# MANAGING WORK STRESS AND EMPLOYMENT RELATION IN INFORMATION TECHNOLOGY INDUSTRY IN PUNE REGION

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#### **ABSTRACT**

Employees of Information Technology work 24 hours in a day, seven days a week. More often than not, Zealous Information Technology take on more work than they can handle, forcing employees to work round the clock. Especially in case of working employee situation is worst because her responsibilities are divided in to two parts - Household activities and the Office. Companies operate in a stressful Design, and the employees work under extreme deadlines. Furthermore, many studies have indicated that much or some of the workspace inhibits, rather than promotes, teamwork and flexibility, which are key factors in productivity. Today's workplace is different, diverse, and constantly changing. The typical employer/employee relationship of old has been turned upside down. Management's new challenge is to create a work Design that attracts, keeps, and motivates its workforce. The responsibility lies with managers at all levels of the organization. Businesses must step outside their traditional roles and comfort zones to look at new ways of working. They have to create a work Design where people enjoy what they do, feel like they have a purpose, have pride in what they do, and can reach their potential.

Keywords: Work Stress, Information Technology, Work life balance, Work Design, Job Satisfaction

# 1. INTRODUCTION

IT, short for Information Technology, and pronounced as separate letters, Information Technology is the application of computers and various techniques, to handle masses of data. This broad subject is concerned with all aspects of managing and processing information, especially within a large organization or company. Computers and communications technologies form the backbone of Information Technology (IT). To a large extent it underlies the rise of modern business and economy.

Constantly, such a technology forces an industry to learn, to acquire, to adapt and to change its very mindset, let alone its technical knowledge. The impact of IT on workplaces, employment relations, individuals and society as a whole has increased dramatically during the last two decades of the 21st century. This period has witnessed maturation in the field of digital computing, with the combined usage

of telecommunications technology, in order to link many computers, into what is 'virtually' a very large single network, the Internet. It is invading the very core of the way things are being done including industrial relations.

#### **STRESS**

As far as stress is concerned, there is no universal definition of stress. Interestingly, most of the mechanical devices/structures are tested for stress levels in laboratories and manufacturing places for their prolonged life and efficient working. Both physical and psychological stressors have a tremendous impact on not only the employees' health, but also the organization's wealth. Stress has become a major concern of the modern times as it can cause harm to employee's health and performance. However the present paper encloses the human stress, especially among in Information Technology industry.

## STRESS GENERATOR FACTORS FOR EMPLOYEES IN IT SECTOR

# (a) Impact of technology on job satisfaction

Job Satisfaction is the favorableness or un-favorableness with which the employee views his work. It expresses the amount of agreement between one's expectation of the job and the rewards that the job provides. The nature of one's job environment is an important part of life because ultimately Job Satisfaction influences one's general life satisfaction. Job Satisfaction, thus, is the result of various attitudes possessed by an employee. In a narrow sense, these attitudes are related to the job under condition with such specific factors such as Wages, Employment Supervision, Working conditions, Social/Human relation on the job, Prompt settlement of grievances and Fair treatment by employer. However, more comprehensive approach requires that Inter and Intra Personal factors to be included before a complete understanding of job satisfaction can be obtained. Such factors as employee's age, health, temperature desire and level of aspiration should be considered. Further his family relationship, social status, recreational outlets, activity in the organizations etc. contribute deeply to job satisfaction.

Information Technology (IT) has played an important role in business since the 1950s and the use of technology to reduce costs, improve operations, enhance customer service, and improve communications has progressed rapidly over the past four decades.

Job satisfaction is an important criterion for the success of an organization where it is closely associated with job turnover and life satisfaction. Using new technologies such as Computer-Aided Manufacturing (CAM), Virtual Reality (VR), Expert Systems (ES), and the Internet can give companies an edge. New technologies can result in employees "working smarter" as well as providing high-quality products and more efficient services to customers. Companies that have realized greatest gains from new

technology have human resource management practices that support the use of technology to create what is known as high-performance work systems. Work, training, programs and reward systems often need to be reconfigured to support employees' use of new technology.

# (b) Impact of technology on performance

Performance is the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed. Use of technology within the ethical limits definitely benefits the organization, along with improvisation in individual and group performance. On one hand, employee workload reduces through technological advancement; on the other number of employees to perform a task is also reduced, thus reducing job opportunities. Companies use advanced technologies to check and evaluate employee's performance via Human resource management department. To drive productivity and manage human capital, HR department leverages emerging technology to keep up with the market trend. Current technology trends impacting HR are Outsourcing and focus on value that HR brings to the organization. The demand for better service performance has driven a technological trend towards more powerful, integrated and scalable system components.

## (c) Impact of technology on work-life balance

Work- Life Balance is a comfortable state of equilibrium achieved between a person's primary priorities of their employment position and their personal lifestyle. To put it in simple words demands of a working individual's career should not overwhelm his ability to enjoy a satisfying personal life beyond the business environment. These days, we have so many potentially labour saving technological devices, which we have deeply inculcated in our daily practices but with a logical question: to what extent do such advances increase rather than decrease workload and stress? New technology can clearly enable us to work faster and more efficiently, and it facilitates flexible and remote working e.g. work from home, preparing quick presentations

## 2. OBJECTIVES

- a. To study the impact of technology on various related factors 'Employment relation', and 'Work stress Balance' respectively.
- b. To study for factor is most affected by the implementation of new technology via Analysis.
- c. To study the association between level of stress and level of work load among employees in IT sector.

## 3. REVIEW OF LITERATURE

**Derks et al** [64]: examined the impact of work related smartphone use on daily recovery from work-related efforts to which work home interference (WHI) is an important inhibitor. Contrary, to their hypothesis it was found out that smartphone user did not experience more overall work-home interference (WHI) than nonusers. For control group WHI was positively related to psychological detachment, relaxation, mastery and control activities, implying that being connected to work in evening hours through smartphone's had consequences only to the extent to which employees succeed in recovering.

**Mazmanian et al [65]** studied how wireless e-mail devices specifically the Blackberry were incorporated into daily lives of professionals and its consequent social impact. Findings suggested these Blackberry communication entailed 3 important dualities having conflicting consequences for work and lives of plymouth members: continuity and synchronicity, engagement and withdrawal, autonomy and addiction, making it difficult for members to disengage from work and blending among people.

Ali[66] analyzed employment relation systems of three Asian countries-China, India, and Korea. He made a case for diversion in employment relation systems that technological advances, improved communications, economic liberalization, and increased international competition has brought in an era of economic, institutional and cultural integration. Under globalization the workplace practices are under a constant state of movement. Academicians not only analysed the benefits and the deleterious effects of this phenomenon on the employment relations of developed and under-developed nations, but also stirring up the debate whether the industrial relations systems of countries are converging or diverging.

Morris and Dillon[69] focused on understanding the factors which influence user acceptance of information technology. They reviewed literature that demonstrates the nature of technological acceptance, which is mediated by distinct factor groups related to: the psychology of the users, the design process of information technology, and the quality of the technology in user terms. The research offered insights that could support the derivation of reliable predictions of user acceptance. However, potentially overlapping theories seem to exist, though independent of each other creating possibilities for unifying this framework to extend innovation diffusion concepts and systems design models (particularly user-centered design) into a formal theory of user acceptance of information technology.

**Gudmundsdottiret. Al.** [70] investigated that great changes have been discovered with the introduction of technology in the last decade, regarding the organization of work. The results show that when dividing fishing factories into three technological stages; low technology, middle technology and high technology, the job strain was highest and the decision authority by the employee was lowest in the high technological factories. This even had an impact on health and atmosphere at the workplace, where the employees in the high technological factories were more likely to complain about several health problems as

well as about low degrees of cheerfulness at the workplace and tiresome jobs. However, initially these same people were most positive towards the implementation of the high technology and the new way of organizing their job that the technology introduced. This effect has made the psychosocial and physical working environment tougher, especially for women .

**Bresnahan** [71] investigated that information technology (IT) and associated changes in work organization were important causes of shift in labour demand in favour of high-wage, high-skill work, which contributed to a substantial rise in income inequality in the United States. Specifically, it was found out that IT use is correlated with a new workplace organization that includes broader job responsibilities for line workers, more decentralized decision-making and more self-managing teams. Therefore, both IT and new organization are correlated with worker skill, measured in a variety of ways. Significantly, firms which attempt to implement only one of the hypothesized complements without the others are less productive than firms which invest in all the complements. Taken together, the results highlight the importance of organizational changes stimulated by IT in the changing demand workers of different types.

# 4. BACKGROUND RESEARCH

As economic times get harder; there arises diminishing security of jobs, because of which people remain in jobs that are consistent; but not fulfilling. The IT sector is seen to be characterized with high Role Stress (Colomo-Palacios et al., 2014b; Karad, 2010). The organizational culture is seen to be lacking in terms of assisting the employees on the knowledge about stress and coping for psychological problems. The work process are highly dynamic and time bound, as employees have definite targets to meet, that are incubated in different time zones. The life expectancy of products and programs declines each year, while the demands on employees to provide better solutions increases. Internal IT departments that cannot keep pace with the changes and are not sufficiently adaptable are in a danger of being outsourced. Because of the unique set of environmental pressures in IT functions - continuous re-engineering, out sourcing, more demanding customers, general information overload (Karad, **2010**) and hard decisions (Colomo-Palacios et al., 2013).

In the Indian IT industry, the trend towards aspiring youngsters who would work extra hours to acquire material comforts; seems to increase. Researchers have shown that broadly the major causes of workforce attrition in the IT sector are work-related, psychological and emotional. The specific variables are effort-reward imbalance, perceived workload and emotional exhaustion. Research shows that there is a very common practice of software engineers who have less than five years of work experience; to leave work. This

is a resultant of issues like a shrinking student base, low attractiveness of the profession in terms of image and status (Garcia-Crespo et al., 2008; Day, 2007). A direct outcome of stress is seen in the high levels of attrition that the industry faces. A big challenge for contemporary organizations is to create an environment that equips employees with well suited coping mechanisms and programs in stress management. Research shows that, high levels of stress can lead to emotional exhaustion, lower organizational commitment, and increased turnover intentions (Cropanzano et al. 2003). More recently, research by ColomoPalacios et al. (2014) shows that stress also leads to IT career abandonment.

A big challenge that the organizations face is that, stress interventions cannot be used as a blanket strategy for all the employees. Apart from individual differences that exist in the workforce; there are always generic differences that are brought forward by demographic factors. The present study explores in detail, the role of various demographic factors in studying workplace stress among the professionals of the IT industry. There are extremely few researches that explore this aspect in the Indian IT industry. The outcomes of the study will be beneficial for the management professionals in dealing with different strata of employees, when it comes to the issue of workplace stress.

#### 5. HYPOTHESIS OF THE STUDY

Ho: There is no significant association in the level of stress and level of work load among IT employees.

H1: factor affects implementation of newer technology

H2: More work load leads to more stress

H3: More stress leads to straining of employee relation

## 6. KEY FINDINGS

This research study examines the various factors that lead to stress at the workplace in IT Sector in Pune City. The employees in this sector experience a lot of stress due to various problems like glass ceiling, 24 X 7 work pressure, prolonged working shifts, work-life balance, gender biasness, social constraints, security problem, lack of training and development opportunities, sexual harassment at workplace etc. in addition to these they also face same problems like work, family, conflict, hostile environment at home, children and elderly care etc.

The study throws light into the work life balance issues of the organization and reflects the general industry scenario. The organization needs to bring in more policies to enable better work life balance and thereby facilitate better productivity. There also seems to be a lack of awareness and usage of the existing policies aimed at better work life balance. The problem of work life imbalance appears to be a matter of

huge concern when looked from an outsider's point of view and so are their aftermaths. But the solutions are very simple and easy to implement.

## 7. MANAGERIAL IMPLICATIONS OF THE RESEARCH

This research study throws key challenges to the HR departments in the IT sector. Effective study and implementing employee friendly policies by taking across all the stakeholders involved into the purview can lead to stress free and conducive work environment that can go a long way for improving work life balance and enhancing the productivity of the employees working in the IT sector. This study can pave way for further detailed studies in the field of HR and its implementation at the managerial level to enhance the dignity and the social well being of the employees engaged in the IT sector.

## 8. CONCLUSION

As we witness an increasing number of work force in the information technology sector. This research focuses on employees in IT sectors in Pune city. Job stress is challenge for both employers and employees of an organization. They should deal with stress efficiently. As the organizations change, its employees may face stress. Stress problems at work should be regularly supervised to avoid its consequences (WHO, 2004). Stress should be properly managed to avoid its adverse effects. Every organization should take measures (working environment, duty timings etc.) in order to keep its employees away from an environment of stress which will ultimately create a win-win situation for both of an employee and an organization. The employee will enjoy good health and the organization will prosper beyond the boundaries when the organization will provide better working conditions and in result the employee will work with zeal and zest for the organization.

#### REFERENCES

- 1. Baker, D. B. (1985). The study of stress at work. Annual review of public health, 6(1), 367-381.
- 2. Bakker, J., Holenderski, L., Kocielnik, R., Pechenizkiy, M., &Sidorova, N. (2012). Stess@work: From measuring stress to its understanding, prediction and handling with personalized coaching. In Proceedings of the 2nd ACM.
- 3. Bakker, A.B., Demerouti, E., &Euwema, M.C. (2005). Job resources buffer the impact of job demands on burnout. Journal of Occupational Health Psychology, 10(2), 170.

- 4. Baruch, G. K., & Barnett, R. C. (1987). Role quality and psychological well-being. In: F. J. (Ed) Spouse, parent, worker: On gender and multiple roles. Yale University Press, New Haven, Connecticut.
- 5. Belkic, K. L., Landsbergis, P. A., Schnall, P. L., & Baker, D. (2004). Is job strain a major source of cardiovascular disease risk? Scandinavian journal of work, environment & health, 85-128.
- 6. Bickford, M. (2005). Stress in the Workplace: A General Overview of the Causes, the Effects, and the Solutions. Canadian Mental Health Association Newfoundland and Labrador Division, 1-3.
- 7. Blaug, R., Kenyon, A., & Lekhi, R. (2007). Stress at work: a report prepared for The Work Foundation's principal partners. Project Report. The Work Foundation, London.
- 8. Bosma, H., Peter, R, Siegrist, J., & Marmot, M. (1998). 'IV° alternative job stress models and the risk of coronary heart disease. American journal of public health, 88(1), 68-74.
- 9. Buunk, B.P., de Jonge, J., Ybema, J.F., & de Wolff, C.J. (1998). Psychosocial Aspects of Occupational Stress. In P.J.D. Drenth, H. Thierry, & de Wolff, C.J. (Eds). Handbook of Work and Organizational Psychology, 145-182.
- 10. Canadian Union of Public Employees. (2003). Enough Workplace Stress: Organizing for Change.
- 11. Canadian Centre for Occupational Health and Safety. (2000). Workplace stress general.

  Retrieved December 30, 2014 from http://www.ccohs.ca/oshanswers/psychosocial/stress.html
- 12. Chay, Y. W. (1990). Stress, individual differences, and social support. PhD Thesis, University of Oxford.
- 13. Cooper, C., Cooper, R., and Eaker, L. (1988). Living with Stress. Harmondsworth, NY:Penguin Health.
- 14. Cooper, C.L., Dewe, P.J., &O'Driscoll, M.P. (2001). Organizational Stress: A Review and Critique of Theory; Research, and Applications. Sage Publications.
- 15. Cox, T. (1987). Stress, coping and problem solving. Work & Stress, 1(1), 5-14.
- 16. Cox, T., & Griffiths, A. (1995). The nature and measurement of work stress: theory and practice. The evaluation of human work: A practical ergonomics methodology. London: Taylor & Francis.
- 17. Cox, T. (1993). Stress research and stress management: Putting theory to work (Vol. 61). Sudbury: HSE Books.
- 18. Cox, T., Griffiths, A., & Rial-Gonzalez, E. (2000). Research on work-related stress. Office for Official Publications of the European Communities: Luxembourg.

- 19. Cox, T., & Ferguson, E. (1991). Individual Differences, Stress and Coping. In C.L. Cooper, & R. Payne (Eds.). Personality and Stress: Individual Differences in the Stress Process. New York: Wiley.
- 20. Crandall, R., & Perrewe, P. L. (Eds.). (1995). Occupational Stress: A Handbook. CRC Press.
- 21. Cryer, B. (1996). Neutralizing workplace stress: The physiology of human performance and organizational effectiveness. Presented at: Psychological Disabilities in the Workplace, The Centre for Professional Learning, Toronto, CA. June 12, 1996.
- 22. Dewe, P. (1991). Primary appraisal, secondary appraisal and coping: Their role in stressful work encounters. Journal of Occupational Psychology, 64(4), 331-351
- 23. De Jonge, J., & Dormann, C. (2003). The DISC model: Demand-induced strain compensation mechanisms in job stress. Occupational stress in the service professions, 43-74.
- 24. De Jonge, J., Bosma, H., Peter, R., & Siegrist, J. (2000). Job strain, effort-reward imbalance and employee well-being: a large-scale cross-sectional study. Social science & medicine, 50(9), 1317-1327.
- 25. Fletcher, B.C. (1994). The epidemiology of occupational stress. In: C.L. Cooper and R. Payne (Eds). Causes, Coping and Consequences of Stress at Work. Wiley & Sons, Chichester.
- 26. French, J. R., Caplan, R.D., &Harrision, R.V. (1982). The mechanisms of job stress and strain (Vol. 8). New York: Wiley.
- 27. Griffiths, A. (1998). The psychosocial work environment. In R.C. McCaig& M.J. Marrington (Eds.), the changing nature of occupational health, 213-232.
- 28. Ganster, D. C., &Schaubroeck, J. (1991). Work stress and employee health. Journal of Management, 17(2), 235-271.
- 29. Johnson, J. V. & Hall, E.M. (1988). Job strain, workplace social support, and cardiovascular disease: A cross-sectional study of a random sample of the Swedish working population. American Journal of Public Health, 78, 1336-1342.
- 30. Kawakami, N., &Haratani, T. (1999). Epidemiology of job stress and health in Japan: review of current evidence and future direction. Industrial health, 37(2), 174-186.
- 31. Klitzman, S., House, J. S., Israel, B. A., &Mero, R. P. (1990). Work stress, no work stress, and health. Journal of behavioral medicine, 13(3), 221-243.
- 32. Kompier, M. (2003). Job design and well-being. The handbook of work and health psychology, 429-454.
- 33. Lazarus, R S., & Cohen, J. B. (1977). Environmental stress. In Human behavior and environment (pp. 89-127). Springer US.

- 34. Lazarus, R.S. (1991). Psychological Stress in the Workplace. In P.L. Perrewe (Ed.) Handbook on job stress [Special Issue]. Journal of Social Behavior and Personality, 6, 7, 1-13.
- 35. Llorens, S., Bakker, A. B., Schaufeli, W., &Salanova, M. (2006). Testing the robustness of the job demands-resources model. International Journal of Stress Management, 13(3), 378.
- 36. McNamara, R. (2008). Combined and selective effects of environmental and psychosocial workplace hazards: associations with health and well-being in public sector employees (Doctoral dissertation, Cardiff University).
- 37. Mark, G. M. (2008). The relationship between workplace stress, and job characteristics, individual differences, and mental health. PhD Thesis, Cardiff University.
- 38. Michie, S., & Williams, S. (2003). Reducing work related psychological ill health and sickness absence: a systematic literature review. Occupational and Environmental Medicine, 60(1), 3-9.
- 39. Peter, R., & Siegrist, J. (2000). Psychosocial work environment and the risk of coronary heart disease. International Archives of Occupational and Environmental Health, 73(1), S41-S45.
- 40. Peter R & Siegrist J. (1999). Chronic psychosocial stress at work and cardiovascular disease: the role of effort-reward imbalance. International Journal of Law Psychiatry; 22, 441- 449.
- 41. Parkes, K. R. (1994). Personality and coping as moderators of work stress processes: Models, methods and measures. Work & Stress, 8(2), 110-129.
- 42. Parkes, K. (1989). Personal control in an occupational context. In A. Steptoe, & A. Appels (Eds.), Stress, personal control and health, 21-48. Chichester, England: Wiley.
- 43. Rahman, H. (2013). Job Stress-Employees Performance and Health: A Study on Commercial Bank in Bangladesh. Global Journal of Management and Business Research, 13(4).
- 44. Repetti, R.L., Matthews, K.A., & Waldron, I. (1989). Employment and women's health: Effects of paid employment on women's mental and physical health. American Psychologist, 44(11), 1394-1401.
- 45. Rydstedt, L. W., Devereux, J., &Sverke, M. (2007). Comparing and combining the demand-control-support model and the effort reward imbalance model to predict longterm mental strain. European Journal of Work and Organizational Psychology; 16(3). 261-278.
- 46. Selye, H. (1946). The general adaptation syndrome and the diseases of adaptation 1. The Journal of Clinical Endocrinology & Metabolism, 6(2), 117-230.
- 47. Sauter, S., Murphy, L., Colligan, M., Swanson, N..Hurrell, J..Scharf. F. S. ... & Tisdale, J. (1999). Stress... at work (DHHS NIOSH Publication No. 99-101). NIOSH. Cincinnati.
- 48. Sharit, J., and Salvendy, G. (1982). Occupational Stress: Review and Reappraisal. Human Factors: The Journal of the Human Factors and Ergonomics Society, 24(2), 129162.

- 49. Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. Journal of occupational health psychology, 1(1), 27.
- 50. Siegrist, J., Peter, R., Junge, A., Cremer, P., & Seidel, D. (1990). Low status control, high effort at work and ischemic heart disease: prospective evidence from blue-collar men. Social science & medicine, 31(10), 1127-1134.
- 51. Spector, P. E. (2003). Individual differences in health and well-being in organizations. In D.A. Hoffman, & L.E. Tetrick (Eds). Health and Safety in Organizations: A Multilevel Perspective.
- 52. Stainbrook, G. L., and Green, L. W. (1983). Role of psychosocial stress in cardiovascular disease. Houston Heart Bulletin, 3, 1-8.
- 53. Sonnentag, S., &Frese, M. (2003). Stress in Organizations. In W.C. Borman, D.R. Ilgen& R. J. Klimoski (Eds.), Comprehensive handbook of psychology.
- 54. Tsutsumi, A., & Kawakami, N. (2004). A review of empirical studies on the model of effort-reward imbalance at work: reducing occupational stress by implementing a new theory. Social science & medicine, 59(11), 2335-2359.
- 55. Van der Doef, M., &Maes, S. (1998). The job-demand-control (-support) model and physical health outcomes: A review of the strain and buffer hypothesis. Psychology & Health, 13(5), 909-936.
- 56. Van Vegchel, N., De Jonge, J., Bosma, H., &Schaufeli, W. (2005). Reviewing the effort-reward imbalance model: Drawing up the balance of 45 empirical studies. Social Science & Medicine, 60(5), 1117-113.

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