



Changing the Workplace with Technology Driven Flexible Management

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Abstract

Advancements in the Information and Communication Technologies (ICT) transformed the traditional workplaces into digital workplaces. Human resource is regarded as a significant asset in terms of skills and abilities. Flexibility in managing human resources is an important aspect in organizational productivity. With new technologies and digitization, organizations require a flexible system in its portfolio which will encourage employees with multiple job skills and abilities to prove themselves in result driven environment. In this paper, we present a framework that facilitate interrelationship between human resource flexibility and organizational effectiveness. Further, we establish the possible role of organizational citizenship behavior and employee interest to stay with the organization.

Keywords: *Human resource flexibility; organizational citizenship behavior; intent to stay; organizational effectiveness.*

Introduction

Human resource (HR) is regarded as a significant asset in terms of skills and abilities. There is a strong relation between productivity and employee-employer relationship. So, flexibility of human resource is an important aspect in organizational productivity. In many organizations profits define employees incentives where as in government organizations and academics, incoming and outgoing time is very important where a punctual employee is treated as best employees irrespective of his contribution to the organization. Family responsibilities of staff have a direct effect on the company's productivity. An employee who is worried about the care of an elderly parent, or kids is unlikely to give full attention to the task at hand. Flexible management is a cost-effective way of dealing with these issues. Managers who have the skills to be flexible and the strategies to work with employees for a win-win situation are more productive and favourites among their employees. So it is the time to change the workspace with the changing realities of society. With the advancement of technology in this digital world *Flexible management* can become a reality. In the fast changing era of Information Technology, new technologies and digitization, organizations require a flexible system in its portfolio which will encourage employees with multiple job skills and abilities to prove themselves in result driven environment.

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In this paper, we propose a framework that facilitate interrelationship between human resource flexibility and organizational effectiveness. We study different type of Indian organizations that possess possibility of flexibility and its influence on organizational effectiveness. This work also establishes the possible role of organizational citizenship behavior and employee interest to stay with the organization. The rest of the paper is organized as follows. In Section II, we discuss background and related work. Section III presents our proposed framework along with architecture details for Flexible Workspace management related Human Resources. In Section IV, we highlight the important three dimensions of HR towards digital workplace. We conclude the paper in Section V.

Background and Related Work

Flexibility at workplace deals with making flexible as to when, where and how a person will work to meet his employers needs. Flexibility at workplace relates to flexibility in time, location and flexibility to choose area of interest. Flexibility is proposed by the employer and adopted by the employee with an aim to increase employer-employee relationship and thereby increase the overall productivity. The organization may adopt two types of flexibility, one in which there is predefined policy of the organization and one which is given out of concern for the employee. It is to note that formal flexibilities can be measured whereas informal cannot be.

One of the most famous models of human Resource flexibility is the '*Model of the flexible firm*', developed at the Institute of Manpower Studies¹²; where the 'flexible firm' is defined as a workplace management and organization technique which optimizes HR through flexibility based on segmenting the workers into peripheral and core groups. The core groups of employees are difficult to replace as they have a specific skill set or experience, meanwhile the peripheral group consists of employees who could easily be replaced or who are only needed in the organization for either peak periods or for specific jobs.

The 'core group' of employees are full time, they show high levels of engagement within the organization and they have many different skills. They are also flexible in working time, in order to adjust more closely to production demands. These employees are usually managers, technicians, and designers. The employees in the core group present *functional flexibility* so that they can move between different roles and tasks. Functional flexibility is usually associated with the employees' abilities and a set of tasks that require different skills. On the other hand, Wright and Snell (1998), described human resource flexibility composed by three sub dimensions: employee skill flexibility, employee behavioral flexibility and HR practice flexibility.

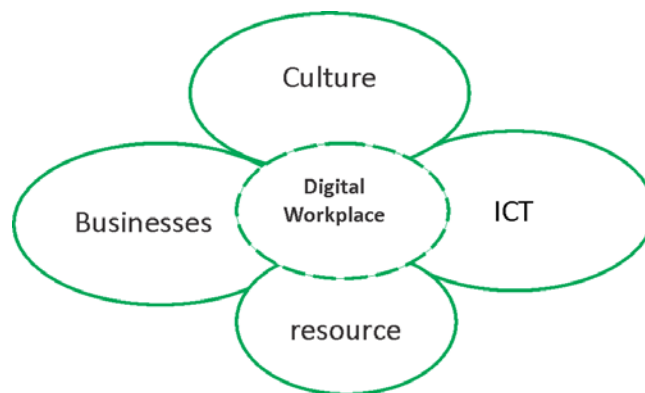


Figure 1: Framework for Technology Driven Flexibility

Information and Communication Technologies (ICT) made a significant impact on various businesses and transformed the traditional workplaces into digital workplaces. The three main characteristics of digital workplace are **3Cs**: (i) Communication, (ii) Connectivity and (iii) Collaboration. These 3Cs help users/employees to work in unprecedented ways. We introduce 'Culture' as an additional dimension that creates adaptive workplace and allow flexibility towards organizational empowerment. That is, the digital workplace brings 'cultural change' in a working environment. The benefits of digital workplace include work-life balance, work from anywhere, work from anytime, knowledge sharing, etc.

Figure 1 shows high-level overview of our framework that enhances flexibility in the workplace. The major aspects that influence the workplace are (i) Business with respect to their policies, (ii) Information and Communication Technologies (ICT), (iii) Human resources and (iv) Culture. Figure 2 shows an architecture framework towards achieving Better Employee Engagement and Employee Inclusive workplace. Major infrastructure requirement include cloud, data center and networking.

Technologies that drive digital workplaces are e-mails, Virtual Conferences, Virtual Meeting rooms, Chatbots, Video calls (e.g., Skype), Artificial Intelligence (AI), etc. AI transforms the workplace the way manager perform their works and interact with their peers and team members. For instance, AI helps managers in mining the vast amount of data related to workers like skills, experience, performance, past works carried out, etc. The patterns from these data is useful to allocate works based on the skills, portfolio management (placing employees in the appropriate units/departments), etc. Further, AI driven Digital Workplaces allow creating/configuring bots (virtual agents) so that the bots can estimate the time taken by each task (based on the historical data), assign tasks to appropriate workers, schedule meetings, etc. The technologies create digital workplace innovation that continuously improve the organizational effectiveness and employer-employee relationship in a more informed manner. Finally, technology and culture change along with 3Cs make better workplace. Further, digital workplaces that facilitate flexible management improve the efficiency, productivity and overall workplace practices. Some limitations of these changes in workplace are security and privacy, work on any time zone, spoofing, etc.

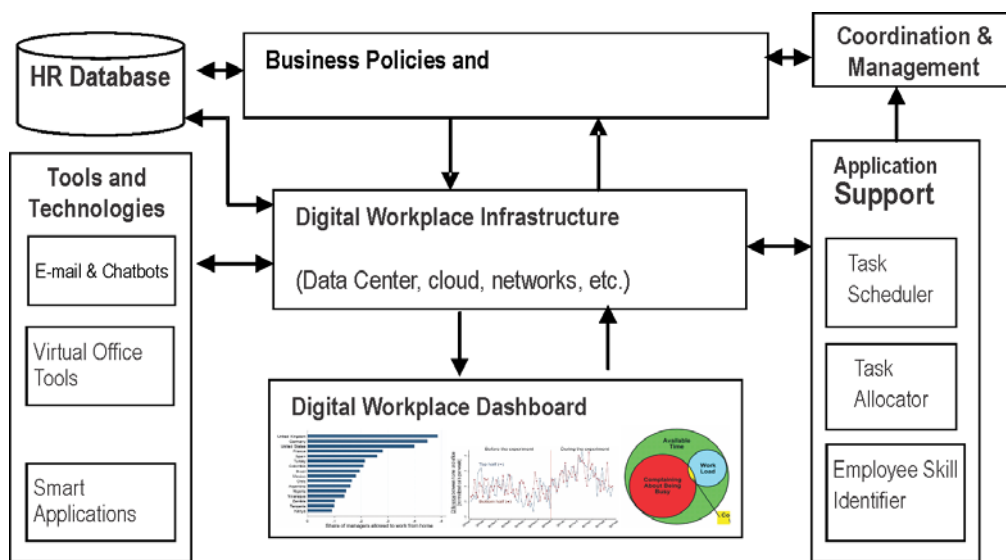


Figure 2: Architectural Framework for Digital Workplaces

Flexibility in Work Culture

In this section, we discuss three dimensions namely work from home, working in shifts and flexibility in skills, which results into changes in culture at workplaces.

A. Flexibility in place of working (Work from home)

There are two sides of the coin when it comes to working from home. One side is no work will be done as there is no monitoring where as other side is workers will be happier and more productive as, when required, they have work home balance. While a few workers feel that there is more productivity at home and more distraction in the office with wastage of travel time and friends chitchat and unnecessary meetings, others feel there is a lot of distraction at home with TV and family around. It all depends on the personality of the worker and the kind of work in hand.

Recent studies have supported the idea that working from home - for the right people - can increase productivity and decrease stress. Several studies show that supporting work from home saves money for the company - an added bonus on the employer side.

The IT industry is well known for its shift schedules and work from home option. With networking going stronger and with the rise in facilities such as VPN chats, Video calling facility and wireless internet, people across the globe are always connected with one another as if they are all at one place. Technology experts across the globe can be shared by more than one company instead of permanently hiring them for a short schedule as a package which adds advantage to the company and the skilled person has more opportunities than bond.

Employer Benefits

(a) Better utilization of space

Employees are not the only ones who benefit from working from home; organization also benefit just as greatly by utilizing same office space for double the number of employees, increase productivity, and save money. This is very easy to implement where companies generally take projects of remote users. Similarly, the companies can get the work done using remote employees with added SVN facility to monitor the work.

(b) Better utilization of skills

Simon Slade, CEO and co-founder of Affilorama has experienced firsthand the benefits of having remote workers at his company, According to him, "By allowing employees to work remotely, you can hire the best of the best while not limiting yourself by geographical restrictions. And some time we need not hire them completely but take work and pay them". Study shows that work from home gives same work satisfaction and performance. Instead organizations can save money as such employees use their own computer, electricity and other utilities. Opening the talent pool with freelance workers can become a big benefit with research and open source departments which allows the research to happen round the globe. Linux and other open source software are examples of this kind of products.

Companies might also retain more employees if they enact a work from home benefit. Nick Bloom, a Stanford professor, conducted a study to evaluate the benefits of working from home. He found workers were more productive, got more done, worked longer hours, took less breaks, and used less sick time than their in-office counterparts. These employees were also happier and quit less than those who went to office on a regular basis. He estimated that, on average, the company saved around \$2,000 per employee who worked from home.

(c) Health Benefits

People who work from home travel less and hence face less stress in traffic. Travel cost is also saved by the employee and employer. They can have an easier time eating healthy and striking a manageable work-life balance. Eating healthier and having more time to spend with your family can help you feel less stressed, which will make for a happier more productive workday.

Managing work from home through technology

Companies are certainly catching onto the trend, and most of them are already giving the flexibility to work from home - at least when needed. Definitely in the fast growing market and technology and even banking facility on mobile, increased productivity can be measured with work from home option. With virtual team working, employees need not work at same place, or even at the same time, in order to work together. Consider the following options:

- employees work separately and keep in touch with employer and each other via email.
- **Same time, different place Different time, different place** - employees can communicate with each other in 'real time' through telephone conference calling, video-conferencing or using instant messaging.
- **Different time, same place** - employees can access your business network or databases by connecting to an intranet or extranet. A virtual private network is a more secure, but expensive, way of doing this.
- **Same time, same place** - even working from home, employees will still need to meet face-to-face occasionally. Email and electronic diaries allow to arrange meetings and transfer documents, while wireless technology allows to meet anywhere.
- **Any time, any place** - mobile phones and laptop computers with wireless internet access mean that employees are always accessible and can work wherever they are.

Security

Security and privacy of the data is the main issue. Antivirus and firewall and secured VPN connections would be an option but the workers should read and understand IT policies and know their information security responsibilities.

Employees who deal with sensitive information should be particularly careful about:

- **Safety of equipments at home**
- **Safely carrying equipment from one place to another and be aware of theft and misplacement due to negligence**
- **Working using public internet access may not be always secure**
- **Printout and other paper document related to work should not be thrown at public places without shredding them**

B. Flexibility in timings (Working in shifts)

There have been many deliberations over the advantages and disadvantages of working in shifts for employer or the employee. A specific work is handled in shifts by different sets of crew working in shift relay which is how the work gets 24 hours exposure and coverage. For certain time sensitive tasks, such practices are beneficial in terms of employer's perspectives. For the employee it can mean liberty and convenience. However it can have many negative impacts too. Most of the bad impacts on employees are related to health. The main advantages

of working in shifts are convenience, reduced amount of working hours, training prospects; avoiding peak hour's traffic, pushing works to weekends and flexibility to leave.

1. Convenience:

Employees are able to choose the shift according to their needs. A person who needs to take care of home can opt for night shift and a person who is free in the morning can opt for morning shifts. At the same time it is beneficial when it comes to taking leave. The common morning shifts seems convenient however these days people choose for night or evening shifts because they get the liberty of time with such shifts. This is one of the benefits of working nights.

2. Reduced amount of working hours:

The working hours are less in shift works. In regular ordeal the work hours extend to overtime with the purpose of completion of tasks given. However in shift works becomes easier as the next crew to shift shall be handling the rest of the work thus no need of putting in extra hours.

3. Training prospects:

This is the best attribute of shift work. One gets opportunity to enhance his skills by working in shifts and managing time for the training without taking leave.

4. Avoid peak hours:

Morning shifts take most of the travelling time. Peak hours or rush hours travelling to work leads to stress, frustration and less concentration. Slight change in timing can make travelling flexible.

5. Pushing works to weekends:

Working in shifts allow completing important family chores during weak as they are not pending for the weekend. This leads to relaxed weekends which can be spent with family and friends leading to a balanced life

6. Flexibility of leave :

Instead of keeping option of leave only at weekend, one can request in the midweek and compensate for it later. It is easier as one can swap shifts with coworkers too.

Disadvantages of working in shifts are abnormal routine, shift inequality and safety.

1. Abnormal routine:

The pattern of sleep, wake up time and eating time is not the same for the shift workers. Night shift workers feel tired and lazy as they do not get enough amount of sleep during day time. Even the eating schedule changes for night shift employees. Shift workers have regular change in routine which is difficult for the body to adjust and sometimes he gets totally disconnected with social life. Lack of sleep reduces the ability to be attentive at work affecting productivity and even may lead to major accidents.

2. Shift inequality:

In some of the organizations, shifts are based on seniority and seniors get the best slot like the day shift and the rest of the employees get evening and night. This may result into imbalanced team with respect to experience and juniors do not get the advantage of working with seniors and learn from their experience.

3. Safety

This is the major concern of organizations specially with women workers as either they have to employ women workers in morning shift or carefully handle their safety in night shifts. Night shifts still prove risky for women out of the workplace premises.

C. Flexibility in skill

Employees who approach their job with a flexible mindset are typically more highly valued by employers. Flexibility on the job includes the willingness and ability to readily respond to changing circumstances and expectations. They never say "I don't know" or "I will not" they find opportunities to take new assignments and understand demands and situations.

In general organizations appoint people based on qualification and experience. But sometimes while working in an organization, employee learns new skills as per his area of interest and would like to work in the same area. Organizations should be flexible to allow him and utilize his skill set as such an employee is ready to take more responsibilities and ready to do more work. Performance management system should not value current performance of the employees, but provide them opportunities for their advancement of capabilities, skills and knowledge in upcoming times. This will inspire them for positive conduct towards work and organization. At the same time, this will make employees to react aggressively and effectively to their respective portfolio, ultimately leading to effective organizational performance (Galinsky, Sakai, & Wigton, 2011). An organization may develop skill flexibility through processes such as job-rotation, cross-functional teams, and project-based work arrangements, all of which generate broad skill configurations specific to the organization that are not easily replicable. Employees stick to the organization which adopt new technology, provide them training to increase their skill set.

Flexible Managers treat their employees as individuals and make an effort to accommodate personal styles and needs. They help them suggest the ways to achieve the goals and create a kind of relationship with the employee. They regularly motivate them and give recognition of their hard work

Optimize performance

Work satisfaction and family well-being give employees a level of control over their work arrangements⁸. Organizations that invest considerable time and money into training and developing their staff see it as good business to adopt policies that will attract and retain skilled personnel.

Employees who are interested in organizational citizenship behavior are bold and committed, work hard to meet organizational goal effectively, and have a need for developing innovative ideas in achieving organizational innovation (Yang & Konard, 2011). Hence organizational creativity and adopting to new technology relates to organizational citizenship behavior that is instrumental in achieving competitive advantage. The organizational citizenship behavior is the outcome of organization's human resource system. Thus, the association between human resource flexibility and organizational citizenship is likely to have a positive influence on organization..

Relationships between human resource flexibility and job satisfaction produces (a) Employees with part-time contracts by employers' decision will have lower levels of job satisfaction than employees with full-time contracts, (b) As higher is the flexibility in the working schedule, higher will be the level job satisfaction, and (iii) Workers on shift contracts have a lower level of job satisfaction than those who does not work on shifts.

Conclusion

Human resources flexibility has an important effect on job satisfaction. The human resources department and the whole organizations should take into consideration when they decide the HR policies. Flexibility in the workplace will continue to become more important for both men and women. However, with the advent of new technologies, workplaces develop strategies that enable and encourage flexibility for those with family responsibilities, the needs of those with other commitments, including sport, community or political involvement, other business and even recreational pursuits, will also be able to be accommodated. This flexibility will be significant advantage for older employees at the workforce just as it has been associated with more women actively engaging in the workforce.

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