

ECONOMIC IMPLICATIONS AND SUSTAINABILITY OF INFORMATION AND TECHNOLOGY JOBS IN HYDERABAD

S. Sujitha

M.A. (Economics), Department of Economics, O.U. College for Women

Koti, Osmania University, Hyderabad-500095, e-mail: rameshrathod2623@gmail.com



Scholarly Research Journal's is licensed Based on a work at www.srjis.com

1.0 INTRODUCTION

India has, over the past years, directed its development pathway to meet its priorities of employment, economic growth, food, water and energy security, disaster resilience and poverty alleviation. India has also aimed to restore its natural capital and adopt transparent and robust governance along democratic lines. However, emerging challenges of climate change impacts, increasing inequities, and lagging human development indices are well recognised by both the citizens as well as the government. The post 2015 UN Sustainable Development Agenda framework provides an opportunity to renew and integrate efforts in order to meet, to a significant degree, national and global aspirations in a defined time frame.

In its simplest form, we can picture economic growth as a reinforcing loop, to use a term from systems thinking; that is, growth sustains growth like a snowball collects more layers as it rolls down a snowy hillside.

In the short term, the benefits of economic growth are many: the more that businesses and nations grow and profit, the more individuals have jobs, resources and quality of life. At this point in human history, technology has enabled miraculous products, global travel, rapid communication, astonishing efficiencies and unimagined leisure. Economic growth derived from all these technological marvels does indeed feed on itself, as consumers demand more and more.

Yet in order to grow, the economy also feeds on natural resources and emits waste that pollutes the air and threatens the delicate climate on which life relies. Behind the scenes are other reinforcing loops created by the unlimited use of natural resources such as oil and gas that facilitate economic growth and by technological advances that extract the last dregs of energy from the earth. These counterbalancing forces undermine the foundation upon which economic growth is built and, over the long term, create a sinkhole which will swallow

up the economy, environment and society. Furthermore, we now live with the toxic byproducts of carbon-based resources.

The common thread across the 17 SDGs is sustainability in its multiple dimensions. First and foremost, the development goals have to consider the sustainability of resources, including the health of the planet (environmental sustainability). In addition to protecting the natural environment, it is also important to consider how to ensure that the development goals are economically viable (economic sustainability) and consistent with sound public policies that support healthy governance systems (social and political sustainability). Although the SDGs overlap and achieving sustainability in each of the three senses noted above (environmental, economic, and social/political sustainability) is important for each of the SDGs, some SDGs emphasize one aspect more than others. For example, SDGs 13-15 emphasize the importance of environmental sustainability and the need to take action to address climate change, promote biodiversity, and protect our forests and oceans; whereas SDGs 4, 8, 9, and 12 focus more on ensuring economic sustainability by promoting goals designed to expand productive economic opportunities for all people; and SDGs 1, 3, 5, 11, 16, and 17 target issues impacting social and political sustainability by focusing on the stability, security, and openness of our social and political institutions, the rule of law, and policy processes.

In this paper, the researcher present the economic implications of IT based jobs on the basis of the nature of employment, nature of work and skill enhancement opportunities among IT employees on the basis of demographic variables such as – gender, education, designation, salary and migration.

Objectives

- (1) To know the economic implications of IT based jobs on the basis of nature of employment.
- (2) To know the economic implications of IT based jobs on the basis of nature of work.
- (3) To know the economic implications of IT based jobs on the basis of skill enhancement opportunities.

Hypotheses

- (1) There is no significant difference on the opinions of IT employees with regard to economic implications (nature of employment) considering different variables such as gender, education, designation, salary and migration.

- (2) There is no significant difference on the opinions of IT employees with regard to economic implications (nature of work) considering different variables such as gender, education, designation, salary and migration.
- (3) There is no significant difference on the opinions of IT employees with regard to economic implications (skill enhancement opportunities) considering different variables such as gender, education, designation, salary and migration.

2.0 REVIEW OF LITERATURE

Amit Sharma (2017)¹ tried to capture how these Green economic changes brought about by globalization have affected sustainable development. The main aim of the paper is to study and analyze the overall view of globalization in India. the author opined that it is easy for those in the advanced industrial countries to seize the opportunities that the opening up of the markets in the developing countries affords -and they do so quickly. Globalization and sustainable development will remain topical subjects of debate for quite some time come.

Mohd Ishtiyaque and Ranjana A Gera (2014)² conducted a study to know the reasons with regard to sustainability for call centers jobs on the basis of their employment. Keeping this in view, the data was collected from customer care centre executives, team leaders, assistant managers, quality analysis through by using a questionnaire in call centers situated in the National Capital Region of Delhi. The study revealed that the repetitive and stressful nature of work, disruption in social and family life and lack of career growth may be held major factors for low sustainability in call center jobs in India.

Vinodh Kumar G.C. (2013) conducted a study to know about the socio-cultural changes taking places and the effects on socio, economic, cultural and moral aspects. The paper aimed at identifying variables' which result in such change. Though there are innumerable variables which alter every day with varying degrees, the necessity to identify and possible control of these variables are being explored in this study.

Nirvikar Singh (2012)¹ reviewed interrelated aspects of the role of IT in the evolution of India's economy. It considers the unexpected success of India's software export sector and the spillovers of this success into various IT enabled services, attempts to make IT and its benefits available to India's rural masses, e-commerce for the country's growing middle

¹ Amit Sharma (2017), "Impact of Globalization on Sustainable Indian Economy", *International Journal of Business Administration and Management*, Vol.7, No. 1, pp.1-14.

² Mohd Ishtiyaque and Ranjana A Gera (2014), "Economic and Social Implications and Sustainability of Call Center Jobs in India", *Journal of Urban and Regional Studies on Contemporary India*, vol.1(2), pp.1-7.

class, the use and impacts of IT in India's manufacturing sector, and various forms of e-governance, including internal systems as well as citizen interfaces. It concluded that with an overall assessment of these different facets of IT in the context of the Indian economy.

Marita Raderbauer (2011)³ investigated the importance of sustainable business practices in accommodation businesses in Vienna. He examined the relationships between attitudes and actions as well as differences in attitudes and actions related to the business' characteristics. A mixed method approach was chosen and the results of the quantitative questionnaire (n= 59) and the qualitative in-depth semi-structured interviews (n=7) were integrated to ensure a more complete understanding of the data. The results showed that the general attitude towards sustainability was very positive for all businesses. No relation was found between the general attitude and the actions taken. It can be summarized that higher classified, medium size, hotels, and businesses that were part of a corporate chain took significantly more actions compared to low classified, micro size, guesthouses, and businesses that were ownermanaged. A high implementation of sustainable business practices correlated with a high level of benefits perceived, more strategic planning and a less intense perception of barriers. The greatest barrier reported was the lack of support and information and the difficulties with obtaining permissions and subventions. Also the awareness and demand from guests for sustainable business practices were perceived as low. Consequently the study shows that the communication between public and private sector as well as the awareness raising and marketing of sustainability to consumers need to be improved.

3.0 METHODOLOGY

The Universe: The universe of the sample consists of working as managers, team leaders and executives working in IT companies situated in Hyderabad, Telangana state.

The Sample: The sample for the investigation presented in the following tables was drawn from the staff of MNCs.

Sampling Technique used: In order to select a representative sample for the study random sampling technique was used. For preliminary sample 12 managers, 30 team leaders and 78 executives. Care was taken to cover the representative sample of the population in spite of administrative difficulties.

³ Marita Raderbauer (2011), "The Importance of Sustainable Business Practices in the Viennese Accommodation Industry", Thesis submitted to the University of Exeter as a thesis for the degree of Master of Sciences.

Data Collection method: Data collection is ‘a systematic way of gathering information which is relevant to the research purpose or questions’ (Burns & Grove, 1997). For the purpose of the study, the researcher has collected the primary data from the IT professionals of Hyderabad.

Questionnaire technique is used to collect the data. The researcher personally visited the MNC and collected the data by handing over the questionnaires.

Reference period: The researcher started data collection from the respondents during November, 2017 to January, 2018. Thus, the data pertains to the IT employees’ opinion on economic sustainability.

Data Analysis: Data analysis was done by applying statistical tools such as measures of arithmetic Mean, Standard deviation and t-test to test the hypotheses. Statistical product services and solutions/Statistical Package for Social Sciences (SPSS) version 17 was used for processing the data and obtaining the measures.

4.0 DATA ANALYSIS AND INTERPRETATION

4.1 Economic implications vs. Nature of Employment

The following hypothesis-I has been formulated with regard to responses of IT employees on economic implications: “There is no significant difference on the opinions of IT employees with regard to economic implications (nature of employment) considering different variables such as gender, education, designation, salary and migration”. The results pertaining to the above hypothesis are presented in Table 4.1.

Table 1 Showing the Mean, Standard Deviation, degrees of freedom and t-value/F value among IT employees on economic implications (nature of employment)

Variable		N	Mean	SD	Degrees of freedom (df)	t-value/F value	Sig.
Gender	Male	65	3.40	1.10	118	1.458	NS
	Female	55	3.26	0.98			
Education	UG	75	3.56	0.88	n ₁ =2, n ₂ =117	1.887	NS
	PG	36	3.33	0.92			
	Ph.D.	9	3.12	1.05			
Designation	Managers	12	3.21	0.93	n ₁ =2, n ₂ =117	10.155**	S
	Team leaders	30	3.56	0.83			
	Executives	78	3.98	0.72			
Salary	<Rs.25000	15	4.01	1.20	n ₁ =3, n ₂ =116	9.985**	S
	Rs.25001- Rs.50000	50	3.91	1.09			
	Rs.50001- Rs.75000	47	3.85	1.15			
	>Rs.75000	8	3.90	0.98			

Migration	Local	86	4.05	0.92	118	1.250	NS
	Migrated	34	3.78	0.99			

NS = Not Significant at 0.05

Table 1 shows the mean values, standard deviation and t-value of male and female IT employees with regard to economic implications (nature of employment). The mean score of male employees' responses is 3.40, standard deviation value is 1.10, correspondingly the mean score of female employees' responses is 3.26 and standard deviation value is 0.98. The calculated t value (1.458) is less than the tabulated t value (1.980) at (p=0.05) at 118 degrees freedom. Hence it can be concluded that there is no significant difference in the responses of male and female IT employees at 0.05 level.

On the basis of education levels, the mean value of UG qualified employees is 3.26 and SD is 0.88, similarly, the PG qualified employees the mean value is 3.33 and SD is 0.92 and Ph.D. holders the mean value is 3.12 and SD is 1.05. The calculated F value is 1.887 and the tabulated F value is 5.991 (p=0.382) with $n_1 = 2$ and $n_2 = 117$. Since the calculated F value is lower than the tabulated F value at 5% level of probability, the deviation in the mean value of the five groups are not significant.

On the basis of employees' designation, the mean value of managers is 3.21 and SD is 0.93. In the same way, the team leaders the mean value is 3.56 and SD is 0.83 and executives the mean value is 3.98 and SD is 0.72. The calculated F value is 10.155 and the tabulated F value is 5.991 (p=0.382) with $n_1 = 2$ and $n_2 = 117$. Since the calculated F value is higher than the tabulated F value at 5% level of probability, the deviation in the mean value of the five groups are significant.

On the consideration of salary, the mean value of employees whose salary is less than Rs.25000 is 4.01 and SD is 1.20. The mean value of employees whose salary is between Rs.25001 to Rs.50000 is 3.91 and SD is 1.09, whose salary is between Rs.50001-Rs.75000 the mean value is 3.85 and SD is 1.15 and whose salary is more than Rs.75000 the mean value is 3.90 and SD is 0.98. The calculated F value is 9.985 and the table F value is 2.60 with $n_1 = 3$ and $n_2 = 116$. Since the calculated F value is higher than the table value at 5% level of probability, the deviation in the mean value of the four groups are significant.

On the basis of migrated IT employees, the mean score of local employees' responses is 4.05, standard deviation value is 0.92, correspondingly the mean score of migrated employees' responses is 3.78 and standard deviation value is 0.99. The calculated t value (1.250) is less than the tabulated t value (1.980) at (p=0.05) at 118 degrees freedom. Hence, it

can be concluded that there is no significant difference in the responses of local and migrated IT employees at 0.05 level.

4.2 Economic Implications vs. Nature of Work

The following hypothesis-II has been formulated with regard to responses of IT employees on economic implications: “There is no significant difference on the opinions of IT employees with regard to economic implications (nature of work) considering different variables such as gender, education, designation, salary and migration”. The results pertaining to the above hypothesis are presented in Table 4.2.

Table 4.2 Showing the Mean, Standard Deviation, degrees of freedom and t-value /F value among IT employees on economic implications (nature of work)

Variable		N	Mean	SD	Degrees of freedom (df)	t-value/ F value	Sig.
Gender	Male	65	3.48	1.02	118	2.328*	S
	Female	55	3.34	0.88			
Education	UG	75	3.52	0.88	n ₁ =2, n ₂ =117	0.666	NS
	PG	36	3.29	0.90			
	Ph.D.	9	3.04	1.03			
Designation	Managers	12	3.15	0.92	n ₁ =2, n ₂ =117	0.921	NS
	Team leaders	30	3.52	0.78			
Salary	Executives	78	4.18	1.02	n ₁ =3, n ₂ =116	8.526**	S
	<Rs.25000	15	4.25	1.21			
	Rs.25001- Rs.50000	50	3.86	1.00			
	Rs.50001- Rs.75000	47	3.34	1.13			
Migration	>Rs.75000	8	4.08	0.89	118	6.234**	S
	Local	86	4.16	0.91			
	Migrated	34	3.82	1.00			

NS = Not Significant at 0.05

Table 4.2 shows the mean values, standard deviation and t-value of male and female IT employees with regard to economic implications (nature of work). The mean score of male employees’ responses is 3.48, standard deviation value is 1.02, correspondingly the mean score of female employees’ responses is 3.34 and standard deviation value is 0.88. The calculated t value (2.328) is higher than the tabulated t value (1.980) at (p=0.05) at 118 degrees freedom. Hence, it can be concluded that there is a significant difference in the responses of male and female IT employees at 0.05 level.

On the basis of education levels, the mean value of UG qualified employees is 3.52 and SD is 0.88, similarly, the PG qualified employees the mean value is 3.29 and SD is 0.90

and Ph.D. holders the mean value is 3.04 and SD is 1.03. The calculated F value is 0.666 and the tabulated F value is 2.99 ($p=0.382$) with $n_1 = 2$ and $n_2 = 117$. Since the calculated F value is lower than the tabulated F value at 5% level of probability, the deviation in the mean value of the three groups are not significant.

On the basis of employees' designation, the mean value of managers is 3.15 and SD is 0.92. In the same way, the team leaders the mean value is 3.52 and SD is 0.78 and executives the mean value is 4.18 and SD is 1.02. The calculated F value is 0.921 and the tabulated F value is 2.99 with $n_1 = 2$ and $n_2 = 117$. Since the calculated F value is lower than the tabulated F value at 5% level of probability, the deviation in the mean value of the five groups are not significant.

On the consideration of salary, the mean value of employees whose salary is less than Rs.25000 is 4.25 and SD is 1.21. The mean value of employees whose salary is between Rs.25001 to Rs.50000 is 3.86 and SD is 1.00, whose salary is between Rs.50001-Rs.75000 the mean value is 3.34 and SD is 1.13 and whose salary is more than Rs.75000 the mean value is 4.08 and SD is 0.89. The calculated F value is 8.526 and the table F value is 2.60 with $n_1 = 3$ and $n_2 = 116$. Since the calculated F value is higher than the table value at 5% level of probability, the deviation in the mean value of the four groups are significant.

On the basis of migration of IT employees, the mean score of local employees' responses is 4.16, standard deviation value is 0.91, correspondingly the mean score of migrated employees' responses is 3.82 and standard deviation value is 1.00. The calculated t value (6.234) is less than the tabulated t value (1.980) at ($p=0.05$) at 118 degrees freedom. Hence, it can be concluded that there is a significant difference in the responses of local and migrated IT employees at 0.05 level.

4.3 Economic Implications vs. Skill Enhancement Opportunities

The following hypothesis-III has been formulated with regard to responses of IT employees on economic implications: "There is no significant difference on the opinions of IT employees with regard to economic implications (Skill Enhancement Opportunities) considering different variables such as gender, education, designation, salary and migration". The results pertaining to the above hypothesis are presented in Table 4.3.

Table 4.3 Showing the Mean, Standard Deviation, degrees of freedom and t-value/F value among IT employees on economic implications (Skill Enhancement Opportunities)

Variable		N	Mean	SD	Degrees of freedom (df)	t-value/F value	Sig.
Gender	Male	65	3.35	0.89	118	0.233	NS
	Female	55	3.25	0.71			
Education	UG	75	3.45	0.83	n ₁ =2, n ₂ =117	7.20**	NS
	PG	36	3.22	0.92			
	Ph.D.	9	3.03	0.99			
Designation	Managers	12	3.12	0.93	n ₁ =2, n ₂ =117	1.500	NS
	Team leaders	30	3.45	0.80			
	Executives	78	4.16	1.05			
Salary	<Rs.25000	15	4.22	1.11	n ₁ =3, n ₂ =116	2.78	S
	Rs.25001- Rs.50000	50	3.68	1.02			
	Rs.50001- Rs.75000	47	3.45	1.30			
	>Rs.75000	8	4.05	1.92			
Migration	Local	86	4.62	0.94	118	4.48**	S
	Migrated	34	3.78	1.03			

NS = Not Significant at 0.05

Table 4.3 shows the mean values, standard deviation and t-value of male and female IT employees with regard to economic implications (Skill Enhancement Opportunities). The mean score of male employees' responses is 3.35, standard deviation value is 0.89, correspondingly the mean score of female employees' responses is 3.25 and standard deviation value is 0.71. The calculated t value (2.328) is higher than the tabulated t value (0.233) at (p=0.05) at 118 degrees freedom. Hence, it can be concluded that there is no significant difference in the responses of male and female IT employees at 0.05 level.

On the basis of education levels, the mean value of UG qualified employees is 3.45 and SD is 0.71, similarly, the PG qualified employees the mean value is 3.22 and SD is 0.92 and Ph.D. holders the mean value is 3.03 and SD is 0.99. The calculated F value is 7.201 and the tabulated F value is 2.99 (p=0.382) with n₁ = 2 and n₂ = 117. Since the calculated F value is higher than the tabulated F value at 5% level of probability, the deviation in the mean value of the three groups are significant.

On the basis of employees' designation, the mean value of managers is 3.12 and SD is 0.93. In the same way, the team leaders the mean value is 3.45 and SD is 0.80 and executives the mean value is 4.15 and SD is 1.05. The calculated F value is 1.500 and the tabulated F

value is 2.99 with $n_1 = 2$ and $n_2 = 117$. Since the calculated F value is lower than the tabulated F value at 5% level of probability, the deviation in the mean value of the five groups are not significant.

On the consideration of salary, the mean value of employees whose salary is less than Rs.25000 is 4.22 and SD is 1.11. The mean value of employees whose salary is between Rs.25001 to Rs.50000 is 3.68 and SD is 1.02, whose salary is between Rs.50001-Rs.75000 the mean value is 3.45 and SD is 1.30 and whose salary is more than Rs.75000 the mean value is 4.05 and SD is 1.92. The calculated F value is 2.780 and the table F value is 2.60 with $n_1 = 3$ and $n_2 = 116$. Since the calculated F value is higher than the table value at 5% level of probability, the deviation in the mean value of the four groups are significant.

On the basis of migration of IT employees, the mean score of local employees' responses is 4.62, standard deviation value is 0.94, correspondingly the mean score of migrated employees' responses is 3.78 and standard deviation value is 1.03. The calculated t value (4.48) is less than the tabulated t value (1.980) at ($p=0.05$) at 118 degrees freedom. Hence, it can be concluded that there is a significant difference in the responses of local and migrated IT employees at 0.05 level.

4.4. SUMMARY AND CONCLUSION

(1) Findings on Nature of employment: It was found that there is no significant difference in the opinions of IT employees with regard to economic implications (nature of employment as one of the factors) on the basis of their gender, education and migration, whereas there is significant difference on the basis of designation and salary.

(2) Findings on Nature of work: It was found that there is no significant opinion among IT employees with regard to economic implications (nature of work as one of the factors) on the basis of their education and designation, whereas there is significant difference on the basis of gender, salary and migration.

(3) Findings on Skill Enhancement Opportunities: It was found that there is no significant difference in the opinions of IT employees with regard to economic implications (skill enhancement opportunities as one of the factors) on the basis of their gender, designation and salary, however, there is significant difference on the basis of education and migration.

BIBLIOGRAPHY

- Amit Sharma (2017), "Impact of Globalization on Sustainable Indian Economy", *International Journal of Business Administration and Management*, Vol.7, No. 1, pp.1-14.
- Bhagwati, J. 2007. *Outsourcing is as good or bad as any kind of trade.* *The Economic Times*, 29 January 2007, New Delhi Edition.
- Marita Raderbauer (2011), "The Importance of Sustainable Business Practices in the Viennese Accommodation Industry", Thesis submitted to the University of Exeter as a thesis for the degree of Master of Sciences.
- Mohd Ishtiyaque and Ranjana A Gera (2014), "Economic and Social Implications and Sustainability of Call Center Jobs in India", *Journal of Urban and Regional Studies on Contemporary India*, vol.1(2), pp.1-7.
- NASSCOM-Everest 2008. *NASSCOM-Everest India BPO Study: Roadmap 2012-Capitalising on the Expanding BPO landscape*, New Delhi: NASSCOM.
- Nirvikar Singh (2012), "Information Technology and its Role in India's Economic Development: A Review", A paper presented at a conference celebrating 25 years of the IGIDR, held on December 1-4, 2012.
- Ramesh, B.P. 2004. *Cyber coolies in BPO: Insecurities and vulnerabilities of non-standard work.* *Economic and Political Weekly*, 39(5):492-497.
- Sridhar, L. 2013. *IT has done more harm than good.* *The Hindu*, New Delhi edition, September 15: 16.
- Wright, R. 2002. *Transnational corporations and global divisions of labor.* In *Geographies of Global Change: Remapping the World*, eds. R.J. Johnston, P.J. Taylor, and M.J. Watts, 68-77. UK: Blackwell Publishing House.