CHAPTER- 1

BHEL – A BRIEF INTRODUCTION

In the post-independence era when India was moving towards Industrialization, the major thrust of the Government was in the core sector and this sector was given to the public sector. With this objective, Heavy Electricals (I) Limited was set up in BHOPAL in August 1956 with a view to reach self-sufficiency in industrial products and power equipment. This plant was set up under technical collaboration of M/s AEI, UK.

Three more plants were subsequently set up at Tiruchy, Hyderabad and Haridwar with Soviet and Czechoslovakian assistance in May 1965, Dec 1965 and Jan 1967.Respectively.

As there was a need for an integrated approach for the development of power equipment to be manufactured in India, Heavy Electricals Ltd. Bhopal was merged into BHEL in 1974.

BHEL manufactures over 180 products under 30 major products groups and caters to core sectors of the Indian Economy viz, Power Generation & Transmission, Industry, Transportation, Telecommunication, Renewable Energy, etc. The wide network of BHEL'S 14 manufacturing divisions, four Power Sector regional centers over 100 project sites, eight service centres and 18 regional offices, enables the Company to promptly serve its customers and provide them with suitable products, systems and services efficiently and at competitive prices. The high level of quality & reliability of its products is due to the emphasis on design, engineering and manufacturing to international standards by acquiring and adapting some of the best technologies from leading companies in the world, together with technologies developed in its own R&D centers.

BHEL has acquired certifications to Quality Management Systems (ISO 900 I), Environmental Management Systems (ISO 1400 I) and Occupational Health & Safety Management Systems (OHS AS 18001) and is also well on its journey towards Total Quality Management.

BHEL's operations are organized around three business sectors, namely Power, Industry including Transmission, Transportation, Telecommunication & Renewable Energy and Overseas Business. This enables BHEL to have a strong customer orientation, to be sensitive to his needs and respond quickly to the changes in the market.

BHEL OBJECTIVES

A dynamic organization is one which keeps; its aim high adopts itself quickly to changing environment. So here we are in BHEL. The objectives of the company have been redefined in the corporate plan in 2002 to be taken new one.

GROWTH

To ensure a steady growth by enhancing the competitive edge of BHEL in existing business new areas and international market so as to fulfil national expectations from BHEL.

PROFITABILITY

To provide a reasonable and adequate return on capital employed, primarily through improvements in operational, efficiency, capacity, utilization and productivity and generate adequate internal resources to finance the company's growth.

FOCUS

To build a high degree of customer confidence by providing increased value for his money through international standards of product quality, performance and superior customer service.

PEOPLE ORIENTATION

To enable each employee to achieve his potential, improve his capabilities, perceive his role and responsibilities and participate and contribute to the growth and success of the company to invest in human resources and continuously and be alive to their needs.

TECHNOLOGY

To achieve technological excellence in operations by development of indigenous technologies and efficient absorption and adoption of imparted technologies to suit business and priorities and provide competitive advantage to the company.

IMAGE

To fulfil the expectations, which stake holders like Government as owner, employees, customers and the country at large have from BHEL.

TRANSMISSION

BHEL is the manufacturing transmission equipment for all voltage ratings including the 400 KV class transformers, switchgears, control and relay panel, insulators, capacitors and other substation equipment.

Highlights:

Systems

- HVDC
- Compensation - Series & shunt (SVC)
- Substation
- Power system analysis
- SCADA

Products

- Transformer (Oil filled and dry type)
- Switch gear (Oil, vacuum & SF medium)
- GIS
- Capacitor
- CT/PT/CVT
- Reactor

Voltages

- AC up to 400k; 800kv under development
- DC up to 500kv

Major Clients

- SEB'S
- West Bengal Power development Corp. Ltd.
- Tenughat Viduyat Nigam Ltd.
- NTPC
- Rashtriya Ispat Nigam Ltd.
- Indian Organic and Fertilizers Ltd.
- National Fertilizers Ltd. Etc.

INDUSTRY

Offer a comprehensive range of electrical, electronic and mechanical equipment for most of industries like fertilizers, petrochemicals, refineries paper, sugar, rubber, cement, metal, steel, aluminium and mining.

Highlights

Products and systems

- Turbo set
- Diesel generator sets
- Boiler
- Steam generator
- Pump
- Valve
- Seamless steel tube
- Drivers and controls
- C&I Etc.

Application

- Fertilizer
- Petro Chemical
- Refinery
- Coal
- Steel
- Aluminium
- Mining Etc.

Major Clients

- National Aluminium Co.
- Hindustan Fertilizers & chemical Ltd
- Hindustan Paper Corp.
- Hindustan Sugar, Mysore Sugar
- Indian Oil Corp.
- Defence Ministry
- Indian Petro Chemicals Ltd.
- Reliance Industries Etc.

TRANSPORTATION:-

BHEL offers a variety of transportation equipment to meet the growing needs of the country. 65% of Indian Railways are equipped with BHEL manufactured traction equipment. Underground metro also runs on drives and controls supplied by BHEL. BHEL has taken up the manufacturing of Locomotives to provide a pollution free transportation. BHEL also offers a battery operated Passenger was provided to Delhi Government.

Highlights
Products

- Locomotive (electric, diesel electric) and bogies
- Traction motor, traction generator/ alternator

- Transformer, CVB/ high speed CB, smoothing reactor, converter/ invertor
- Chopper associated control equipment, electronic control etc.

Application
- AC and AC_DC locomotives
- EMUs & DMUs
- Electric vehicles

Contribution
- 70 % of the Indian Railways is equipped with traction equipment from BHEL
- Countries first underground metro at Calcutta equipped with BHEL Drives and controls

Major Clients
- Indian Railways
- Port trusts Viz Mumbai, Calcutta, Chennai etc.
- Steel Plants
- Cement Plants
- State Electricity Boards
- Urban transport Authorities Etc.

OIL AND GAS

Equipment for oil and gas exploration and transportation is manufactured by BHEL.

HIGHLIGHTS

Products
- Drilling Rigs
- Cathode protection system
- Line pipes
- Service contracts undertaken for rigs in operation
  Major Clients

    - Oil and Natural Gas Commission
    - Oil India Ltd.
    - Gas Authority of India Ltd.
    - Mazagon Docks Ltd.

NON CONVENTIONAL ENEGY

BHEL is playing a vital role in helping to harness the vast renewable source of solar, wind and biogas energy. BHEL has supplied several water heating systems, wind mills, biogas generators and photo voltaic system.

TELE – COMMUNICATION

BHEL has entered the field of telecom with electronic, PABX system based on indigenous technology from C-DOT.

MANUFACTURING TECHNOLOGY:-

BHEL has 14 manufacturing plants which are spread over different parts of the country having unique manufacturing and testing facilities, CNC machines, turbine blade shape system, system banner, 8000 ton hydraulic press, heavy duty lathe milling machines and many more are available.

RESEARCH AND DEVELOPMENT:-

A highly talented and experienced team of the scientists from the backbone of BHEL Corporate R&D.

A few accomplishments are:-

- o Direct ignition of pulverized coal (DIPC)
- o Magnetic Hydro Dynamics
- o Aerostatic Bearing

AFTER SALES SERVICE:-

BHEL has 8 organized service centres which are geographically distributed throughout the country. It also undertakes power plant renovation and rehabilitation jobs.

EXPORTS:-

The organization commitment to quality has earned recognition from over 45 countries; export order range from equipments to turn key projects to consultancy services.

BHARAT HEAVY ELECTRICALS LIMITED JHANSI (UNIT)

A BRIEF INTROCUCTION

By the end of 5th five-year plan, it was envisaged by the planning commission that the demand for power transformer would rise in the coming years.

Anticipating the country's requirement BHEL decided to set up a new plant which would manufacture power and other type of the transformers in addition to the capacity available at BHEL Bhopal. The Bhopal plant was engaged in manufacturing of transformers up to 220 KVA, Class and Instrument Transformers.

This unit of Jhansi was established about 14 km from the city or the NH No.26 on Jhansi Lalitpur road. It is called second-generation plant of BHEL and was set up in 1974 at an initial cost of Rs. 21.03 crores inclusive of township. Its foundation was laid by Late Mrs. Indira Gandhi, the Prime Minister on 9th Jan 1974. The commercial production of the unit started in 1976-77 with an output of Rs. 53 Lacs.

This plant of BHEL is equipped with the most modern manufacturing processing and testing facilities for the manufacture of power, special transformer and Instrument transformers, Diesel shunting Locomotives and *AC/DC* Locomotives. The layout of the plant is such that it is well streamlined to enable smooth material flow from the raw material stages to finished goods. All the feeder bays have been laid perpendicular to main assembly bay and in each feeder bay raw material smoothly gets converted to subassemblies, which after inspection are sent to main assembly bay.

The raw material that is needed for manufacture is used only after thorough material testing in the testing lab and with strict quality checks at various stages of

productions. This unit of BHEL is basically engaged in the production and manufacture of transformers of various type and capacities. With the growing competition in the transformer section, in 1985-88 it under took the re-powering of DESL. Subsequently it started manufacturing complete Diesel Electric Shunting Locomotives of various ranges BHEL has progressed a step further in undertaking the production of *A/C* Locomotives for Indian Railways. And subsequently it is manufacturing *AC/DC* Locomotives also.

THE PRODUCTION PROFILE OF BHEL JHANSI UNIT

	PRODUCTS	RATINGS
01	Power Transformer	Upto 220 KV Class 2.0MVA
02	Special Transformer	Upto 110 KV
03	ESP Transformer	100KV, 1400 MA
04	Freight Loco Transformer	3900 to 5400 KVA & 6500 KVA (3 Phase)
05	ACEMU Transformer	Upto 1000 KVA 15KV (1Pase) 1385 KVA
06	Dry Type Transformer	Upto 3150 KVA
07	Bus-duct	Upto 15.75 KV generating voltage
08	Instrument Transformer	VT & CT upto 220 KV class
09	Diesel Electric Loco	Upto 2600 HP
10	ACDC Locomotive	5000 HP
11	Over Head Equipment cum Test Car	

GROWTH OF PRODUCTION AND MILESTONES OF JHANSI

1976-77

Start of Instrument Transformer production.

1977-78

Start of Traction Transformer and Power Transformer (upto 132 k V)

1978- 79

Start of HFTF type freight Loco

1979-80

Commissioning of 2,500 kV DG Set (due to server Power Cuts)

1980-81

Start of ESP Transformer

Start of 220 kV Power Transformer.

1982-83

Achieved Break Even

1983-84

Start of Bus-duct

1984-85

Start of dry type transformer.

1985-86

Re-powering of Diesel Loco Started.

196-87

Start of new Diesel Loco Manufacturing.

1987-88

Manufacturing facilities for AC Loco.

1988-89

Crossed 100 crore target.

1990-91

Successful design and manufacturing of 450 HP 3 Axel Diesel CCI

1991-92

Manufacturing 2600 HP Diesel for NTPC.

1992-93

Successful Design and Development of 5000 HP Thyristor control Locomotive.

1993-94

Unit has been awarded ISO-9001 certificate for quality systems.

1994-95

240 MVA Power Transformer Produced first time.

1995-96

AC/DC Locomotive first time in India.

1996-97

100th Loco Manufactured.

1997-98

250 MVA Transformer produced first time.

1998-99

Developed Overhead equipment cum test Car Exported one Diesel Loco to Malaysia.

1999-2000

Start of Diesel Hydraulic Shunter.

2002-2003

Start of rail cum road vehicle, utility vehicle, Diesel electric power car and certification of EMS 14001 from DNV.

2003-2004

Certification of OHSAS-18001 from DNV. Start of BPRV and DG set.

2004-2005

Start of ship lift system.

HUMAN RESOURCE MANAGEMENT

1. INDUCTION OF MANPOWER:

BHEL Jhansi at present has 1974 manpower strength at various levels. In BHEL the levels are broadly categorized in 3 groups:

      1. Executive Cadre

      2. Supervisory Cadre &

      3. Workmen Cadre.

The induction of workmen and supervisors is done at unit level whereas in executive cadre, it is done at Corporate Level. Various broad designations covered in the above 3 categories are indicated below:-

A.   **Executive Cadre**

    i)   Engineer/Officer   E1

    ii)   Sr. Engineer/Sr.Officer   E2

iii)	Dy.Manager	E3
iv)	Manager	E4
v)	Sr.Manager	E5
vi)	Dy.GM	E6
vii)	Sr. DGM	E6-A
viii)	AGM	E7
ix)	GM	E8
x)	ED	E9

B. Supervisory Cadre

i)	Chargemen	S1
ii)	Asstt. Foreman	S2
iii)	Foreman	S3
iv)	General Foreman	S4
v)	Executive F/Man	S5
vi)	Sr.Exe. F/Man	S6
vii)	Gen Exe. F/man	S7

C. Workmen Cadre

i)	USW	A01
ii)	SSW	A02
iii)	Artisan Gr. IV	A03
iv)	Artisan Gr.III	A04
v)	Artisan Gr.II	A05
vi)	Artisan Gr.I	A06
vii)	Technician	A07
viii)	Sr.Tech	A08
ix)	Master Tech	A09
x)	General Tech	A10
xi)	Executive Tech	A11

However, the induction level in each cadre is defined and is done only at the minimum level of the cadre. For example, induction in workman cadre is done at two levels i.e at A01 for USW/SSW and at A03 for Artisans. Induction of Supervisory level id one at Charge-man (SI) scale and induction of Executive level is done at Engineer level (E I) In case of workmen and Supervisors cadres the names are obtained from local Employment Exchanges or through Act Apprentices The written tests and personal interviews are conducted and the selected candidates are issued the offer of appointment in the regular scale.

2. TRAINING AND DEVELOPMENT:

BHEL, Jhansi emphasizes on development of its employees on regular basis. The Human Resource Development Department of the unit annually identifies tile training needs of all the employees through line managers. The calendar of the in plant program is formulated based on the above needs and programs on various topics are conducted in the financial year so as to meet the training requirement. If specific skill is required to be imparted to certain groups of people, which cannot be organized within the unit, these employees are nominated to outside institutes within the country or abroad.

In addition to above the training is imparted to Act. Apprentices (Trade Apprentices and Technician Apprentices), Company Training (Supervisory Trainees and Engineering Trainees) and vocational trainees from various institutes in the fields such as Engineering, MBA graduates, MCA graduates etc.

In the year 2001-2005 total 95. In plant Training Programs were conducted covering 975 Executives, 575 Supervisors and 1200 Workers. In addition, training was also imparted to 210 Trade App., 45 Technician App and 475 Vocational Trainees.

3. PERFORMANCE EVALUATION

BHEL, Jhansi has well-established Performance Evaluation System for Supervisors and Workers categories in terms of Annual Confidential Report (ACR). The various parameters of performance evaluation system are laid down in the ACR Forms with the marking systems. The total 100 marks are allotted for performance evaluation,

Based or the marks, the grading of the individual performance is done in the following broad categories.

- Outstanding
- Very good
- Good
- Fair
- Poor

Based on the performance evaluation and on completion of the minimum eligibility period, the individual is considered for his promotion to next level by the Departmental Promotion Committee (DPC). The unit is proposing to go for open appraisal system called as 'Performance Management System' (PMS) for all Executive Categories w.e.f. 1st April, 2001. The system will broadly focus on target setting at the beginning of the year, mid term and annual review of the achievements, potential performance appraisal etc.

However for executives the performance evaluation is done by e-MAP System- Moving Ahead Through Performance.

E-Map aims at creating alignment of the employee's goals with those of the company and enables the employee to effectively manage performance - for the employee and for the employees team

Map covers grades EI-E7 of the executive Carder.

4. PARTICIPATIVE FORUM:

BHEL has a unique system of participative management implemented since more than last 2 decades, Under this, Joint Committee is the apex body at Corporate Level in which the representative of participative unions from all the units along with their Central Leaders participate on one side and equal numbers of members from management side participate on other side. They discuss all the matters related to general police concerning to workers in all the units such as (I) Production & profitability (2) Incentives (3) Bonus (4) Plant Performance Payment (5) Wage Revision (6) Working Conditions (7) Welfare Facilities (8)Environmental Issues etc.

The next level to the joint committee is Plant Council, which is the apex body at unit level. In this committee, equal numbers of workers representatives and management representatives participate and discuss the matters related to the workers in the unit.

The third level is the Shop Councils, which is constituted at shop level to discuss all the issues related to shops.

In addition to above there are various bi-partite participative committees(statutory and non statutory) such as PF Trust, Canteen Committee, Safety Committee, Cultural Committee, National Festival Celebration Committee, Township Advisory Committee, Medical Advisory Committee, Sports Committee etc. In all these committees the participation of workers representatives and management representatives in ensured.

Trust is also given in direct participation and involvement of workers at the shop level by introducing various schemes such as - Suggestion Scheme, Quality Circles, 5S, Productivity Forums etc.

5. WELFARE MEASURES:

BHEL, Jhansi has a strong belief that its Human Resource is an important asset and is, therefore, committed for welfare of its employees and society at large with this assumption the Unit provides variety of Employee benefits. Welfare measures such as Leave, LTC Loans & Advances, Awards and Incentives Gratuity, Employee family Pension, Group Insurance. Death Relief Fund, Family Planning Incentives, Medical Facility, Canteen Facility Transport, Education, Recreational Facility Sport Uniforms etc.

BHEL being the Public Sector it also shoulders its responsibility for Social Development of nearby areas by providing employment, opportunities , developing ancillary units, extending help to weaker sections, adopting village in the nearby locality etc.

INTRODUCTION TO HUMAN RESOURCE DEVELOPMENT

Human Resource development is the process of helping people to acquire competencies. The employees in an organization are helped in a continuous and planned way to

- Acquire or sharpen capabilities required to perform various functions associated with their present or expected future roles.
- Develop their general capabilities as individuals and discover and exploit their inner potential
- Develop an organizational culture in which supervisor –subordinate relationship team work and collaboration among the sub –units are strong and contribute toward the professional well being motivation and pride of employees.
- HRD process is facilitated by mechanisms like performance appraisal training OD, Feedback and counselling, Career development pretention development job rotation rewards etc.
- Employees are continuously helped to acquire new competence thro a process of performance planning feedback training periodic reviews cresting opportunities through training job rotation etc.

People need competencies to perform tasks. Higher degree and quality of performance of tasks require higher degree of level of skills. Without continuous development of competencies in peoples an organization is not likely to achieve goals. Competent and motivated employees are essential for organizational survival growth and excellence.

Over a period of time an organization may achieve a saturation point in terms to its growth. Even to maintain such a saturation level of growth employee competencies need to be sharpened or developed as organization operate in environment that keep changing requiring the employees to have new competencies.

Any organization list is interested in improving its services and its effectiveness in other way (e.g. cost reduction, reduction in delays, increased customer satisfaction,

improved quality, promptness of services, market image etc.) needs to develop its employee competencies to perform tasks required to bring about such improvement. For example if a university wants to do better than before by improving its nature of courses offered and quality of teaching, it has to undertake a faculty development program. If it decides to improve its administration, HRD activities may need to be undertaken to equip administration with better competencies.

Thus the core objective of the training is to enhance the competencies, skills of the employees to help him perform better in one way or the other. The individual with enhanced competencies and skills can contribute and relate with an organization in a more productive way.

VARIOUS MODELS AND APPROACHES TO TRAINING

Numerous experts have propounded various models and approaches to training from time to time. These experts have endeavoured to develop best suitable model for training by defining characteristics of best training practices. However, with the change of context, time, environment the preference as to the best also has been experiencing change. The analysis of these models is valuable in so far as they highlight the additional features that need to be considered in defining a new, more comprehensive model.

THE SYSTEMATIC MODEL

The systematic training model has shaped the approach to training since 1960. Although of considerable value in introducing discipline it is at best a practical guide to what the training management should do.
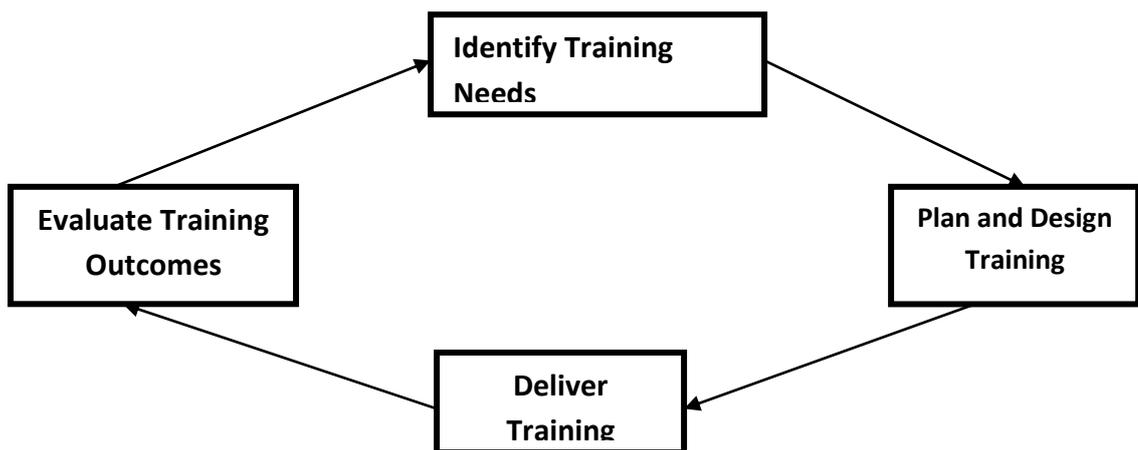
The most important and pervasive model for the role of training in the organization can be labelled the systematic training model. The systematic training is therefore the training undertaken on a planned basis as a result of applying a logical series of steps. Hence it relates to

- Development of training policy
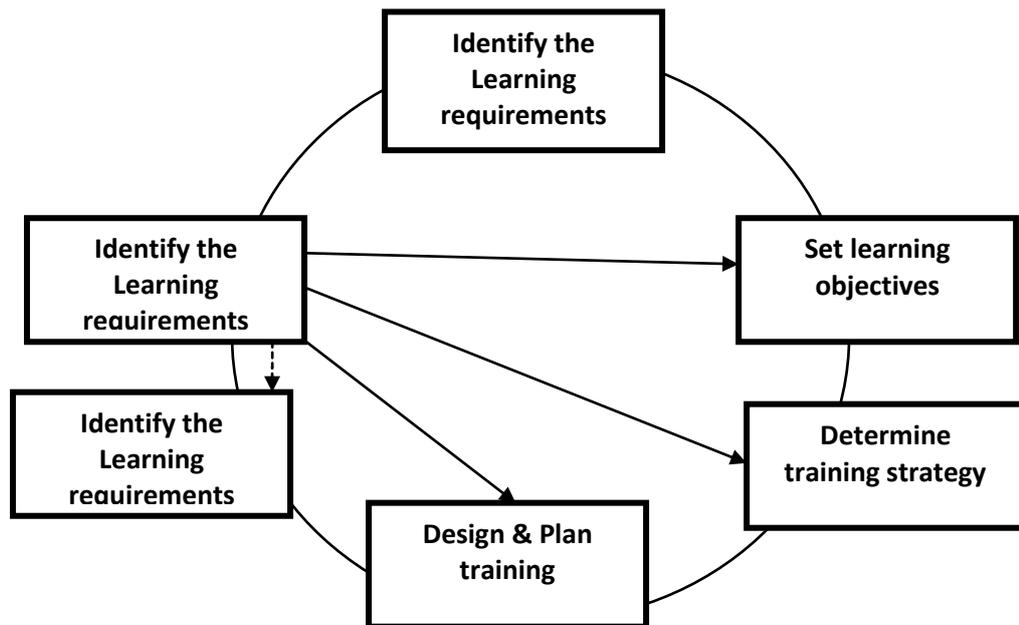- Identification of training needs

- Development of training objectives and plans
- Implementation of planned training
- Validation, evaluation and review of training.

A five stage system approach was developed by United States Military – Analysis of training need, designing of training curriculum, development of training curriculum implementation and evaluation.

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                    ┌─────────────────┐
                    │ Identify Training│
                    │ Needs           │
                    └─────────────────┘
┌─────────────────┐                    ┌─────────────────┐
│ Evaluate Training│                   │ Plan and Design │
│ Outcomes        │                    │ Training        │
└─────────────────┘                    └─────────────────┘
                    ┌─────────────────┐
                    │ Deliver         │
                    │ Training        │
                    └─────────────────┘
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A Systematic Training Model

The above circular model introduction a link from evaluation to further identification of training needs. However the Kenney and Reid version emphasizes the importance of considering the feedback from evaluation at all stages in the process.
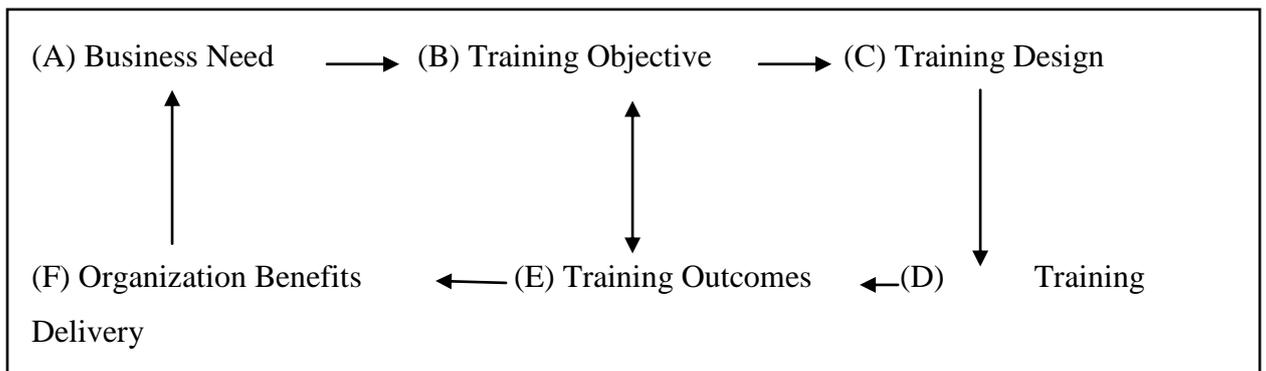
	Identify the Learning requirements	
Identify the Learning requirements		Set learning objectives
Identify the Learning requirements		Determine training strategy
	Design & Plan training	

<u>Kenney and Reid Model of Planned Training</u>

The systematic model definitely has two key characteristics. First, training can helpfully be perceived as a set of sequential steps and secondly, the identification of needs can be introduced into the training cycle at the appropriate stage. Essentially, these are discovered through carrying out thorough investigation of individual or group training requirements or by interpreting overall objectives set by the organization.

The systematic training model is useful so far it goes, it does centre the trainer's attention on the need to act in a structured and disciplined way, and, most importantly, stresses the place of effective evaluation of the training activity and the benefits that it can bring to the other parts of the training cycle. However, it cannot be regarded as a structured attempt to deal with the issues involved in delivering best training practice. In particular, it does not suggest that the training function should take a proactive role in developing supply-led capability, nor does it consider the need to embed the modern training function in the organization and define its relationship with the other parties involved in delivering training.

THE NATIONAL TRAINING AWARD MODEL

This is the model of best training practice that underpins government intervention in delivery of company training in UK. This was introduced in 1987. The entrants to the National Training Award Program are told that the judges look for evidence that training contributed significantly to improved organizational performance.

```
(A) Business Need  ──────▶  (B) Training Objective  ──────▶  (C) Training Design
        ▲                              │                              │
        │                              │                              │
        │                              ▼                              ▼
(F) Organization Benefits  ◀────── (E) Training Outcomes  ◀──(D)        Training
Delivery
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The National Training Award Model

Business Need is what prompted the training initiative. Training Objectives define what individuals involved should be able to do. Training Design is the plan or what is to be done to achieve the Training Objectives. Training Delivery is the implementation of Training Plan. Training Outcomes are the measure to what the training actually achieved for business and trainees.

The positive features of this model are that it explicitly recognizes the need to link training objectives with the requirements of the organization. It does not assume that training activity is solely the preserve of training specialists. However this model does not fully addresses or recognizes some other facets of training such as the proactive role of training in the organization, by placing firm emphasis on quantifiable results it down grades the importance of other les quantifiable effects of training activity for e.g. improved morale through team building. It limits creativity by concentrating monitoring performance against pre-specified objectives which are hardened down to the trainer.

CONSULTANCY

The strongest case made on the consult nous approach is that presented by Saunders and Holdaway, what focused on the attractants of the consultancy route. Consultancy, according to then means more control over what we do and how and where and when we do it. It applied basically to mainly self applied consultants outside the organization, it also applied to internal consultants. The authors argue that the organization will benefit because internal consultants offer more focused solutions and the knowledge, skills and experience normally deployed and gained by external consultants. Problems are solved jointly by business operations and training services. The in-house trainer requires developing consultant's skills.

The author arrange that through this model organization benefit since internal consultants offer more focused solution and the knowledge, skills and experience normally delayed and gained by external consultants remain within the organization. In – house trainers or training mangers need to develop the skills of consultant and have to manage the input of training consultant external to the organization. Different processes are needed to deliver internal consultancy services and to manage input from elsewhere.

The consultancy model offers a useful perspective on the skills required by the training professional. The consultancy relationship, however, is not an appropriate paradigm for the delivery of effective training within the organization.

THE ASHRIDGE MODEL
This model was developed by the Asridge Management Research Group and jointly by Ashridge Management College, UK. It considers organization at three levels of sophistication:
- A Fragmented Approach
- A Formalized Approach
- A Focused Approach

The Fragmented Approach

Training not linked with the organizational goals – Perceived as luxury and wastage of time –Approach towards training in non systematic –Training is directive – It is carried out by trainers – Emphasis on knowledge based course – Training takes place in training department – Focus on only training rather than development.

The Formalized Approach

Training becomes linked to Human Resource needs – Becomes systematic by linking to Appraisal System – Emphasis still on knowledge -based courses but focus is also on skill based courses – Link with HR encourages development approach – Training carried out by trainers but tends to develop broader skills- Line managers involve d in T & D – Pre and Post Course activities attempt to transfer learning -- Concern of linking program of training with individual needs.

The Focused Approach

T & D and continuous learning by individuals is perceived as necessity for organizational survival in rapidly changing environment - Training is regarded as a competitive weapon - Learning is linked to organizational strategy and individual goals - Emphasis is on-the job development so that learning becomes totally continuous - Specialized training courses available across knowledge/skills/values spectrum –Training is generally nondirective, unless knowledge based - More concern to measure effectiveness of training and development – Main responsibility of training rests with line managers – Trainers adopt a wider role - New emphasis on learning as a process - Tolerance of some failure as part of the learning process.

The Ashridge model is stronger in description than prescription. It describes an ideal state of training and development and offers a useful set of indicators, which could be used to measure progress. It does not, however, deal with the detailed mechanics involved in securing such progress. It does not offer directions for the training manager in an organization which is fundamentally unreceptive.

THE CONTINUOUS DEVELOPMENT APPROACH

The Institute of Personnel Management, London has developed a valuable perspective on the ideal situation for training in the organization. The models of training process reviewed so far have related to the means of delivering training in a particular moment. They have not been designed to offer perspective on continuous development of training function. The IPM has produced a set of recommendations for developing an organization which will encourage its workforce to achieve its capability. Hence only indirectly it can be regarded as the model of training. Seven areas of activity are identified in the statement for continuous development

- Policies, where a written statement is useful.
- Responsibilities and role, which are designed for senior executives, managers, personnel professionals.
- The identification of learning opportunity and needs, through operational plans, job descriptions, appraisals, interviews etc.
- Learner involvement through encouragement and integration.
- The provision for learning resources.
- Benefits, which should be categorized and identified.
- Results, which are the characteristics that are displayed by a continuous development team.

Each of the above areas is broken down into greater detail. Its strength are, firstly it places successful training in its wider organizational context and explores the links with other development activities. Secondly, it identifies a series of component activities which can be addressed and achieved separately. However, its major criticism is that its standards of achieving continuous development are absolute and lie outside the control of training manager for e.g. it states that the impetus for training should come from chief executive and investment in continuous development must be from top management team.

THE LEARNING ORGANISATION APPROACH

The perspective on training that has attracted particular support in recent years has been the concept of learning organization. The term has achieved prominence amongst the training and management development community and has gained wide acceptance as an expression of the desired or ideal state for training in the organization. The impetus came from the American organizational psychologist Chris Argyris whose work has centered on developing individual potential within the company. The authors argue that the organizational learning involves the detection of errors and corrections. If this detection and correction allows current policies and processes continue, the process is described as single loop learning. If however, the detection and correction activities modify and change fundamental behaviour, the organization can be said to have gone double - loop learning.

A conceptual leap from individual to corporate learning is central to the notion of learning organization it is a form of anthropomorphism, defined as ascription of a human attribute to anything impersonal. This leap was accepted by peters and waterman in early 1980s.

Thus, a learning organization is one where - the importance of individual learning to corporate development is recognized - team learning is promoted through interaction and feedback - experimentation is encouraged and hence failure is tolerated there is an effort to devolve responsibility in a supportive environment in a way that allows the individual to develop and grow. In general, however, the term 'learning organization' lacks precision. It certainly describes an organization which exhibits the characteristics set above but do not constitute a dramatic sea change in thinking about the place of training in the organization.

TRAINING EVALUATION

(Understanding its need & importance, types, steps, methodologies etc.)

UNDERSTANDING TRAINING EVALUATION

Providing training to staff has many costs: the cost of resources involved in preparing and giving the training, the cost to participating organization in travel and lodging, and the cost of staff being away from the work place. To justify these costs, managers need to feel confident that the training they are providing, or asking their staff to attend, will make a difference in staff performance. They need to know that staff members have not only acquired new knowledge, attitudes, and skills from the training but can, and do, put them into practice back on the job.

There are many kinds of evaluation involved in developing and managing, a high-quality training program which will ensure the results that managers need. These include:

- Needs assessments;
- Baseline evaluations;
- Input evaluations;
- Process evaluations;
- Outcome evaluations;
- Impact evaluations (which are used to evaluate individual job performance, organizational performance, program performance, and demographic health indicators)

Training organizations or training programs within a larger organization most commonly evaluate baseline knowledge, attitudes, and skills (KAS), and conduct input, process, and outcome evaluations. Needs assessments are done infrequently and are generally conducted for the purpose of designing a new course or for a large-scale,

ongoing course. Often, years after an initial needs assessment, the same course is still given, even though changes in the environment would suggest that a new needs assessment be conducted or that the course be revised an impact evaluation, in spite of its importance, is rarely conducted.

Focusing on the impact of training on individual performance

The desired long-term impact of training is to improve organizational and program performance and, ultimately, to contribute to the achievement of national demographic and health goals. It is difficult to demonstrate a direct link between training and these long-term results because of the many factors other than training that are involved. However, it is possible to demonstrate the impact of training on staff skills and performance. For this reason, TIE focuses on the first level of impact-job performance of trainees-with the assumption that good individual performance will lead to strong organizational and program performance and better client services, and eventually make a significant contribution to the achievement of desired demographic and health goals.

TIE attempts to address these concerns. The core of this issue provides a detailed description of the TIE process. It offers you practical techniques for implementing each step of the process form identifying performance standards to instituting training organizational or environment changes. In addition to describing the steps of the process the issue discuss the feasibility and value of internal participatory evaluation and concludes with ways in which you can follow up on and maintain the TIE process.

Types of Training Evaluation

There are many ways that managers and staff can evaluate training. This Family Planning Manager focuses on one level on impact evaluation –individual job performance as a result of training.

Type of Evaluation	Purpose
Needs assessment	To identify the knowledge attitudes and results (KAS) needed for acceptable job performance.
Baseline evaluation	To determine the trainees' Levels of KAS before training
Input evaluation	To assess the elements associated with the training costs selection of trainers and trainees curriculum plans venue, materials.
Process evaluation	To conduct assessments periodically during the training and adapt the schedule content or approach accordingly
Outcome evaluation	To assess new or improved KAS after training
Impact evaluation	To determine the effect of the training on • Individual Job performance (on the job application of new knowledge, attitude and skills, works that meets or surpasses professional or organizational requirement) • Organizational performance (quality of services, client satisfaction) • Program performance (use of modern contraceptive methods, couple-years-of-protection). • Regional or national demographic and health indicators (decreases in birth, fertility, infant mortality, and maternal mortality rates)

Using Internal Resources to conduct the Evaluation

When organizations consider conducting an impact evaluation, they often turn to outside experts in the belief that only outsiders can provide the unbiased, objective expertise that produces credible results. But many managers have learned that external evaluation does not guarantee appropriate recommendations, partly because outsiders cannot always grasp the realities of the workplace and the related training need, of a particular organization in the short period of time that they are given to conduct the evaluation.

There is growing support in the evaluation community for participator's evaluation which allows stakeholders to assess their own achievements [Feuerstein], drawing on special external expertise (for example in sampling) only when necessary. In the training business, the key stakeholders include the managers and staff of the training organization or program, and the managers and staff of the organizations that send their staff to be trained. Evaluating a training program through a participatory process that includes representatives from both organizations has important benefits:

- **Internal evaluation costs less than hiring outside experts:** As funding agencies cut back on their support, organizations will have to draw on their own funds for evaluation.
- **When trainers participate in impact evaluations, they become familiar with their trainees' working conditions**. Training organizations can also use the results from the TIE to design future training courses.
- **TIE can be incorporated into routine supervision and monitoring.** Service delivery organizations can institute regular, focused, small-scale evaluations to explore reports of problems encountered in the field or to confirm that specific elements of a course have succeeded and should be duplicated in other courses.
- **Organizations that send staff for training gain a better understanding of what training can and cannot do.** They can use this information to clarify their expectations for future training events.

Forming an Internal Evaluation Team

The evaluation team should include representatives from the training organization or training program and the service delivery organization (or organization receiving the training). If possible, one or more trainees should be on the team so that their perspective and experience can be taken into account during the process. If you decide to include an expert whose skills are considered essential to a particular aspect of the TIE process (for example, a statistician), that person's role and responsibilities should be clearly spelled out to the satisfaction of every team member. This clarification will ensure that the process remains in the control of the participating organizations.

This cross-organization team is particularly valuable when the evaluation uncovers the need for improvements either organization. If both the training and service delivery organizations have participated in the entire TIE process and agreed to the objectives and eventual recommendations they will be far more likely to accept the suggestions and make worthwhile changes. If time or distance do not allow a close working relationship between the two organizations, either organization may have to conduct the TIE on its own. This presents some risk in that the non-participating organization might not fully accept the findings and recommendations. But if every step of the process is well- documented and the other organization is kept informed, the risk can be minimized.

CONDUCTING A TRAINING IMPACT EVALUATION

There are several reasons for undertaking a TIE. You may want to conduct a TIE to:
- Assess new training course to see whether it has fulfilled expectations.
- Evaluating an existing course whose effectiveness may have diminished over time, such as when there have been considerable changes in the external environment.
- Identify tasks or topics for when refresher training is required;
- Responsible to doubts about the usefulness of a particular training course expressed by an organization that has sent staff to be trained;

- Address concerns about job performance that have been raised through routine monitoring of field activities, staff supervision, or other worksite observations.

When one or more of these reasons exist, TIE can be initiated by any stakeholder: the manager of organization, trainers, supervisors of trained staff, or program officers. The process will work most smoothly if the members of your TIE team represent the perspectives of all the interested partners. The team members should familiarize themselves with the content and methodologies of the training program or course being evaluated, and with the general requirements of the trainees' jobs. They can set the stage for their work by discussing the reasons for understanding the TIE, clarifying their expectations of the process, and soliciting any needed support from their organizations.

To do a thorough training impact evaluation, you need to follow all the steps of the TIE process. The TIE process is a cycle that continuously links job performance with training. Before beginning the cycle, you should gather and review performance information from the worksite.

MODELS AND APPROACHES TO TRAINING

DONALD KIRKATRATRICK MODEL FOR MEASURING TRAINING EFFECTIVENESS

One of the most popular methodologies for measuring training effectiveness was developed by Donald Kirkpatrick This model articulates a four-step process.

Level 1: Reactions

At this level, the participant's reaction to the programme is measured. This is measured through the use of feedback forms (also termed as "happy-sheets"). It throws light on the level of learner satisfaction. The analysis at this level serves as inputs to the facilitator and training administrator. It enables them to make decisions on continuing the programme, making changes to the content, methodology, etc.

Level 2: participant learning

It measures changes pertaining to knowledge, skill and attitude. These are changes that can be attributed to the training. Facilitators utilise pre-test and post-test measures to check on the learning that has occurred. However, it is important to note that learning at this level does not necessarily translate into application on the job.

Measuring the effectiveness of training at this level is important as it gives an indication about the quantum of change viz-a-viz the learning objectives that were set. It provides critical inputs to fine-tuning the design of the programme. It also serves the important aspect of being a lead indicator for transfer of learning on to the job context.

Level 3: Transfer of learning

At this level, we measure the application of the learning in the work context, which is not an easy task. It is not easy to define standards that can be utilised to measure

application of learning and there is always this question that preys on the minds of various people: 'Can all changes be attributed to the training?'

Inputs at this level can come from participants and their supervisors. It makes sense to obtain feedback from the participants on the application of learning on the job. This can be done a few weeks after the programme so that it gives the participants sufficient time to implement what they have learnt. Their inputs can indicate the cause of success or· failure: sometimes it is possible that learning was good at level-2, but implementation did not happen due to system-related reasons. It can help the organisation deal with the constraints posed by systems and processes so that they do not come in the way of applying learning.

Level 4: Results

This measures effectiveness of the programme in terms of business objectives. At this level we look at aspects such as increase in productivity, decrease in defects, cycle time reduction, etc.

Many organisations would like to measure effectiveness of training at this level, the fact remains that it is not very easy to do this, as it is improbable that we can show direct linkage. However, it is worthwhile making the attempt even if the linkage at this level is indirect.

It is possible for organisations to measure effectiveness for all programmes at level- 1 and level -2. This can be built into the design of the training programme.

It has been established that it is easy to measure training programmes related to technical and functional areas at level-3 and level-4. It is not easy to do this with behavioural skills programmes. Organisations that choose to measure training effectiveness can start with the former category before moving to measuring behavioural skill level-3 and level-4.

An example to show how we can measure some training programmes at levels-3 and level-4. Let us consider the case of an IT service company that conducts technical training programmes on products for their services engineers.

Learning at level-2 can be measured at the end of the programme by the use of tests-both written and practical Measurement at level-3 is possible for these programmes by utilising the wealth of data the organisation will have on calls attended by engineers at various customer sites. This data is generally available in "Call tracking systems".

Valuable insights have been found by comparing data pertaining to the period before the training programme and after the training programme. To simplify analysis we can take a 24 week cycle -12 weeks prior to the training and 11-weeks subsequent to the programme. The data gives a picture on aspects such as:

How many calls did the engineer attend on the given product prior to and after the programme? We need to analyse this data. If sufficient calls were not taken after the training, is it due to the fact that there were no calls in this category or because the engineer was not confident to take calls?

Comparison of the average time to complete a call, Did the cycle time to close similar calls reduce?

Comparison of the quality of the solution e.g. did the problem occur again within a specified period?

Did the engineer change parts when they were not required to be changed? Such speculative change of spares gives as indication of the diagnostic capability of the engineer. Organisations get to know the details of such speculative changes when a so called defective spare is returned by the repair centre with a statement that there is no problem with it.

The data from the call tracking system and other related data give a clear indication of application on the job. However, I will not attribute all of the transfer of learning to the training. It is possible that the organization has instituted mechanism such as mentoring, sending new engineers on calls with senior colleagues, etc., to enable them to also learn on the job. Hence the data need to be interpreted keeping the overall environment in mind.

This data can also be utilised to measure effectiveness at level-4. It is easy to calculate productivity increases and cost savings for the example cited above. The measures from level-3 can be converted into revenue or cost saving figures.

Similarly, it is possible to conduct measurement in the areas of software development, manufacturing area, accounting and other such functional skills. There are prerequisites to conduct effectiveness of training at this level. It is important for the organisation to institute strong indicators to measure performance levels.

There are mechanisms to measure effectiveness of behavioural skills at level-3. These are cumbersome to implement. It needs a fair amount of investment by the organisation in terms of time and money. Organisations that have chosen to implement assessment centres have been able to measure learning at this level. Assessment centre is a large topic on its own and has been kept out of the scope of this article.

Dr. JOHN SULLIVAN'S APPROACH FOR EVALUATION OF TRAINING
(College of Business, San Francisco University)

I - Prior to training

- The number of people that say they need it during the needs assessment process.
- The number of people that sign up for it.

II - At the end of training

- The number of people that attend the session.

- The number of people that paid to attend the session.
- Customer satisfaction (attendees) at end of training.
- Customer satisfaction at end of training when customers know the actual costs of the training.
- A measurable change in knowledge or skill at end of training.
- Ability to solve a "mock" problem at end of training.
- Willingness to try or intent to use the skill/Knowledge, at end of training.

III - Delayed impact (non-job)

- Customer satisfaction at X weeks after the end of training.
- Customer satisfaction at X weeks after the training when customers know the actual costs of the training.
- Retention of Knowledge at X weeks after the end of training.
- Ability to solve a "mock" problem at X weeks after end of training.
- Willingness to try (or intent to use) the skill/knowledge at X weeks after the end of the training.

IV - On the job behaviour change

- Trained individuals that self-report that they changed their behaviour/ used the skill or knowledge on the job after the training (within X months).
- Trained individuals who's managers report that they changed their behaviour used the skill or knowledge on the job after the training (within X months).
- Trained individuals that actually are observed to change their behaviour use the skill or knowledge on the job after the training (within X months).

V- On the job performance change

- Trained individuals that self-report that their actual job performance changed as a result of their changed behaviour / skill (within X months).
- Trained individuals whose manager's report that their actual job performance changed as a result of their changed behaviour / skill (within X months).

- Trained individuals who's manager's report that their job performance changed (as a result of their changed behaviour/skill) either through improved performance appraisal scores or specific notations about the training on the performance appraisal form (within X months).
- Trained individuals that have observable / measurable (improved sales, quality, speed etc.) improvement in their actual job performance as a result or their changed behaviour/skill (within X months).
- The performance of employees that are managed by (or are part of the same team with) individuals that went through the training.
- Departmental performance in departments with X % of employees that went through training ROI (Cost/Benefit ratio) of return on training dollar spent (compared to our competition, last year, other offered training, present goals etc.).

Measures

CEO/ The management knowledge of *I* approval of / or satisfaction with the training program.

Rank of training seminar in forced ranking by managers of what factors (among miscellaneous staff functions) contributed most to productivity/ profitability improvement.

Number (or %) of referrals to the training by those who have previously attended the training.

Additional number of people who were trained (cross-trained) by those who have previously attended the training and their change in skill/behaviour/ performance.

Popularity (attendance or ranking) of the program compared to others (for voluntary training programs).

KOSMIN APPROACH TO TRAINING EVALUATION

According to Kosmin there are only two areas of valid feedbacks in training: skills training which measures the difference between before-course and after-course performance and organizational training, which measures procedural or regulatory requirements.

Identifying types of training evaluations

To initiate an evaluation process, it is required to first distinguish between two types of training skills for a specific process (i.e. software program, or equipment usage, or trade speciality), with identifiable and measurable knowledge parameters based on pre- and post-performance tests and organizational training (which is organization specific and has time sensitive procedural or regulatory requirements).

Skills Training

Skills training evaluation is relatively easy to analyse, since one is dealing with measurable and predictable parameters. Either a predictable procedural parameter is met, or not (by the trainee at the end of the course), or inversely, either a given parameter is valid or not (from a technological point of view). The issue of trainer competency should not be a subject in the training evaluation process, because this must/should be part and parcel of the vendor selection process.

Organizational Training

Organizational training is by definition organization specific (never generic). It must be adaptive, reflecting the evolving needs of the given enterprise. Therefore it must be timely and must regard the course recipients as professional equals who are being exposed to upcoming required organizational changes/innovations.

There are various types of training courses within the category of organizational training. These include orientation courses for new employees; procedural/legislative changes seminars, organizational/technological courses.

The evaluator therefore has clear markers to follow when developing an evaluation approach to a given situation. The what, when, where, how and why of the given analytical process should then be able to be instituted within definable parameters.

Next questions pertaining to actual organizational requirements can be addressed from an organizational development point of view. Training effectiveness analyses cannot be performed without a valid correlation between organizational requirements and the actual course.

Benchmark questions

When conducting evaluation, there are various benchmark questions that need to be raised. This avoids the potential (in large multiplayer organizations) of identifying needless "requirements"-requirements that do not reflect organizational, task-related growth so much as managerial dysfunction, or political" interference.

Factors in Evaluating Training

Factors to be considered in evaluating given training programs are as follow:

- Given organizational development status (growth or "restructuring"/entropy) requirements.

- Who defined training requirement (separate division in charge of training, or actual departmental request/need).

- Individual performance measures (are they based on subject or skill requirements or other factors, e.g. desire to create a certain "corporate style")?

- Course content (Is it based on the "information transmittal" principle or on the skills training atmosphere in class room?).

- Whether or not a given course is the result of introducing new automation processes from "above" without input from the department in charge of the given service;

- Whether there is confusion between the various types of established corporate "feedback" mechanisms in their applicability and validity (from an evaluation point of view);

- Whether the materials presented are concurrent with the give corporate requirements;
- Whether the "feedback" mechanism is appropriate to the given course;
- Who is in charge of deciding on the type of "feedback" to be used (the course vendor or corporate management)?
- What are the intervals in performance measures (quarterly, semi annually, immediate (within days) or annual) of given course effectiveness?
- How are the various course offerings tied to individual performance evaluation within the given corporate setting?
- Is attendance at outside institutional training establishments regarded as an indispensible, desired, individual development process or, as a convenient substitute to internal corporate proprietary training needs?
- How often are corporate training courses revised and why?
- At what executive level are goals and training requirement established and/ or monitored within the given corporate environment?
- What type of rapport is being encouraged / desired between instructional staff and course participants?
- What is the relationship between course material and the actual work environment needs for given participant?

Questions of this nature could easily be expanded. Here, they merely represent the framework in which the analytical process will need to function. Of the perennial questions used – the what, when, why, where and how – the most important ones within the training evaluation process are the why and the how.

The tools and venues used to present a given course should be the first criteria to be evaluated. They represent, however, merely the starting point in the analytical process. The much more salient issues are those that deal with the status or health of the given enterprise (expansion or "re-engineering" being mere euphemism for contraction/ decline) and, the reasons for on-going corporate training programs. Do

they represent a genuine human resources development program or are they part of a convenient tax-write off mechanism?

Finally, evaluation should be used within the framework of personal briefing / debriefing and within the individual development tracking/evaluation process. This applies not only to rank and file employees but also especially to executives and their performance level.

RON KAUFMAN`S APPROACH FOR MAXIMIZING IMPACT OF TRAINING

Training staff is an essential investment in today's changing and competitive environment. But just sending staff to attend training programs is not enough. The impact of investment can be maximized by following the key guidelines for management and staff interaction "before", "during" and "after" the training program.

Before the Training program

Review with staff why they were selected for the program and discuss anticipated benefits for the organization. This shifts their perspective from purely personal. "I am going to attend a training" to personal and organizational, "The organization is making an investment so I can attend a training. The purpose of this investment is to help me upgrade my skills so that our organization becomes even more competitive and productive".

Ask participants to talk about how they might benefit from the program. Where do they see opportunities for improvement in their own skills and / or behaviour?

Discuss and obtain agreement from the staff on their punctuality, attendance and participation in the training program.

Redistribute participants' workload during their absence so they do not return to a mountain of pending matters. This helps participants keep their minds focused on the course.

If sending more than one participant, create a "buddy system" before they go. Buddy teams can ensure that both participants get maximum value and understanding from the training.

During the Training Program

If the course is more than one day long, have participants brief their managers as the course progresses. This can take the form of a short face-to-face meeting, a telephone call at the end of the day, or a summary fax written and sent overnight.
Participants should identify what material was covered during the day, what new learning occurred, and what value they see in applying this learning back at work.

Discuss any amount of uncertainties that arise. Help participants identify examples of learning point with application on the job. Help formulate clarifying questions for participants to bring back to the course instructor on the following day.

If there are interim assignments to complete, engage others who are not attending the course in discussion and deliberations. This brings the learning experience back into the office, building internal and support network for during and after the training.

After the Training Program

Meet with course participant to review:

What were the most valuable learning form this program?
What will he do differently now at work? In which situation?
When will be begin or try this new approach?
What suggestions does he have to improve or customize the course?
Who else should attend this particular training program?

Discuss organizational improvement based upon the participants' new learning. Be willing to implement new suggestions on a trial basis with participants involved in tracking and implementation.

WHAT FIGURES SAY?

70% don't measure the business impact of training investments

A new survey has found that 70% of organizations have no formal measurement practices to assess the impact of training employees on the performance of their business.

- 30% measure impact of training on business performance.
- 50% evaluate impact of training on job performance.
- 62% compare their learning analytics results with external benchmarks.
- Majority of companies are only using end-of-course surveys that measure delegate satisfaction.
- Human resources dedicated to learning analytics spend only 20% of their time actually performing data analysis, with the remainder spent on collecting, storing and processing data.

Source: Global learning Alliance

TARUNS MODEL FOR IMPACT

Training Leadership	Training Process	Resultants	Measuring Initiatives

1. Visualizing & setting individual, departmental and organizational goals 2. Preparing Plans	Training Need Identification Development of course and inputs Selection of trainers Selection of Venue Pre-training	Impact on Individual dimensions Impact on Work Related dimensions Impact on Organizations dimensions	Post-Training interview Post-Training Evaluation of Training initiative Post-Training On-the-job Evaluation of Training Identification of

Facilitating elements & input activities	Outcomes and end result activities

CONTINUOUS IMPROVEMENT & UP GRADATION FOR FURTHER IMPACT

A MODEL FOR IMPACT

A suitable model of training for impact has been evolved as given above. The research plan therefore has been devised keeping in view the various elements and activities as depicted in the model.

The basic premise of the model is based on the concept that the impact of training cannot be *viewed* in isolation. The impact is basically an outcome of various elements, activities and initiatives. The study itself is focused on the premise of the impact of training on organizational effectiveness and human potential of the employees working in an organization.

The factors of organizational effectiveness are those parameters that contribute positively towards the organizational goals and objectives and facilitate the sustenance of the organization for continuous development and growth of both the individual and organization together. The organizational effectiveness in not only the financial gain or profit of the company but there are numerous other parameters such as employee satisfaction, sustenance and development, opportunities for growth, involvement in decision making, motivational aspects etc. The financial indices do indicate the organizational health such as profitability, value added, financial growth and turnover, cash reserves etc. The output parameters pertaining to quality, productivity, waste control and economic production are also indicative of the organizational effectiveness. The job and work related parameter such as improvement in work process, technology and systems also add to the qualitative performance of the organization and are indicative of the organizational effectiveness.

The individual dimensions, such as team working, values, motivational, level, leadership, involvement etc. are also indicative of the humanistic approach of an organization and are indicative of the well being of the employees working in an organization. This approach leads to more productive utilization of the human capital and it's potential. In such an organization the employees contribute more productively to the organization and add value to its sustenance, growth and development.

The training does help in providing broad based solutions based on learning approach. It adds quality and continuous growth wherever and whenever such opportunities arise in an organization.

The training can play an important role in providing learning and development solutions for number of organizational, work related and individual areas of improvement. It is therefore considered a partner for other functions of the organization that work together in harmony and are complementary to each other for their requirements. This approach thus strengthens the internal process of learning and growing together.

THE IMPACT OF TRAINING

When we speak of training effectiveness, we essentially mean the positive contribution of the training, **whether directly or indirectly**, towards the organizational parameters and individual requirements. The training becomes effective if it is able to achieve its desired goals and objective. The evaluation process is the process through which we try to assess the training activity viz-a-viz it achievement of objectives. Thus the obvious relevant questions are:

- Whether training can help in increasing profitability of the organization?
- Whether through training process we can improve our financial turnover?
- Whether training can help in value addition?
- Whether through training we can contribute towards customer satisfaction?
- Whether through training we can enhance productivity?
- Whether through training we can optimize product quality?
- Whether through training we can reduce wastage?
- Whether through training we can motivate people?
- Whether through training we can enhance team working?
- Whether through training we can involve people to perform better?
- Whether through training we can improve employee efficiency and effectiveness?

The impact of the training is an outcome of a comprehensive approach and is not a result of a single parameter. The combined energy of all elements and the activity that are involved in the training process contribute towards the broader impact on the organization and the potential of the individual. The comprehensive strategy in capable of capturing the various processed and is able to provide solution through multi pronged approach. The activities that are crucial to the training process are outlined and linked to the results and final outcomes. Each activity and training process is capable to generate impact in its own way and as such the sum impact can be experienced on organization and the individuals. The broad parameters/components that are considered as crucial for training effectiveness are outlined below.

(I) <u>The Training Leadership</u>

The training leadership essentially means the inner will and the initiative to take a lead in the process. It usually starts with the visualization of the training process and its requirements and setting the training objectives and goals. Based on the goals and objective training plans are prepared. Thus it is the process of:

Visualization - Taking vision about what can be the future expectations from the training? What solutions the training can provide as a part of long-term strategy? Anticipating the technological and environmental requirements of future and then developing a training strategy accordingly. Thus visualizing training as a resource that continuously analyzes the long and short-term requirements for the organization. This approach has an element of pro-activity that forms the basic premise and assumption.

Determining training goals and objectives and preparing plans- Based on the vision that the training has forecasted, provides a blue print for determining training plans and objectives of departments, functions and individuals. These serve as a guide maps for providing training solutions. **A well-drafted requirement based on effective visualization is capable of impacting the training process.** Setting departmental training plans and objectives has been discussed in detail in the forthcoming chapter.
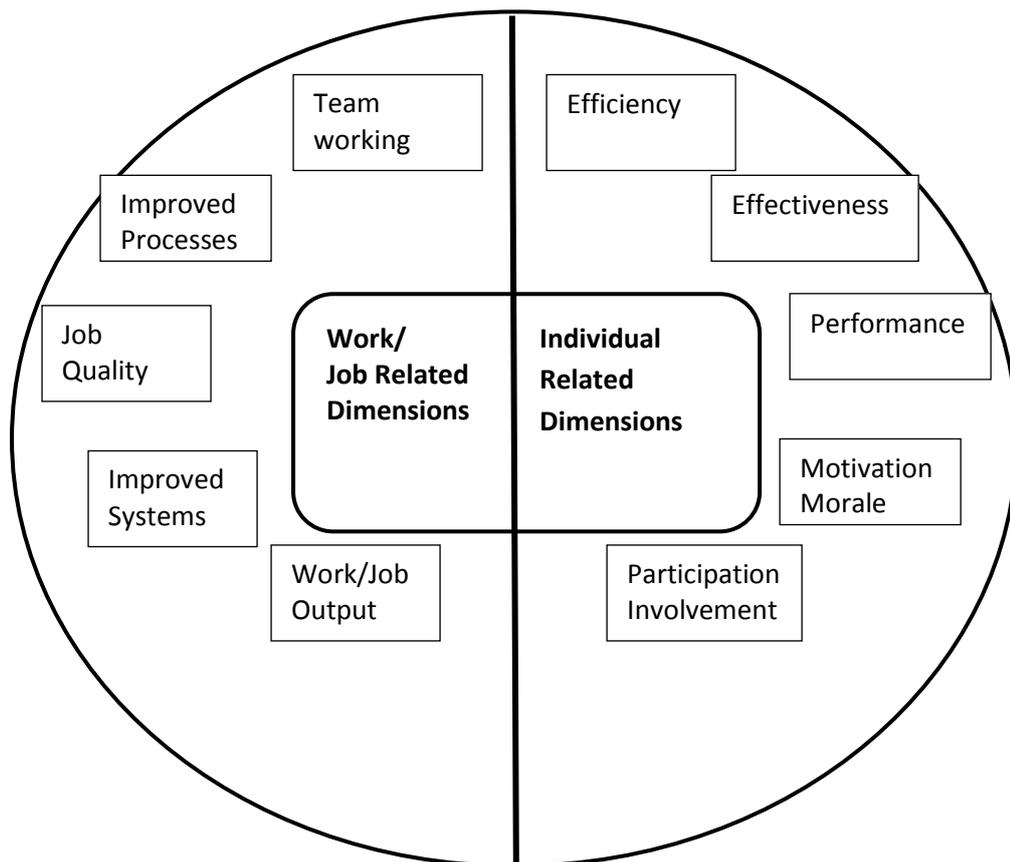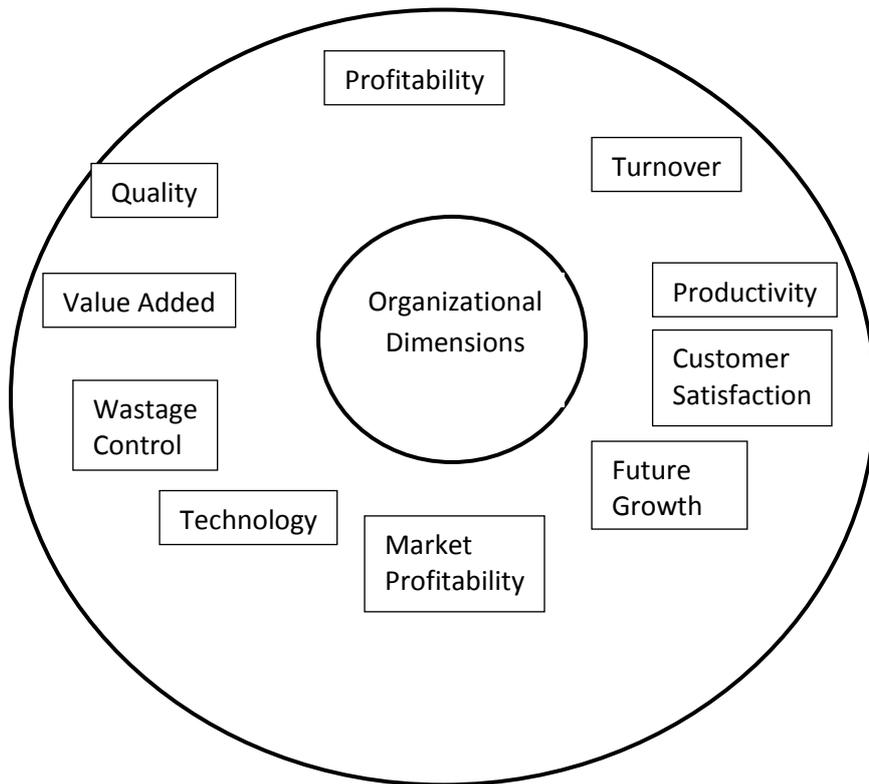
(II) The _Training Process_

The training process encompasses the training activities that are essential for fulfilment of the training vision. They also have an element of continuous up gradation and updating of these activities. These activities are essential for the purpose of proper alignment of the training efforts and interventions. Without these sets of activities the training per-se will not be able to achieve the desired goals. The activities also have inbuilt mechanisms of self-evaluation and improvement on a continuous scale. The activities can be many; however few important ad essential activities are outlined below:

- Training Need Identification
- Selection of Trainers
- Development and Preparation of Course and Inputs
- Identification and Selection of Venue
- Pre- Training Counselling to Participants

These activities, if carried out in an effective manner, can contribute towards the positive impact of training since they form the basic premise for any training program and initiative. These activities are discussed in detail in the forthcoming chapters.

(Ill) _Resultants &Outcomes of Training_

The training leadership of visualization and goal setting together with -the training process contribute towards the impact. This impact is evident on the organizational parameters as well as the individual and work related parameters if the leadership and the processes are carried out in effective way. The evident areas can have their sub parameters or dimensions that are diagrammatically represented below. These parameters are not comprehensive but are suggestive and as such there can be more parameters. Thus the indices of these parameters for certain years can indicate the direction of impact and serve as an analytical tool for trainers.

Organizational Dimensions

- Profitability
- Turnover
- Quality
- Productivity
- Value Added
- Customer Satisfaction
- Wastage Control
- Future Growth
- Technology
- Market Profitability

Work/ Job Related Dimensions

- Team working
- Improved Processes
- Job Quality
- Improved Systems
- Work/Job Output

Individual Related Dimensions

- Efficiency
- Effectiveness
- Performance
- Motivation Morale
- Participation Involvement

(IV) Measuring and Evaluating Initiatives

The training leadership initiative and the training processes are not in themselves sufficient to determine the effectiveness unless these are measured and evaluated against the set standards of goals and objectives. The impact evaluation thus forms an important set of dimension in the entire training effort. To make this continuous process it is pertinent that all possible means and initiatives are deployed for accurate assessment of the outcomes. Multi pronged approach is therefore essential. These measuring and evaluating initiatives can be introduced at various stages of the training process. The pre-training interview is incorporated as a part of the training process. Subsequently in the following phases the evaluation can be done for a training input, application of learning on-the-job. Thus the entire measuring and evaluating initiatives comprise of various stage from where the evaluation can proceed and forming a complete loot of continuous improvement.

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                    ┌─────────────────────────┐
                    │  Pre-Training Counselling│
                    │ (For determining standards│
                    │     & expectations)      │
                    └─────────────────────────┘
                ↙              ↓              ↘
┌──────────────────┐ ┌──────────────────┐ ┌──────────────────┐
│Post-Training     │ │ Post –Training   │ │Post-Training     │
│Interview         │ │ Evaluation of    │ │on-the-job        │
│(For knowing      │ │ Training         │ │Evaluation        │
│levels of         │ │ (For knowing     │ │(For knowing the  │
│standards &       │ │ participants view│ │on the-job        │
│expectations      │ │ about            │ │application of    │
│achieved)         │ │ training)        │ │learning)         │
└──────────────────┘ └──────────────────┘ └──────────────────┘
                ↘              ↓              ↙
                    ┌─────────────────────────┐
                    │  Identification of Gaps  │
                    │  (For Knowing gaps in    │
                    │  learning during training)│
                    └─────────────────────────┘
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The entire gamut of measuring and evaluating initiatives comprise of multifarious activities and can be taken up in stages which are in logical sequence as given above. Number of concepts and approaches has been discussed in the research pertaining to evaluation/measuring training effectiveness. However, we have basically taken up a "stage-based" approach for evaluation of training keeping in view the objective and goals of each of the stages. This has helped in focusing broadly taking into account the sequence of each stage. This is depicted in the diagram above; this concept of stage is useful in a way that it sees the entire training as a process having various stages and helps in identifying the further requirements. This also helps in identifying interventions required for bringing about improvement at each and every stage. Thus, each stage has its own relevance.

Post-Training Interview

When the participant has attended the training program and returns back to the shop/department, he comes back in a different mood and expectations. By this time his knowledge also is enhanced. During this session of interviewing the interviewer can find whether the expectations from the training have been achieved or not. The line officer or training manager can come to know about the quality and standards of knowledge or skills that have been imparted to the participants and how the participant feels about the same. The training officer can also know about the resources that are required to implement the learning and knowledge acquired. The post-training interview requires a cordial atmosphere in so that free and frank exchange of dialogue takes place.

Post –Training Evaluation of training

This activity of taking feedback and evaluation can be done immediately after the program in over. In this activity set of questions pertaining to the training per-se can be asked. This is usually done to know the reaction of participant about the program, Kirk Patrick has termed as "reaction" evaluation.

In this feedback a questionnaire can be devised where the participant's opinion towards various elements of the training can be gathered. The satisfaction level of the

participant can be known towards the quality of the training inputs, training design, faculty – its knowledge, approach and command over the subject, communication skills, environment and atmosphere of training – both physical and conceptual/learning, knowledge gathered. On the subject, how effective the training was? Level of skills gained, quality of training material provided during the training etc.

The aforesaid feedback is helpful in evaluating the training per-se and to know the extent of the delivery in terms of the expectation. However this feedback in itself is not sufficient because the prime focus of this stage is the quality of training ingredients and inputs and has to be integrated with another stage in order to know the impact of learning while the participant is actually working on the job. However based on this feedback, decision pertaining to continue such training in future or continuing training with such an organization can be taken. Thus this stage has to be further integrated with another stage in order to know the actual impact of the training.