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A STUDY ON TECHNO STRESS AT SOFTWARE COMPANIES

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Abstract

In particular, if you are not a geek or a technical guru, techno stress might be challenging to manage. We experience this type of tension while interacting with our slick, cutting-edge electronic devices, and they always seem to win. Thus, it is critical to investigate employee perceptions of techno stress and to recognise the signs of technological stress in the software industry. The management will benefit from a decrease in technological stress and an increase in production. This project's main objective is to find out how stressed out employees of software companies are over technology. Technological stress and increasing productivity Secondary objectives include examining how employees feel about technological advancements, estimating the extent to which employees' personal lives are invaded during the process of technological change at software organisations and assessing the success of technical staff members' cloud migration training Additionally, it entails assessing the level of technical security among employees and coming up with workable methods to lessen their technological stress The project entails determining the level of technological stress among all employees at Software companies in Chennai. Employees' distress Depending on the assessment, levels can be managed utilising stress-relieving techniques. The individual will be able to perform at their peak and boost production once they have attained the ideal degree of stress to collect responses from 120 employees, multiple choice questions were used. In the research, the convenience sampling method was used. The collected data has been interpreted using percentage analysis. Several statistical techniques, including the Chi-square test, the One-way Anova test, and Karl Pearson's correlation, were used to analyse the collected data. A few insightful and practical recommendations have been given to the management of software companies in light of the many findings in order to lessen technological stress and boost the general productivity of technical staff.

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INTRODUCTION

Techno stress is the term for the adverse psychological relationship that exists between people and the adoption of new technology. Techno stress is the result of altered work and cooperation habits brought on by the use of contemporary information technologies in the workplace and at home, as opposed to ergonomics, which studies how people interact with and physically fit with equipment in their surroundings. Techno stress occurs when a person is unable to adjust to or use information technology in a responsible manner. Women experience technological stress less than males do, older workers experience technological those who are more computer literate are less stressed by technology than younger workers Techno stressors' anxiety can result in insomnia, a loss of temper, irritation, and anger, as well as increased judgement errors and subpar work performance, if it is not treated. The twenty-first century has given people the tools they need to better service their customers, especially those who are stressed out by technology The sources of technological stress are as follows:

- Availability of reliable hardware and software
- The speed at which technology is changing
- A lack of sufficient training, a rise in workload
- Lack of technology

The Four Facts of Techno stress:

1. Physical symptoms include headaches, backaches, joint ache, tense shoulders, and neck stiffness.
2. Emotional characteristics such such as agitation, loss of temper, and extreme
3. Behavioural aspects include excessive computer comfort, excessive computer spending, insomnia, uncooperativeness and unwillingness,

4. Information overload makes it difficult to look for, assess, and utilise information in the best way possible while also putting unnecessary strain on workers and making technological tasks routine and ambiguity about employment role brought on by an increase in time spent using technology are only a few examples of psychological elements.

Obtaining sufficient, user-friendly software, improving communication within the environment, increasing assurance, tolerance, environmental stability, and upholding a consistent programme of training and instruction for both new and dated technology can all aid in lowering technological stress

- Limiting the use of technology
- Encouraging the organization's employees to share their computer-related expertise

REVIEW OF LITERATURE

Idella. M. Evans and Patrician. A. Smith (2007), The failure to seek help for extreme felt Techno Stress was caused in the past by the very disruptive experience of the Techno Stress conditions.

Keith Davis and John. W. Newstrom (2008), Managers and workers report roughly the same amount of Job Techno Stress as executives. If Managerial work is more Techno Stressful, it appears that the Managerial selection process selects Managers who are better able to withstand it, so Managers and workers experience similar levels of Techno Stress.

In an effort to evade or reject their grasp and the substance of altered situations, conceptual pressures and technical stress can be pushed into social and environmental settings, according to **Bridger (2009)**. On the other hand, the endeavor to comprehend their nature must be promoted and developed if conceptual pressures and technical stress are to be controlled and managed.

Khan and Katz, 2009 Techno Stress is thought to be a stimulus response to a personal trait, a feature of the environment, or a relationship between individuals and their surroundings.

James P. Spradly and Robert L. Veninga (2010). Techno Stress at work is typically a part of job reformers' frontal assault, but the improvements they want go well beyond just lowering Techno Stress. This group waged a fervent campaign, griping, organising, and pleading with others to support their cause. They fight back rather than give up when they are up against resistance from coworkers or management. There was a Techno Stress Manager for every profession. Techno Stress is recognized and managed by managers who deal with it on the job.

Gore, as cited in 2010 She researched the responses of males in their mid-thirties working in blue collar jobs who had lost their jobs due to factory closures over a two-year period for the majority of her Techno Stress indicators. She came to the conclusion that "those who had both significant unemployment and inadequate support were more at risk." In the subject of Techno Stress Research, there are always conflicting vocabularies for the term "Techno Stressors." Techno Stress can take over without them and result in ghost-term occurrences. Jacobs

Cassel (2011) Discussing how psychological factors can alter an individual's susceptibility to external Techno Stressors emphasises the need for a more explicit, "two-dimensional" approach. Not only can psychosocial conditioning variables increase the experience of Techno Stress, but they can also help to provide protection in the midst of sorrow.

According to **Peter F. Drucker (2011)**, each person must find their own approach to cope with technological stress. Understanding the ability to handle technological stress and the necessity for a

highly controlled and predictable workplace are both important. Some individuals excel at both. Oftentimes, individuals who have achieved great success in huge organisations fail badly when they transition to smaller ones.

M.J.Mathew 2010, Recent studies and publications indicate that the majority of organisations provide their staff some kind of official course for managing technological stress. Techno Stress courses or less formal adjustments to policy or process. The focus is on making an effort to explain to the employee what to anticipate in the new position through a thorough orientation programme. It's encouraging that management is worried about technological pressures.

Kris Cole in 2011, Clenched fists, teeth grinding, forgetfulness or irritability, increased blood pressure, generalised worry, mood swings, or dogmatic perspectives are some signs of techno stress. Technical stress is good for us because it keeps us alive, keeps us motivated, and gives us the willpower to succeed. The expression "get up and go" is given more "get up and go." Others Techno Stress is tiring, incapacitating, and harmful to our physical and emotional well-being.

Cornville (2015) 'We triumph without glory when we conquer without danger,' says the author. The total elimination of Techno Stress could thus significantly reduce life quality.

The Profile Mood States and the State Anxiety Inventory were used to analyse differences in mood before and after class of college students taking various courses (swimming, body conditioning, hatha yoga, fencing exercise, and lecture) in Bonnie G. Berger's study, "Techno Stress Reduction and Mood Enhancement in Four Exercise Modes: Swimming, Body Conditioning, Hatha Yoga, and Fencing". The findings indicate that classes that meet the four criteria of aerobics, non-

competition, predictability, and repetition may reduce Techno Stress.

- Descriptive research methodology;
- Informal research methodology

OBJECTIVES OF THE STUDY:

Primary Objectives:

A Study on the extent of technological stress among software company personnel

Secondary Objectives:

- Examine employees' attitudes towards the growth of technology.
- To assess the extent to which employees' personal lives are invaded by technology at software companies.
- To evaluate the success of the technical staff's cloud migration training.
- Assess the employees' level of technological security.
- Come up with workable strategies to lessen employee stress related to technology

RESEARCH METHODOLOGY

According to Claire Seltizetal, "Research design is a list of the steps and details involved in creating a research project. It involves organizing data collection and analysis in a way that balances procedural effectiveness with relevance to the research objective

The following three elements of research design are crucial:

1. The investigation design should be based on the current problem;
2. How creatively the designs are implemented will determine whether they are successful in a particular problem environment;
3. Understanding the basic design is necessary in order for it to be modified to meet specific requirements.

The following are the three basic designs:

- Exploratory research methodology;

In this study, Descriptive research methodology was employed.

Research Approach

Explanatory research design is another name for the descriptive research design. This one merely describes things, like demographic characteristics. The goal of a descriptive study is frequently to establish the frequency with which something occurs or the relationship between two variables.

Size of the Sample

It refers to the number of population elements to sample. The survey's sample size has been set at **120** people.

Data Sources

The researcher's job is to look for the types of data and data sources that could lead to the desired results after defining and identifying the study problem and specifying the precise information needed to address it. There are two categories of data sources that are utilised to gather data.

One category of data sources is

- Primary data.
- Secondary information

Original data

Primary data are facts that the researcher personally observed. It is discovered for the first time during a field study. These are the people that have been convened especially for the issue at hand. Observations, interviews, questionnaires, and other primary data collection techniques are available. The questionnaire served as the study's primary data source.

Secondary Data

Information that is already well known, regardless of whether it has been published, is referred to as secondary data. Main source of data is also used to acquire historical data. Secondary data sources include, but are not limited to, books, periodicals, journals, directories, magazines, statistical data sources, and more. Some of the secondary materials used in this study are the firm profile, scope, need, and literature review.

Sampling

The census method is used to collect data on each individual in the population. The term "sampling method" refers to a strategy in which only a small portion of the population being studied is taken into account for analysis. Different sampling techniques can be grouped into two broad categories. The first of the two types is

- Probability sampling.
- Non-probability sampling technique

In this study, Convenience sampling is employed with regard to Non-Probability Sampling

DATA ANALYSIS AND INTERPRETATION

TABLE SHOWING AGE WISE CLASSIFICATION:

Particular	Number of respondents	Percentage
20-25	36	30
25-30	36	30
30-35	21	18
35-40	18	15
Above 40	9	7
Total	120	100

INFERENCE :

The above table shows that 30% of the respondents age is 20-25, 30% of the respondents age is 25-30, 18% of the respondents age is 30-35, 15% of the respondents age is between 35-40, and 7% of the respondents age is Above 40. Therefore, The majority of responses are between the ages of 20 and 30.

TECHNO OVERLOAD

S. No.	Particulars	SA	%	A	%	N	%	DA	%	SD	%	TOTAL
1	Forced to work more quickly by technology	52	43	47	39	19	16	2	2	0	0	120
2	Technology is making me do more work than I can handle.	65	54	38	32	14	12	3	2	0	0	120
3	Compelled by technology to work under very strict time constraints	35	29	24	20	53	44	6	5	2	2	120
4	I had to alter my working habits to accommodate new technologies.	82	68	16	13	11	9	8	7	3	3	120
5	I read a ton of emails every day, which took up a lot of my time.	113	94	5	4	2	2	0	0	0	0	120

INFERENCE:

The above table shows that:

- 94% of the respondents admitted to reading a significant portion of their daily email.
- 68% of respondents say they are compelled to alter their work practices in order to adopt new technologies.
- 54% of respondents said that technology forces them to take on more work than they can handle.
- 44% of the respondents were required to operate under extremely strict time constraints due to technology.
- 43% of the respondents said that technology forces them to work much more quickly.

TECHNO-INVASION:

S. No.	Particulars	SA	%	A	%	N	%	DA	%	SD	%	TOTAL
1	It takes a while to learn how to use new technologies.	65	54	28	23	20	17	5	4	2	2	120
2	Had to be in touch with my work even during my vacation due to technology advancement	63	53	26	22	11	9	15	12	5	4	120
3	I gave up my weekend and vacation time to stay up to date with new technologies.	48	40	37	31	16	13	13	11	6	5	120
4	personal life is being invaded by technology advancement Techno-complexity	56	47	29	24	21	17	8	7	6	5	120
5	Do not know enough about ICTs to handle my job satisfactorily	12	10	2	2	4	3	65	54	37	31	120
6	It takes a while to learn how to use new technologies.	29	24	33	28	22	18	12	10	24	20	120
7	I lack the time to learn and improve my technological abilities	62	52	27	22	23	19	5	4	3	3	120
8	Discovered fresh hires for this organisation more knowledgeable than I am on computer technology	36	30	22	18	18	15	26	22	18	15	120
9	I frequently find new technology to be too difficult for me to comprehend and use.	62	52	26	22	12	10	5	4	15	12	120

INFERENCE

This table shows that:

- 54% of the respondents take a while to learn how to use new technology advancement and Do not know enough about ICTs to handle job satisfactorily.
- 53% of the respondents Had to be in touch with work even during my vacation due to technology advancement
- 52% of the respondents frequently find new technologies to be too hard for to grasp and operate, and lack the time to learn and improve technological skills.
- 47% of the respondents personal life is being invaded by technology advancement, Techno-complexity
- 40% of the respondent gave up weekend and vacation time to stay up to date with new technologies.
- 30% of the respondents discovered that new hires in this organisation are more technologically savvy than.

- 28% of the respondents takes a while to learn how to use new technologies.

STATISTICAL TOOLS**CHI-SQUARE ANALYSIS**

Chi-square is calculated as the product of the squared difference between the observed data (o) and the expected data (e), also known as the deviation (d), and divided by the expected data over all conceivable categories.

Null hypothesis (H0):

There is no relationship between the employees find it too complex to understand and use new technology and age

Alternate hypothesis (H1):

There is a relationship between the employees find it too complex to understand and use new technology and age

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Employees find it too complex to understand and use new technology	120	100.0%	0	0.0%	120	100.0%

Age * Employees find it too complex to understand and use new technology Cross tabulation

		For employees, utilising new technology is too complicated to understand.					Total
		Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	
20-25	Count	36	0	0	0	0	36
	Expected Count	18.6	7.8	3.6	1.5	4.5	36.0
25-30	Count	26	4	0	1	5	36
	Expected Count	18.6	7.8	3.6	1.5	4.5	36.0
30-35	Count	0	21	0	0	0	21
	Expected Count	10.9	4.6	2.1	.9	2.6	21.0
35-40	Count	0	1	12	2	3	18
	Expected Count	9.3	3.9	1.8	.8	2.3	18.0
Above 40	Count	0	0	0	2	7	9
	Expected Count	4.6	2.0	.9	.4	1.1	9.0
Total	Count	62	26	12	5	15	120
	Expected Count	62.0	26.0	12.0	5.0	15.0	120.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	235.030 ^a	16	.000
Likelihood Ratio	204.845	16	.000
Linear-by-Linear Association	68.916	1	.000
N of Valid Cases	120		

a. 19 cells (76.0%) have expected count less than 5. The minimum expected count is .38.

Age * For employees, utilising new technology is too complicated to understand. Cross tabulation

		For employees, utilising new technology is too complicated to understand.					Total
		Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	
20-25	Count	36	0	0	0	0	36
	Expected Count	18.6	7.8	3.6	1.5	4.5	36.0
25-30	Count	26	4	0	1	5	36
	Expected Count	18.6	7.8	3.6	1.5	4.5	36.0
Age 30-35	Count	0	21	0	0	0	21
	Expected Count	10.9	4.6	2.1	.9	2.6	21.0
35-40	Count	0	1	12	2	3	18
	Expected Count	9.3	3.9	1.8	.8	2.3	18.0
Above 40	Count	0	0	0	2	7	9
	Expected Count	4.6	2.0	.9	.4	1.1	9.0
Total	Count	62	26	12	5	15	120
	Expected Count	62.0	26.0	12.0	5.0	15.0	120.0

Degree of Freedom= (r-1) *(c-1) = 4*4= 16

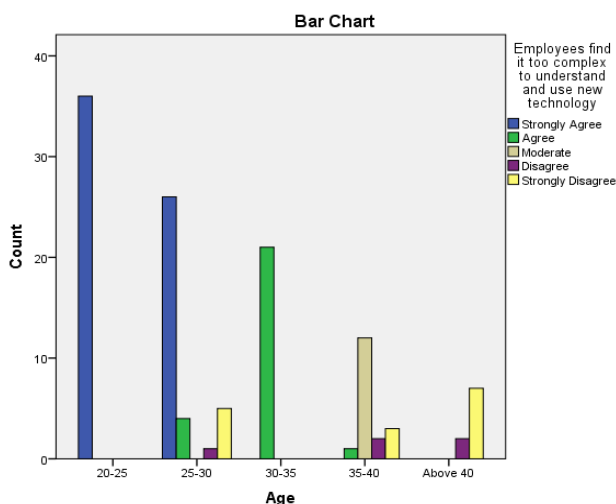
Calculated value = 235.030

Tabulated value = 26.296

Z = Z cal > Z tab

Z= 235.030 > 26.296

Hence, the Alternate hypothesis [H1] is accepted



INFERENCE:

Since the calculated value is higher than the tabulated value, we accept the alternate hypothesis and find a correlation between age and the employees' perception of new technology as being too complex to understand and use.

KARL PEARSON'S CORRELATION-BASED ANALYSIS

The statistical technique used to assess how linearly connected two variables are to one another is correlation analysis. The

degree of relationship between two variables is measured by correlation.

Null hypothesis (H0):

There is no relationship between the Need a long time to understand and use new technologies and Owing to technological advances, I spent less time with my family.

Alternate hypothesis (H1):

There is a relationship between the It takes a while to learn how to use new technologies and Owing to technological advances, I spent less time with my family.

Correlations

		It takes a while to learn how to use new technologies.	Owing to technological advances, I spent less time with my family.
It takes a while to learn how to use new technologies.	Pearson Correlation	1	.013
	Sig. (2-tailed)		.886
	N	120	120
Owing to technological advances, I spent less time with my family.	Pearson Correlation	.013	1
	Sig. (2-tailed)	.886	
	N	120	120

r= .013

INFERENCE:

Since r is positive, there is positive relationship between the Need a long time to understand and use new technologies and owing to technological advances, I spent less time with my family.

CONCLUSION

This study opposes techno stress rather than technology. Through this study, the researcher better understood the numerous problems associated with technological stress among workers at software companies. A few insightful and practical recommendations have been given to the management of software companies in light of the many findings in order to lessen technological stress and boost the general productivity of technical staff.

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