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Impact of Information Technology to Enhance Human Skills

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Abstract **- Strength of a nation is now measured based on the level of technology it possesses and with the "technovation" (technology and innovation) is the key for growth of the organization. It is the single most important factor that drives organization. Organizations are likely to sustain that are able to identify consumer preferences, predict market trends, innovate new products and produce world class product and services. In this scenario, there is a need to clearly identify new technology, modern manufacturing processes, ensure quality in production and improve skills of the employees so that they are able to adapt to new environment. By doing so organizations are expected to improve upon their knowledge management function. It is therefore essentional to understand new technology paradigm and dovetail skilled human resource in the process to achieve human factor engineering to enable quality product and services are rendered to the society. It is in the light of the above; HR functions are required to be seen to meet the impact of technology. The article examines the current trend in new technology and development of human skills in its light.**

Keywords **- Information Technology, Human Skills, HR Functions and Current Trend.**

INTRODUCTION

Traditionally labour, land, raw material and capital are considered to be factors of production. Capacity of a nation is judges based on how in abundance these resources were existing. But the situation has changed. Strength of a nation is now measured based on the level of technology. A nation has to keep pace with technology development and discard obsolete technology, processes and practices. Technology and innovation (technovation) is the key for growth and competence. Changes are necessary for growth. Technovation is the single most important factor that drives the organizations. Competitive advantage goes to that organization, which can absorb, apply and coordinate new technological developments. In the present environment, organization will only sustain that are able to identify consumer preferences, predict market trends, innovate new products and produce world class product and services.

SPECIAL FEATURE OF NEW TECHNOLOGY AND PROCESSES

1. RESEARCH AND DEVELOPMENT

Organisations have to meet the ever changing demands of large number of customers of variety of products and services. This is decided by study of markets, consumer perception and the market trends. Time factor plays an important role in the whole process. Organisations therefore should endeavour and identify new products and services, develop, test market, manufacture and market the same in the least possible time. Research and development therefore should cater for the following:

- Shorter product life cycle
- Shorter product change over cycles
- Short production runs
- Higher rate of new product development

TOTAL QUALITY CONTROL

Edward Deming Philip and Grosby have made a unique contribution to the humanity by introducing concept of total quality management. They emphasized total quality management in every organization. Quality is an organization-wide concept and not merely restricted to any particular department. It is continuous process. Organizations should insist on zero defect production. Quality and productivity integration is required to be achieved by the organization. Total quality control (TCQ) or company–wide total quality management are prerequisite for any organization to achieve growth. Management must insist and promote technological innovation. Fear of mistakes by the subordinates should be removed and failures encouraged, that is how people will generate new ideas, product, services and predict human needs. All employees must be made quality conscious.

KNOWLEDGE MANAGEMENT

Organisations consider knowledge as strategic resource. They believe that wide spectrum of knowledge is necessary for decision making. Due to computerization, organizations can store volumes of knowledge that can be retrieved as and when required. Tacit knowledge is important. Organizational policies must promote retention of old employees so that the tacit knowledge is not lost due to individual leaving the organization. Knowledge management cycle i.e. procurement, synthesis, interpretation, dissemination and creating new knowledge should be continuous.

TECHNOLOGY BASED SKILLS

Greater shift to a new techno-economic paradigm based on new set of concepts of quality, responsiveness, speed of market, flexibility and efficiency in service are the corner stones of new technology. Greater emphasis on creativity and innovations, competitive strategy based on technology and training of employees in multiple work skills, participation and ability of employees to take greater responsibility. Emphasis is laid on the following points.

- Computer aided designs (CAD).
- Computer aided manufacturing (CAM).
- Increased use of decision support systems (DSS).
- Technological changes in information handling and office automation.

CURRENT TRENDS IN INDUSTRY AND BUSINESS

Globalisation has led to transnational strategic alliances between firms. Knowledge intensive nature of production has led to automation and lesser human participation. Changing customer demands have led to more customized products and services leading segmented production and markets having divided in penny packets. The following trends have been noticed.

1. Faster product renewal to meet the ever changing demands.
2. Access to state of the art technology has led to lower usage of traditional material, reduced use of resource–based inputs as various synthetic substitutes having been developed.
3. Higher expectations of stake–holders.
4. Transnational strategic alliances.
5. The trend has led to work being undertaken by cross–functional teams leading to lack of cultural formation and continued cohesion among the team members.

IMPACT OF TECHNOLOGY ON HUMAN RESOURCE

The basic objective of ergonomics is to properly balance the anatomical, physiological, perceptual and information processing capabilities and limitation of human operators against the requirements of tasks, equipment, tools and machines in work situations. Ergonomics or human factor engineering is concerned with achieving the best fit between human skills and technology. It utilizes results and insights from psychology, anatomy and physiology with that of machines and tools to achieve optimum output. It focuses on the scientific study of human capabilities, (IQ & EQ) to work performance. While doing so, it takes into considerations the environmental severities like heat, fumes, vibrations, toxic substances and fatigue to human mind and body. Technology is a systematic application of organized knowledge to practical tasks. In recent days technology has been developed beyond anybody's comprehension. Technology has led to reduces distances, explore universe, map any place on the earth, explore genetical issues and produce product and services that give leisure to human beings. The effect of technology on human resources is as under:

1. Jobs have been upgraded hence an enhance level of intellect is now required to handle most of the jobs hitter to handled by unskilled or semi-skilled labour.
2. Highly technical jobs have resulted in displacement of people unless they have kept pace with the technological development.
3. For those employees, who pick up and acquaint themselves with new technology, the job will be challenging and rewarding. Working class, in general, stands to gain through increased productivity, reduced prices an increased real wages - all by product of new technology.
4. Technology has attributed development and promotion of human relations. Introduction of team work, quality control teams are outcome of technology–human interface.
5. Job holders have become highly knowledgeable and hard core professionals. Organizations have become "techno-structure" having ideal combination of scientists, technocrats and management specialists.

FUTURE CHALLENGES

1. **Governance:** Achieving legitimacy for dispersion of power, decision making and accountability.
2. **Employment:** Satisfying social needs for job creation and employee demands for secure and challenging employment.
3. **Environment:** Integrating restorative economics and sustainable development into the main stream of corporate competitive strategy.
4. **Infrastructure Development:** Building and maintaining physical and social infrastructure necessary for social and corporate success.
5. **Public-Private Sector Roles:** Working together to achieve a viable synergy for growth.

CONCLUSION

Globalised environment, technology based short product cycles, market growth has led organizations to tailor human resource management functions. Organizations have to review external and internal environment continuously and implement change. This is required to be growth oriented and competitive. Those organization cannot survive that do not keep human resources fully trained and management cadre developed.

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