

Organizational Change with respect to technology and workforce for creating an optimized organization

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Abstract

Change is the process of moving from the present to future state. Technological change has dramatically increased the pace of change, organizations are required not just to function effectively but efficiently and ensure optimum utilization of available resources to meet the challenges of changing business environment. The study focuses on understanding the significance of Organizational change and the need to create an optimized organization. The study also focuses on impact of technology both as a factor of production and as tools for workforce management for achieving organizational optimization. The study concludes with right mix of different factors of production along with other indigenous variables influencing organizational optimization.

Keywords: *organizational change, Optimized organization, technological change, workforce optimization, Human Resource*

1. Introduction:

In today's rapidly changing business environment and the resulting competition has made it essential for business organizations to adopt and adapt to the changes. The conventional resources available for organizations are its men, machinery, material and Money. Organization is to have the best combination of these resources if it is to compete in the market. Assuming the material and money to be given the men i.e., workforce and machine i.e., technology plays a critical role in creating an optimized organization. The right mix of workforce utilization along with technological change is required on the

march towards achieving organizational optimization. The first part of the study is on forces of organizational change and the benefits of effective organizational change. The second part of the study introduces the concept of organizational optimization and its management. The third part of the study is concerned with technological change both as a factor of production and as a tool to optimize the workforce performance.

2. Objectives:

1. To understand the significance of organizational change.
2. To comprehend the need for creating an optimized organization.
3. To review the significance of technology and workforce for optimized organization.

2.1 Research Methodology:

The present study is exploratory in nature and relies extensively on secondary data like journal, books, and published reports of the Government. The scope of this study is not confined to any one or few organization and hold true in general for all the organizations. The major limitation of this study is that the findings are not substantiated with primary data.

2.2 Literature Review:

(Kotter, 1995) suggests as eight step model to understand and manage the process of organizational change. Each step relates the responses of people to

the change process, where people see, feel and then change.

(Lewin, 1951) has characterized three basic stages of change namely Unfreezing, Changing and Refreezing. In Unfreezing stage organization adopts as series of change initiatives and present to the people. The refreezing stage is stabilizing and disintegrating

(Halkos, 2012) one of the major reasons that necessitate change in modern enterprises is the evolution of technology. New raw materials, products, methods and operations, require organizations to adapt and implement new technologies, and employees to constantly update their knowledge

(Christensen,2003)Technology Management is the field of study which imparts skills and knowledge designed to improve the entire process of technological change and ranges from system planning and design, to introduction, to evaluation of effectiveness.

3. Organizational change:

Change refers to an alteration in the existing state of things. All managers today recognize the inevitability of change, the fact that the only constant (permanent) is change itself. In today’s rapidly changing business environment organization may find it difficult to run a business successfully if they do not adapt themselves to the changes in the business environment.

Change is a process of moving from the present to future. In recent times the pace of change has increased dramatically, the effectiveness and efficiency of the organization depend upon its success in embracing the change needed in the organization. An organization that ignores changes does so at its own peril.

According to Daft (2004) organization change is the adoption of new ideas or behavior by an organization. Organization change is the movement of an organization from its current state to some future desired state.

Table 3.1: Forces of change

Forces	Examples
Nature of the Workforce	More cultural diversity, Aging population, Many New entrants with inadequate skills.
Technology	Faster, cheaper and more Mobiles, Computers and hand held devices ,Advanced manufacturing machines, Robots, PLC,CNC etc.
Economic shock	Financial sector collapse, Global recession
Competition	Global competition, Merger and consolidation, increased government regulation and commerce.
Social trend	Increased environmental awareness, more multitasking and connectivity
World politics	Rising health care cost, Negative social attitude business and executives etc.

Source: Robbins, S. P., Judge, T. A., & Vohra, N. (2012). *Organizational Behaviour. India: Pearson. ISBN 978-81-317-6093-2*

(Bhattacharyya, 2015) organization change comprises four main elements namely; Content, Context, Process and Criterion. The contextual theory of organizational change emphasizes the identification of forces and conditions in internal as well as external environment. Process theory of organizational change deals with actions or organizational responses to implement change within the organization and employees’ response to these. Content theories of organizational change deal with the causes and the resultant effect of change in individual and organizational performance data. Criterion theories on the other hand tackle outcomes usually evaluated in organizational change. The need for change in an organization is often difficult to trace. Some of them could be, to improve and grow, as, to seize the opportunity, to face the challenge to set right the situation etc. The intended outcome and benefits of organizational change are as follows.

(Rodovic, 2007) most companies’ operational strategies and structures reflect past business realities—making organizational inertia one of the most significant obstacles to change. However, it is noted that leadership and management skills, such as visioning, prioritizing, planning, providing feedback and rewarding success, are key factors in any successful change initiative.

Table 3.2 Outcomes of Effective Organizational change management (OCM)

OCM Outcome	Bottom Line Impact
Visible, consistent support for the change (less resistance)	Reduced Project contingencies
Implementation plans that accurately and proactively Identify and address change-related disruption	Closer adherence to project timeframes and budgets
Greater implementation speed because of reduced resistance from end-user, and increased capabilities for successfully interacting with technical solution	Momentum necessary for selling and implementing follow-on versions of technology solutions.
Alignment of change with existing organizational structures and systems	Greater customer satisfaction and an increase in customer referrals leading to a competitive advantage.

Source: Adapted from Kotter, J. P. (n.d.). *Leading change: Why transformation efforts fail*. Retrieved September 1, 2018,

(Bhattacharyya, 2015) the failure rate in organizational change is high because of the following reasons.

1. Inappropriate and often UN realistic expectation form organizational change.
2. Absence of sustained efforts over a period of time to introduce organizational change.
3. Incompatibility between declared change objectives and actual behavior and action
4. Lack of support and systems
5. Lack of commitment to organizational change plans.

4 Optimized Organizations

. Organization is to have the best combination of these resources if it is to compete in the market. With the organizations entering new age of economic uncertainties, competing by capability maximization has become the need of the hour. Such organizational capabilities are created using combination of limited resources dispersed within the organization. Real opportunity for optimization is locked in the way different dimensions of organizational framework (structure, workforce, processes and technology) interact with each other. Optimized organizations ensure that the resources are leveraged to their best potential to create the unique capabilities.

As given in the KPMG Report 2012, Ideal state optimization results with the concurrent

maximization of resource efficiency, effectiveness and utilization.

Utilization: It is the proportion of the available time (expressed as a percentage) for which the resources are deployed.

Efficiency: It is the ratio of the output to the input of the resources.

Effectiveness: It is the extent of the match between the actual outcome and the intended outcome of the resources

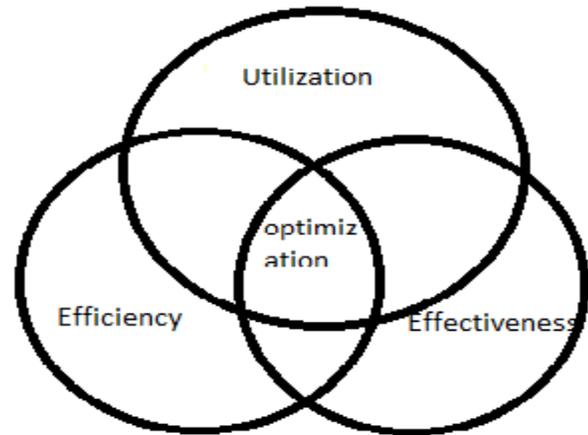


Fig 4.1. Ideal state of Optimization

Source; Adapted and modified from the KPMG Report 2012

Management of creating an optimized organization may require much deviation from the normal ways of working within the organization. Management of organizational change for creating an optimized organization is addressed through three phase

Analysis phase: It is about assessing the risk and cultural readiness of the organization. In this phase following questions are to be answered. Why do we need to change? What are the desired benefits? How does it impact us? To identify the risk associated with change? Decide on the strategy for change?

Engagement phase: It is about addressing and mitigating change resistance. How to galvanize Leadership consensus for change .Managing the

stakeholders Involvement of stakeholders in decision making process

Delivery phase: It is about the implementation Mode of the Change. Organization integration How to ensure workforce effectiveness How to measure and monitor progress to ensure sustainable benefits.

5. Significance of technological and workforce optimization:

Resources available in any organization being scarce, it is not enough for the organizations to just function effectively but they have to function efficiently and ensure optimum utilization of the resource available to them. The degree or pace of change is new and information revolution has accelerated the pace of change. Competition and host of other reasons are responsible for the rapid technological change and innovations all over the world. The change in technology continuously demands the existing employees to upgrade their skill and knowledge.

In this study the term technological change is presented from two perspective firstly, the change in technology as change in factors of production and its consequent impact on workforce. Secondly, it refers to change in technology used to manage the workforce i.e., workforce management technology.

Organizational change with regard to both these perspective require change in the way workforce function. With respect to the first perspective organizational effectiveness is posited through skill up gradation of workforce. Through the second perspective optimization is achieved through the use of technology in workforce management, i.e., through the use of automated workforce management tool.

(Holland & Bardoel, 2016) There are both smart and dark sides of technology and the new wave of technology has led to significant change in the people work. Technological change disturbs the existing social adjustment at the workplace. The impact of technology on human resources is significant, direct and complex. Jobs are becoming more intellectual, enhancing the need for highly skilled worker and multi-professional managers. Jobs handled by semiskilled employees are now to be handled by skilled employees. Technology change demands employees who are multi-professional. Technology influences organizational structure through job

redesign and change in job description demands for new knowledge and skills from the employer.

Workforce planning requires high readiness levels require anticipating and responding to changing workforce needs and market demands, and allocating resources effectively and analyze what an organization will need in terms of the future size, type, and quality of workforce to achieve its objective. The tough challenge here is to identify, synergize and leverage dispersed capabilities within the organization; and the ability to do so may be the key source of competitive advantage in the current times

Workforce optimization is a key element in creating an overall optimized organization. Simply stated, it is about getting the right set of employees, at the right time, at the right cost and at the right place. It seems like organizations have to get a lot of things 'right' in order to reap the benefits from workforce optimization. This often seems to be the reason why most organizations don't even attempt it. However in the changing economic scenario, organizations can no longer take the liberty of continuing with the misaligned workforce. Appropriate workforce planning and negotiating the right workforce contract (part time, temporary, permanent, contract employees) are the two key facets of workforce optimization. Organizations are thus increasingly exploring diverse internal/external partnerships to realize the objective of workforce optimization.

- Manage the total (Right Number)
- Know what expertise is needed (Right Skills)
- Pay best market rates (Right Price)
- Align resources to the work (Right Match)

The right mix of workforce utilization can help the organization in reaping the maximum benefits to the organization.

In the era of technological change organization, one of the means to achieve organizational effectiveness and excellence is through skill up-gradation along with technological up-gradation. Any organization intending to upgrade its skill is required to undertake the following:

Skill Inventory: Skill inventory helps in immediate identification of individual and their suitability for different jobs. Its purpose is to provide the

organization with quick, accurate information, about employees and their skill.

Multiskilling: Multiskilling aims at a holistic development of human potentialities to effectively address the requirement of changing production processes, organizational system and technology. Multiskilling facilitates intra-occupational and inter-occupational job mobility, and thereby reinforces organizational effectiveness and excellence.

Acquiring new skills: Modern workplace is technology-driven and makes extensive use of information and communication. Employees should acquire technical skill related to specific concepts, methods and tools, specific to the organization skills to handle information technology and learn to use new tools to achieve efficiency.

The automated manufacturing process leads to effective workforce by eliminating unproductive practices. Increasing the efficiency of manual day to day tasks, new technology that optimizes the workforce leads to greater customer retention, minimized compliance risks and more cost-efficient operations- resulting in more revenue and increased Return on Investment. Human capital is one of the important assets of a firm for sustained business growth. While most companies have automated the core Human Resource functions. The uses of automated workforce management tools are important for obtaining optimum results.

(David Caruso,2007)workforce management technologies that boost manufacturing labor productivity include tools for talent acquisition programs supplemented by automated sourcing, screening, assessment, and selection tools can result in a reduced time, to set up and track adherence to policies for attendance and related elements like tardiness, discipline, and overtime, – to track adherence to leave policies for vacation, disability, and regulated benefits, tracking of certifications and licenses is also critical to maintaining and ensuring adequate inventories of employees who are qualified to perform specific tasks or use specific pieces of equipment, more advanced automated applications can optimize the allocation of labor resources, based on employee skills, attributes, and preferences, across locations, times and tasks – something very important in a globally deployed workforce, task management applications create the ability to assign specific employees to specific activities with specific completion deadlines for execution, by using

performance and incentive management tools in conjunction with compensation systems, companies are striving to achieve true pay-for-performance

However technology by itself does not guarantee success.. According to Christensen (2003) it is also important to understand that new technology per se, cannot improve business performance without first improving the operational process. If the existing process itself is inefficient, technology cannot provide a substantive impact. Accomplishing dramatic improvement in performance usually requires streamlining or fundamentally redesigning existing work processes. Introduction of technology is to simultaneously accompany with re-engineering of people and processes to exponentially increase the value of technology.

According to a report developed by the evidence Centre for skills for health on hoe do new technologies impact on workforce organization posits that the introduction of new technology alone does not guarantee positive outcome, instead simultaneous re-engineering of people and processes is needed to exponentially increase the value of technology to an organization.

6 Conclusions:

Organization is to have best combination of its resources if it is to compete in the given competitive business environment. The right mix of workforce utilization along with technological change is required on the march towards achieving organizational optimization. It is said that any problem rightly identified and defined reduces its intensity by half, on similar lines the rightly identified and defined need for organizational change reduces complexities associated with change management process. To address the impact of technology on workforce through skill up gradation and use of workforce management tools shall results in optimization of both technology and workforce in organization. However technology and workforce by itself does not guarantee success, the right mix of both is required for optimization along with other factors such as appropriate organizational culture, High performing leaders as change agents and the way resistance to change in tackled plays a significant role, which shall be the area of research in my next study.

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