

his learning as far as he can. Individualised programmed instruction, individual written and practice assignments, individual consulting and counselling, all these offer settings for individual learning.

To sum up, a syllabus that alternates between stimulation and reflection, involvement and analysis, practice and study, and group and individual events seems to provide the kind of variety that promotes learning. Frequent changes of 'subject matter' to provide variety is wasteful and unnecessary. The modern trend is to compose the syllabus in subject 'blocks' so that participants concentrate on two or three subjects only over a training period, preferably inter-related subjects. Continuity of subject matter reinforces learning and has been found to economise on time as well.

Instructors

The training designer must decide who is to present the various subjects to the course. They may be members of the training staff, other staff of the organisation or outside experts. The choice will depend upon the nature of the subject and the availability of particular individuals. The designer will naturally take into account the capabilities of different people. The best instructors are those who not only have the knowledge and the ability to communicate, but who also have the right personal qualities for getting on with people. The designer should try to secure the best available outside help within the inevitable constraints including financial resources.

Trainees

It is particularly important that the selection of trainees should be done with care. Ideally, the group should be made up of individuals with the same level of education, experience, background and needs. The trainees should be actively concerned or involved with the subject. No course will be a success if the trainees are incapable of learning from it. In company situations, this emphasises the need for close working with the Personnel and other departments.



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Training and Line Managers

S. K. Parthasarathi*

Introduction

It is well established that 'transfer of experience and learning' takes place best in a person-to-person, face-to-face relationship at work, i.e., through on-the-job training. This can be undertaken satisfactorily only by the Line Manager/Supervisor, for he alone knows what the job is designed to achieve and what the job-holder should know and apply for achieving the job objectives. Updating and upgrading the skills of assistants is, therefore, a specific and continuing opportunity and challenge for every Manager/Supervisor. This important aspect of his job cannot be passed on to anyone else within the organisation or outside. Successful enterprises appreciate and act on the principle that at the junior level, nearly 80 percent of training has to be on-the-job and by the immediate supervisor. Thus, the need for every manager/supervisor to learn and master the tools and techniques of imparting on-the-job training for those who report to him, is obvious.

Conditions relating to work content and work context are changing; education and earlier experience are inadequate for 'managing change'. New and different skills and knowledge are required when men are transferred or promoted, or when new techniques, machines, processes, methods, materials etc., are introduced; or when the business environment changes, for example, from a seller's to a buyer's market or from a semi-feudal social set-up to that of an egalitarian democratic order.

Need for Training

Training assists people to work effectively by upgrading their technical skills, updating knowledge and reorienting attitudes. Increased on-the-job effectiveness promotes productivity and helps to take-off from the stage of 'survival' to 'prosperity'. The immediate benefit to the individual

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employee is greater self-confidence, mastery of the present job, increased effectiveness on-the-job and preparation for assuming higher levels of responsibility and achieving personal growth.

On-the-job training cannot be made the responsibility of the Training Specialist or the personnel department except to the extent of guiding the manager/supervisor in training tools and techniques.

The experience of industrially advanced nations is that for training employees in the 'knowledge' and 'attitude' aspects, the line manager/supervisor will do well to seek the advice and assistance of the training specialist and/or the personnel department. They are expected to have expertise, and experience in ascertaining training needs in these fields and in organising appropriate training. Even here, the line manager/supervisor cannot and should not hand over entirely to the specialist and hope for the best. The manager/supervisor should be in the position of a 'general practitioner' who knows the history of the case, and is generally aware of requirements but consults a specialist and helps the specialist to help himself.

The responsibility for ascertaining and assessing the training needs of the job, and arranging systematic follow-up work as part of routine organisation of individual or institutional programmes, rests on the line manager. Questions such as, who is to be trained, how, in what area, when, and for how long, etc., are to be determined by the line manager, because it is he who knows them well and is responsible for his assistant's effective performance. It is he, who will feel the direct effect of poor performance of his untrained team on his efforts to achieve his department's objectives. A manager is as strong as his weakest assistant. The responsibility to train and contribute to the development of assistants, is an overlooked constituent of the function of managing. A manager is seldom specifically held accountable for this. But no manager who is committed to his own and organisation's excellence, can afford to overlook his basic responsibility for continual training of his men as an on-going activity and integral part of the management process.

The role of the training administrator/technician/officer is advisory—and not on a take-it-or-leave-it basis. Like other staff officers, he is accountable for results. As a specialist, he must assist the line manager in determining training needs, advising him on the best way of using avail-

able training facilities and suggesting the most appropriate methodologies suitable for specific programmes. It is for the line manager to make the most of available opportunities for the training and development of individuals working under him, to achieve his objectives as well as those of the employees and the organisation as a whole.

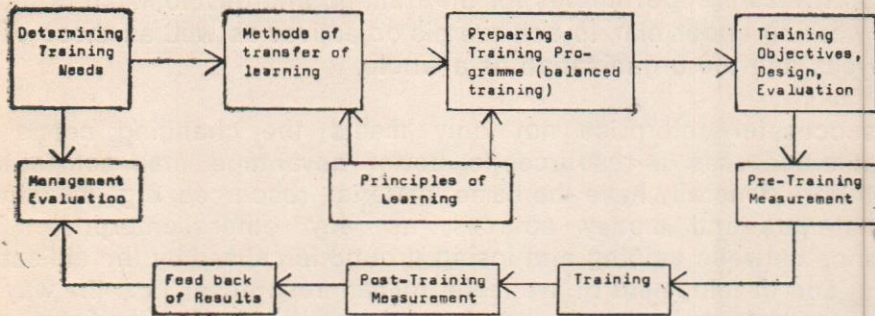
The successful enterprise not only meets the changing needs but innovates and uses its resources to better advantage than competitors. Competitors generally have the same material resources, e.g., machinery, raw materials and money sources as any other enterprise. The difference between gaining and losing ground is caused by the utilisation, training and development of available human resources, i.e., the way the intelligence, talents and energies of people are channelled and motivated for achievement of individual and organisational objectives.

As business and individual operations continue to change, demands on employee also change. The nature of the workforce changes as a logical part of this process. The focus is shifting towards higher technical and social skill requirements and a decrease in the semi-skilled jobs and a dwindling of unskilled jobs. One of the major problems in the coming years is the plight of the unskilled worker, who will find it increasingly difficult to remain employed.

Even though colleges are turning out graduates by the thousands each year, there is a critical shortage of 'skilled' manpower. There is a stiff, inter-firm competition for skilled workers, managers, top administrative staff and creative engineers - both from abroad and within.

The typical employee of today must update his skills and knowledge on a continuing basis merely to keep pace with the changing times. When employees make their personal adjustments as they go along without any forward planning, they are apt to miss on several of the essential factors for functioning effectively in the environment. These deficiencies often go unnoticed until they cause a major morale problem, loss of jobs, loss of production, fall in quality, and the like.

For upgrading skills, updating knowledge and reorienting attitudes, and thereby bridging the gap between 'as is' and 'as it should be', training affords wide scope. Training also helps to bridge the gap between 'efficiency' and 'effectiveness'

The Training Cycle

The training challenge is two-fold. The first is, skills development to improve the ability to handle existing tasks. Each person in the organisation must be afforded opportunities to develop specific job-skills that enable him to perform predictably according to established standards. Skills requirements are far from static, and, therefore, must be a planned activity that will keep up with organisational and individual needs.

The second challenge is, employing the whole person. For developing the understanding and capacity necessary for using an employee's most productive qualities, his ability to dream, imagine, create, make decisions, and function as a change agent and as a leader, training is a powerful tool. Training has to help broaden jobs, call for higher levels of skill development, and plan for intensive integration of acquired skills into a 'total-job concept'.

Employees have to be trained in such a way as to motivate them to become responsible for broad projects and duties, instead of exhausting themselves on miniscule repetitive chores. They must be enabled to satisfy their creative drives on the job. Participative activities will then become a normal function for the average employee. This does not mean that all workers will become independent operators or decision makers, nor does it imply returning to the days of independent craftsmen. It emphasises the need for full utilisation of the capacities of each person. Some people like and want repetitive, short cycle work; others just do not have the learning capacity to do more than simple tasks. But the vast majority of employees can handle broader jobs. Moving into a total-job concept implies considerable 'human development', effective

motivation recognition and adequate rewards. But the most important ingredient is 'development' which is essentially self-development through learning.

Training may be regarded as a series of three distinguishable steps, viz., think-step, set-up and action-step. Any training programme should be continuous and self-generating. As needs are identified for individuals or groups, plans should be made to help them increase their knowledge, acquire additional skills, or change attitudes by providing one or more combinations of training approaches, techniques and methods. Training, therefore, cannot be *ad hoc* side shows or regarded as 'industrial aspirin'

In middle and large size organisations, a combination of these is common. The old but true notion that the line manager is the person primarily responsible for training and most concerned with it, must be strengthened. Successful training effort requires active and continuous co-operation between line managers and the training specialists. The line manager is at the point of action and has first-hand knowledge of facts necessary to determine training needs.

His understanding of the strengths and limitations of training is necessary to increase training pay-off. To facilitate learning, line managers must become familiar with new ideas, principles and methods of training, learn to work closely with the training specialist and appreciate the implications of the 'transfer of learning' in practice. They must be learning-oriented, and avoid training gimmicks or be over-concerned with training techniques.

Training should be planned and started as part of the preparation for managing anticipated changes in the business. It has to be integrated with the whole 'Process of Management'.

It is best to recognise that an organisation can at best provide the facilities and stimulus for learning through training, but the success of the training effort depends largely on the individual employee's motivation for self-development and the immediate supervisor's commitment to training and developing his assistants.

Assessing Training Needs

The responsibility for determining training needs belongs to the line manager who is accountable for results and he is in the best position to

assess training needs. The training specialist can make useful contribution, when present skills, methods, attitudes are inadequate or inappropriate in meeting standards and when new equipment or facilities dictate new methods.

Both the line manager and the training specialist have complementary roles. The training specialist needs to be familiar with jobs analysis and performance standards/indicators, for training purposes. He needs also to be familiar with the entire work process and the required skills, knowledge and attitude for achieving agreed objectives.

One of the best ways a line manager can determine training needs is by spending time systematically, at least once a quarter, with an employee in reviewing his response to the questionnaire, work content, work context, objectives, results, opportunities, problems, development, etc.

<i>Kinds of Training</i>	<i>Approaches for 'Development'</i>
Orientation training Apprentice training, Pre-supervisory training and Skills training	Enlargement of present job Development assignment Job rotation Staff meetings 'Assistant to' jobs Committee assignments Task force memberships Fill-in-assignments Special assignments etc.

Administering the Training Programme

Familiarity with the principles of learning and the basics of the enterprise's work are essential for the training specialist and line managers to enable them to select the right methods of training, prepare and carry out a training programme. The training effort will have to cater for balanced training. This is because no one can know better than the line manager what aspects employees need to master to perform their jobs adequately.

The three essential qualifications for trainers are :

- * A thorough understanding of the topic and "trainees";

- * Familiarity with the method used; and
- * Earnestness to teach (keenness).

A particular programme may be made up of several courses, divided into specific subjects, and sub-divided into more specific units of instruction. Each element in the programme must be presented in packages small enough for the participants to be able to grasp in a single training session. In other words, a coordinated programme syllabus should be drawn up.

The programme syllabus usually includes :

- * a statement of the need for training and how that need was determined,
- * the level and number of personnel involved, and
- * a description of the programme.

Before finalising any programme the following aspects are usually attended to :

- * subjects to be covered in each course,
- * units of instructions in each subject,
- * the objectives, methods, time requirements and instructor for each unit,
- * the measurement to determine pay-off, and administrative information , cost, number of man-hours required, whether instruction will take place on or off company time, pay considerations for people called out for training, etc.

A combination of on-the-job and off-the-job or class-room instruction must be coordinated in writing, to reduce the chances of friction between activities and possibility of interrupting on-the-job training because of other demands on personnel concerned.

The choice of method will depend on the primary objective, make-up of the group, the subjects, the nature of the material, and the time available, etc.

Managements demand that all activities prove their worth to enterprise. This means that there must be some form of measurement built into the

programme to assess the nature and extent of the pay-off. As a programme is phased out, modified or completed, its effectiveness should be capable of being established in a training report providing the organisation with information for making decisions about further training.

Managers often ask that the worth of a programme be determined. The process of measuring training effectiveness can yield answers to questions like :

- Are training needs being satisfied?
- Are methods appropriate?
- How can trainers be more effective?
- To what extent are principles, practices, and new ideas being learned?
- Has job performance improved as a result of training?
- How can the line managers increase the pay-off?

Training pay-off is much more likely if managers are committed. Just as line manager's encouragement of subordinates motivates them to respond to training and to work hard during training, it sustains them after training. Line Managers can support training pay-off by

- * setting specific goals,
- * checking personality,
- * maintaining a permissive climate,
- * basing decisions on facts, and
- * making better use of the training technologist.

Guidelines for Training

Each person in the organisation must be offered the opportunity to develop specific jobs skills that will support him to achieve predictable performance according to established standards.

An individual should continue to learn throughout his career. It is through industrial training—the deliberate act of providing a means for learning to take place—that learning experience can be directed to positive and beneficial channels.

Training must satisfy real needs: The responsibility for determining training needs rests squarely on the shoulders of the line manager. When training needs have been carefully determined, the planning, initiating, measuring, follow-up of training are better organised and pay-off is, consequently, more likely. Training aimed at satisfying real needs but poorly planned or executed is wasteful. Individuals must be given what they need, when they need and are ready to receive it, and learning is more probable.

Individual learning can be facilitated : To motivate an individual to use his capacity, his strengths and weaknesses have to be considered. Poor prior adjustment to the learning process, frustrations, fears, animosities and other blocks to learning as well as keen interest, broad experience, fine talents, and sharp mental ability should be spotted in the typical industrial training session. The best motivator for learning is the individual's desire to master some subject or skill for its own sake.

Verified principles of learning should be followed : The learning process, the optimum condition for learning and more effective instruction and measurement methods have been researched. While there are limitations to the contribution training can make to an organisation, the use of verified principles of learning in training activities give better results for the money, time and effort expended.

Most learning takes place on the job : Learning goes on during most of every working day, as a person acts, interacts with others, performs tasks, makes decisions, listens and talks. The line manager is the on-the-job coach. He sets the example, goals and standards and provides feed-back on performance.

On-the-job instruction can be supplemented by class-room work : When identified training needs cannot be fully met on-the-job for any reason, it is important that class-room instruction be planned. Training research has provided excellent instruction techniques designed to encourage trainee participation, personal involvement, positive effort, and individual learning in the class-room situation. Class-room instruction pays off when new skills, improved knowledge or more mature attitudes are brought back to the job and applied.

Instruction requires thorough preparation to be effective : No training programme should be initiated until it is thoroughly planned. Time and

effort should be spent in drawing up a programme syllabus, instruction unit, teaching outlines and instructional aids. Care must be taken in the selection of instruction methods and instructors. Any training activity deserves the best preparation possible.

Balanced Training : Balanced training requires the co-operation of keen and informed line manager and an enthusiastic and qualified training specialist. The various parts of a training have to be in balance. On-the-job training must be co-ordinated with off-the-job instruction. The total training effort must be in balance with needs of the organisation and of the individual employees as well as with available resources.

Measurement is Essential : Learning and improvement are too often thought of as synonymous. Measurement can be taken before, during and after training to meet questions asked by trainees, managers and training specialists. The methods of measurement that can be included in a training evaluation design are varied.

Improved Performance is the Real Pay-Off : Where an individual employee modifies his behaviour as a result of training in such a way as to be more productive or better adjusted to his job, or when the sum total of the results of training improves overall department functioning, pay-off can be claimed. Transfer to the workplace of new skills, increased knowledge or more mature attitudes must be realised before productivity can increase and the department functions smoothly and effectively.

Training should be Continuous : Constant work and planning are necessary to maintain balanced training in response to the altered plans and resources of the organisation. As the organisation changes, its demands on individuals and groups of individuals change. And as the demand changes, individual training needs change, requiring a modification in training effort. Training reports should promptly help to redirect and refresh training activities, not terminate them.

All managers must participate : Without the active participation of the line manager, training pay-off will be poor. In many cases there will be none. By determining training needs and planning training, by on-the-job coaching and the use of development assignments, by encouraging subordinates to broaden themselves by the periodic instruction of groups, and by effort at self-development, the line manager can ensure good pay-off. The challenge is clear, the fullest possible use of the most valuable asset—human resources is committed to the line manager's care.

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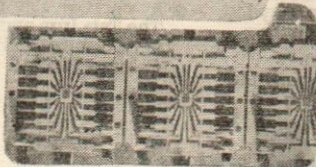
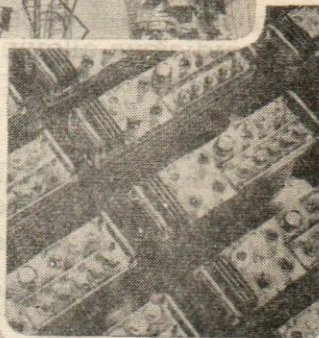
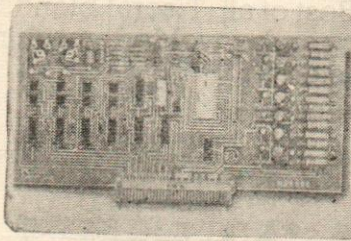
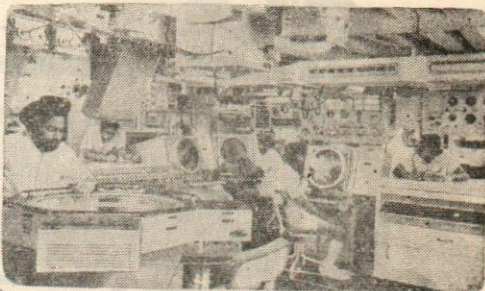
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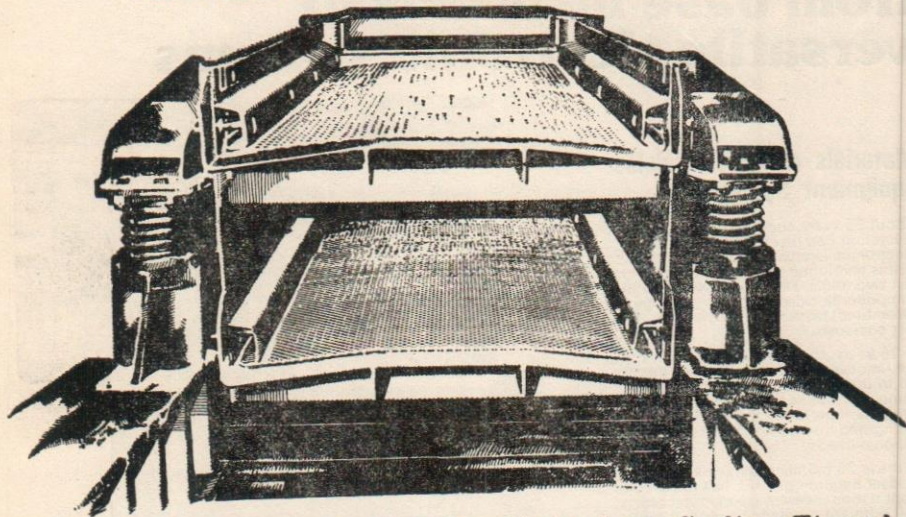
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Four Basic Tasks for Training Managers

Sharu S. Rangnekar*

Training Managers operate essentially in four areas of training :

— Information, Skill, Motivation and Innovation. In all these areas, the impact is on Knowledge and Behaviour.

It would be worth while to cite some illustrations to distinguish between knowledge, i.e., knowing more and behaviour, i.e., behaving differently.

*An 'Information' Programme, e.g. 'Computer for Non-computer Executives': Executives from areas other than computers can get to 'know' what a computer is, what it does (and does not) and how it does it — *this is knowledge*. Some of them may start thinking about how to change their 'modus operandi' to utilise computer and ultimately change their style of operations — *this is change in behaviour*.

*A 'Skill' Programme, e.g. 'PERT' : Executives from areas connected with project management can get to 'know' the use and monitoring of projects—*this is knowledge*. Some of them may start utilising the technique themselves and thus operate in a way different from that they were accustomed to—*this is change in behaviour*.

*A 'Motivation' Programme, e.g. 'Conflict Resolution' : Executives can get to 'know' the causes for conflicts, the nature of conflict, the reactions and strategies to deal with conflicts, etc.—*this is knowledge*. Some of them may start utilising this knowledge to identify conflicts and to deal with them, *thus behaving differently*.

*An 'Innovation' Programme, e.g. 'Management of Creativity' : Executives can get to know the process of creativity and the techniques to promote innovation. Some of them may innovate their own methods, thus behaving differently.

These imply that the first basic task of training managers is to emphasise that effective learning is not knowing more but behaving differently.

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Risk in Professionalism

As long as training is limited to knowing more, it is safe. As soon as it leads to a different behaviour, it can create problems. The different behaviour may not be acceptable to the boss, the colleagues, the subordinates or the persons outside the organisation the executive has to deal with. This can lead to a conflict—and yet, without such conflicts organisations cannot change. If the executive refuses to accept this risk, he will not change his behaviour—or if he changes his behaviour, he will quickly return to his former behaviour as soon as he sees even the possibility of a conflict. The very concept of professionalism has this kind of risk inherent in it. Without such a risk, a professional cannot maintain any standards of professionalism.

So the second basic task of training managers is to emphasise that professional learning involves facing risks of professionalism.

Autonomy of the Executive

Most executives attending training programmes are expert *alibi* managers. They have *alibis* ready for why they cannot practise what they accept as a sound practice of management. The 'organisational culture' is the most common *alibi*. It is necessary to bring 'sub-organisations' and the executive is himself the head of one of his sub-organisations and is largely responsible for the culture of his sub-organisation. The second relevant fact is that, particularly in large organisations, each executive has considerable autonomy in managing his own sub-organisation as long as he is delivering the goods. This is why one finds some very effective departments (sub-organisations) in many ineffective organisations.

If an executive maintains that the whole organisational culture must change before he makes his department effective, it only means that he is sticking to his *alibi* and has no desire to change his behaviour. Any training given to him will be a waste—since no learning is possible.

Therefore, the third basic task of training managers is to emphasise that an executive can be effective in spite of the organisational culture if he is ready to identify, extend and exploit his autonomy.

Resources Investment in Follow-up

There is a great temptation for training managers to indulge in the 'number game'. Consequently, the resources are expended on conducting more and larger training programmes to give impressive statistics in terms of number of programmes, number of participants, number of participant-days, etc.

In this orgy of training, development may be lost. Khalil Gibran, in his "Garden of the Prophet", talks about a country full of beliefs—but empty of religion. Similarly, the organisation can be full of training, but empty of development.

So it is essential for the training manager to find out the development impact of his training. He must spend resources to issue questionnaires, interview executives trained—as well as their bosses, subordinates and colleagues, tour the organisation to identify problem areas and study managerial and organisational effectiveness before and after training.

Thus, the fourth basic task of training managers is to allocate resources to follow-up the impact of their training efforts.

The technology and techniques of training are tools for the prime purpose of training, i.e., personnel and organisational development. Through performing the four basic tasks the training manager can ensure that the tools are directed towards the prime purpose of training. □

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Training and Employment of Young Executives in Industry

B. G. Varshney*

Role of Executives in Industry

An executive plays a significant role in industry by getting things done by others to achieve results. In doing so, he assumes the role of a good supervisor and an efficient manager who not only manages the work of his subordinates but also trains them properly to develop their skills and capabilities to suit their job requirements—present and future. Besides loyalty and devotion to the aims and objectives of the organisation, the industry also expects its executives to :

- * develop specialised knowledge and skill in their specific field of work;
- * acquire thorough knowledge about the technical, social and economic background of the industry and its role in the country's development;
- * acquire knowledge about their own relevant discipline and also of the functions of different other associated disciplines and their inter-relationships;
- * develop sense of pride to work in that industry and be a pride for the industry as well.

It has, however, been experienced that such accomplishments are best acquired by appropriate training and development and systematic injection of knowledge preferably at the initial stage itself while entrusting the job and the responsibility.

Why Train Executives?

Training is the process aiding employees to gain effectiveness in their work through the development of appropriate habits of thought and

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action, skill, knowledge and attitudes. Training aims to increase the proficiency with which the functions of an organisation are to be carried out by its personnel. Intelligently planned and skillfully executed training helps materially to bring about the improvement in the morale of an organisation, improved job performance and job satisfaction to the workers and simultaneously, increased production at lower unit cost to the management. Training of the young executives has the obvious advantage of gainful life, quicker return of investment and greater efficiency input. The purpose and importance of executive and managerial training activity in an industry is, evidently, to meet the above requirements which are vital to the success of the enterprise. Thus, training is a continuous and dynamic activity which involves its own technique or methodology and offers immense scope for research and development also.

Training Methodology

Training methodology can be termed a science as well as an art, which aims at a scientific approach to systematic training of men in the use of men, material and machines. Whereas 'Training Administration' that is, programme planning, implementation and control is an art, 'Training Methodology' is a science, and a positive one which has its own philosophy and ethics. Much of the success of training activity in industry depends upon how well it is planned and how best it is carried out; what effective techniques are adopted and at what cost? Evaluation of training success, though by itself a technical issue, depends on whether the methodology involved in the training effort is correct or otherwise, whether there is a need for change in the approach to training or not, and if so, what kind of change is warranted and to what extent.

The importance of training of managerial and administrative personnel has long been realised by the industrially advanced countries and has been recognised and accepted by Indian industry as well. Major industrial establishments, both in the public and private sectors, have established management training centres of their own, which run formalised training programmes at various levels. These centres have become indispensable service departments of those organisations.

Training activities in an industrial organisation aim at the development of their technicians, engineers, administrative, commercial and managerial personnel, etc., and the training techniques adopted by each are important media to the fulfilment of this objective. This paper is, however, confined to the training methodology adopted for the training and development of industrial administrative personnel.

Basically, the problems that are encountered by an industrial training centre are similar in nature although the contents may vary little depending upon individual requirements and nature of industrial activity. The major problems are :

- * Provision for the supply of adequate trained manpower for carrying out various functions of the organisation.
- * Development of essential skills so as to achieve better utilisation of human ability and potential in the industry.
- * Growth and development of the employees working inside the factory so as to prepare them to undertake higher responsibilities in promotion positions.
- * To motivate workers at all levels for higher productivity gains.

How Young Executives are Trained

At Fertiliser Corporation of India (FCI), the Junior Executive Trainees (JET) are recruited for both technical and non-technical cadres. The following paras illustrate the kind of training the trainees undergo at FCI. After the successful completion of training they are absorbed in FCI. The training imparted is rigorous and absorbing, as is indicated below.

Mode of Training :

Various training techniques and aids are adopted to train the executives in skills like Group Discussion, Case Studies, Method, Syndicate System, Presentations, Quiz and Questionnaire Method.

The central core of the JET training scheme lies in its objective approach — covering different phases of administration and commercial

activity starting from the very base, and the subjective approach of inspiring through constant contact and follow-up. Training programme, therefore, incorporates a judicious blending of theoretical as well as practical aspects of work designed to suit the requirements of the industry.

The training, in theory, comprises the following :

Special Study Assignment :

With a view to inculcate the habit and practice of technical report writing, presentation of ideas and technical exposition of methods involved, each JET is required to prepare a detailed note on a specific subject relevant to the administrative assignment by studying books, mutual consultation and collecting statistical data over a period of six months. The thesis of this report is subjected to critical study and scrutiny by the Training Officers and Heads of various departments and after a personal interview is evaluated for merit assignment.

Compulsory Reading :

Besides this, all the trainees have to study a set of prescribed books and literature on subjects like Industrial Laws, Industrial Engineering, Industrial Management and Administration such as Industrial Disputes Act, Labour Laws, Indian Electricity Rules, Indian Boiler Act, Personnel Relations in Industry, Efficient Foremanship, Supervision in Industry, Preventive Maintenance, and Productivity in Industry, Psychology of Labour, Plant Management and qualities of leadership.

Colloquiums :

In order to develop the faculty of expression and the art of communication as well as the sense of proportion and co-ordination of ideas and to imbibe self-confidence, all apprentices, in rotation, are asked to address a weekly expert gathering on subjects connected with their training programme, in a Colloquium Hall equipped with necessary Audio-Visual Aids. The speaker is then subjected to questions from his fellow apprentices and other members of the audience including the training staff, plant officers and senior executives. Such discussions are highly informative and extremely useful.

Special Lectures and Tutorials :

Regular lectures on Accounts and Audit, Sales and Purchase, Store-Maintenance and Stock Control, Industrial Efficiency, Industrial Safety, First-Aid and Fire-fighting, Personnel Management, Preventive Maintenance and Productivity and Planning and Development are delivered to groups of 15 apprentices in one course by respective departmental heads. Tutorials and 'quiz' tests follow these lectures. Such lectures are often tape-recorded for repeat-lecture-system.

Extension Lectures :

Series of lectures on special problems and technical subjects are delivered by engineers, senior executives and outside faculty periodically. Attendance is obligatory for all JETs and they are required to make briefs of lectures for tutorials.

Plant Lectures and Dissertations :

Elementary lectures on the working of different plants and production processes are also given to groups of administrative and commercial JETs by plant officers about their respective working spheres and every encouragement is provided to the trainees to discuss and criticise the existing administrative procedures, to evolve new techniques and to suggest new methods of approach for increased efficiency and economy in pursuit of higher productivity. This kind of an environment gives a fillip to original thinking and creates a healthy spirit of constructive criticism. Case-study and conference-methods are special features of such frequent discourses. Rather than the usual theoretical deal, the case-study technique presents typical problem situations which the practitioners confront in actual field activity.

Language Courses :

Since extensive literature on plant description, operation and maintenance is available in languages other than English, the Training Centre of the FCI runs classes in French, German, Russian, Italian and the like with the help of foreigners working here and the linguaphone medium. Trainees are encouraged to learn at least one foreign language. Such classes are periodically held in the

evenings so as to enable others also to take advantage of these facilities during 'off' hours.

Audio-Visual Education :

Technical film shows are a regular feature for all training programmes and projector, epidiascope, public address system and conference equipment etc., are used for imparting audio-visual education. Study tours are also conducted for the apprentices to places of professional interest, whenever possible. Recording-reproduction technique is adopted for self evaluation under supervisory development programme. The Audio-Visual Education division of the Institute of Management Development provides following aids for better understanding and perception—Management films and film strips, slides on management subjects, management cartoons and comics, charts on management concepts, tape-recorded talks on management subjects, projection of statistical charts, equations and break-even-points through viewographs, etc.

Group Discussions :

With a view to developing personal contact and free exchange of ideas, the JETs in batches of 10 meet their Training Officer every fortnight in a specially designed Conference Room equipped with necessary audio-recording apparatus. Here, they discuss their plant difficulties and personal problems in a relaxed atmosphere and also receive essential instructions for future plan of work. An atmosphere of personal touch to the solution of problems is maintained. Such discussions are also attended by departmental heads and senior executives, whenever necessary. This also helps in the development of the art of 'conference leadership'.

Participation or Co-ordination Programmes :

The professional institutions and the Industry are active co-partners in the task of preparing trained staff for productive work in Industry. Whereas the former produces raw material, the latter completes the finished product by suitably grinding it to actual industrial requirements. The cultivation of close fraternity between the University and the Industry is the chief object of the co-ordination programmes. With this end in view, a number of symposia and seminars are frequently organised and

professors from the Universities and Technical Institutions are invited to take part in them. Staff and Executive Trainees share these activities and get an opportunity to learn about the latest professional advancements from them and in exchange impart their own experiences of industrial applications. The impact of such contacts has immense educative value to the participants.

Personality Development :

Extra-curricular activities are highly encouraged and JETs are, as a rule, required to take part in sports and such other healthy activities like debates and technical forums, with a view to developing in them a sense of co-operation and collective effort, team-spirit and resourcefulness as well as qualities of leadership. The primary object is the development of a balanced personality of the individual.

Records of Progress :

A comprehensive system of follow-up is adopted to check the progress of a trainee and to evaluate his knowledge and efficiency. Qualified and experienced Training Supervisors of senior rank, regularly visit the working sections and keep an eye on the trainees' work by means of :

- * spot-checking
- * scrutinising daily-diaries
- * correcting notes and reports
- * holding 'quiz-tests' on the knowledge of plant operation and maintenance
- * holding periodical interviews on sectional training, and lastly
- * by gathering confidential reports of individuals' conduct and aptitude from officers concerned.

Conclusion

No training schemes can be said to have attained perfection, however, elaborate they are, and therefore constant endeavour is being made by management of the FCI to improve upon training features by incorporating all modern techniques essential for the methodical and scientific training of young executives so as to prepare them to shoulder the heavy responsibility of running the fertiliser industries efficiently.

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Organisational Effectiveness Through Training Effectiveness

Kulwant Singh

Introduction

Over the last decade the banking industry has achieved commanding heights and so-far-as the growth is concerned — both in size as well as business — the achievement is unparalleled. Simultaneously, the changes have occurred in roles and functions, and apparently, all the major clients, namely, its customers, its people resources, and its investors that the industry deals with, have undergone transformation. The deployment of credit is regulated with the overall consideration of socio-economic development. A large segment of the clientele, both depositors as well as the borrowers, can be identified as 'small men', from whom the industry has mobilised deposits. Today the industry serves these customers located in rural, semi-urban and urban areas.

All the growth and expansion that has been witnessed is in response to the 'needs of the community'. In the final analysis, the performance of the industry will be judged not in terms of its size, growth rate, or expansion, but by the *quality* of its services and capabilities to *manage large sized organisation 'effectively'*. The real question before the industry is : '*How to Manage Change?*'

This paper attempts to identify the criteria of effectiveness, common problems being faced in fulfilling the corporate objectives (industry level/bank level), and the training strategies to be adopted to improve the overall efficiency and effectiveness of the system.

Some Basic Assumptions

(a) It is assumed that the training system is a part of the overall 'organisational system'.

(b) It is also necessary that the training has credible knowledge and information about the corporate objectives as well.

(c) The only function of the training system is to increase the performance of the organisation.

(d) In order to be effective, the training system has to be dynamic, otherwise, it would fail to respond to the expectations and become obsolete. In fact, the idea of the systems-framework is to explicitly recognise the processes of simultaneous changes in the sub-systems whenever there is a change in any part of the system or in the environment.

(e) In order to perform the above functions, it is indispensable that the training system should cater to the development of the human resources at *all levels* in the organisations (individual, group and institutional), and anticipate future requirements.

(f) The linkages between the organisation and the training system have to be deliberately structured and reviewed periodically to maintain a balance.

(g) The training systems in the banking industry have undergone adjustments and adaptations sporadically. Yet, the industry is going through *critical* times, and concerns have recently been expressed for a host of issues at various forums*.

Criteria of Organisational Effectiveness

With increased emphasis on achievement of social and economic development, there has been a distinct change in the corporate objectives in the banking industry. The survival of this business is dependent on profitability, it deals with money which belongs to the public — whether in public sector or in the private sector. In addition to the above criteria the overall performance will be judged by a number of other factors : (a) fulfilment of social objectives, (b) organisational climate and public image, (c) organisational health, (d) customer service and satisfaction, (e) employer-employee relations, etc.

* —Indian Bankers Association, Chairman's Address (1979), *IBA*

—See also address of Dr. K. S. Krishnaswamy, *RBI Bulletin*, January 1979

—Dr. I.G. Patel's address, (*RBI Bulletin*, February 1979) regarding Monetary Policy

—*Annual Reports* of the SBI and other Banks

At present there are nearly 30,000 branches of 124 scheduled banks (including Regional Rural Banks), employing about 500,000 people and deposits amounting to Rs. 290 million and advances Rs. 200 million. According to guidelines of the Government, about one-third of the credit advances should be allocated for development of hitherto neglected and the priority sectors. It is, therefore, imperative to ensure that the banks have a sound organisational system at all levels—head office, controlling offices, as well as sound organisational structure for branch banking in metropolitan, urban, semi-urban and rural areas.

Obviously, there is multiplicity of goals and to that extent, it should be recognised that *goal approach* is inadequate to understand the performance of the banking industry. The *systems approach* comprising profitability, productivity, climate, image, and the like has distinct advantages. The system's model, however, is not free from drawbacks as all the variables cannot be quantified. Nevertheless, it is becoming obvious to all concerned that quantitative measures do not explain everything. There is high obsession with regard to the quantitative analysis, and it is high time to recognise the goals like organisational climate, organisational health and employee satisfaction for organisational effectiveness are recognised.

Organisational Challenges

1) MANAGEMENT OF CHANGE

With rapid expansion in size as well as business, the organisational structure has to be examined carefully to identify the training requirements. Most of the large-sized banks had the following types of changes :

- a) Creation of new departments or sections.
 - b) Induction of specialised personnel (for areas like agricultural financing, small industries and project management persons with specialised knowledge have been hired).
 - c) Structural changes—creation or re-organisation of zonal and regional systems.
-

- d) Restructuring of branch management system.
- e) Experiment with new structures, like Regional Rural Banks.

A number of commissions, committees and groups have been appointed from time to time and depending on the terms of reference, each of these has reported on various aspects on the functioning of the banking industry.

These changes and recommendations for change are well meant. However, most of the time such changes are characterised by *ad hocism*. To that extent, they have been partial in their emphasis as well as their pay off. Management of change is one of the most difficult challenges before us. One cannot think of readymade solutions. Yet, it is necessary to recognise that the process of change should be viewed from an integrated angle. The training system can contribute to diagnose, understand and accelerate the change process. Unfortunately, this role of the trainer as an Internal Change Agent has not yet been fully recognised for micro-macro level changes.

(II) PRODUCTIVITY & PROFITABILITY

Recently, Rs. 400-500 million wage settlement was reached after prolonged negotiations, go-slow agitations, work-stoppage and strikes. The public sector working has been noticeably criticised at the highest level for their losses. The banks are facing the problem of deceleration of profits on the one hand and managements losing business on the other in rural and semi-urban areas.

Two basic questions arise. How the rural branches can be made profitable? And, can profitability be delinked from productivity?

(III) LENDING

(a) *Priority Sector* : In order to serve a vast number of small customers in priority sectors, different types of entrepreneurship skills have to be developed for staff and borrowers. The bankers have made some headway by initiating training for entrepreneurship. Yet they are far from the goal. How can one accelerate the pace of business through training?

(b) *Lending Procedures* : In spite of decentralisation in terms of delegation of authority, the bank-lending procedures seem to be subjective. What is needed is institutionalisation of lending procedures and emphasis on the professional criteria. Experience shows that the existing training system has to go a long way if this idea is to be achieved. The question, therefore, is how to institutionalise lending ?

(c) *Industrial Sickness* : Industrial sickness has come to stay with us. Recent studies conducted by RBI indicate that nearly 334 units involving over Rs. 10,000 million are affected. After all, sickness did not come suddenly. What can be done in terms of preventing further sickness and reducing the impact of present involvement of the banks is through innovative training activity.

(IV) DETERIORATION IN CUSTOMER-SERVICE

It is a fact that with expansion in operations the quality of service in the industry has deteriorated. Banking is a service industry and it is indispensable that the community has a feeling of satisfaction while they are dealing with the banks. The service rendered by vast number of human beings is obviously connected with the problem of staff motivation. How can the role of grooming manpower effectively be tackled ?

(V) MAN-MANAGEMENT

Inter-personal system is the heart of the banking system. In spite of variety of training inputs, one often hears that the involvement of the staff is lacking, conflict is growing, number of man-days lost due to work-stoppage is increasing and the like. It is generally known that job satisfaction in a young employee is low and alienation high. How can one contribute in promoting employee identification with the employer ? How can one minimise conflict, promote cooperation and collaboration through improved organisational health and improved maintenance ?

(VI) INTERNAL SYSTEM FOR PLANNING, CONTROL & INFORMATION

Off late, new roles have been taken up by the bankers. There have been strains and stresses in the internal information, communication and control systems. These systems require constant renewal.

The existing planning and budgeting system will also have to be geared up in order to function effectively and market the bank services in the context of changing environment. How can the training system respond to meet these changes ?

Role Allocation for the Tasks

The chart summarises the respective rules that the various institutions can take up at the industry level/bank level to cope with these challenges :

Issue Raised	ROLE PERFORMANCE AT		TYPE OF ACTION REQUIRED		
	Industry Level	Bank Level	Research Study	Seminar/ Workshop	Courses
1	2	3	4	5	6
MANAGEMENT OF CHANGE	*	*	*	*	*—Multi-level Interface Organisation Development courses
PRODUCTIVITY AND PROFITABILITY	*	(Strengthening of Corporate Planning System)	(Studies of losing branches)	*	Training in <i>Methodology</i> Planning & Budgeting Courses at all levels
LENDING AREA PRIORITY SECTOR	*	*	*	*	Courses on Entrepreneurial, Motivational Development
LENDING PROCEDURES	*	(Preparation of Handbooks for Credit Appraisal, Foreign Exchange at Industry Level, Rationalisation of Procedures)			

	1	2	3	4	5	6
INDUSTRIAL SICKNESS		*	*	*		* Specialised Courses on Follow up
			Identification of danger signals			
CUSTOMER SERVICE		*	*			Courses in Bank Marketing, Public Relations
MAN-MANAGEMENT		*	*	*	*	(Climate Studies required) 1. Seminar for trainers to take stock of the area of Behavioural Sciences. 2. Integrated Training inputs in the regular courses. 3. Specialised courses on building and promoting climate.
INTERNAL SYSTEMS FOR PLANNING, CONTROL AND INFORMATION (MIS) See (col. 6) above		*	*	*	*	
EVALUATION OF TRAINING SYSTEM		*	*			Inter-Institution Seminars at Regional Level for Faculty Development
			(Methodology Studies)			

Note : *Means the required performance

Training Strategies

MANAGEMENT SUPPORT

All those concerned with training system would agree that the efficient and effective functioning of the training institutions is closely related with organisation wide support from the top and middle level : unless there is a will there is no way to translate the 'organisational objectives' merely through training programmes. The training sub-system will become not only ineffective but will be a burden without such support.

Identification of Training Needs : The existing procedures and linkages of the training systems with the organisation to identify training needs are inadequate to respond to the changing environment. Each institution has to formulate its own strategies. Nevertheless, there are some pre-requisites, which may have commonality.

Firstly, the manpower planning and its linkages with the training system should be established fully through involvement of the various departments concerned with corporate planning.

Secondly, the qualitative aspects of the manpower inventory, should be looked into so that each individual employee is the focus of attention.

Thirdly, those who are incharge of the region/zone, should be fully involved in preparation of the regional/zonal training plans, alongwith the business plans.

Need for Innovation and Experiments : If the problems and challenges have to be met with, then it is obvious that one has not only to conduct new courses but also modify the contents of the existing programmes. Apparently, when merely *quantitative targets* are given and percentage is counted to evaluate the training systems the *quality of training* may suffer. New courses may be experimental when they are started but the pay-off can be better.

Selection of Trainees : In order to utilise the existing training structure correctly and create new facilities, it is indispensable that the college authorities are involved in the selection of the nominees. The actual strategy can be devised keeping in view the set-up at the bank level. If

the right person is not selected for the right course and advance planning is not done for these processes, wastages are bound to occur. With heavy pressure of the training systems, it is all the more necessary that the existing facilities are fully utilised.

Integration of On-the-job Training with Institutional Training : This subject has come up for discussion repeatedly. However, it is significant that the college should have a full idea of the cycle of training for each individual whereby the training at the institutional level and training on-the-job can be properly integrated.

Training Infrastructure : Over a period of time all the major banks have expanded their training infrastructure. However, there is a wide range of variations in quality, long-term and short-term strategies for institution, building process are necessary to produce desired results. The institution building process is necessarily slow and we have to anticipate the requirements when it comes to

- * expanding the intake capacity
- * improving the quality
- * recruiting/replacing competent faculty
- * building expertise for use of multi-media activities
- * accelerating change in methodology/content or introduce new teaching materials.

Entrepreneurial Role for Faculty : A trainer is not merely a person who gives lectures but has to take upon new roles through acceptance of the participants. The role of a *friend, philosopher and a guide* seems to be an ideal one. We have to innovate systems for faculty development, including their time utilisation. Faculty should be in constant contact with the participants, so that each participant, while he is undergoing training can be looked after with a personal touch. Many a time, a person can be helped through informal interaction, specially when attending residential programmes and is easy to talk to. Salvaging in extreme cases of stress is feasible through proper counselling.

Vitality in Training : In order to be effective, training system has to be properly organised at the College Centre level. At present, the centres

seem to be like appendages to the system. The interaction and the inter-institutional relations among themselves and other banks should increase through formal programming in the shape of seminars, workshops and conferences, as well as faculty development courses organised, where trainers from other centres could also join. Faculty exchange among banks should be encouraged for multiplication of quality and new knowledge.

POST TRAINING ACTIVITY : PLANNING & EVALUATION

Placement : If the trained personnel have to be effective on the job, it is necessary that the college is involved in giving enough feedback to the authorities concerned for proper placement of such personnel.

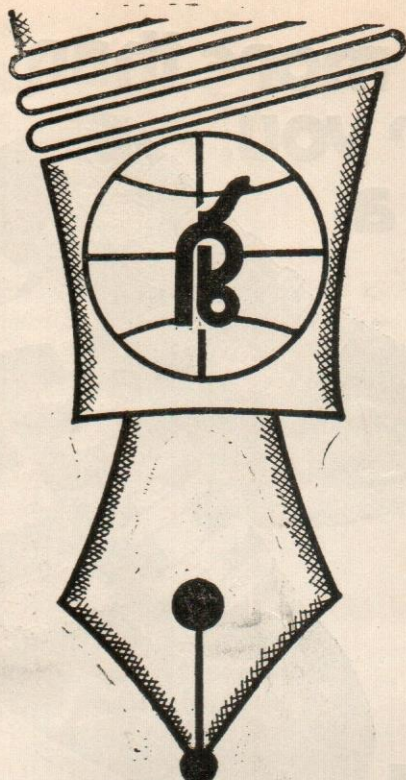
This would not only fit the man to the job (rather than job to the man) but will also avoid wastage in utilisation.

Evaluation of Training : This aspect has been repeatedly discussed at various programmes and has generated more of heat than light. The author is of the view that this kind of a question should not be postponed any more, howsoever, varied our personal positions may be. The methodological issues are complex and it may be difficult but not impossible to sort them out. Once action is initiated, improvements are possible in the conduct of studies. This support is available in a larger measure now than in the past. One has to build upon this so that the organisational effectiveness and climate can be maintained and preparation for the future is facilitated.

Conclusion

It is obvious from the above that a number of adaptations are required in the training systems if they are to be fully effective. If the above multidimensional responsibilities have to be adequately performed, one has to take cognizance of the situation at industry level for these issues.

At the bank level, role ambiguities, role conflicts and role overlaps have to be sorted out. At least one thing is clear : there is a need for increased interaction among the sub-systems, whereby various departments and the training system can join hands and heads together.



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Evaluation of Training Programmes

G. Natarajan*

Introduction

One of the commonly neglected aspects of a training programme is the evaluation of effectiveness of training. Quite often, a company's inactivity in the evaluation area is explained by rationalisations like—"We know our training works", "Evaluation is too expensive", "Better evaluations are impossible to do" (this is heard from organisations that have made at least a surface commitment to evaluation), "Why risk self-evaluation?" (from the point of view of training personnel), etc. Such training, which tends to operate in isolation, does more harm than good. Contrary to such a defensive attitude against evaluation, competent evaluation is the cornerstone of meeting both organisational and individual educational needs, and of improving the cost effectiveness of the training function.

Training Aids, Material for the Trainer, Audio-visual Aids, and physical facilities for training.

The intervening variables reflect the internal state and health of the organisation, *e.g.*, the loyalties, attitudes, leadership styles, motivational techniques, communication pattern, decision making process, etc.

The 'End-Result Variables' are the dependent variables which reflect the achievements of the organisation like reduced operating costs, better quality of production, increased man-hours of production, reduction in frequency/severity of accidents, decreased absenteeism, etc.

It can thus be seen that various aspects of training can be grouped under each of the three Likert variables. To further define what aspects of a training programme can be evaluated, the planning process must be considered. Planning is the process of specifying objectives for a training programme, determining the current attainment levels for those objectives and selecting the best strategies for closing the gap. The training programme objectives can serve as the focus for an evaluation. This, in fact, is the most common of evaluation models. That is, most evaluations focus on whether the programme produces improvements in trainees' attitudes, knowledge, skills, job performance and productivity (costs).

CRITERIA FOR EFFECTIVE EVALUATION

The three basic criteria on which most evaluations can be judged are :

- (a) Validity (b) Reliability (c) Usability.

Validity

Validity measures the potential accuracy of the evaluation. Evaluation can be directed at two general components of training effectiveness. First, to what degree does in-class learning occur as a result of training efforts? Second, to what degree does this learning, translate into on the job behaviour change? These two can be viewed as issues of 'internal' and 'external' validity respectively.

Internal Validity answers the question : "To what extent can we clearly assess whether training really made a significant difference in the actions and attitudes of the trainees". According to Donald Campbell and Julion Stanley, these are factors which, if not brought under control by the evaluator, may complicate efforts to measure training effects. These are called 'threats to validity'. They are :

(1) *History* : Crucial events, of the training programme may account for perceived changes in trainees. Increased attention paid by observers or visitors and replacement of a dictatorial boss are some examples.

(2) *Maturity* : People do, after all, mature over time and might conceivably change any way without programmatic attention.

(3) *Testing* : Exposure to pre-training evaluation may artificially inflate or depress post-test scores.

(4) *Instrumentation* : This refers to revision in evaluation measures and differences in quality of instruction during a programme, change of observers or scoring methods etc.

(5) *Regression* : When groups with extreme pre-training evaluation scores are included, there is a natural tendency for the evaluator to award average scores on subsequent testing. This is called a regression effect.

(6) *Selection* : Training is more likely to be effective when participants volunteer for the programme than when their participation is forced.

(7) *Mortality* : If the programme lasts more than a few days, then the worst trainees may drop out and the evaluation is likely to be more favourable than by these trainees remained.

External Validity refers to the accuracy with which one can generalise (a) an employee's training performance to actual on the job performance, and (b) conclusions about one training programme or group to another programme or group. It should be obvious that external validity is the ultimate target in training programme development and that external validity is impossible without internal validity. Internal validity is a necessary but not a sufficient precondition to external validity; for external validity can

also be threatened by (a) interaction effects of testing and training, and (b) interaction effects of selection and training.

MINIMISING THE THREATS TO VALIDITY : While it is difficult to exercise complete control over the threats to internal and external validity, evaluations can, however, minimise the influence of these threats through three research categories: control groups, random selection of trainees and application of training and appropriate research designs.

Control Groups : The use of control groups protects an evaluation against threat to internal validity. A control group is a group of agency personnel who do not participate in the training programme but who are similar in most respects to those who do not participate. Since threats to internal validity (history, maturation etc.) affect both experimental group (the one which is exposed to training) and control group equally, any difference measured between the groups should be the result of training.

Random Selection : The external validity of a training programme's evaluation depends, in part, on the random selection of trainees for the programme and its evaluation. By randomisation, every member of a population has an equal chance of being selected. Randomisation insures among other things, that an evaluation findings will be generalisable because trainees are roughly representative of the larger agency and do not contain too many people with any particular interest or background. Training officers and evaluators should randomise whenever possible.

Evaluation Designs : Various evaluation designs are available and each of them will be discussed in the light of the extent to which it eliminates threats to validity.

(1) Pre-Experimental Designs or Non-Experimental Designs :

It is of two types (a) one-shot case study, and (b) One group pre-test/post-test design. In both these types, only one group is studied. In 'one shot case study' a single group is studied, only once, subsequent to some training presumed to cause change. This is the simplest and most ineffective evaluation design, since it is impossible to discern the impact of training, which is the primary evaluative concern.

The one group pretest/post-test design is a slight improvement over the one-shot case study in that it uses a pre-test (before training) and a post-test (after training) for the one group participating in the programme. The difference in the performance of the trainees before and after training is a measure of the impact of training. But the pre-test may sensitise 'trainees' to topics and questions they might not ordinarily perceive, consequently changes measured by the post-test may result not only from the training programmes, but also from the pre-test itself. This interference threatens the external validity of this research design, i.e., the extent to which one can predict similar results of the same training programme if tried in another setting.

The non-experimental designs are vulnerable to internal threats such as history, maturation, mortality, etc.

(2) Quasi-Experimental Designs :

This consists of (a) Time series and (b) Non equivalent control group design. Time series design involves measurement at periodic intervals before the programme begins and after the programme ends. Such a design allows the experimental groups to be its own control group and to be especially useful in determining a training programme's long-range effects. The advantage of time series design is that it tries to overcome the reactive effects, which, if present, would have been manifested by the results between the tests before or tests after training.

Non equivalent control group design involves a control group also. Both the experimental and control groups are subjected to pre-test and post-test, though the control group is not exposed to training. In this design, however, the selection of participants to experimental and control groups and exposure of groups to training are not done in a random manner.

Quasi-experimental designs are stronger, when compared to non-experimental designs, but without the benefit of random assignment, one cannot be certain that the experimental and control groups are equivalent and hence comparable.

(3) True Experimental Designs :

True experimental designs are of two types (a) pre-test/post-test control

group design, and (b) post-test control group design only. In both these designs, selection of groups (experimental and control) and exposure to training are done in a random manner. The former design involves pre-test and post-test of both the groups while the later employs only post-test of both the groups thereby eliminating the 'sensitivity' effects of pretest on trainees' attitude towards or awareness of certain issues in their work situations or the training programme. The contribution that random selection can make to an evaluation's accuracy and generalisability are recognised and employed by both those sophisticated designs. These are the most powerful evaluation designs and theoretically all possible threats to validity are controlled. Though the post-test control group design appears to be better of the two, by the elimination of 'sensitising' effects, it has also a drawback. Though, we can conclude that the experimental groups changed as a result of training, we cannot determine how much they changed.

Reliability and Usability

Reliability and Usability are the other two important criteria for evaluation to be effective. Reliability refers to the dependability of the data gathered by an evaluation measure. Reliability can be enhanced by unambiguous questions or items and by provisionally pretesting the evaluation measure with sample population.

Usability refers to the ease of administration, ease of scoring and ease of interpretation of results. The money, time and facilities required to administer properly, the evaluation should be comparable to the informational benefits expected from the evaluation.

Evaluation Methods

According to Kent Chabotar, there are basically eight evaluation measures available to trainers. They are : (1) Interview, (2) Questionnaire, (3) Test, (4) Expert opinion, (5) Observation, (6) Informal feedback, (7) Organisational Documents, and (8) Index.

Before the merits and demerits of the individual measures are analysed, let us examine the characteristics which are common. Two of the important common characteristics are forms of response and sampling.

Forms of response is based on the control the evaluator wants to exercise over the respondents' answers. The evaluator may choose between fixed alternative answers or allowing the respondent to answer in his own words. The common kind of fixed alternative questions are of the following type :

Yes — No Agree — Disagree True — False

Yes — No — Undecided

Strongly Agree — Agree — Neutral — Disagree — Strongly disagree, etc.

Open ended questions are designed to permit a free response. Respondents are encouraged to talk freely and at length about the subject. Questions like 'What skills do you think you gained from the training programme?' or 'How would you rate the job performance of Mr. X ?' are examples of open ended questions.

Fixed alternative questions have the advantages of being standardisable, simple to administer and easy to evaluate and tabulate whereas the analysis of open ended questions is often difficult. The former may not adequately cover the complete range of responses whereas the latter are more flexible and possess greater possibilities of depth. Open ended question is more suitable where the evaluator has limited knowledge as to the kind of answers a particular question is likely to evoke or anticipate a great range of responses. Whatever may be the form of response, the question should be clear and unambiguous.

Sampling is the procedure by which we can infer the condition of a large body of people even though we quiz only a few (a sample). The representativeness of the sample depends on its kind and size. As already discussed, a sample must be, whenever and wherever possible, randomly selected. If randomisation is not feasible, a non random sample may be obtained, which is as representative as possible of the total population. Secondly, depending upon the availability of time, money and staff as large a sample as possible may be used for evaluation.

While analysing the relative merits and demerits of the evaluation measures, we shall analyse them in the light of their vulnerability to 'reactive effects'. The very fact that they are being 'experimented with' makes people feel that they must make a good impression, or if the

method of data collection suggests/responses or stimulates an interest the subject did not previously feel, the measuring process may distort the experimental results. Selltitz calls this as 'reactive effect'.

Interview :

Because it involves fact to face meeting interviews afford the personal contact with the respondents. Interviews also provide flexible means of obtaining data. Follow up question can be used to clarify hazy responses. On the other hand, the interview process is often expensive and time consuming. Because of the face to face nature, it has the highest reactive effects. This can be reduced by creating a friendly and open atmosphere.

Questionnaire :

Because of its impersonal nature, questionnaires avoid most of the embarrassment and anxiety of face to face interviews. Respondents have more time to think and answer. Questionnaire can reach many people quickly and the data can be processed speedily and statistically, especially where fixed alternative items are employed. On the other hand, they offer less chance for free expression of unanticipated responses. This can be improved by sending follow up questionnaire. A low return rate is another serious threat to the completeness of data gathered by a questionnaire. This has to be improved by proper follow-up action. Also, if necessary, the respondents' anonymity can be protected by not insisting for their signatures or names on the questionnaires.

Tests :

Tests are available in standard forms or can be tailor-made for a particular programme. They are generally used to test skill and knowledge. Tests are comparatively cheap and easy to obtain and employ. The limitations of tests include cultural bias and inapplicability. Some consider that tests are biased against trainees from lower socio-economic classes and as irrelevant to poor people. Most often attacked in this regard are intelligence tests and I tests.

Expert Opinion :

Expert opinion can be obtained either from the managers of the organisation itself or from outside consultants.

Opinion can be obtained from the managers regarding change in performance of the employees (as a result of training) in their job attitude, knowledge, initiative, dependability, judgement, etc. An outside consultant is chosen when objectivity, credibility and methodological skills are esteemed. The outside consultant probably has less of a personal interest in an evaluation's results than the manager whose programme is being investigated.

A crucial advantage of an expert's opinion is his ability to consider simultaneously the many aspects of training programme both tangible and intangible. Expert opinion is also helpful where an evaluation involves human values, e.g., the personality of the instructor or elements like appropriateness of a course's objectives.

Observation :

Observation is organised surveillance and appraisal of behaviour of others. In as much as it is less demanding of respondents' active cooperation, observation lowers the reactive effects, i.e., the tendency of some persons to falsify their behaviour in presence of others. The major limitations of observation arise from the resources it requires to recruit and train qualified observers. It also takes lot of time to cover an occurrence of unspecified beginning and duration; events do not happen on command. Since the observer is central to this evaluation measure, the hazards of human error or bias are ominous than with other measures.

Internal Feedback :

This refers to the unofficial transmission of evaluative comments within an organisation. People communicate opinions informally on the phone, or over lunch, or in a recreation club. Since they feel their identity will be protected, they tend to be more candid in these casual settings where poor trainees can be exposed and inadequate job performance can be revealed. Such leisurely comments can be captured in a form and manner suitable for an evaluation.

One of the greatest drawback of this evaluation measure is its reliability. People can lie informally as well as tell truth. Also, this sort of feedback carries with it a huge amount of useless information. Collecting enough of these unconventional reports to constitute an adequate sample of trainees' opinions can take a very long time indeed.

Organisational Documents :

Official papers that constitute the written records of administration like audit reports, programme budgets, employee rating forms, etc., can be used for observing changes in quality and/or quantity of documents, even though these documents are not specifically produced for evaluation purposes.

Organisational documents expedite the gathering of the data. The drawback of this system is that data is filtered and unfavourable reports about persons, programme or agencies go unrecorded. As such these data are not accurate indicators of the people or process being evaluated.

Index :

An index combines the results of two more evaluation measures to obtain one complete result for all measures. Since it is a combination of measures (interviews, questionnaires, tests, observations, etc.,) the evaluator can increase his confidence in the accuracy of his evaluation. It also allows him to choose the relative importance of, or weights for, each measure he employs in his index.

The important limitation of the use of index is its heavy dependence on the measures which comprise it. The reliability of the index depends, obviously on the reliability of the measures itself.

CONCLUSION

Having enumerated the various evaluation designs and evaluation measures, let us now come to the vital question 'which design or measure to choose?' It is not possible to choose any one method as suitable for all occasions. The selection of the design and measure should be based on evaluative needs, expertise and resources. The choice of evaluation

design is generally influenced by the intricacy of the training programme, the level of accuracy required for its evaluation, the availability of control groups and the ability to randomise. The pre-experimental designs are seldom recommended since they ensure neither accuracy nor generalisability. True experimental designs are the most sophisticated and ensure both accuracy and generalisability. But to employ such designs, lot of money, time and expertise have to be expended. Quasi experimental design provides the compromise, though such designs vitiate external validity. Regarding the evaluation measure, interviews and questionnaires are commonly associated with the measurement of attitudinal change. Tests are more applicable to an examination of knowledge and skill gained through training. In some cases, expert opinion and observation may be required for assessment of skills and job performance. Informal feed back is an integral part of organisational communications process any way and does not require an evaluation project to get started, however, its reliability is questionable. Such an analysis as given above does not preclude the employment of other evaluation measures and the success of an evaluation depends on the judicious selection of the design and measures appropriate to the programme, keeping in mind the resources available. □

Acknowledgements

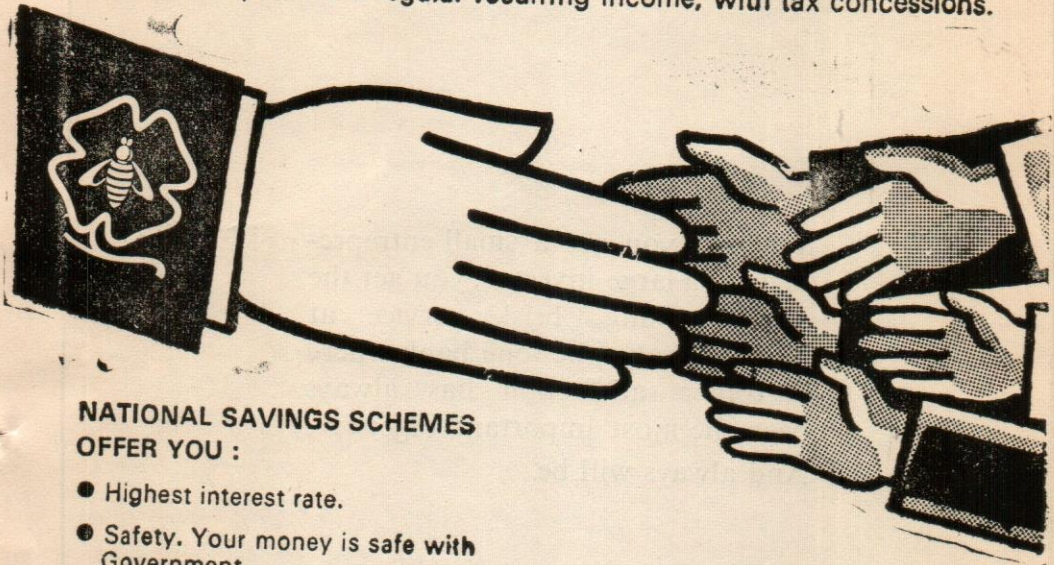
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Methods and Problems of Evaluating Training Programmes

N. R. Ranganathan*

Evaluation is an essential feature of all training programmes, whether in-company or institutional. Just as managements want a fair return on the investment of their capital, equipment and other resources, similarly, there is always an expectation of improved performance due to a training programme. The objectives of the problem then become one of the scope and extent of evaluation and the methods used there in. Accurate and quantitative methods are not available and as a consequence one has to rely on judgement and other evidence which again is subjective in nature. Evaluation is commonly interpreted to mean the effectiveness of a programme. Effectiveness on the shop floor of production line is quantified; but in administration it is, however, interpretative. If one considers that a particular programme was effective because it went through smoothly or it met the objectives or it enhanced and enriched the knowledge of the participants, then evaluation loses its meaning. For evaluation to be effective it has to be clearly stated in relation to the organisational objectives and goals derived from development needs. This would imply that a meaningful evaluation is possible only when there are clearly defined objectives, both short and long term ones.

Such objectives are normally derived from the specific development needs. For instance, if the objective is to fill development in an official's knowledge of a new concept or theory, then evaluation will be easy because he can be tested on his knowledge before and after the programme. But not all knowledge inputs are as yet measurable. For instance, if the programme is for developing his skill in leadership or decision making or motivation, then evaluation becomes difficult.

For objectives to be measurable objectively, they should meet four criteria: they should be realistic, understandable, achievable and measurable. No programme can be evaluated unless it is designed to meet targets within well defined span of time. Thus, evaluation becomes a matter of measuring the extent to which objectives are met, how they can be met adequately and how they relate to the short and long term

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corporate objectives. From here onwards, evaluation becomes a process of collecting information through a series of data collection.

To collect relevant data certain questions have to be answered :

- * whether the programme is possible of evaluation as per criteria established earlier;
- * who will evaluate—the participants or the course leaders or the sponsors;
- * what is the type of data that is required and how is it to be collected?
- * what is the method of processing this data and what conclusions are going to be drawn from the data ?

To answer these questions one has to be purely guided by experience as there is very little literature available on the subject. Data regarding improved participation is also scarce. This is true since the problem of evaluating senior managerial positions itself is yet to be resolved. The safest thing to do in such cases is to err on the right side by conducting the programme and exempt the evaluation systems.

Evaluation also provides a feedback on the effectiveness of the design and content of a programme and a basis for planning the development of senior administrators. Information culled from these data will suggest the areas in which development is needed for further improvement.

The major problems in evaluation are :

- * Generalised conceptual design,
- * Timing,
- * Targetting, and
- * Failure to differentiate between research and evaluation.

Many trainees fall a prey to the fallacy that evaluation is an end and not just the first step. This concept creates a tendency to concentrate on

the programme method rather than the specific content related to objectives. When the method gets acceptance then evaluation is abandoned. This can be disastrous as there is a lack of feedback, thus preventing useful future planning, operation and control of programmes.

Yet another pitfall is the general assumption that all programmes are good for all levels and people. Programmes if they are meant to improve individual effectiveness, then they have to be tailored to the individual's needs. If it is individual effectiveness one is contemplating, then evaluation has to be informal and narrative, rather than a number of structured questions with yes and no answers.

Another problem that dogs the footsteps is to decide on the type of programme and the selection of participants. A properly structured evaluation system would automatically have in it the criteria for selection of both programmes and participants. A generalised selection of either would result in the evaluation results being worthless. Hence major emphasis needs to be placed on the selection of participants for the evaluation to be meaningful.

Evaluation conducted during a programme or at the end of it and held in a posh hotel or hill station or similar environment gives more information about the superficialities rather than about the inputs. Again a programme conducted by a leading person's presentation and personality will not be very meaningful.

Another drawback is that people generally tend to say pleasant things, especially in writing, rather than the drawbacks. The purpose of an evaluation, as has been observed earlier is to know what the new inputs are, what has actually been learned or gained, whether a change in attitude or behaviour manifests itself at a later stage, whether productivity is increased and the like. These require special timing. Increase in productivity can happen soon but a change in behaviour takes quite some time. Although evaluation in writing is a good source of information about the participants intake of new knowledge, yet, if conducted too soon, it may be purely an academic exercise without visible results in the subsequent behaviour of an individual.

There is another tendency on the part of trainers and managements to think of evaluation as a justification for the money spent on the

programme. Financial evaluation should be separate and not confused with general evaluation of effectiveness. Evaluation to be objective should be structured in such a fashion that basic facts emerge. The questionnaire method of evaluation should not be so structured as to get only friendly or favourable response. Evaluation is an assessment of the programme effectiveness only and not on other trivia like the administrative arrangements, the lunch, etc.

Evaluation to be meaningful has to be carried out of the individual's effectiveness before and after exposure to a programme. At senior levels evaluation can be a threat if it is formalised. Programmes in behavioural skills, decision making, etc., often cannot be evaluated immediately at the end of the programme. The inputs have to be practised, mistakes committed, corrections made and all this involves time. There is another problem in evaluating programmes. Since development is a process of change and change takes place over a long period, it even becomes doubtful whether improved effectiveness is caused only by the programme or by other environmental agencies and criteria in addition.

Many trainers and administrators of programmes, tend to fail to distinguish between evaluation and research. Evaluation is based on observable and measurable data. Research is collection of data and arranging in a matrix or system to draw hypothetical conclusions there from.

The training technique to be utilised to achieve a desired result is research based, whereas whether the participant effectiveness has improved or not can only be seen by his behaviour, decision-making and risk taking. This is not to say that one should not collect data for research, but one should not use such data to determine or forecast effectiveness. Methods of evaluation in the present day tend to be more based on the behavioural and social science approach. The technique in collecting such evaluative data depends largely on the skill of the evaluator, the number, nature and availability of the participants about whom such data is collected. There are various sources for collecting such data.

The primary source is the participant himself. He can provide pertinent information about the usefulness of the programme in the furtherance of his work or career. The technique of participant evaluation may vary

from a formal report to evaluation, questionnaire, formal interview or a presentation to his peers or even an assessment. When a larger number of participants is available to collect data from, then evaluation becomes a research project and as such has to be handled by competent specialists. But when only a few participants are available then a group discussion and opinion survey would be desirable.

Another source is the people with whom the participants interact. They can best see attitudinal and behavioural changes in the participant and can be used to intelligently assess the value or otherwise of a programme. An evaluation of the course material, and capabilities and attitudes of the faculty can also be useful in assessing programmes. This might best be done by personal visits, extended participation in programmes offered and data collection from participants from other enterprises. This information should be collected more in an informal way rather than formal basis.

The evaluation thus obtained will be meaningful and will provide the administrators of programmes a tool to (a) review and restructure as necessary to meet the objectives, (b) measure its usefulness towards furthering corporate goals, and (c) provide valid criteria for measuring effectiveness. Evaluation thus conducted can be used to determine what changes have taken place and what further steps are necessary to effect such a change, if it has not taken place.

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Book Reviews

Impact of Economic Development on Industrial Relations: An Empirical Analysis

Pramod Verma

Published by Academic Book Center Ahmedabad 1979, 166 pp., Rs.20.00

Reviewed by Baldev R. Sharma*

Many direct and indirect variables, says the author of this monograph, influence industrial relations in a developing economy. While the proximate causes for industrial relations conflict are said to be the inflationary trends in the economy and the declining share of wages in the value added, the author admits that there are other equally critical problem areas. These additional causes are said to include alienation of the Indian worker, social needs of labour, disparity in wage rates, lag between productivity and wages and stagnation of real wages. As indicated by the sub title, these issues have been examined in this monograph on the basis of empirical evidence which was gathered by the author through his own studies or taken from secondary sources.

Here is a brief outline of the book under review. Chapter I contains a brief Introduction and lists a number of hypotheses which are examined in the subsequent chapters. Chapter 2 presents series of Profiles of the Indian production workers, salaried staff, and managers in terms of socio-economic background, occupational characteristics, and certain attitudes. Growth and spread of trade unionism are studied in Chapter 3, while occupational, industrial and regional wage structures are examined in Chapters 4, 5 and 6 respectively. Chapter 7 studies wage trends and attempts to find its possible determinants. Using time series and cross-section data, industrial conflicts are analysed in Chapter 8. And, finally, Chapter 9 summarises the main findings of the book and attempts some policy recommendations.

A lot is written every day in India on the subject of industrial relations. Barring few exceptions, however, these writings are based wholly on intuition, experience or theoretical models. The book under review is one of those welcome exceptions. From beginning to the end, it tries to put forth certain theoretical propositions and then tests every one of them on them on the basis of empirical evidence. Sophisticated statistical techniques like multiple regression have been used to determine the direction and magnitude

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of relations among variables. A few examples of this rigorous analysis are as follows:

(a) *Workers, Salaried Staff and Managers* : The workers face certain social and economic problems; these problems are not really appreciated by the managers; workers face a certain degree of alienation; managers are generally positively inclined towards the workers within the work context; and the quantitative increase in the number of salaried staff and the relatively faster increase in the emoluments of the salaried staff have not led to much improvement in either personnel practices or industrial relations.

(b) *Trade Union Membership* : Inflationary trends in the economy, increasing employment opportunities, wages and strikes are important factors in explaining variations in the growth of trade union membership over time, among different states and among different industries.

(c) *Wage Structure* : Disparities in wage structure between occupations, industries and regions are primarily influenced by productivity although other factors such as trade union membership, rising prices and capital intensity are also important to some extent.

(d) *Industrial Conflicts* : Inflationary conditions are more important in explaining variations in industrial conflicts at the macro level while at the state and industry level it is the variation in employment that is more important.

While the author must be commended for arriving at the above conclusions on the basis of rigorous statistical analysis, the book is not without some faults. To begin with, the title of the book is misleading. Economic development has nowhere been used in the book as a *variable* in the absence of which it is impossible to study its *impact* on industrial relations. Instead, the book attempts to study relationships among selected variables in one country at a particular stage of economic development. Clearly, one needs a different kind of study and research design to verify the contention that economic development does, in fact, influence industrial relations. A more appropriate title would have been *Determinants of Wage Structure, Wage Trends and Industrial Conflicts*.

The second weakness relates to the choice of independent variables for

studying variations in industrial conflicts in Chapter 8. Table 8.4 on pp. 142-143 clearly shows that non-monetary factors (e.g., personnel and retrenchment, leave and hours of work, indiscipline and violence, and others) account for more than half of the industrial disputes during the period 1961-1973. The author's own studies reported in Chapter 2 also highlights the importance of certain non-monetary factors (e.g. work technology, alienation, style of management, and personnel policies and practices) in effecting the climate of industrial relations. And yet the role of none of these factors was examined in Chapter 8, as a possible determinant of industrial conflicts. Instead, the factors examined are consumer price index, wage productivity ratio, wage rate, trade union membership, ratio of salaried staff to total employees and average daily employment of workers.

To be fair to the author, we should remember that available sources of secondary data do not contain information on any of the non-monetary factors described above. Nevertheless, the author should have acknowledged this basic limitation of the study so as to give his findings and conclusions a correct perspective.

Despite its limitations, the book under review is a significant addition to the growing body of literature on industrial relations. It should excite the imagination of others to study industrial conflicts by incorporating in the model additional variables wherever possible. The book is well-written and is by and large free from printing errors. □

Strategic Management

H. Igor Ansoff

Published by Macmillan Press Ltd., London, 1979, pp. ix+236, £ 12.00

Reviewed by P. Chattopadhyay*

Professor Ansoff has in this volume put forward a fitting finale to his earlier scholarly expositions, viz., *Corporate Strategy* (1965) and *Business Strategy* (edited) (1969) and a number of learned papers that appeared in various journals, like the *Harvard Business Review*, during the last two decades. Thematic

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link among them, in fact, underlines the growth and granulation of his ideas almost reaching their destination in this study, marked by an assimilation of massive detail, an incisive insight into the functioning of large industrial and other productive enterprises and an urge to draw hypotheses, based on axioms, creams of the findings of other authors, for testing them in the light of organisational behaviour, unfolding itself in varied processes of challenge and response. The span of focus in the book is large, necessarily because of the similarities of anticipation response reactions towards formulation of strategy and its management in different contexts.

It may be mentioned here that A. D. Chandler's *Strategy and Structure* has initiated several country studies on the subject, adding substantial empirical support to the original findings, extending the premises adding new knowledge often at variance with the original, and also sharpening the methodology of analysis adopted by Chandler. In this take-off context, Ansoff's is a valuable addition to knowledge, and to the literature, on the subject which has of late gained considerable significance in different management-related intellectual disciplines. As a work of painstaking research, extending over a decade, this study underlines a logical rigorous analysis of the strategic phenomena in complex organisations and a methodical approach to formulation of theory in an untrodden field.

Strategic management easily transcends the barrier of individual intellectual disciplines. The composite nature of strategic problems and the way they come require a highly sensitive touch and delicate handling, the indicators for action most of the time are no better than faint signs and symptoms. Depending on the degree of futurity involved, multi-disciplinary approaches should be at play for enhancing the degree of confidence of management, on the one hand, and for sensitising the state of preparedness, on the other. The changes in the external environment have been far too frequent and violent tending to catch management unawares. This game of chess has spelt checkmate to many an otherwise flourishing organisation. The motivational context varies from organisation to organisation with respect to whether it is producing goods or services for profit and otherwise. The exchange factor is common and the process of servicing external environments is generic. Thus, irrespective of whether these organisations are product or service-oriented or whether they are profit or non-profit organisations, they are all environment servicing. They all subscribe to large common behavioural features, except in minute detail. The way complex organisations seek to adapt to the environment in conditions of environmental turbulence

is the subject matter of the book, aiming at underscoring that an organisation will be successful if environment, response, culture and capability match each other. These four elements are dynamic, changing over time and within each. But Professor Ansoff does not take into view that a complex organisation may condition the environment itself so that it may not be enough to have only the response mechanism, it must also have necessary anticipatory organs and in-built thrust for marching ahead of others as a leader rather than as one led, imitating others.

On the other hand, capability has to have something in reserve for contending with the forces as and when they come up. Thus, though in the past the built-in capability might have been adequate to encounter the challenges, in the future it may not be so in view of the possible magnitude and complexity of these challenges. Ansoff attempts to embrace all these questions in what he terms "turbulence". Its primary concern being commercial strategic behaviour of ESOs, in terms of entrepreneurial and marketing aspects, the book takes account of a host of forces that exert both overt and covert influence on strategic behaviour of management. The already existing gap between theory and practice has further widened, in terms of the interface between them and each of them in its own way has failed to granulate and solidify while environmental turbulence has gathered storm all over. Ansoff thus sets about filling in these gaps, developing axioms on the basis of the discussion in the book and findings of other authors and formulating hypotheses, testing them in the light of theory and practice. The picture drawn is comprehensive, yet penetrating enough, of an issue which has gained a great deal of complexity over time due to various factors, both internal and external.

Noticing the feature of bureaucratic behaviour in both profit and non-profit organisations and different other similarities, at times considerable overlaps, his analogy of ESOs appears appropriate particularly because of the fact that efficiency and thrust are no more germane to particular types of organisations and the objectives they subserve. There is a noticeable emergence of hybrid organisations in which the 'public' and 'private' features get intermingled and intertwined. This is interesting in itself challenging, as it does, the traditional theories of the firm in several intellectual disciplines, "optics" as Ansoff calls them for the standpoints they offer. The thirteen chapters in the book not only describe its framework and the discrete elements comprising it or the models of budgeting behaviour and of turbulence, on the one hand, and of strategic choice or of transition behaviour, on the other, but also the questions of strategic capability, power, aspirations and culture, strategic

leadership and transition behaviour. The basic axioms attempt to put the essence of the present discussion of different aspects in capsule. He also puts in nutshell the findings of other authors. The entire discussion is integrated, subscribing to the main purpose of the book, as indicated in the foregoing paragraphs.

In dissecting the process of environmental changes, Ansoff notes several characteristic trends. First, he underlines the discarding of 'economic growth' as a primary instrument of social progress in conditions of affluence. Second, large enterprises are being increasingly taken as a social threat, contrary to their normal growth propensities and economies of scale. Third, acquisition and merger are viewed with suspicion as devices for stunting competition. Fourth, shifting social aspirations from 'quantity' to 'quality' of life have underlined emergence of 'zero growth' alternatives but without underscoring the means that could sustain social vitality. Last but not the least, gradual coming into the limelight of 'social responsibility' as a major corporate objective. All these have virtually meant loss of social centrality for the institution that created it. Obliteration and dilution of commercial focus of firms and increasing doses of commercialism in non-profit organisations would thus bring them closer in future, essentially as mechanism for servicing environment. Management of strategy in conditions of overt hostility is a task involving not only immense complexity but also constant threats, in a game of tight rope walking, having to strike a balance all the time for averting a fall into a fathomless pit.

Identification of the factors and forces, and their interplay contributing to success or even avoidance of failure, is attempted by Ansoff in his characteristic analytical style, taking on in his stride the condition of the rope, the types of performers and the consequences, as also chances of success or failure. His theoretical formulations are immediately put to test in the light of practical reality, culled from his experience in different countries of Europe and America. Variances in managerial styles and behaviour are taken into view in his discussion on managerial strategic capability sensitive enough to contain or to succumb to the forces of transition caused by turbulent environment.

Ansoff talks intimately of some of the crucial aspects of strategic management with a graceful abandon that is typical of multi-disciplinary specialisation and personnel acquaintance with the reality. His point of view is essentially top downward, from the general to the specific, though he moves with ease from

one point of view to the other in his attempt to unfold the enigma that strategic management by nature is. It is also a multi-faceted problem, the exact nature of which is hardly signified by the expression "complexity" as Ansoff uses. The process of identification of strategic problems, defining them and suggesting action to deal with them-all bear the imprint of his first-hand knowledge of what goes on in strategic management for surviving the onslaught of what the author brands as turbulence, bordering on turmoil many a time. Comprehension of complexity is not only attempted successfully but also compressed so much as to look simplistic all the way. This is a strong point of the author as he establishes credibility and rapport. He produces a theory, consisting of several parts and components, which is practicable, sharing his confidence and insight which is readable. A detailed bibliography at the end of the book has enhanced its value. It commends itself for wide readership among managers and policy makers, researchers and consultants in countries, both developed and developing, and with respect to organisations belonging to both private and public sectors. □

Studies in Indian Financial System

V. A. Avadhani

Published by Jaico Publishing House, Bombay 1978, pp 375, Rs. 70.00

Reviewed by N. L. Dhameja*

This book on Indian Financial System is an attempt to cover various components and aspects of Indian system from a macro angle. It presents the financial system covering the corporate sector, the agriculture sector and the unorganised sector in sixteen chapters.

The first chapter deals with the financial system and real system. The financial system is said to regulate dealings between various economic units including individuals and institutions in money assets including individuals and institutions including all IOUs. There is a direct correlation between the growth of the economy and the growth of the financial system, as the financial system by collecting and channelling savings into investment

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creates economic growth. Financial system is composed of two markets—money market and capital market. Money market institutions like—Reserve Bank of India, Commercial and Cooperative Banks—are intermediaries between savers, investors, and are also creators of credit and deposit money. The capital market institutions are mere financial intermediaries. The former influence the quantity of the money as well as the velocity of circulation, while the latter influence only the velocity.

The author differentiates between finance and capital, by saying "In modern theory, while the former relates to money and near money assets which have separate entity and marginal satisfaction to the holders, capital relates to the physical plant and capital goods such as machinery etc., which are capable of further production". However, the funds required for such capital goods like plant and machinery are supplied by the capital market institutions which are components of the financial system and this part of financial system is not made clear in the book.

The next two chapters discuss Reserve Bank of India (RBI) and the various components of money market. RBI is described as the centre piece of the financial system and an apex institute in the money market. It keeps a watch on the developments and disturbances in the financial system and provides liquidity to the system with a view to facilitating the smooth functioning of the system and controlling it.

A money market functions mainly as an aid to banking and monetary institutions to utilise their surplus funds and lend them in times of need. The Indian money market is characterised by the seasonality in the demand for funds, insulation from foreign money markets due to the strict exchange controls and the dichotomy between organised and unorganised markets.

Capital market and various issues related to these are discussed in Chapters 4 to 9, 11, 13, 14 & 15. Chapters 4 & 5 relate to the demand for funds from the government and private corporate sector. Discussing the demand of funds from private corporate sector, the author states that the retained earnings influence the demand for fund indirectly. The retained earnings are related with profits before tax and the allocation of profits between the government, shareholders and the company is described as a subject of management policy. Tax, however, is regulated by the government and is not a subject of management policy, and retained earnings better should be

related to profit after tax. Further, the capital structure of companies is said to be influenced by the tax structure and so there is high preference of internal capital followed by debt capital and equity capital in that order. The author further states that the internal retained profits of corporate sector are low due to high marginal tax incidence and this statement does not appear to be consistent with the previous one.

Supply of funds and various financial institutions and their operations are discussed in Chapters 6 to 8. Financial flows referring to flows between various sectors of the economy are indicators of financial development. The corporate sector and the Government sector are deficit sectors. They borrow more than they lend. The financial deficit of the corporate sector (non-departmental commercial undertakings) is more than that for private corporate sector. For the public corporate sector, the major sources of supply are Government, banking and foreign credit. For the private corporate sector, the corresponding sources are households, banking and other financial units through loans and advances, issue of securities and trade credit.

The role of the banking sector has grown sharply in the last decade. The direct contribution of household sector is small and that of the private corporate sector is negative in the sense that the Government contributes to the latter rather than the reverse. Financial ratios as discussed indicators of economic growth are ratios of financial assets to total assets, the financial intermediation ratio and the financial interrelation ratio. The financial intermediation ratio (the ratio of debt issued by the non-financial sector to debt given by the financial sector), and the financial interrelation ratio (the ratio of total debt to total investment activity), indicate that the role of financial investments and financial intermediation in the Indian Economy has been growing over the last decade or two.

The Interest rates in various markets and on different types of securities are discussed in Chapter 10. Interest rates are controlled by RBI in some form or another and none of the rates are freely determined by market forces. The interest rate charged by different institutions are explained but the study fails to highlight the differences in term-lending rates by banks and financial institutions.

The supply and demand aspects of capital market are inter-connected with the performance of corporate sector. The financing and performance of corporate sector as studied by RBI is discussed in Chapter 11. Ratios

indicating the various aspects of performance of corporate sector are also discussed in the same chapter.

Various controls, other than fiscal and monetary controls, on industrial projects are dealt with in Chapter 12. The chapter concludes that Government controls are wide ranging and deep enough to affect the free and unfettered working of the corporate sector. It also concludes that taxation is heavy and there is a need for simplification of the tax structure (though this aspect has not been covered in this chapter).

The study points out that the capital market is sluggish since the recession in 1967-69 and the investment is now picking up since then partly due to heavy taxation. But the study does not consider the impact of the reduction in the rates of tax on personal income over the last few years.

Agricultural finance and Government policy towards agriculture finance are discussed in the last chapter. To quote the author, "the agriculture should be made a business proposition and agricultural finance duly institutionalised to save the rural households from the hold of non-institutional agencies. Agriculture finance being tied intricately with the nature of agricultural activity, an all round attack including credit and non-credit aspects of the rural households would be necessary to achieve this objective. . . . A multi-pronged and an all out effort is necessary to develop and integrate rural financial system into the overall organised system in India".

Though unorganised and agricultural sectors are covered in this volume, it focusses on the need for a more detailed analytical study of the financial system of these giant sectors in India.

In short, the book is a comprehensive analytical study of Indian financial system and is presented in a lucid and simple manner. It will be useful for students of management.

Technological Forecasting

P. K. Rohatgi, K. Rohatgi and B. Bowonder

Published by Tata McGraw-Hill, New Delhi, 1979, pp. 332, Rs. 87.00

Reviewed by Prem Vrat*

Technological Forecasting—a broader concept of Futurology—is the art and science of predicting with certain confidence, of the future technological developments, scientific innovations and the future social, economic and political environments. Of late, a great deal of interest has been shown in this field of knowledge both at the global and the national level. A number of books have recently appeared on this subject, but the book under review is probably one of the first Indian books.

It has 13 Chapters with 5 appendices and is basically divided into two major sections. The first section (of five chapters) gives general introduction to the concept of Technological Forecasting (TF) and brings out various methodological approaches to TF (Chapter 2), identifying the sources of errors as well as its history, growth and application potential in various sectors. Chapter 5 deals with the Technology assessment and its relevance to developing countries like India.

However, it appears to the reviewer that the techniques of TF described in Chapter 2 are too capsuled and brief for a new and emerging field and may be, in regard to the understanding of the techniques of TF, this book could not possibly substitute some of the books published by the foreign authors. However, the authors have included at the end of each chapter a very good list of literature available on the subject. Another aspect which strikes this reviewer is the scanty relevance shown how TF could be used for corporate planning, long range planning etc. Because, TF should basically go as an input to shape future plans, the relationship between TF and corporate planning and long range planning should have been much more elaborate than few pages devoted to it in Chapter 4.

The second section of the book (Chapter 6 onwards) orients towards Indian conditions and the reviewer is of the view that this is one of the major contributions of the book, which, no foreign book, however good in

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methodology, could possibly supply. In Chapter 6, the authors have argued about the applicability of various techniques of TF in Indian situation on various aspects of Indian scene : resources and materials, energy, housing, population, health, food and education. Each subsequent chapter devotes to the futuristic aspects of food and agriculture, education, energy, health and family planning and economic, political and social environments and authors have reported many extensive research studies to focus attention on major problems which we, as a nation would be facing in future. Of course, most of the studies reported attempt future as it could be by 2000 AD. Interesting scenarios are written and useful policy directions are listed at the end of each chapter to deal with the future events as they visualise them. This section makes use of all major techniques of TF like trend extrapolation, Delphi, growth curves, correlation and regression analysis etc., to 'Indian conditions and presents some very valuable data for policy planning'.

The scenario of Integrated Political-Economic-Social-Technological India in 2000 AD (Chapter 11), is particularly interesting and revealing—touching the possibility of the substitution of bureaucrats by technocrats, new sets of social values, complete recycling of human wastes, more participative management structure, appropriate technology and above all a political hierarchy—technologically enlightened and trusting the scientists. However, it remains to be seen as to what extent such a scenario—which looks rather optimistic—comes true in rather a dynamic environment changing at a fast rate, because it appears that much of this scenario is based on intuitive judgement and the only quantitative aspects reported in this chapter are the trends of per capita income, GNP, net domestic product (NDP) by industrial origin and the production levels needed in 2000 AD for various major items of consumption.

Chapter 12, together with its appendices lists the research effort (including the research teams) being made in India by various organisations in this field of knowledge and it can prove to be a good directory of information to many interested in following the concept further.

Finally, in Chapter 13, the authors have identified the technologies that need to be accorded the highest priorities in India within the wide range of technologies varying from primitive to very sophisticated as well as basic needs like food to military needs. Of course, without claiming to look objective, the authors have suggested the priorities that need to be given to satisfy the need for food, energy and materials and have lamented that

to date, in their view, disproportionately less funds have been directed towards the above mentioned priority technologies and that this could be one of the reasons for our plight today. In this chapter they also bring out an undesirable and a desirable scenario for India in 2000 AD. The five appendices given at the end of the book are very useful.

On the whole, the book is well written and is almost error-free printing. Though, the price of the book is high it is a good bargain for the educators, scientists and organisations who wish to develop in the field of Technological Forecasting. □

Preparing for Standardisation, Certification and Quality Control

Kenneth Stephens

Published by Asian Productivity Organisation, Tokyo, pp. 298

Reviewed by M. V. V. Raman*

From the preface by the author and foreword by Dr. Brady of US National Bureau of Standards, one gets an understanding of the objectives of the book as well as the importance of the topics : standardisation, certification and quality control.

Briefly, quality and its related disciplines have played a significant role in providing higher standards of living for the people of the developed nations and is of great importance to developing countries as well. The book is written as a guide for developing countries who wish to set up or improve the existing standardisation and certification efforts for giving a fillip to economic development through integrating these efforts with quality control programmes.

The book is divided into four parts : Part 1 deals with Standardisation and Certification and consists of five chapters. Chapter 1 on General Perspective briefly touches on the need for standardisation, history and growth,

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relationship between standardisation to industrial development and national certification programmes.

The author emphasises that the national standardisation efforts must be established as one of the first steps to any serious industrialisation programmes and which must be actively supported and publicised, and says "in Asia the Singapore's notable rise in prosperity has been accompanied by a substantial boost to standards making and certification. Thus developments are significant in Hongkong, Taiwan and to a lesser degree in Philippines, Malaysia and Indonesia," It may be noted that India is not mentioned here. Another interesting observation is the British National Survey of public awareness of quality remarks : "Among other things 33 percent of the adults surveyed claimed that they looked for quality marks on products when shopping. Another 34 percent said that they would look for quality marks if they knew more about the marks and what they represent about the assurance of quality. This indicates the strong influence which quality marks can have on consumers". One wonders whether this holds good in developing countries.

Chapter 2 deals with the case study on Thailand Industrial Standard Institute, and serves as a model for understanding and implementing standardisation programmes and certification schemes.

Chapter 3 entitled 'Certification Programmes in Comparison', presents the survey of 7 Asian countries who responded to a questionnaire (the questionnaire was sent to 17 selected Asian countries). Chapter 4 discusses the comparative study of laws of various standardisation bodies.

Chapter 5 discusses integrated standardisation under the heads : industrial metrology (laboratory accreditation, precision measurement and calibration), legal metrology, certified reference materials, certification and quality marking, export inspection, applied research, and quality control.

Part II which deals with Quality and Quality Control, has two chapters (6 & 7). Chapter 6 on How to Ensure Quality discusses the implications of quality and quality control at the unit level. The author points out that the manufacturers often fail to make the distinction between 'design quality', and 'manufactured quality' and emphasises that the distinction is very important because with correct understanding of these aspects of quality the extremely

important fact is realised "that good quality and low cost" can be achieved simultaneously. The author further stresses two aspects, that is, control of quality and improvement of quality; former pertains to procedures used routinely in manufacturing processes in an attempt to achieve uniformity of quality and prevent too many defective products, and the latter to procedures and techniques for achieving specific improvement in manufacturing process where quality and production difficulties are apparent. A case study is provided in cost reduction through the application of quality control principles and methods.

Chapter 7 on Quality Control at national level highlights activities in this area as distinct from incompany activities and programmes relating to Quality Control. The discussion in this chapter pertains to national policies and organisation, roles of government organisations, national quality control society to the organising of seminars and conferences and promotional aspects relating to quality control. It contains a brief section dealing with Quality Control and Assurance Systems followed by a large number of references.

Part III dealing with Implementing Standards, has only one chapter (Chapter 8) entitled 'Quality Standards', which emphasises that the standards documented should themselves be of high quality so that it can serve a useful purpose. The author examines some existing standards with respect to (i) clarity of expression and presentation of facts, instructions, requirements, etc, (ii) technical acuity, and (iii) adequacy and accuracy of compliance with the sampling procedures. While discussing the clarity of expression the author quotes profusely from various authorities rather than logically structuring the points to be considered in such a presentation. Technical acuity, that is technical accuracy in specifications is discussed through an example, Thai Standard TIS-18-2514, specification for asbestos cement corrugated sheets. The example serves to illustrate that certification, as a means of implementation of standards, helps to improve the quality of standards through feedback of errors, inefficiencies, misinterpretations etc., technical committees, standards councils, or other responsible bodies, provided the feedback loop itself is implemented.

'While discussing compliance sampling procedures the author provides a summary and critique of the 'quality characteristics', 'tests' and 'sampling procedures' from JIS, BSI and ISI Standards (Japanese, British and Indian respectively) of cotton sewing thread, and points out that in view of the misapplications of sampling principles and theory in many national and

international standards, it becomes evident that standard makers should learn or seek out the knowledge of these principles and theories for preparing standards.

Part IV consists of Appendices (100 pages) dealing with material pertaining to various aspects of standardisation supporting the case study provided in Chapter 2 (taken from the manual prepared by Rohn Hopper of the UNIDO project with Thai Industrial Standards Institute). Another important appendix is "Draft ISO Guide on use of Reference Materials in ISO International Standards" (Revision of ISO-REMCO 6). Appendix 7-1 Part II is entitled "Partial list of organisations on Quality Control in various countries"; the word 'organisations' seems to be inappropriate here and probably should read 'Professional Associations'.

The author has undertaken numerous technical assistance assignments in developing countries and the book is based on these experiences. The discussions on the subject matter are brief. Quotations from other experts in the field are liberally used and a detailed reference material is provided at the end of each part. This should prove to be useful. The detailed presentation as a case study of the setting up of the Thailand Industrial Standard Institute (TISI) and the associated appendices provides an example of a successful project in the field of standardisation and certification, integrating the same with quality control programmes. The author's emphasis is well placed, particularly for the developing countries, when he remarks that quality control principles and methods have proved effective in bringing about *cost reductions* as well as *improved quality* and *greater productivity* (of good quality units). Again the developing countries would do well to recognise the role of quality control techniques in quality improvement and cost reduction as the author has implied in his presentation. The distinction of activities of quality control at the unit and the national level is appropriate and necessary; both micro and macro approaches are required in developing countries for the propagation of quality control and its integration with standardisation, assisting in speedier industrialisation, leading to improved standards of living of the people of the developing countries. The book is a useful guide and a reference material for policy makers, administrators and practitioners in the fields of standardisation, certification and quality control. □

How to Motivate Your Sales Force

Published by Modern Business Reports, New York, pp. 96, 1977

Reviewed by R. P. Bhukhandi*

One of the most challenging and difficult tasks of a sales manager is to motivate the sales force. With it, the company achieves its desired objectives which result in profit generation. Sales is the outcome of all the marketing activities of a company, and this is accomplished by the sales force. Hence, a motivated sales force can prove to be the company's most valuable asset.

A number of books written by academicians are available on motivating sales force. But the book under review has been written by practicing managers of some of the largest and successful enterprises of USA. Each chapter has been contributed by a different author who has drawn mainly from his experience. Thus, there is less of theorising and more of practical aspects related to the motivation of sales force.

In addition to the principles of motivation, the book also deals with the programmes of motivation as being currently practiced in some of the American concerns. Three related areas of sales force motivation, *viz.*, management's responsibility, motivational programmes and salesman morale have been explored in separate chapters.

The primary responsibility of motivating the sales force lies with the management. It must believe and encourage its sales staff. The positive attitude on the part of the management is the corner-stone for the effectiveness and success of any motivational programme. Just as the salesman has a responsibility towards the management, the management also, in turn, has the responsibility to motivate him. GTE Sylvania's Sales Promotion Manager puts it very succinctly, "Effective, successful, creative application of the principles of motivation is the test of effective, successful, and creative management."

Most of the papers very clearly distinguish between motivation and inducement. While motivation is the inner drive that inspires action, inducement

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means rewards or material gratification that does not remain in the memory of the recipient for a long time. This distinction has relevance for the line managers entrusted with the responsibility of sales force motivation. They highlight the importance of "recognition" of a salesman's efforts. The "feeling of importance" motivates people more than other material rewards. Motivation is a continuous process and is an on-going challenge.

Sales force motivational programmes vary with the needs and circumstances of different companies as motivational requirements of one company are not precisely the same as those of the other. However, the principles of motivation remain the same. The book emphasises the need of "impelling" rather than "compelling" the sales force in all motivational programmes.

Sales contests have been the most common motivational programmes of a large number of enterprises. The contest based on tradition has proved to be the most successful tool of motivation because "it builds pride, which, in turn builds sales success" and programme "based upon tradition and pride is almost guaranteed to succeed."

Salesman morale is another aspect of the motivational programmes which has been dealt with in the book. Morale building and motivating sale force are two inseparable responsibilities of management, as one leads to the other. "A highly motivated salesman has high morale. Conversely a salesman with high morale is highly motivated". Thus "an effective motivational programme results in high salesman morale, which results in better sales performance and increased profit for a company".

Therefore, morale problems should not be ignored by the management. These have to be solved in order to make any motivational programme a success.

The papers have been presented in a simple manner and are devoid of management jargons. The basic points of motivation which are highlighted in the book are applicable not only to the field of sales management but also to other areas, wherever human element is involved. The people have to be trusted, given due recognition, and kept in high morale; and this in brief describes the theory of motivation. Any motivational programme which lacks human understanding, and has negative approach, is bound to fail; it may even backfire. All the managers dealing with people, ought to have an understanding of the psychological factors involved in the process of motivation.

Public Distribution Systems. Evolution, Evaluation and Prospects

Published by Indian Institute of Management, Ahmadabad, 1979

Edited by Prof. N. Dholakia and Rakesh Khanna

Reviewed by J. D. Verma*

In a welfare state, one of the most important objectives of the state is to ensure timely and regular supplies of essential commodities falling in the general customer's inventory of consumption goods, at the cheapest possible price. The state, to achieve this objective, relies on several methods including free operation of demand and supply, of course at times with the assured support facilities to facilitate free and timely movement of consumables from one point to another, adopting statutory controls and putting restrictions on the supply and demand and later taking over the function of procurement and suppliers of these consumables and then taking to the consumers either directly or through its nominated agencies. Depending upon the political system prevailing in the country, state can even introduce statutory compulsions on the consumers to consume within limits. Nevertheless, State, whatever political system it is affiliated to, has to ensure that the consumers do not suffer for long from real or created shortages. This objective gathers added importance during the time when abnormal situation like scarcities arising out of droughts, epidemics and failure of crops emerges. Moreover, when the inflationary situation becomes rampant, the traders get an upper hand to create artificial shortages by withdrawing stocks of essential commodities for the purpose of making higher profits through artificial scarcities. Perhaps because of the last year's drought in the country coupled with the high rate of inflation prevailing in the economy, the Union Government had earlier during the year rightfully thought of introducing a public distribution system as an important instrument of policy to meet the basic consumption needs of large segments of the Indian population. Present situation apart, even otherwise Government of India has always been keen to ensure timely and regular supplies of essential commodities at reasonable prices to the masses.

In order to highlight the implications of introducing such a system and bring to fore important aspects which the Government may consider while introducing this system, the Indian Institute of Management, Ahmadabad

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organised a Seminar in August 1976 wherein they brought together the policy makers, the policy implementors and the researchers. The participants in the Seminar presented papers on various aspects of the problem covering its evolution, evaluation and future prospects. These papers have now been brought out in the form of a book.

The participants, undoubtedly, are well known for their knowledge and experience on various aspects of this problem. Some of the papers are based on first-hand surveys conducted by the authors for writing their respective papers. The fair price shops which are considered to be an important mechanism of implementing public distribution system have been referred to by various authors. Likewise, there is a reference to the working of these fair price shops and other such media as are considered effective for ensuring regular supplies of essential commodities to the consumers at a reasonable price in various states where, undoubtedly, the success varies as per local conditions. One of the important aspects of the problem relates to monitoring the prices and ensuring timely supplies of the essential commodities to the distribution links in the field. The paper on 'Monitoring of Prices and Availability of Essential Commodities' written by one of the administrators concerned with this programme in the Union Ministry of Civil Supplies and Cooperation accordingly emphasises that the successful working of the public distribution system has got a positive correlation with the availability of essential goods. In this task, it has been stated that the enforcement measures which can be adopted by the administrators at different levels can ensure reasonable degree of success.

Of course, one has to keep close and continuous watch on the inventory situation as an unnecessary inflated inventory at any stage whether it is with the producer, the seller or the consumer will have an adverse effect on the successful working of any public distribution system. There is need for maintaining an effective check on the movement of prices as frequent and violent changes in the prices of essential commodities will make the public distribution system ineffective. Everyone will think in terms of anticipated shortages and thereby indulge in hoarding. Perhaps the experience during the world war II could be a useful quite to the administrators of the policy in minimising the evil of hoarding the resultant disadvantages to the producers, distributors as well as consumers. In fact an important omission in the book seems to be the lack of contribution from any one of those civil servants who were concerned with the rationing/public distribution of essential commodities during

the World War II. Some of the retired civil servants could be invited by the organisers of the Seminar to enlighten the participants with their experiences in this regard. No doubt, the objective at that time was not the same as it might be today. Nevertheless, even then the Government very much wanted to keep the impact of inflationary situation as low as possible and at the same time ensure that supplies to the army at that time remain uninterrupted. In fact keeping aside the objective behind the urgency of the public distribution system adopted by the then Government, the methodology adopted was more or less the same, i.e., starting fair price shops, rationing shops and bringing about almost complete control on the supplies of essential commodities as also restriction on the consumers to keep their inventory confined to the extent as was considered economically desirable.

A paper included in the book deals with the consumer's reaction to the usefulness of the fair price shops. It makes a very interesting study as even some of the consumers have not responded favourably to the idea of having fair price shops. The reasons, of course, do not seem to be absolutely objective, rather it is the individual's distrust in the working of these shops. By and large, the papers presented in the book are quite interesting and useful for all those who are concerned with the policy making concerning the public distribution system, issuing guidelines to the field where the system has actually to be implemented. The book is equally useful to the District Industries Centres in, on one side, planning the programmes of establishing new Industrial units in various consumer items and on the other, assisting the small scale units in marketing their products. □

Training and Administrative Development

Edited by Ramesh K Arora and Jagdish C Kukar

Published by HCM Institute of Public Administration, Jaipur, pp. 197, 1979, Rs. 40.00

Reviewed by Ram Prakash*

Administrative Training is an established tool for exposing the civil servants to latest techniques of management planning and control and is ambitiously

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aimed to bring about appropriate attitudinal changes. It is the general experience that after training in the "back home" situation the enthusiasm for utilising newly acquired knowledge and skill wanes soon. A middle-aged businessman visits a strange club and happens to meet his landlady with inflated charms, but knows he cannot touch. In the same way quite often a young manager is deputed for training to a staff college to be exposed to the skills of higher managerial control, only to return to his old job where there is hardly any scope to apply these techniques. Inevitable result is frustration. Is it due to ineffectuate training or due to apathy from within the organisation to accept "new fangled" techniques or failure of trainers to bring attitudinal change at certain age of administrators ?

The book under review attempts to find satisfactory answers to these questions and suggests corrective mechanism in training efforts. It contains 21 essays selected from different issues of house journals of the HCM State Institute of Public Administration (SIPA).

The papers cover different dimensions of training management and have been written by eminent professionals in this field. The forestatement of the volume rightly mentions answer to the questions relating to the gap in ideal and practice can be found in a pragmatic way.

Chaturvedi, mentions in his paper that "Training, however, scientifically conceived and implemented, cannot yield desired result unless other essential of a sound personnel policy exist. Training in order to be effective has to be sustained by adequate career planning, placement and promotion policy". Bhargava, Director, SIPA also shares the same view and raises issues relating to personnel policy in the government. According to Mehta, late Chief Secretary, Govt. of Rajasthan, effective management depends on three basic skills which have been called technical, human and conceptual (a thought earlier expressed by Robert L. Katz in his article appearing in January-February, 1955 issue of Harward Business Review). He concludes that the approach to executive development for the above skills has to be a part of day-to-day activity of the organisation. Prof. Jagannadham emphasises needs of a "systematic" approach to administrative training and coordination of research with training. Ramesh Arora (one of the editors of the book) gives a description of SIPA activities in one of the essays and in the other refers to the need to constitute a National Training Commission as an advisory body for formulation of a national training policy. The author is of the opinion that "a civil servant in about 30 years of his career in government

service should be able to attend one training programme every five years". The operational details of the proposals made are left to the imagination of the readers. Kurup (formerly Director, SIPA) highlights the need of an adequate administrative set up charged with the responsibility of looking after training activities in government departments. How this is going to promote training profession is not clear. However, experience of SIPA in conducting training programmes in important areas like rural development and judicial administration have been cited by Hari Mohan Mathur, (Joint Secretary, Department of Personnel, Govt. of India) and Mohan Mukerji, (former Chief Secretary, Government of Rajasthan). Kukar, Sisodia and Richard Parkins raise the question of developing "right attitude". How change in attitude can be brought about has been well illustrated through experience-based paper "Designing an Organisational Behaviour Laboratory" by Uday Pareek (Senior Professor of Indian Institute of Management Ahmedabad) and his two associates. The training practitioners specialised in Behavioural Science connected with personality functioning and understanding human behaviour, will find this essay extremely interesting and informative.

The book on the whole, is a useful collection of essays on different aspects of training to be made available at one place. The utility of book could have been enhanced if the editors had arranged the essays in some meaningful order. For instance, the essays on organisational aspects of training institutes based on SIPA experience could be put together in a logical sequence. It is, no doubt, true that when selected essays are written by different authors the editors have a problem of working out a design frame for their presentation in some logical sequence to answer questions relating to gaps in ideal and practice. □

The Principles of Practical Cost-Benefit Analysis

Robert Sudgen and Alan Williams

Published by Oxford University Press, New Delhi, 1978, Rs. 60.00

Reviewed by P. Chattopadhyay*

Literature on Cost-Benefit Analysis has been growing at a fast pace, both in economics and in various techno-accounting disciplines. Some esoteric

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flavour is already being emitted by CBA experts, partly in the formulation of the cost-benefit principles and partly in the context of their application to different projects, particularly public projects where such analysis is intended not only to show a logical way of project selection but also to act as a mechanism of formal and explicit accountability of the public decision maker to the public, by way of, so to say, putting all the cards on the table. In this respect it is relevant to understand project in its broad definition indicating a way of using resources, a decision involving choice between alternative ways of undertaking a project. Project appraisal, on the other hand, involves a process of investigation and reasoning for assisting decision makers towards an informed and rational choice.

Literature so far has remained in the realm of sophisticated discussion among technicians on the subject. In such a course, two points appear to have been missed so far. One, a coherent analysis of all that goes in Cost-Benefit Analysis has been absent in most part, missing links have been far too many and establishing rapport with the uninitiated has not figured among the objectives of Cost-Benefit Analysis. Its major concern has been with projects and their analysis, whether a certain project should be undertaken or not. This book by Sudgen and Williams bridges a major part of this gap.

Two, in view of the growth in the literature on the subject, it has become essential to churn out the cream with its emphasis on applicability, purposiveness and tooling. All this is also available in the book in a substantial measure. More than other things, the book generates a good deal of confidence among readers and practitioners as to the niceties of the technique of CBA and the cautions that are necessary for its application in respect of different types of project analysis. One easily appreciates the authors' emphasis that Cost-Benefit Analysis is a way of organising thought, a way of reasoning about decision making.

In three parts and sixteen chapters, the reader is led from the introductory aspects of CBA to the problematic contexts of financial appraisal involving time, costs and returns, the discount rate, accommodation of uncertainty and input constraints. In the final part, the authors give a competent account of the objective in Cost-Benefit Analysis, shadow pricing, price changes and their direct and indirect impact, valuation of unmarketed goods, distribution of income and the discount rate. An epilogue provides the context of CBA, the decision-making process and the political and ethical

foundations of CBA. Copious illustrations, charts and diagrams as also problems at the end of each chapter and their solutions have brought down to earth, taking, as the authors do, problems involving different features and the way one should go about them.

The whole framework of CBA has been subjected to a thorough scrutiny in these chapters and with a graceful abandon the authors have taken the reader from one problem area to another, unfolding the complexities and pinpointing the issues that should be taken in view. In short, perhaps for the first time, CBA is dished out in a palatable form, containing both the difficult parts and the way they should be handled. The book commends itself for wide readership among students of economics, management, decision makers and teachers and researchers. In the context of the planned economy in this country and the large number of public sector projects, this book should be found handy by the policy makers and managers.

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