves recognition, it is best done with a special event, such as a dinner or an outing. Further, awards should never be given out before the achievement has actually been completed.

Many companies place more of an emphasis on implementing short-term ideas which can potentially result in an immediate (one year) profit to the company and in general make the company more efficient. Typically, the company rewards these ideas as soon as the ideas are implemented.

Companies also reward employees who work on an idea for extended and protracted periods of time. The companies will reward their employees during the project to insure the continued motivation of the team and again upon the successful completion of the project. It is very important to keep employees motivated through a series of reward systems during the tenure of long-term projects (e.g., projects in excess of six months). This will help the employees stay motivated and will continue to spark enthusiasm for the project. In a complete reward system, the employees should also be rewarded upon the successful completion of the project.

Therefore, organizations should reward their employee's ideas if the ideas result in either a short-term or long-term profit for the organization. Ideas that can be implemented in a short period of time and result in immediate profits are immediately rewarded. Ideas that are implemented over a long period of and result in long-term profits for the company are typically rewarded during and upon the completion of the project. However, a system of rewards during the life of the project may be advisable to retain employee interest and motivation. In addition, the magnitude of the reward is usually greater for ideas with long-term benefits than short-term benefits.

#### WHO DOES REWARDING? WHO IS REWARDED?

Since successful innovation is a process that has a number of steps, it frequently requires various people as the effort moves from idea, to the bench, to commercialization and to ultimate mass production.

In the established small-sized and medium-sized organizations, innovation and its reward are typically managed by a technical director or by a director of research. In a typical small organization, there is usually only one manager or director and only one laboratory. Therefore, the manager is typically given significant discretion to determine amounts and types of awards given to innovators.

In larger organizations, there is typically many research programs relating to various diversified areas, products,

technologies and markets. Such organizations as General Electric, Bell Laboratories, and DuPont require massive research staffing and organizational structures designed to facilitate attainment of the defined corporate objectives. In these organizations, responsibility for innovation management and reward management may be spread out over various levels.

An IBM award plan which combines both "formal" and "informal" monetary awards illustrates the reward-giving decisions being made at various levels of management. "Informal" awards range from \$50 to \$1500 and can be given at a low-level manager's discretion. Once the manager makes a decision on granting an award, the award can even be given on the same day. The larger awards are more formal, and divisional management approval is required for sums of up to \$25,000 for important achievements. Corporate approval is required for IBM corporate rewards, which can range up to \$100,000 or more, and these are reserved for truly unique accomplishments.

It is interesting to characterize the managers of innovation: What do they have in common, and how do they differ from other managers? Ten attributes have been shown: integrity, scientific credentials, intellect, foresight, interpersonal skills, imagination, analytical ability, objectivity, energy drive and judgment.

The innovators, who tend to be scientists and engineers in technology companies, also have certain characteristics. Scientists and engineers are usually intelligent, tend to be more independent and demand more personal freedom than others in an

organizational hierarchy. They measure and respect the overall technical competence of their supervision rather than the level of organization position. This is why it is important to be able to tailor the rewards to the persons receiving them.

In some companies, participation eligibility for reward systems is denied when the suggestion is closely related to the employee's regular job responsibilities. Thus, some companies hold that engineers and scientists are not eligible for rewards, perhaps at the cost of inhibiting individuals for exhibiting truly innovative behavior for lack of recognition and reward. Many managers are biased against suggestion systems because they believe employees are compensated to "give their all" for the betterment of the company and therefore additional compensation for ideas is unnecessary and wrong.<sup>16</sup>

The timing of rewards is an important consideration. Rewards can be given as a one-time award which would be appropriate for accomplishments which provide single-time benefits, such as capital savings or measurable profits. It is recommended that this award be given as soon as possible after determination, since the effectiveness of an incentive varies inversely with its remoteness in time.<sup>17</sup> In contrast, where the accomplishment is expected to result in long-term benefits in terms of savings or profit, the total award could be paid in installments. This works particularly well with achievements that significantly push technology with innovation and patentable inventions and with the viability of commercial operability for many years.



For reward systems of this type to work effectively, they must be both fairly administered and widely understood by everyone in the organization. Criticism is often directed at both real and imagined inequities: individual awards adjudged to be too small or large depending on the recipient, and contributors who fail to be included. These can cause questioning and disrespect of the reward system. Often secrecy by the corporation denies prospective recipients the criteria for awards or track records of actual recipients. This masking can only result in a reduction of potential benefits which the corporation would likely receive.<sup>18</sup>

#### TYPES OF REWARDS

The basic idea behind reward systems is to recognize and reward significant achievements as promptly as possible. Rewards that make workers feel good about their creativity accomplish more toward increasing creativity than simply being paid for the hours worked. When a reasonably large portion of the workers know that their efforts are recognized, they will continue their creative work, and the organization will improve.<sup>19</sup>

Reward systems may mix several types of internal motivators, such as the opportunities to pursue one's ideas, promotions, recognition, systems and special monetary awards. Some people can be attracted and motivated intrinsically by simply giving them the opportunity and autonomy to pursue their own ideas. For some people, this is enough and the company need do no more.

Motivational leverage can also be obtained by promotion and recognition for innovating performance. The dual ladder -- that is, a system whereby an individual contributor can be promoted and given increased salary without taking on managerial responsibilities -- is the best example of such a system and is used by many organizations. Some companies grant special recognition for high career performance. The IBM Fellows Program allows a person selected as a fellow to work on projects of his or her own choosing for five years. At 3M, there is the Carlton Award (which is described as an internal Nobel prize) which has been quite successful in recognizing innovation.

When still greater motivation is needed and/or the organization wants to signal the importance of innovation, special compensation can be added to the above systems. Some companies reward successful idea generators with one-time cash rewards. If the product continues to succeed, additional cash and recognition awards may also be given. Programs that give a "percentage of the take" to the idea generator and early team members have been found to provide strong motivation.

Some of the more common reward forms are discussed in more detail below:

Money. Money is one of the more commonly used rewards in most companies. Some of these rewards are one-time, lump sum payments. Other rewards are calculated as a direct function of the profit or savings (e.g., 10% of the net savings over the next year) to the company from the employee's suggestion. For example, one company

uses the following system: Employees submitting acceptable suggestions are rewarded 20% of the first year's increase in "measurable net savings" which result directly from the suggestion; the reward is limited, however to \$10,000.<sup>20</sup> A more common percentage for companies with this type of program appears to be 4%-10%. These awards may be given to both salaried and hourly employees.

The National Industrial Conference Board performed a survey in which various companies were polled and asked questions on suggestions the companies received from their employees. Among the 125 companies surveyed with suggestion award systems for both blue collar and white collar employees, 67% determined the amount of the award as a per cent of "what the suggestion saves the company during the first year."<sup>21</sup>

The survey found that while there is often no direct correlation between the amount of money saved the company and the value of the reward given to the employee, it is common industry practice to increase the size of the reward to the individual if the invention or innovation turns into a large money saver/maker for the company.

However, monetary rewards are not without their problems. Rewards designed specifically for creative accomplishments may seem to be inconsistent with the team concept that is so prevalent in management. Also, some companies prefer reward structures that are consistent with the rank of their employees and thus do not want workers making more money than their supervisors. Some

organizations are leery of giving an individual credit or even credit to a specific group -- it is much easier to act as though the effort is a result of the efforts of the whole organization.<sup>22</sup>

Visibility. A good type of psychological reward is visibility, whether it be widespread or merely local. Publicity, such as articles in company newspapers and displays of well-done jobs, are used to recognize employee contributions. Disseminated managerial compliments, both verbal and written, are perhaps the cheapest form for psychological feedback for good work. Significant IBM awards are presented at an annual gala recognition dinner where the award recipients and their spouses are joined by senior IBM executives at a three-day affair equivalent to that given the most productive salespeople. The main drawback with this type of visibility is that contributors who are overlooked may feel a great deal of resentment.

Professional visibility is another important psychological rewards. Some companies recognize their employees for extraordinary achievement not only within the company but also outside of it. There is often a perceived risk from outside visibility because of the possibility of pirating. However, the risk is usually more than offset by the reward to the employee.<sup>23</sup>

Promotions. Often companies reward innovative and productive workers by promotion within the organization, with the attendant increase in prestige and salary. However, promotion may backfire since it takes a successful innovator out of that environment, such as by switching the person to management. Many innovators need the

freedom to create new ideas, not broader responsibilities for manufacturing old ideas.

Internal Funding of Ideas. A reward for intrapreneurs might also include internal funding of ideas, which the innovator can then use to further refine and develop the idea. This funding often comes as the form of intracapital, which is a fund set aside by the corporation for use by the intrapreneur to start new businesses on behalf of the corporation.<sup>24</sup>

Flexible hours. Some companies recognize the innovative employee's need for independence by allowing the employee to work flexible hours. Some companies have adopted a program of "flex time" which allows the employee to come to work within a preset period of time. However, the organization's structure may not allow people to be gone during working hours due to production requirements, unacceptable changes in the routine and communications problems. Also, management often judges performance, perhaps incorrectly, by attendance.

#### **CORPORATE CULTURE AND STRUCTURE**

Most successful businesses and entrepreneurships depend on highly motivated employees who think and behave as risk takers and innovators. In such firms, reward systems must motivate employees to think and behave as entrepreneurs. Reward systems that pay employees for behaviors that are effective in bureaucratic organizations may actually hamper appropriate performance in an entrepreneurship.

The primary characteristic that sets the entrepreneurship apart from other types of firms is the rate of new product introduction or innovation. There are two types of entrepreneurs: (1) the independent venture; and (2) the internal group, which is sometimes called an intrapreneurship.

The independent entrepreneurship is generally a business venture in its early stages of growth that has been started by an entrepreneur. Later, if the business is successful, it may develop into a larger enterprise that may, or may not, maintain its entrepreneurial spirit.

An internal entrepreneurship is a unit of a large corporation formed to develop new products that differ from the corporation's mature, core businesses. The corporation provides the finances and other resources to nurture the venture, expecting it to take off and be self-sustaining and to generate profits over the long run.<sup>25</sup> The 3M Company and Hewlett-Packard are two large corporations that are well known for corporate cultures that encourage internal entrepreneurship to develop new and innovative products for the market, which will be discussed in a later section.

In today's environment, attracting engineers and scientists willing to work in an atmosphere of high uncertainty, relatively low pay, and rapid change can be a significant challenge. An equally difficult task is training them and developing a corporate culture that harnesses the energies of the team and encourages and rewards creativity.<sup>26</sup>

One can think of a company's culture as being the behavior visible to someone walking into that place. On a deeper level, it is the values espoused by the people who work there. Even how people address the boss tells about the company's climate and its values. The culture must include the goals of the organization (including an emphasis on creativity) and what has been learned through the company's successes and failures. It often reflects the biases of the founders. It is at that level that the culture has its impact. It is the culture that dictates the way things get done, that sets the unspoken rules by which employees learn to recognize what constitutes appropriate behavior and what does not.

Organization with many levels and well-entrenched procedures for decision making are more unlikely to reflect a culture which puts a premium on risk taking, as opposed to getting it right at all costs. The rewards systems in organizations can also provide an obvious clue about company culture and values. In fact, it has been suggested that a good way to understand the deepest assumptions of a culture is to review the strategic decision-making process, paying particular attention to the courses of action that had been rejected in that process.<sup>27</sup> Thus, the culture can either promote or discourage creativity, depending on the approach that the company takes.

As far as the relationship between a company's culture and its ability to spur innovation, change is good for some company cultures and as a consequence, their reward system favors the innovator. But we sometimes find in some businesses, insurance is

an example, that the culture minimizes innovation in favor of stability. We can assume that innovation will have a tough time getting off the ground in that kind of an atmosphere.

On the other hand, a company should not always be encouraging innovation. Whether a company should be spurring innovation depends on the business environment. If a company is in a relatively stable environment, innovation can be a drain on resources and a waste of time. If it is in a fairly dynamic environment with lots of competitors and rapidly changing technology, then innovation becomes necessary for survival.<sup>28</sup>

Development of a healthy culture can be particularly important to a high-technology business. Recent literature on this topic also covers the importance of risk-taking and instilling creativity as organizational core values.<sup>29</sup> Reward systems also can be a major factor in developing and shaping an effective corporate culture.

Reward systems represent a particularly powerful means for influencing an organization's culture. Much of the substance of culture is concerned with controlling the behaviors and attitudes of organization members, and the reward system is a primary method of achieving control. The reward system defines the relationship between the organization and the individual member by specifying the terms of exchange: it specifies the contributions expected from members and expresses values and norms to which those in the



organization must conform, as well as the response individuals can expect to receive as a result of their performance.<sup>30</sup>

Reward systems express and reinforce the values and norms that comprise corporate culture. A careful consideration of reward system design can help decision makers successfully modify the organization's culture. Reward systems are, in effect, powerful mechanisms that can be used by managers to communicate desired attitudes and behaviors to organization members. Because the success of entrepreneurship depends on innovative, creative employees who are willing to accept risk, such organizations must develop compensation policies that reward such behaviors.

#### COMPANY EXAMPLES

There is no doubt that innovation is necessary for most expanding and dynamic companies. The loss of innovators may sound the end of self-renewal within companies. The main function of rewarding innovation is to encourage and to keep creative people inside the organization. From this point of view, almost every company has developed either a culture or a strategy to satisfy innovators. As it has been shown earlier, many innovators are not primarily motivated by money; instead having the necessary freedom and capital to turn ideas into realities is a very strong attraction. This appears to be the reason which has pushed many companies to implement intrapreneurship.

Following those principles almost from its creation, Texas Instruments<sup>31</sup> has institutionalized innovation through its culture.

Its Objectives, Strategies, and Tactics System (OST) has been one of the instruments of its success. Basically, this system gives each small group, called a Product Customer Center, a large autonomy as long as it meets the goals of the company. Each innovator finds satisfaction in the recognition of his ideas, which could be considered as a positive reward. But the OST process is administratively quite heavily and can block innovations through the evaluation at higher levels of the company's goals and innovations. To avoid too much control by top management, TI has also developed another program to permit creative people to find immediate support to their projects. The so called IDEA program allows an innovator to go and see one of the 50 key persons, named because of their skills to recognize a good idea, which can fund up to \$25,000 to support their project. Two very successful products, the \$19.95 digital watch and the "Speak and Spell" learning aids, came from the IDEA program. The strategy of TI emphasizes mainly on the recognition and the possible development of new ideas, which has been proved efficient in the company's context.

The TI example is very difficult for other organizations to follow because it often requires a complete reorganization of the company and above all, a change of the company's culture, which may be nearly impossible. Therefore, many firms have chosen a different way of rewarding innovation.

An interesting example is the case of Control Data Corporation.<sup>32 33</sup> Control Data developed the corporate value and then a strategy which states a goal of addressing society's unmet

needs as profitable business opportunities. The company has started to help internal innovators start businesses. Control Data created this possibility for its personnel through the Employee Entrepreneurial Assistance Office. Employees have the opportunity to get help and test their ideas. In three years operation, 600 employees have established 61 new businesses and created 330 jobs. From the innovator's point of view, this kind of experience is very positive, since it satisfies many of the needs of innovators: independence, recognition and the idea's development. But, from the company's point of view, the advantages of such policies are most questionable. The company creates a large external network of relationships, but, at the same time, it loses key people in the organization as its creative strength is used in external ventures.

To avoid the loss of the innovators, many companies have opted for internal ventures. One of the most successful firm in this way is certainly 3M<sup>34</sup>, with its New Business department, and "Post It" notes are a perfect example of 3M's policy toward innovation. Fry, the inventor of the notes, used the freedom offered by 3M to develop his ideas. 3M allows technical employees up to 15 percent of their time to explore new ideas. The innovator is therefore rewarded through time flexibility and recognition, but stays inside the organization which can provide technical or financial help.

DuPont<sup>35</sup> has established a development department, much like the New Business at 3M, which is designed to bring together the resources from all areas of the company to make new businesses happen. These businesses are based on autonomous intrapreneurial

teams and can exist in every department of the company. This system of internal ventures rewards the innovators by developing their ideas and realizing them, but some rules limit the innovator's independence.

General rules for the system include:

1. Similar goals for the business and the company.
2. Company shares the risk and the reward of the business.
3. The individual should have a well-defined risk.
4. The entrepreneur should have a well-defined reward based on the development of the business.
5. Since the business is to be independent, there should be rules facilitating buildup of capital.

Rules 1 and 4 limit, respectively, the field of innovation and the outcomes of the innovation for its inventor. However, rules 3 and 5 help the innovator to try the adventure.

Halfway between the internal and external ventures are the separate ventures. In such cases, the company helps the innovators to start an enterprise and allows it time to evolve, and, in return, the company receives a part of the benefits at the level of its investments. The example of such a system is Proctor & Gamble, where many new products and innovations lead to separate brands. For example, the idea of introducing cookies into the marketplace led to Duncan Hines cookies. The advantages of using separate ventures is as follows:

1. Exploit radical innovation.
2. Exploit engineering or marketing opportunities.

3. Bypass technical and bureaucratic barriers.
4. Keep key people.
5. Avoid overload of operating divisions.
6. Separate innovators and operations managers.

For innovators, such organizations authorize more independence and permit the development of innovations, but the innovators don't profit completely from their ideas. The innovations become the company's property.

As discussed above, money is not always attractive to innovators, but freedom can be obtained with it. That is one of the reasons some companies still reward creativity with money. One can look at the example of Levi Strauss & Company.<sup>36</sup> In parallel with the development of new ideas, the company tries to retain the best and brightest employees and to stimulate innovation by paying up to \$500,000 for the best ideas. In 1986, \$3 million was devoted to this program and among the six projects supported that year, three of them have been successful.

From all the previous examples, one can correlate some interesting facts. First of all, the rewards are absolutely necessary to keep the innovators in the company. Losing creativity is paramount to losing your leadership and your business. So the great majority of companies have developed policies with this aim in view. Two different strategies have been implemented: (1) short-term rewards like money and other tangible benefits; and (2) long-range rewards through the development of the innovative ideas. The long-range strategy is certainly the most interesting from the

company's and the innovator's point of view because the company will have the best returns on its investments if the idea is good and the innovators will have self-fulfillment with the realization of their dreams. There are three different patterns to develop innovations:

1. External ventures;
2. Internal ventures; and
3. Separate ventures.

External ventures are more concerned about the innovators, internal ventures are more concerned about the company, and separate ventures are compromises between the two others. Every company can choose its own way between those three possibilities, but they are certainly the best way to reward innovators. The only problem is that not all the small companies can afford the creation of ventures and they will use more short-range rewards.

#### ANALYSIS OF SURVEY DATA

As a way of looking at reward systems actually used in industry, a survey was sent to approximately 140 Oregon-area companies dealing with various technologies. Responses were received from 37 companies. The results are tabulated in Appendix A and shown graphically in FIGURES 1 and 2 of Appendix B. The breakdown of the companies is shown in FIGURE 3 of Appendix B.

In the first part of the survey, a wide range of rewards were listed to determine the relative importance and availability of these rewards in the companies. FIGURE 1 graphically represents

the results of this section and the normalized results are shown in Appendix A.

According to the survey results, visibility is the most widely used reward, with over 19% of the companies responding that it was "always" important. Visibility fills a psychological need for recognition in employees, and perhaps, more importantly, is accomplished at little or no expense to the company. From the survey, visibility of employees can include presentations, special parking, recognition at meetings, or perhaps a picture in the company newsletter.

Awards were the second most important reward used by the companies. Once again, awards often involve little or no expense to the companies. Upgrading of a job assignment to a more choice one is an example of an award used, according to the survey. Other examples include certificates, dinners, meetings, and published papers. One respondent noted, "Titles are cheap." However, there may be some costs involved with conferred titles if the company includes a pay increase with a title.

The least important rewards were the use of flexible hours and internal funding of ideas, with 27% and 26%, respectively, of the surveys noting that these rewards were "never" used. Flexible hours may be less widely used since the organization's structure may not allow people to be gone during working hours. The survey did not distinguish between whether the companies gave money to the individual to develop the ideas or whether the company itself spent money to develop the employee's ideas. Direct company funding of

employees to develop the ideas is a rather new concept, and it appears that few companies have actually adopted it at this time.

Status and money fall somewhere in the middle of these two extremes. Status is inexpensive, but generally a good psychological motivator. Money is not universally used, but it is not known whether this is a result of the company finding that money is not the most successful form of motivation or whether the companies feel that this is too expensive or too hard to administer. Examples of monetary rewards noted in the survey include: shares of company stock, spot awards of cash and merit raises. The survey also noted that other rewards may be given in certain situations, including special training and choice assignments.

In the second part of the survey, several questions were asked to explore the employee freedoms in the various industries. Specifically, the freedoms which allow new ideas to be developed were examined. The questions tested entrepreneuring and intrapreneuring factors within the organization, but also looked at aspects within the organization environment which could be used to improve innovation. These factors, if present, can determine how effective intrapreneuring can be within the corporate structure. They provide the foundation and tools to cut arbitrary paperwork constraints and allow the people who actually do the work a means of streamlining their activities.

Several conclusions can be reached from an analysis of the survey information:



1. The companies surveyed were generally committed to having entrepreneuring and intrapreneuring activities take place within their organizations. This was especially true of companies who were already managing several small groups of people whose work was composed of experimental projects and products. Generally, resources were available at all levels to pursue new ideas.

2. Employees were allowed to take risks and mistakes were generally tolerated; however, management wanted results in shorter times than current projects and experiments would indicate.

3. Autonomous idea teams were allowed and preferred by management more often than individuals having similar autonomy in the work place.

#### RECOMMENDATIONS FOR EMPLOYEE REWARD SYSTEMS

Some sort of reward system is desirable for most companies, as shown in the literature and in the survey. Reward systems can help to promote innovation. Recommendations for implementing an award system are as follows:

A. Rewards should be tailored to the specific needs and desires of the individual at every level within the organization. Once these needs/desires are identified, rewards can be designed to fulfill those specific needs/desires and provide motivation to spur innovation.

B. The rewards should be given immediately or at other appropriate times. After completion of a project or a discrete

task, the employees should be rewarded. This will help to spur on-going innovation.

C. Rewards help to encourage innovation in the culture of the company. If an individual/group of employees is rewarded, the enthusiasm this reward sparks can quickly filter throughout the company, spurring other employees to provide ideas.

D. Reward systems must be custom tailored to the size of the company. Larger companies require a different reward system than smaller companies based on the sheer size and magnitude of the organization.

E. If an employee or group of employees is to be rewarded, at the very least the employees should receive recognition. Not recognizing employees can be a detrimental force to employee innovation.

F. The organization should reward small ideas/innovations, not only large ideas/innovations. Although monetary rewards may not be needed for all ideas, recognition is recommended as a minimum to foster innovative behavior.

G. The organization must permit failures. Many times an idea or innovation fails in the early stages of development before it becomes successful.

H. If possible, more autonomy should be give to employees to spur innovation. Rigid, highly-structured, tightly-controlled organizations are not conducive to innovation.

Implementation of the above recommendations should provide an organization with the framework to initiate an innovative environment within the work place.

#### CONCLUSION

Employees are often underutilized by their employers as sources for innovative ideas for the corporation. Reward systems have been shown to increase innovation in many companies. For a reward system to be successful, it must match the needs of individuals to the needs of the company to arrive at a system which benefits both. As the complexity of products and services grows, the need for innovative employees becomes more important and the need for well-designed reward systems becomes crucial.

## EXECUTIVE SUMMARY

Employees are often an untapped source of new technical ideas and improvements for enhancing processes, equipment, and products. Ideas can come from a variety of people within the organization, but companies differ significantly in how they encourage and reward employees for such ideas and improvements.

This paper includes a literature investigation of the fundamentals of rewards and reward systems. Examples of how various companies reward their employees are also included. A questionnaire dealing with reward systems was sent to a 140 companies and the results were interpreted to see whether there was a correlation between creativity and the rewarding of creativity. The survey found that most companies utilize some sort of reward system. Visibility and awards were the most widely-used rewards, with monetary rewards used to a lesser degree. Recommendations for a successful reward system are also included.

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