Are creative ability and work standardization in contradictory relationship?

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Abstract

Argues that a full display of creativity is indispensable, not only for developing new products and technology, but also for managing any business for future development, if it is to result in market growth and profitability. Work standardization, on the other hand, is stressed in the ISO 9000 Series Standards to raise work efficiency and to ensure product quality. Although both elements of creativity and standardization are considered indispensable for corporate management, they are thought to be mutually exclusive, because the remaining space for creative work is reduced along with the progress of work standardization. Demonstrates, on the contrary, that they are complementary.

Introduction

The coming twenty-first century is foreseen as the century of quality in contrast to the present twentieth century of productivity. It is evident that the momentum towards an increasingly open and globally competitive market has an unstoppable force which no government can delay any more, and that this will mean an enormous increase in the competitive pressure on almost all companies. It is clear that quality is the key to competitiveness and that it has become a fundamental way of managing any business anywhere for market growth and profitability.

When quality is improved in a creative way, cost is reduced and productivity is raised[1,2]: a quality-first philosophy and creative efforts are indispensable and appropriate ways for enhancing corporate performance.

On the other hand, the necessity and importance of standardization (formulating and implementing various standards governing the product quality and performance of work) is emphasized from the standpoint of improving work efficiency and assuring product quality.

This kind of standardization can generally be broadly divided into standardization of goods and standardization of work. Among them, everybody accepts that standardizing goods in various ways is indispensable and effective for ensuring quality and reliability (including after-sales service), reducing cost, and improving productivity.

Standardization of work has been emphasized in order to ensure the product quality by documenting the work flow, issuing the work standards as to the means and methods and working in accordance with the standards[3]. The work standardization of this kind is stressed in the registration to ISO 9000 standards. Many corporations are enthusiastic in adopting standards-based management of this kind in order to secure business opportunity.

When it comes to the standardization of work, however, the following problem is pointed out.

It is pointed out that work standardization conflicts with motivation, since it restricts the creativity and ingenuity of the people engaged in the work and reduces their opportunities to
exercise those faculties. For the motivation of people, we should try to allow them as much freedom as possible in the means and methods they use in performing their work. The more freedom they are given, the greater their sense of responsibility and the more creative ability they display. Does work standardization really prevent this? This problem should be considered very carefully.

**Difficulties in standardization**

As Kume [3] explains, a difficulty in achieving successful standards-based management is that work standards are often not adhered to, even after a lot of time and effort has been put into standardizing the work methods. It is reported [4] that although most Japanese companies have their own regulations stipulating that their in-company standards are to be obeyed, approximately 50 per cent of them do not have any definite procedure for ensuring that these regulations are enforced. The job of standardization is quite a hard job. Is it so difficult for the workers in the workplace to follow the work standards that have been set? Furthermore, it sometimes happens that workers are forced to obey the standardized means and methods without any explanation about the aim of the assigned work. Suppose that the workers are only informed of, and forced to obey, the detailed means and methods of doing the work and that all the products they made turn out to be non-conforming. The manager who set up the instructions will almost certainly rush to the workplace and blame the workers, claiming that they are responsible for manufacturing non-conforming products. When scolded like this, the workers can quite reasonably reply that they carried out the work faithfully according to the standards they had been given and that, if non-conformance resulted, it was because the work standards were incorrect and it was not their fault but the fault of the manager.

A strong sense of responsibility towards work cannot be created by treating people as a substitute for a machine or robot, telling them only how to carry out the work but not its true aim. On the contrary, we should think that however mechanized and automated a process has become, it is ultimately human beings who use the machines to get the work done. When we adopt this standpoint, the education and training of these people assume importance: but, over and above this, it is essential to state the aim of the work clearly, so that the people responsible for performing the work can think how best to achieve its aim. The sense of responsibility which is being discussed here is not the “after-the-fact” type responsibility involved in writing explanation or apologies, but the “before-the-fact” type responsibility which can be defined as a strong desire to achieve, by some means or other, the aim of the assigned work. To this end, the following two premisses are required:

1. clearly indicating the aim of the work, and
2. providing freedom as much as possible in the means and methods of doing the work.

**Creativity as a powerful motivating factor**

It is sometimes said that work is to earn money and nothing else. But this is not the only view of work. We think that in addition to earning money something else exists which strongly stimulates us to perform good work. To clarify this “something” is the central problem of human motivation.

In hard times when our living standards are low, work and money are extremely tightly linked. We work because otherwise we would starve. As the living standard and educational level improve, however, the value of received money as an incentive for work diminishes rapidly. The rise of absenteeism of employees in the developed countries since the 1970s is a manifestation of this. As work and money become more and more separate, the distinction between work and play blurs, and the two begin to overlap.

One typical human play is sport. It is a commonly accepted idea that, while work may sometimes be unpleasant, sport is always such fun that it can make us forget even about eating and sleeping. Today, as the line between work and play becomes harder to define, it is important to know why this idea is accepted. An approach to this problem from the opposite side is to identify the elements which make sport so enjoyable and take positive steps to incorporate them into our daily work. If it is successful, our work would definitely become more pleasurable than it is now. The elements of pleasure in sports are summarized as follows:

1. Our sporting activities are always independent and voluntary.
The score does not always turn out as the player wishes, even though he/she makes great efforts.

The player’s mental faculties are under strain from time to time.

Rhythm is important in sporting activities.

A fair and impartial comparison is always made in respect to the score.

The score is known to the player without any delay.

The score is decisive for each player.

A player’s efforts are precisely reflected in his/her own score.

An individual score is clearly recognized by the other participants.

The score has no relation to money.

In fact we can get many useful ideas from studies of this kind. It is summarized that sport is enjoyable because it always contains the elements of humanity, while our work is sometimes unenjoyable because it might become to a certain extent dehumanized.

The explication of humanity must be an explication of the working of the human heart and mind, which in turn depends on the working of our brain. The studies in the field of cerebral physiology are directed to elucidate them. Tokizane[5], a prominent Japanese cerebral physiologist, cites human behaviour of 26 kinds as the features which characterize human beings. They are shown in Figure 1. Furthermore, these behaviours can be grouped into the following types: creative function, social function and the rest.

O’Toole et al.[6], on the other hand, criticized the American custom of emphasizing monetary compensation for work and proposed that human work should be defined as follows:

An activity that produces something of value for other people.

Meanwhile, Nishibori[7] stresses that human work should always include the following three elements which are shown in Figure 2. They are:

1. creativity (the joy of thinking);
2. physical activity (the joy of working with sweat on the forehead);
3. sociality (the joy of sharing pleasure and pain with colleagues).

Although O’Toole et al.’s and Nishibori’s proposals were made completely separately, they match each other perfectly, if we interpret O’Toole et al.’s definition in the following way: an activity (physical activity); that produces something of value (creativity); for other people (sociality).

It can be said that the essence of human motivation is introducing and fully displaying humanity in our daily work.

Creative ability versus work standardization

As described earlier, there is an opinion that work standardization prevents the display of creativity, and they are mutually exclusive. In order to discuss the question of creativity and
work standardization in more concrete terms, we consider the example of work standards in the manufacturing process. Work standards may be set in various ways, but they usually include the following three items:

1. aim of the work: in a manufacturing process, this corresponds to the quality standards for the intermediate or final products that the process must produce;
2. constraints on carrying out the work: these consist of restrictions that must be observed during performing the work. The most important are those designed to ensure employee safety and preserve the quality created in upstream processes;
3. means and methods to be employed in carrying out the work.

Among these three items, item 1 must always be achieved and item 2 must be scrupulously obeyed by whoever is responsible for doing the work. Clearly everyone must make conforming products and work safely. Also, it is obvious that the fewer the restrictions listed under item 2, the greater the degree of freedom in performing the work and the greater the degree of ease in doing it. We should therefore consider these conditions very carefully and take bold steps (for example, by introducing errorproofing systems) to eliminate as many of them as possible.

Must item 3 be obeyed in the same way as item 2 regardless of who is responsible for the work? As emphasized before, establishing and enforcing prescribed means and methods encourage people to avoid responsibility for failure; claiming that the failure was not their fault because they followed the stipulated standards. This must be strenuously guarded against.

One of the grounds for insisting that item 3 must be obeyed is that, since standardized working means and methods have been formulated after careful consideration of all the angles, they must be the most productive and efficient means and methods possible, regardless of who uses them – at least the people who drew up the standards think so. However, in view of people's different characteristics and habits, it is highly unlikely that any single standard could be the most efficient for everyone, no matter how carefully it was formulated. If we force a left-handed worker to obey the standards formulated for right-handed workers, for example, it is obvious that his/her efficiency is lowered.

We know that this kind of standardization of action is missing from sports. This is because, if such optimally efficient standards for action did exist in sports, anybody would be able to produce the world record by following them and there would be no need to hold the Olympic Games. To excel at a sport, we must first master the basic actions by reading textbooks and taking lessons from instructors, but this will not allow us to produce the world record right away. The only way to keep improving our personal best is to discover and build on those basic actions through hard work, that is, by continually practising and exerting great ingenuity in the method that suits us best.

In the light of this, item 3 (work standards relating to means and methods) should be divided into two types: one would consist of training manuals for beginners, equivalent to the basic actions in sports discussed above, while the other would consist of work standards describing special tips and tricks or know-how for experienced workers who have already mastered the basic techniques. The two types should not be confused. Also, as described earlier, these two types of standards must be regarded not as rigid instructions to be obeyed without fail but as useful hints or references for carrying out good work.

The first of these two types of standards (manuals for novices) are for helping people understand the basic actions and making the process of learning the job more efficient. They should therefore be written as simply and plainly as possible and should be clearly laid out with plenty of illustrations.

In using these manuals for novices, it is also important to make it clear to all trainees at the end of the basic training that the working methods they learned so far are no more than standard actions that are useful hints for improvement, and that, having mastered them, they should actively try to develop methods of working that really suit themselves as individuals. They should be told that this will help them to improve their skills, and that the managers actively support and encourage them to do so. Conversely, forcing novices to perform standard actions exactly as they have been taught is an absurd way to proceed, since it not only leads to shirking responsibility but also prevents them from improving their skills. Such an approach is nothing short of ridiculous.
If workers are encouraged to improve their skills, they are requested to use their own initiative to develop the standard actions into practical working methods, and discover the secrets of performing the work efficiently. These methods can be documented in the form of work standards for the experienced workers. Managers should establish a system for recording the hints and tips brought up in this way by individuals or groups and actively encourage them to do so. At the same time, they should check the means and methods carefully to ensure that they do not contravene any of the restrictions of item 2, and coach their subordinates skilfully so that correct and effective working methods are proposed and recorded. Since it will be possible to incorporate most of the work methods documented in this way into the standard actions, the standard actions themselves should also be revised periodically, further increasing their effectiveness.

Creativity and work standardization are thus not mutually contradictory but mutually complementary. By encouraging and promoting the kind of standardization described here, managers will help the people engaged in the work make full use of their creativity, and discover methods of doing the work even better, and try to enhance and improve item 3 even further. Again, since we can expect workers’ own skills to improve as a result of this process, standardization should not be left entirely up to them – managers and staff should also offer as much encouragement and assistance as possible.

Conclusion

Introducing and fully displaying creativity is indispensable for human motivation. It is closely related to the keen sense of responsibility of doing the good work. Two factors, clearly indicating the true aim of the work and providing freedom in the means and methods, are indispensable.

The means and methods given in the work standards are not the enforcement, but the important elements similar to the basic actions in sports. The workers are requested to improve their skills further starting from the given work standards. The managers should encourage and assist the workers to do so. This is indispensable for the motivation of workers. In this way, creativity and work standardization are not contradictory, but they are complementary to each other.

References

1. Kondo, Y., “Creativity in daily work”, 1977 AsQc-Tech


Further reading