



国际工商管理 百科全书

.....(第2版).....

International Encyclopedia
of Business & Management

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[英] Malcolm Warner 主编

Ibuka 至 Lewin

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第 4 卷

清华大学出版社

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Using the encyclopedia

The *International Encyclopedia of Business and Management* is designed for ease of use. The following notes outline its organization and editorial approach and explain the ways of locating material. This will help users to make the most of the encyclopedia.

Sequence of entries

The encyclopedia contains 750 entries arranged in a single, alphabetical sequence through seven volumes. Entries are listed in alphabetical order. Note that the sequence follows the order of words rather than that of letter, and that the words *and*, *in*, *of* and *the* in entry titles are disregarded. A complete alphabetical list of entries is given in Volume 8 (the Index Volume).

The Index Volume

Volume 8 is devoted to a comprehensive index of the key terms, concepts, countries and names covered in Volumes 1 to 7, allowing users to reap maximum benefit from the encyclopedia. A guide to the index can be found at the beginning of the index. The Index Volume also includes permission acknowledgements, listed in alphabetical entry order.

Cross-references

The encyclopedia has been extensively cross-referenced in order to signpost other entries that are likely to be of interest. There are three types of cross-reference in the encyclopedia:

'See' cross-references

Throughout the alphabetical sequence of entry titles, there are cross-references which direct the user to the entry where a particular topic is discussed either under a different entry title or as part of a larger entry. For example:

Corporate taxation: see TAXATION, CORPORATE

Ethics: see BUSINESS ETHICS; MARKETING ETHICS

'See' cross-references within an entry

Cross-references within an entry direct the user to other entries closely related to the theme under discussion. These other entries will normally give a fuller explanation of the specific theme. These cross-references appear in small capital letters.

'See also' cross-references

At the very end of each entry, 'See also' cross-references guide the user to other entries of related interest, such as more specialized entries, biographical entries and geographical entries, as well as related entries in other disciplines. These cross-references appear in small capital letters in alphabetical order.

Structure of entries

A numbered contents list at the beginning of each entry in the encyclopedia gives the headings of its main sections. The scope and structure of the entry can thus be reviewed and sections of particular interest easily located.

Thematic entries begin with an 'Overview' section that serves as a brief introduction to the topic and a useful summary of the entry's contents. Biographical entries begin with a summary of the significant dates and events in the life of the subject and a list of his or her major works. Every entry is followed by a 'Further reading' section (see below).

Authors

The name of the author or authors is given at the end of each entry. A full list of contributors, showing their affiliation at the time of

writing and the titles of the entries they have written, can be found in Volume 8.

Further reading

Each entry has a 'Further reading' section which gives details of all the references cited in the text. Additional suggestions for reading are also provided for those who wish to delve deeper into a particular subject. References cited in the text are preceded with an asterisk (*).

The Further reading list is arranged alphabetically by author/editor and chronologically under the authors'/editors' names. Publications with joint authors are listed under the name of the first author and are listed after any individual publications of that author. Where publications have been issued by an institution, the name of the institution is given as the author. English translations of publications in other languages have been given wherever possible.

Items in the Further reading list have been annotated with a brief description of the level,

importance and usefulness of the publication listed.

References and suggestions for further reading are given in the Harvard style. The authors and editors have attempted to provide bibliographic data in the fullest possible detail.

Editorial style

Spelling and punctuation in the encyclopedia have been standardized to follow British English usage. The use of italics has been kept to a minimum and is normally restricted to foreign words and book or journal titles. Abbreviations and acronyms are spelled out in full on their first appearance in an entry. Chinese names have been westernized (i.e. Chen Derong becomes Derong Chen or Chen, D.). In alphabetical lists of names, *Mc* and *Mac* are treated as *Mac* and the next letter in the name determines the position of the entry.



Ibuka, Masaru (1908–97)

- 1 Introduction
- 2 Biographical data
- 3 Main contribution
- 4 Evaluation
- 5 Conclusion

Personal background

- born Nikko, Tochigi, on 11 April 1908
- attended Faculty of Science and Engineering, Waseda University
- married Sekiko Maeda, 1926
- founded Tokyo Tsushin Kogyo (Tokyo Telecommunication Engineering) (the forerunner of Sony), 1946
- became president of Tokyo Tsushin Kogyo, 1950
- changed the company name to Sony, 1958
- became chairman of Sony, 1971
- retired from active work and took up the honorary chairmanship of Sony, 1976
- died on 19 December 1997

Major works

Watashino Rirekisho (My Personal History) (1962)

Sozo Eno Tabi (Journey to Creation) (1985)

Ibuka Masaru no Sekai: Erekutoronikusu ni Chosen Shite (The World of Masaru Ibuka: The Challenge of Electronics) (1993)

Summary

Masaru Ibuka was a famous entrepreneur who founded Sony, the worldwide electronics company. He was an innovative engineer and also a capable manager. Sony grew from a small firm, numbering tens of employees in 1946, to an electronics giant. In post-war Japan, Ibuka became a figure symbolic of mass consumption, and also of peace, because Sony was a producer of consumer products, not military ones: the firm is famous for making such things as tape recorders, transistor

radios, television sets, video cassette recorders and Walkman personal stereos. His attitude, stressing originality, was different from typical Japanese firms' behaviour, which has a tendency to follow suit and imitate the inventions of others. After leaving active involvement in Sony, he spent much time in the activity of *zaikai* (Japan's big business circle) and in studying the educational problems of children to expand their potentials.

1 Introduction

Ibuka was renowned for his unique inventiveness, business strategy and innovative flair. His inventions brought him about 70 patents. His strategy, which attaches importance to differentiating, brought him fame as an entrepreneur, along with Soichiro Honda, Akio Morita (see MORITA, A.) and others. Their vivid entrepreneurship represented one aspect of post-war Japan. This tendency to respect originality and not to follow courses laid down by others, is quite different from the group-orientated characteristics seen in trade associations and *keiretsu*. Why and how did Ibuka follow such policies, and what was the result?

2 Biographical data

Ibuka was born in Nikko; his father worked for a medium-sized *zaibatsu*, Furukawa, and died when Ibuka was a child. After a complex childhood as regards his family life, he entered Waseda University and studied electrical engineering. During his time as a university student, he made some remarkable inventions and became known as a student inventor. Around the same time, he became a Christian, though not a passionate one. After graduation, he began to work for Photo Chemical Laboratory in 1933, which was then making recording machines and films.

Not fully satisfied with this firm, he moved into Nihon Ko-on Kogyo (Japan Light and Sound Engineering), and then in 1940, he started a new company, Nihon Sokutei Ki (Japan Measuring Tools) which manufactured relay machines used for searching for submarines. Through this work, Ibuka came to be connected with the navy, where he met Akio Morita, a technical sub-lieutenant. Immediately after the war, Ibuka began again with a new organization called Tokyo Tsushin Kenkyujo, whose main product was voltmeters. Six months later, this was incorporated as Tokyo Telecommunication Engineering, which was renamed Sony in 1958.

Ibuka became president of the firm in 1950 and chairman in 1971, with Morita succeeding as president. In 1976, Ibuka became honorary chairman, with Morita taking the chairmanship as chief executive officer.

3 Main contribution

Ibuka showed brilliant leadership in developing Sony, especially from 1945 to 1976 as president and chairman. His hallmark as an entrepreneur was a scientific-mindedness and interest in innovation (see JAPAN, MANAGEMENT IN; TECHNOLOGY DIFFUSION IN JAPAN). His background in engineering is likely to have been the source of his liking for innovation. During the turbulent years between 1945 and 1950, Sony tried out a variety of products and eventually succeeded in making Japan's first tape recorders, after painstaking trials and errors, in 1950. Ibuka provided strong technical guidance for this project. To achieve his goal, Ibuka recruited many university graduates, including those with doctorates and master's degrees, and even a later Nobel prize laureate, Leona Esaki. A third of Sony's employees were highly educated people. This top-heavy structure, which is related to Ibuka's scientific-minded policy, contributed to the development of tape recorders.

Another example of Ibuka's technological orientation stems from a three-month visit he made to the USA in 1952, where he realized the potential of transistors. After returning to Japan, he pushed research on transistors. In 1953 Sony obtained non-exclusive rights from Western Electric for its 1948 transistor

technology. This did not, however, bring technical know-how, so Sony had to develop its own applications technology. Finally, Sony succeeded in mass-producing transistors. At the outset, the yield ratio of transistor production was so low (5 per cent) that it was thought too risky to launch. Yet Ibuka thought that even if the yield ratio was only 5 per cent, it would have a huge potential for improvement.

Ibuka expanded R&D activity to new fields such as transistor radios, the first transistor television sets, the first home video recorders, integrated circuit-based radios, Trinitron colour television tubes, U-matic videotape recorders and Betamax video cassette recorders. These innovative products were realized through the resolute driving force of Ibuka.

Ibuka's inclination was always toward consumer products, not industrial ones and particularly not military ones. The excellence of Sony's niche strategy is demonstrated by the fact that transistors were used for radios, which a great many consumers wanted at that time. Everyone hoped to have a radio because it was a symbol of affluence. In 1955, one of the first transistor radios in the world was made by Sony. Ibuka was consumer-orientated to the core, and preferred to develop products for direct use by individuals. Almost all products were for private use, although some goods were made for radio and television stations. Transistor radios and transistor television sets, home video recorders, colour television sets and Betamax recorders exemplify this tendency.

The surge of private consumer demand was so enormous that this strategy tied in perfectly with post-war development (see BUSINESS HISTORY, JAPANESE). Ibuka's emphasis on the civil use of transistors was also conducive to development, since the demand for military use was negligible in Japan. The cost constraints imposed by the civil market facilitated the rapid development of the transistor. In the USA, on the other hand, the military market was dominant which impeded the development of transistor production.

However, there were some mistakes which stemmed from sticking to consumer demand. For instance, in 1963 Ibuka ordered the cessation of production of special audio machinery

for broadcasting stations because it was too costly and troublesome. The person in charge of the operation objected, as he thought that if television stations were seen to be using Sony's products, this would engender trust in general users. But Ibuka did not change his view that Sony should concentrate on mass consumer products. More importantly, Sony never fully developed IC (integrated circuits) although some trials were done. Because of failures at the early stage, Sony too promptly abandoned the development of IC, in spite of Ibuka's tenacity in transistor development. It was the same with the development of a magnetic scale to measure materials for machine tools.

One aspect of products particularly favoured by Ibuka was compactness. Accordingly, Sony continually developed smaller and lighter products, going from tube to transistor, to IC-based to pocket-sized radios. Micro-televisions, Walkman and video Walkman are also sold by Sony. This was well suited to the post-war trend whereby many products have been getting smaller. This enabled Sony to grow fast by capturing the market.

To give an example of this concern with size, the first tape recorder weighed about 100 pounds, but a few years later this went down to only 30 pounds as a result of improvements. Nowadays pocket-sized radios and the Walkman continue the trend. These factors – innovation and consumer orientation, and the smallness of products – were instrumental in developing Sony from a small local factory to a multinational enterprise with many thousands of employees.

4 Evaluation

The Sony spirit is expressed, among other things, as 'not liking to do the same thing as others do' (Sony 1986). Profits as a result of cost reduction through simple mass production and mass marketing are not part of the strategy. By aggressive investment in R&D, and making ingenious products, Sony can produce what others cannot, and continuous production of such products is Sony's cornerstone (see BUSINESS STRATEGY, JAPANESE).

Ibuka never lost his innovative stance, although occasional mistakes were made. His

commitment to consumer products and inclination to compactness were quite effective for the development of Sony. His innovative and challenging mind is illuminated in the following passage:

While we should make less risky decisions based on scientific data, it is vitally important to keep the sharp and bold spirit which enables us to challenge. If we become frightened and do nothing, Sony will come to be an old-fashioned firm. If you judge that it is good for Sony, you should daringly try it. Responsibility implies the boldness to fulfil it.

(Sony 1986)

The Ibuka spirit is still the backbone of Sony, in spite of his retirement from the front and death. The heavy weighting, however, towards technology and consumer products was changed after Ibuka's retirement. It is well known that Betamax video cassette recorders were defeated by VHS. Some argued that Betamax was technically superior to VHS, but commercially VHS won the video cassette recorder war. Faced with this situation, Sony responded by restructuring its organization, introducing a multidivisional structure and reinforcing the mass production system and especially its marketing organization. Manufacturing of audio and visual machinery for broadcasting stations was reintroduced. Fortunately, the production of the magnetic scale, which had continued as the business of a subsidiary, became helpful to the parent company's profitability in bleak years.

In terms of corporate culture, Sony has a unique atmosphere, thanks to Ibuka's influence (see BUSINESS CULTURE, ASIAN PACIFIC). It does not have the company song and motto that are almost obligatory for Japanese firms. Relatively speaking, Sony emphasizes individuality. It is said that Ibuka and Morita address their employees as (for example) 'Smith-san' or 'Jones-kun'. These polite expressions reveal the less authoritative and more egalitarian character of Sony, which probably derives from Ibuka's gentle and imaginative influence (see INDUSTRIAL RELATIONS IN JAPAN).

5 Conclusion

Ibuka was a legendary and highly respected entrepreneur in Japan. His career provides a contrast with many top managers of large firms in Japan. If the organization-orientated culture is typical of Japanese firms, Ibuka might be considered an exception in the Japanese business world, along with Soichiro Honda and Akio Morita. Ibuka's brand of ingenuity is urgently needed in today's competitive world.

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Further reading

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See also: BUSINESS CULTURE, ASIAN PACIFIC; BUSINESS HISTORY, JAPANESE; BUSINESS STRATEGY, JAPANESE; COMMITMENT IN JAPAN; INDUSTRIAL RELATIONS IN JAPAN; JAPAN, MANAGEMENT IN; ASIA PACIFIC, MANAGEMENT IN; MORITA, A.; TECHNOLOGY DIFFUSION IN JAPAN

Incentives

- 1 The rise of incentives
- 2 Performance and behaviour
- 3 Incentives, measures and objectives
- 4 Some considerations for white-collar schemes
- 5 Non-cash incentives
- 6 Incentive earnings and performance
- 7 Methods of delivery
- 8 Incentives and payment by results
- 9 Schemes for managerial and white-collar staffs
- 10 Developments for the millennium
- 11 Core competencies and pay
- 12 Other incentive/reward systems
- 13 Conclusion

Overview

Incentives have grown in popularity across wide spectrums of employing organizations and employee groups worldwide, particularly during the past ten years or so. The motivating effect of 'extra income' in one form or another has enjoyed growing interest even in times of recession. Incentive schemes represent an attempt to influence the behaviour and therefore work performance of employees, through the provision of a cash or non-cash (usually cash equivalent) reward which is extra to the basic reward offered. This extra reward is assumed to bring forward a level of contribution to the company which is greater than that normally forthcoming in return for basic remuneration and can be made for extra effort, shouldering extra responsibility, selling more than quota in the sales division, or achieving increased profits in the boardroom: the justifications are myriad. In one form or another, therefore, incentives can be applied to all categories of work.

Incentive schemes have traditionally been more popular in the UK than in many other industrial nations. In the USA remuneration practices have tended to concentrate on the total package of cash and non-cash payments, with any innovations concentrated on the

whole remuneration and methods of 'delivery' rather than an individual element such as incentives. The most notable recent development in remuneration for American companies, therefore, has been 'cafeteria' or flexible systems, which have grown in popularity since the 1980s. The motivating effect of such flexibility has been largely ignored in the UK, where the cash incentive is still regarded as the prime motivator of human resource performance. None the less it would be reasonable to consider such flexibility as an incentive as we shall see later. There is also evidence that US companies view pay as an integral element of a strategic approach to human resource management, thus linking payroll costs to business performance (Schuler 1995). In Europe incentives tend to be less available to company workforces than in the UK: certainly this is so in the Netherlands, France, Italy and Denmark, although ex-eastern bloc countries reportedly use incentives to a greater degree than is the case in the UK (Logger, Vinke and Kluytmans 1995). In Asia and Australasia incentives are as popular as they are in the UK. Interestingly, the Third World economies in the Far East parallel British industry conditions of the early twentieth century, when shop-floor incentives grew apace.

In some organizations incentives represent a considerable proportion of the task of managing remuneration. For the individual on incentive, the payment can represent a significant element of earnings. For the trade union and employee representatives, incentives are a subject for negotiation. For management, the incentive scheme is deemed to offer some hope of a reduction in unit costs of production, an improved level of employee contribution or in more general terms an improvement in corporate performance; or goodwill and commitment at the least. Unfortunately, translating an incentive effect into some measure of improvement in corporate performance has proved difficult and it is a paradox that reward for employee performance is very rarely

linked to the strategic approach to company objective achievement (Smith 1999). What follows examines the origins of financial incentives, the various schemes, their strengths and weaknesses and their application to all categories of work.

I The rise of incentives

The dissolution of the craft guild system in Britain in the sixteenth century saw the rise of a system of merchant capitalism in which workers were hired to work at home for an income based on piece-work. Such a system can be deemed to be the first application for a cash based incentive scheme in the world: it survived to the end of the eighteenth century when the industrial revolution brought the age of the factory to the UK (see INDUSTRIAL REVOLUTION). The factory system did not see the introduction of incentives on any significant scale until the end of the nineteenth century, when schemes were introduced in the form of 'merit differential piece rates' for cyclical or repetitive work in 1884. By the beginning of the twentieth century the names of Halsey, Emerson, Gantt and Bedaux could be attached to a list of schemes aimed at improving manual worker performance; and these improvements were rewarded by some form of financial bonus (i.e. cash incentive). It is from such Taylorist origins in Britain and the USA that today's work-measurement based incentive schemes have grown (see TAYLOR, F.W.).

The age of the factory and urbanization also saw the rise of the department store with hired sales staff. Apparently not documented, the idea of commission on sales certainly surfaced during the latter half of the nineteenth century, with employees paid a flat rate or percentage of the value of the goods sold. To this day commission survives as a financial incentive for sales personnel at all levels, from shop assistant to sales executive (Smith 1991).

It is also worth noting that the nineteenth century saw the introduction of the non-cash incentive with several UK industrialists, including Robert Owen, Seebohm Rowntree, and Cadbury's and Fry's recognizing the importance of worker welfare as a contribution to employee motivation and performance. Rowntree can be credited with introducing a

pension scheme; participative procedures for drawing up and monitoring work rules and worker performance; and the employee representative role. These 'qualitative' means of improving worker contributions helped the performance of a confectionery company which certainly prospered over a long period (Smith 2000b).

Incentive schemes, therefore, have a long history which began on the shop floor of industry. In the USA, developments were limited to the application of measures of labour productivity to underpin the efficiency of mass production technology. In Britain these measures were additionally extended to justify the payment of incentives within such schemes as the Halsey-Weir, Rowan, Atkinson, Allingham, Bedoux, Differential and Accelerating incentive methods. These are a few of the more than 70 types of incentive schemes developed in Britain between 1900 and 1950, and their impact on UK manufacturing efficiency in the inter-war years was notable particularly in automobiles, defence industries and general engineering. Indeed, measurement linked to incentives was a great enabler of the twentieth century mass production 'revolution'.

In Europe, incentives have been scarce until recently, while post-war experience has underlined the importance of generous wages and salaries as reward in themselves and of bringing forth required levels of employee contribution without the need for measures of labour productivity to determine extra incentive payments (Adler 1986). In Japan, individual employee pay is frequently based on seniority, although a trend in the eighties was towards bonuses based on company performance (Lawler 1987). In Africa, Asia and Australasia the growth of incentives has been noticeable in the past 40 years. Pockets of application are Nigeria, Tanzania, Israel, India, Indonesia, Malaysia, Hong Kong and Australia. This list is not exclusive, but reveals some nations where the use of incentives for manual work has been part of a more general push to increase national wealth. The western world has seen a significant emphasis on incentives for white collar, technical, professional and managerial employee groups, particularly since the mid-1970s. This development has

been in pursuit of white-collar efficiencies as blue collar workforces have declined in numbers through redundancies linked to organizational change and the IT revolution.

2 Performance and behaviour

Incentives are offered to improve the level of worker contribution to levels which management consider necessary to maintain a required level of company performance and which are higher than those which would be forthcoming in response to basic pay alone. Worker performances may be defined in terms: (i) quantitative output (measured in terms of time or physical output); (ii) some target to be achieved; or (iii) a broader grouping of qualitative elements including skill, responsibility and general behaviour. The first type of measure is normally used in schemes for blue-collar employees (such as piece-work), the second type in management schemes (such as profit sharing and sales bonuses), and the latter in white-collar schemes (such as merit rating). The incentive scheme should normally cause management to ask themselves what they want of their employees in terms of a performance based contribution, and to determine how much they are prepared to pay for it in cash or non-cash forms.

Incentive schemes therefore represent an intervention in the process of behaviour at work. They are sometimes based on the simplistic assumption that employees are indifferent to corporate needs and require some 'carrot' to bring forward positive and contributing behaviour. It is not often considered necessary to create conditions which will help and allow the employee to change attitudes, but rather to concentrate the incentive effect on behaviour. Any negative attitudes held by the employee towards the company tend to be 'smothered' by the reward in the hope that they will cease to be an obstacle in the relationship between employee contribution and corporate requirement. In these terms, incentive schemes are concerned with the structural elements of the working environment, and aim to modify employee behaviour. Designing in 'behavioural' elements to influence behaviour more positively has proved difficult in practice (Lawler 1987). The objectives

of technical excellence in work measurement, production control and scheduling and pay system design are all too often not balanced by 'behavioural excellence', in the form of a socio-psychologically motivating environment where high levels of performance are permanently maintained. Lacking such an environment, the majority of schemes have tended to provide only a temporary improvement in employee performance at best and at worst a deterioration in industrial relations (see INDUSTRIAL AND LABOUR RELATIONS) (Gregg *et al.* 1993; Heery 1996; Walsh 1997).

It should be noted, however, that the debate in American literature on the subject of incentives has often revealed a lack of confidence in the ability of financial rewards in any form to influence employee performance (Kohn and Davies, 1995). Much of this argument has concluded that organizations achieve success because of cooperation among the labour force rather than any discrete relationship between pay and performance (Pearce 1987).

3 Incentives, measures and objectives

The incentive may be provided to the individual in recognition of his/her personal effort or results (see MOTIVATION AND SATISFACTION). Such a direct and individual approach has traditionally been preferred in shop-floor and management schemes. Alternatively, the incentive may be distributed among a group of employees, sometimes on a predetermined basis. This approach has been used with shop-floor schemes in recent years, but has been more common in white-collar incentive schemes. The provision of group rewards with the addition of an extra incentive to recognize individual performance is also currently growing in popularity.

Because the payment is normally based on performance, measures of employee contribution are required. These measures have been found among the techniques of work measurement for shop-floor operations, and in the form of measures possessing less precision for white-collar and managerial work. Profits and sales values have been used for executive schemes. Value added has enjoyed a 'patchy'

history as a measure to underpin blue-collar and white-collar incentives.

The payment of the incentive or reward is normally made close in time to the achieved performance. For manual schemes the payment has usually been in the same weekly or monthly pay, and for white-collar employees in the next salary payment. Some recent schemes, particularly of the value added and profit related type, have not met such a requirement, delaying payment by months to allow for calculation: the results have been decidedly mixed, with goodwill sometimes generated but not necessarily an improved level of performance.

The objectives for incentive schemes are normally built around the gains in company performance which management expect. Motivating 'after-tax' rewards are the usual objectives for employees. The reward is therefore deemed to be a real incentive, bringing forward demanding levels of effort and/or performance and providing for a return to the employee which exceeds basic pay by a substantial margin. Determining the size of that margin requires some effective judgement on management's part if the incentive effect is to be achieved. Shop floor cash based schemes were originally designed to provide a bonus of 1/3 of basic pay; anything less than 25 per cent of basic pay has traditionally been regarded as unlikely to improve employee effort; this may indicate a potential problem with white-collar methods which often add little more than three or five per cent of basic pay, (Smith 1991, 1993) and even if employee performance does change with such schemes, it may be due to reasons very different from any incentive effect deriving from the reward, and may be limited to a 'goodwill' effect.

Incentive schemes of any type should be self-financing if they are to impact positively on company performance, but this can prove difficult to achieve in practice. The cost of measurement and preparatory work, coupled with the cost of the incentives, can be considerable. Savings from efficiency and the better utilization of staff should at least balance and preferably exceed such costs.

Within the processes of design, implementation and maintenance of incentive schemes

traditional key requirements have been for the scheme to be readily understood by management and employees and to be linked to improved utilization of equipment, services and more effective work methodologies and company organization structures. Thus, incentive schemes have a role to play beyond the quantitative aspects of work, and these qualitative elements include performance measurement in the form of financial and physical data needed for the measurement of employee contributions. This improvement in the data base for management decisions on human resource utilization might be regarded as representing an opportunity for improved effectiveness at the level of the corporate entity.

4 Some considerations for white-collar schemes

The issue of achievable levels of performance is as important to white-collar schemes as to manual schemes. It is inescapable, however, that the means of determining white-collar performance is problematic except in cases where sales and profits can be used. Clerical work measurement schemes have been available for some time to deal with the problem, but they remain limited in terms of application and effectiveness. Length of service has been one popular determinant of white-collar incentives (used in salary progression schemes) but it is doubtful if this provides any real incentive effect in terms of raising performance. The main consideration in such schemes appears to be the provision of an inducement to the employee not to change their job, rather than some stimulus to greater contribution. The majority of white-collar schemes have therefore been traditionally based on subjective measures and can provide a weaker incentive effect than traditional shop-floor methods (Fowler 1988). They may also require a greater degree of management control of performance than has been traditionally the case with manual schemes, although managerial intervention has often proved necessary even with the most generous shop-floor rewards (Smith 1991, 1999).

5 Non-cash incentives

An arrangement such as employee shareholding is a non-cash (or deferred cash) incentive scheme designed to improve the employee's commitment to the organization, while recognizing a higher order of need than immediate cash (Knight 1986). Such a recognition can create a positive climate for employee attitudes to the company, which can in turn facilitate the positive influence of cash incentives on employee and corporate performance. But non-cash provisions can be seen to go much further and include benefits and perquisites – although the majority of organizations fail to recognize this. The provision of long service awards, suggestion awards, expenses, subscriptions in private health schemes and company cars also represent non-cash incentives which may have a role to play in influencing motivation and performance (Smith 2000b). The incentive effect of such benefits is not always as clear as cash rewards, and their influence on behaviour may not be easily measured. As an immediate and short lived incentive they need careful timing in their application. Other non-monetary incentives can include working conditions and education and training linked to career development (see CAREERS). This kind of provision has so far been minimal, but reported success with education and training linked to performance has been notable. (Pickard 1990, Sheard 1992).

That a more focused use of some benefits as incentives is largely ignored by employers has been a major opportunity lost in the field of human resource management, for benefits can influence employee behaviour (Friedman 1990; Terry and White 1997). The performance dimension may be achieved through the goodwill and security offered by benefits provision, if only in the longer term, and as such benefits can at least be appreciated as 'enablers' of employee cooperation in changes which can impact positively on performance. Goodwill and security may therefore act as some kind of hygiene factor, in that the presence of the benefit in the reward package does not improve performance but its absence causes a decrease in performance – after

the general sense of the Herzberg (1975) model of motivation.

In addition to the incentive effect of benefits in their own right, the method of 'delivery' by employers to employees has been regarded as providing some form of incentive effect. The method cited in this context is 'flexible benefits' where the benefits 'package' is tailored to the needs of the individual: thus an incentive effect may be derived through goodwill and motivation of the employee, particularly where high value benefits such as company cars, pensions and childcare are involved. Take-up of flexible benefit plans has been most noticeable in America and much less so in Europe and the UK (Sparrow and Hiltrop 1994; Arkin 1997). None the less, the debate on benefits and flexibility valuably expands the incentives debate into the non-cash area.

6 Incentive earnings and performance

There are three basic questions to be asked by management and employees in their approach to the subject of direct financial incentives:

- what level of payment should employees earn?
- how hard should they work for that payment?
- how hard can they work?

The answer to the first question depends on a mix of issues including manpower supply, the relative bargaining power of employee representatives and management, the economic health of the industry and the expectations of the labour force. The second question is equally difficult to answer. Management may be clear about how hard they want their human resources to work, but the employees determine a pace of work which may be acceptable to them but at variance with management's aim (see HUMAN RESOURCE MANAGEMENT). Faced with difficulties in the control and determination of pay levels and the effort exerted by manpower, management have adopted various measurement methods as an answer to the third question. Thus, within an

incentive scheme management believe they are paying for measured effort or contribution on the basis of three assumptions:

- 1 measured effort equates to the maximum level of effort forthcoming from the organizations' human resources.
- 2 employees are willing to contribute to the achievement of corporate objectives through a financial inducement.
- 3 contribution varies in relation to earnings.

All three assumptions are open to question. The maximum level of effort or contribution is tied up with the issue of how hard people should work and this is not always fully under the control of management. In the case of the second and third assumptions, it may be worth considering that money alone is not the only motivating factor; methods of delivery and sociopsychological factors could also be usefully taken into account by managements.

In the last analysis therefore, financial incentive schemes may represent no more than a 'bargain', or a compromise between management and employee beliefs about performance and pay. Incentive payments reflect conceptions of pay, performance and measurement, in whatever form. The question of whose objectives are met by incentive schemes cannot therefore be answered easily. Both parties are looking for gain, and the responsibility placed on management includes an obligation to ensure that the employees achieve their own objectives of higher levels of earnings and standard of living, while simultaneously contributing to the achievement of corporate objectives. Therefore it is management's task to ensure the permanent balance of effort and reward. Given that such balance is determined by compromise rather than precision, doubts arise about whether such balance can be achieved. The overwhelming evidence shows that at best it has proved difficult (Smith 1993).

7 Methods of delivery

The traditional 'vehicles' used for delivering incentives have been schemes specifically designed for blue-collar or manual employees and schemes specifically designed for white-collar employees. In recent years, however,

there has been a trend away from this dichotomy with the development of incentive scheme methods which are applicable to multiple groups or indeed all employees within the organization, one such example being competency related pay. Discussion now turns to this array of incentive schemes, beginning with the more traditional manual and white collar schemes and continuing with a review of more recent developments.

8 Incentives and payment by results

Schemes under this heading are normally time-based and piece-work derivatives and are based on job fragmentation, repetition, piece rate pay and individual worker reward for effort. They rely for success on the usual assumption that a financial reward can cause an increase in worker effort, and consequently a contribution to the level of productivity of the enterprise. Linked to this is the assumption that worker effort varies in proportion to the levels of earnings. An attempt at some precision is brought into the process of defining the effort-reward relationship, and it is here that the techniques of work measurement played their greatest role in British and North American industry.

In theory, the incentive payment within these schemes is designed to raise employee effort by 1/3 from 75 to 100 on an effort rating scale. The assumption is that this 1/3 improvement will be forthcoming for a cash incentive which represents 1/3 of basic pay. The industrial engineer is trained to use rating as a means of determining just how hard people are working, although to what kind of tolerance is often difficult to determine.

The incentive scheme may be based purely on time saved or may have times converted into units or prices produced. In cases where time, and indeed work measurement are not involved in the determination of effort, workers are paid a fixed sum for each unit produced irrespective of time taken to produce the unit. Such a scheme is called straight or fixed piece rate.

Standard time-based schemes have proved most popular, because the requirements for work measurement involve comprehensive

analysis of the work situation and the provision of production control and standard cost data based on achieved standard times. Additionally, these schemes allow different rates to be set for different workers. This last point is a key feature of traditional payment by results (PBR), i.e. the emphasis on the individual employees, but it has also been the Achilles' heel in terms of creating complexity in the incentive payment system, causing a move away to alternative arrangements.

Modern payment by results

More recent alternatives to traditional PBR have been the types of day work scheme which grew in popularity during the seventies. Unfortunately these schemes have not matched the longevity of piece-work, and a move away from them was clearly discernible in the eighties. An important feature of day work schemes is the emphasis on group or department or company-wide payments as opposed to the payments for individuals in traditional schemes. It was hoped that these newer schemes would provide a greater degree of simplicity in incentive payment structures, and would drastically reduce the opportunities for disputes on the issue of comparability which had marked the history of traditional PBR (i.e. piece-work). The motor industry, in particular, saw some considerable applications of day work schemes, as did the light and medium engineering sector of industry. There are three categories of day work scheme worthy of note, and they have normally been applied to manual and supervisory work categories.

Controlled or measured day work involves a fixed standard bonus for a fixed level of worker performance applied to groups of employees, or sections, or departments, or indeed the whole plant. This type of day work scheme proved the most popular in terms of reported applications.

Graduated or stepped day work provides a whole range of pay and performance levels and is usually applied factory wide. The most developed form is the 'premium pay plan' which required the development of a pay and performance matrix, with job grades determined by job evaluation and performance de-

termined by work measurement (Smith 1991). Workers are able to increase earnings by improving their performance as well as by moving up to jobs of greater degrees of complexity and responsibility. Such schemes are able to provide a greater degree of flexibility in earnings and performance, and they have proved to be the most successful and durable of the day work systems.

High day or time rate schemes offer a consolidated and high level of pay linked to the employees commitment to work at a performance level determined unilaterally by management decision. In many respects, this follows the pattern employed in many North American companies, but it has not proved popular in Britain.

When introduced, many consultant and managers claimed that day work schemes offered an opportunity to develop rationalized incentive payment structures, thus giving management more control over labour costs than was the case with traditional PBR. Employees normally benefited in the short run from an across the board increase in earnings. In the long run they benefited (one hopes) from stability of earnings brought about by the fixed incentive payment; from fewer interruptions to work flow through improved production planning and management; and from the knowledge that workers expending the same effort in similar work were receiving the same level of bonus. Unfortunately, evidence to prove the realization of such hopes is extremely rare, and many modern PBR schemes have been dismantled in the nineties.

9 Schemes for managerial and white-collar staffs

It has traditionally been the case that the encouragement of white-collar commitment to the success of the organization has been founded on schemes peculiar to these employee groupings and somewhat distant from manual schemes. Such schemes have included bonuses, salary progression, merit rating, profit sharing, shareholding and cash allowances. Significantly, recent developments have seen such arrangements replacing PBR schemes for manual workers (Sheard 1992).