

Perspective Statistical Analysis of Officers of Technical Education in India

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Summary

The statistical analysis of the data collected on various responses from officers of technical Institutions (T1 & T2) has been analyzed to find out the perspective HRM and practices prevailing there. The analysis contains administrative, financial and academic aspects of the Institutions. It has been found that the T1 & T2 covered under the study need extensive use of ICT tools for strengthening and modernizing the laboratories and firm policies and programmes for vertical growth and retention of Human Resources in the Institutions. It also requires best practices for cooperation information sharing by all human resources alongwith appreciation of each others views for framing policy planning of H R Management. The technical Institutions should move for paperless office if not fully then atleast near fullness. The officers also expressed their financial autonomy, better perks and further conducive working atmosphere. The paper explicitly focuses critical aspects of development of T1 & T2 & parallelly growth, enhancement of satisfaction level alongwith living conditions & related facilities for retention of human resource management in technical institutions. These conclusions when given in numbers may vary substantially due to nature of T1 & T2. Therefore we have reflected the requirement of officers in percentile form for better comparison of managerial aspects of any Institution.

Key words:

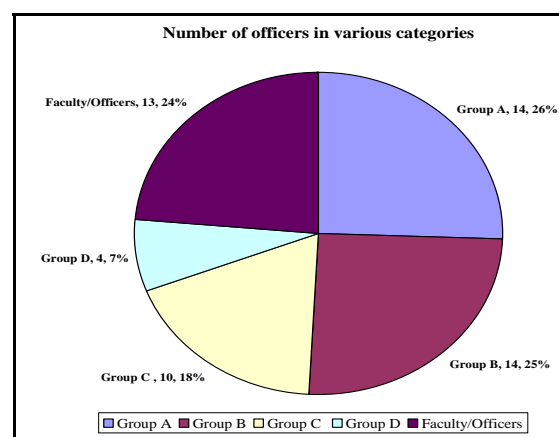
Technical Education, Human Resource Management, Best Practices & Polices, Paperless Office.

Introduction

It has been observed that [1],[2] most of the times there is a lack of appreciation of ideas, suggestions and needs amongst officers, technical manpower and faculty members. This lack of harmony hampers proper growth and development of any organization including educational systems particularly the technical ones. This concern has been expressed in their research work as well. Efforts have been made to involve all the three important pillars (faculty, officers & support system) of the organization under study. As a first effort, selected parameters related to faculty members have been enumerated in our paper elsewhere.

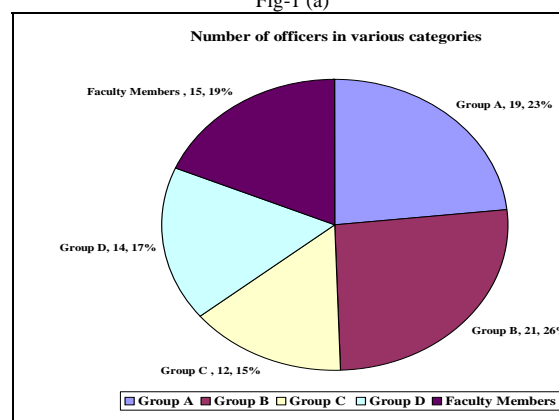
The present work focused around expressions and opinion of second important pillar that is officers of the Institute of

T1&T2. It has been endeavoured to reflect most important aspects of T1& T2 regarding their management, budgets, education and R & D aspects. It is interesting that even having different characters of both T1 & T2, there seem some commonalties in a few points only. The Ins μ titutions, as become older have complexity, operational flexibility and mind set for any change. Whereas in new organization, establishing best practices in every sectors including Human Resource Management are comparatively easy to implement. The following diagrams, pie-chart and graphs represent the views of officers in for 15 valuable parameters.



Technical Institute T1 & T2

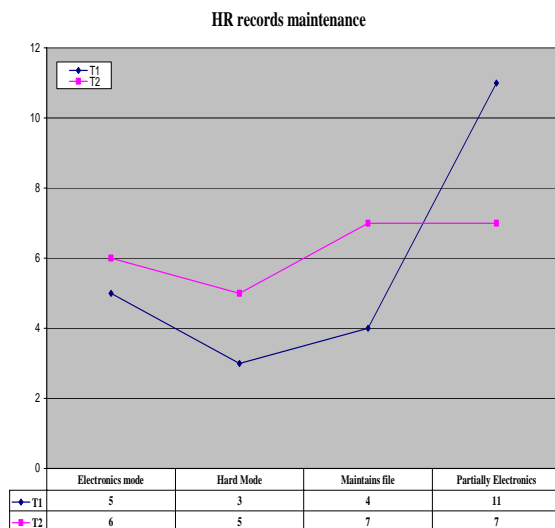
Fig-1 (a)



Technical Institute T1 & T2

Fig-1 (b)

The details of officers in various categories for first technical institution (to be mentioned as T1 in future) is shown in Fig 1 (a) whereas in second technical institution (to be called as T2) is reflected in figure 1 (b). The comparison of the two shows that although T2 is multidisciplinary and aged-old institution and T1 is just a decade one the percentage of faculty officers, group A, group B, group C and group D do not vary significantly. To give an example in T1 the faculty officers are 13. 24% whereas in T2 it is 15. 19%. Almost similar is the situation for other group of officers. It reflects that whether it is old or new or single or multidisciplinary, the institute requires almost equal percentage of officers for effective management of human resources. These conclusions when given in numbers may vary substantially. Therefore in this study we have reflected the requirement of officers in percentile for better comparison of managerial aspects with any Institution.

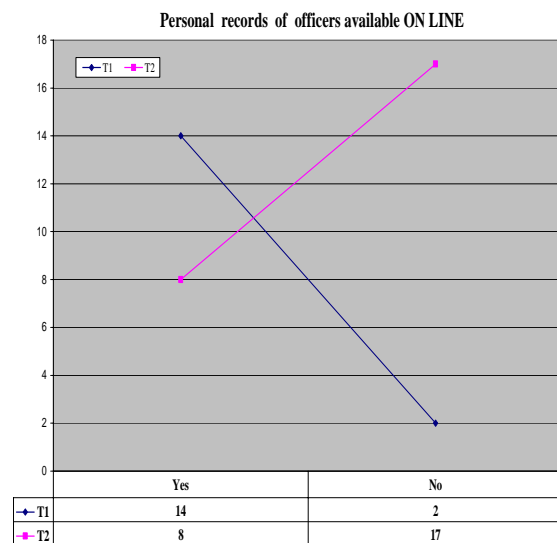


Technical Institute T1 & T2
Fig-2

The maintenance of personal records is absolutely important. Theoretically, It has to be user friendly, easy accessible, reflecting all aspects of records, effective from date of assessment of human resources, the advertisement, selection, joining date till superannuation of the employees and the date of his/her moving out from the Institute. Before emergence of electronic age the records were maintained manually which were taking substantial time, accessibility was horrible and it required a lot of man hours for day to day keep up, concurrent entry, maintenance and retrieval of records using IT tools and other available softwares as the Institutes under study are technical ones. Through this study it was essential to find

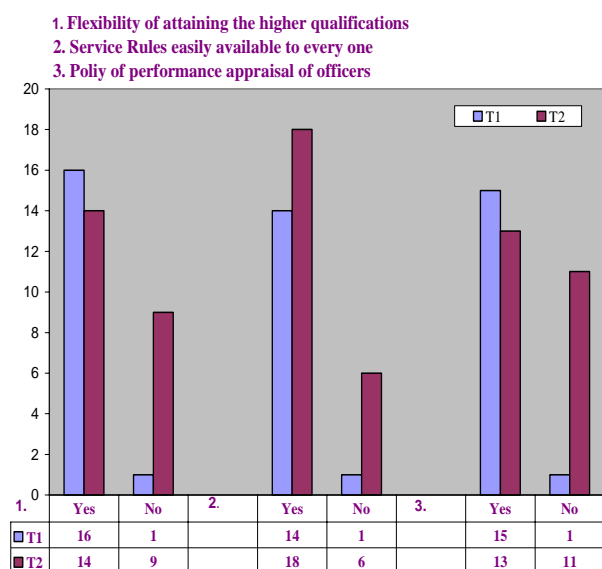
out the quantum of the uses of the latest technological facilities for maintaining the records of T1 & T2.

Fig -2 reflects 4 choices as given to officers under study about maintenance of personal records, they are through electronic mode, hardmode and maintaining files and partially electronic. The comparison of T1 & T2 reflects that T2 is ahead of T1 in first three aspects. Whereas T2 maintains the records through combination of hard & softmodes and it is quite ahead of T1. This is interesting conclusion as in view of the Tech-Era both institutions should have adopted to maintain the records in electronic mode.



Technical Institute T1 & T2
Fig-3

In Fig-3 there is interesting result that the personal records of officers of T1 are available almost 100% online whereas in cast of T2 it is just about 40%. We have not gone through the details of various aspects of records of both institutes as for as number of parameters are concerned for incorporation in developing and maintaining online records. One can presume from the data of T1 that all important personal information of officers is available on line, which is not available to be perused by public at large. However, there is a facility of regular updating and perusal by concerned officer and other authorized persons to do so. The maintenance of online records is quite improved and latest version of maintaining it manually. It is accessible and simple, it is user friendly to officers and concurrent updating alongwith monitoring could be done as and when required.



Technical Institute T1 & T2
Fig-4

Fig -4 basically reflects that once the selections are conducted then accordingly the appointments are issued to officers and the faculty members. There are very few opportunities and flexibility for attaining higher qualifications/achievements in almost every institution for officers & staff. The management has to realize that flexibility of attaining vertical upliftment by way of qualifications of employees results in quality product and enhances the visionary approaches in all spheres of working. As a result, the institutions gain through such caliber and exposures. Keeping this in view the responses from officers of T1 & T2 as depicted in the histogram. More than 85% in T1 and about 70% agreed that there is flexibility of attaining higher qualifications.

Although, 20% or 30 % is not much component looking into total system of the two institutions. However, this may drag off the progress and affect the same in a substantial manner over time frame. Therefore, it would have been better if more than 95% of officers would have gone for vertical growth of their own qualifications.

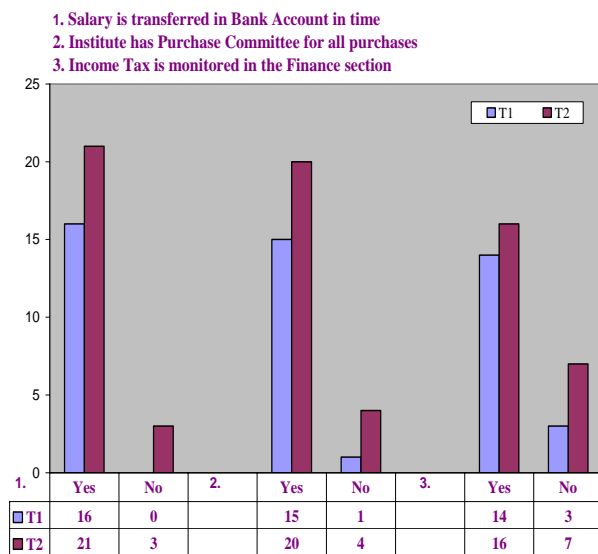
There is a defined process [3] for selecting /searching the human resources. After taking charge of the assigned position and job most of the manpower does not bother for getting the prevailing service rules, terms and conditions. Although these are comparatively very important aspects as one's future and career kept in black boxes in a few pages of papers. When any human resource faces some trouble or disciplinary action he/she consults colleagues who are equally unaware of the rules of the service. Ultimately the employee, due to lack of proper knowledge, suffers. The other side of the coin is equally true

that he/she may not get benefits/advantages for vertical growth due to lack of proper knowledge of in any organization own service conditions. Therefore, this is an important aspect of any organization any employment. Fig 4 show that 90% T1 whereas only 70% of officers T2 expressed opinion that service rules as prescribed by the institution is easily available to them.

In recent decades it has been generally observed that society is becoming commercial oriented [4]. Particularly the present generation is looking after higher pay & perks in their career. In public sector there are definite norms, procedures and rules beyond which none of the organization may take policy decisions for different pay package other than prescribed with the book of rules. On the other side the private sector offers lucrative pay-package and facilities. They have very organized system of performance appraisal of their human resources at every category and on the basis annual progress the position alongwith roles and responsibilities are enhanced and in turn receive better financial incentives. This is not only in India but in several other countries.

Further, private whether or public sector there is a practice of annual performance appraisal in a number of countries. This has resulted as the interest and satisfaction in the manpower of then employees for better performance and achieving goals in a very organized time frame although the working days are only 5 in a week in these organization as compared to 6 days in our country. Whereas through such incentive after appraisal if offered, the institutions grow and there is a life in every manpower for better work of performance appraisal should not be only for incentive for better work. However, there should be disincentive for non-performers so that better performers are happily and feel delighted.

Although, we have short policy of performance appraisal of officers only in two institutions, however, it may be enhanced for all officers of any organization. More than 90% of employees of T1 are in favour of where as in T2 there are only 51% for such policy. This implies that the policy of performance appraisal of officers for purchase evidences is an essential aspect and infact this should be followed strictly. It has been observed that non performance or slow performers have negative opinion about policy of performers appraisal but as mentioned above in most of the countries such policy exists such as in T1. Therefore employees gain out of this policy.



Technical Institute T1 & T2
Fig-5

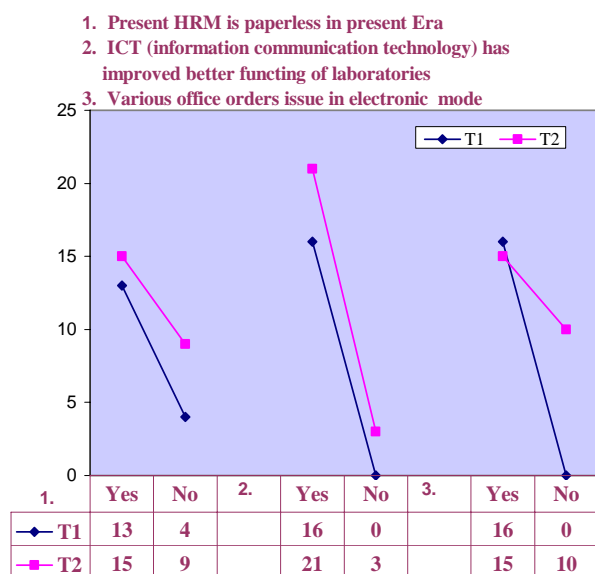
Fig -5 is drawn to stretch back the history of very important crucial component of Human Resource Management pertaining to the payment of salary and allowances to the employees of organizations. In the beginning cash payment was working well however, over the time it was observed that concerned officers were taking marginal share from employees before releasing the cash to them. It was mainly prevalent in private sectors. To arrest such practices few organizations specially those in public sectors started payment through cheques. It was also found that when one to one human factors are there then again corrupt ways are there in such a transaction [5]. On the instructions of government of India local governments issued instructions institutions to private organizations, who began this practice also. This was slightly better than first one. Slowly to over come any untoward aspect salary and other financial claims were started deposited to the account of concern employees. In both cases of T1 & T2 it is almost 100% satisfaction of such system in officers.

It is extrapolated that the opinion of satisfaction level would be in all sectors of human resource practices in most of the organization in general and in T1 & T2 in particular which are the target institutions of this study. Central vigilance commission and State Vigilance commission have been established by the concerned governments to have vigils over various systems being operated in most of the organizations including educational institutions whether established by federal government or by local governments. The concerned governments have already notified book of rules, ordinances and statutes for proper functioning of

organizations since ages. Our concerns are only educational institutions for which book of rules are framed for them including management of human resources and practices prevailing therein. Although there are bodies of governance of each institution, however time and again the concerned governments either directly or through its wings established purposely for maintaining and observing good practices and application of proper rules. One of the critical component is various purchases in institutions. There may be range of cost and therefore, accordingly rules have been framed to avoid subjectively & monopoly. It has been made mandatory to have purchases through group of experts of specific items. It has been also found that such a group or committee popularly called as purchase committee is a mere formality at the level of concerned officers with support of human resources around him/her. It has therefore been taken opinion of all officers in T1 & T2. We got excellent result showing 97% of views for proper purchase committee and in T2 there is same situation about 85%. Therefore, the concerns mentioned above are reflected through the opinions collected in this study from officers of the two organizations.

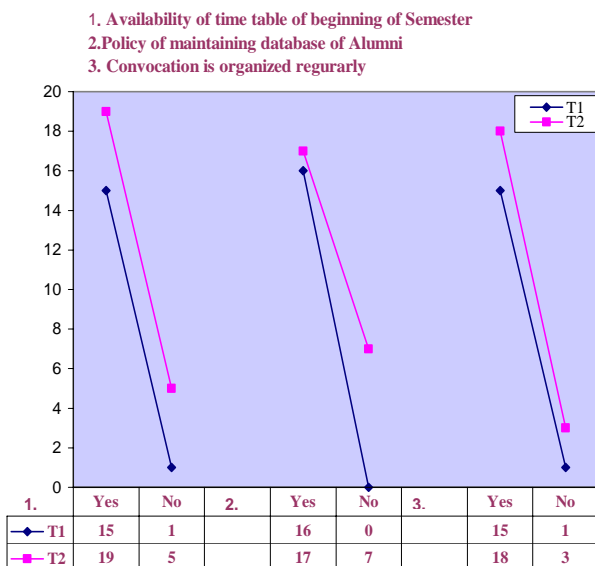
Tax evasion [6] is one of the characteristics of human resources. The study has not classified various types of taxes and confined only one issue income tax. Although there is a specific department which issues directions and other important rules for avoiding such practices by all concerned even then since it is difficult to monitor at Central level therefore the drawing and disbursing officer have been assigned the responsibility to monitor the income tax aspect at the time of releasing the salary and other emoluments to human resources working in any organization. The institute under study shows that only 20% of employees are not interested that IT be monitored at the Finance Section. In case of T2 situation is worst as about 40% are against in such monitoring. This situation somehow has to be improved since it is responsibility of each and every human resources working in any educational institution.

Fig-6 clearly emphasizes that for the T1 institute paperless office [7], [8] concept is of less importance in comparison to the T2 institute. However, the theme of paperless office is of most important for future as it provides a complete automation of all existing cells in the organization. In other words we can say that we will be able to interconnect the past and the present network. If we evaluate the ratio of Yes and No it concludes to 13:15 and 4:9 of both institutions, which is 86% and 41% approximately.



Technical Institute T1 & T2
Fig -6

Similarly for other parameters if we visualize, we find that using information technology tools to issue orders in electronic mode is vertical upliftment of the organization. The concept of information technology directly or indirectly has relation to the mode of working in both depicted organization. Also we observe that for electronic mode of working in the organization T1, there was no negative response, all are in favour.



Technical Institute T1 & T2
Fig -7

Similarly, for fig-7 we observe that the graph shows parallel lines between the two organizations. Taking into considerations, it clearly states the legacy of availability of time table in the beginning of the semester, policy of maintaining database of alumni and the convocation organization regularly. For all of these parameters for T1 organization the response lines are between 90-100% of the total. Therefore, a higher technical institution of a upto-mark gratitude, the mentioned parameters are of most important.

Apart from the above, we also observe that the parameters define the percentage which is more affirmative act on the benchmark [9],[10] of preparing the availability of time table at the beginning of the semester, with policy of maintaining database of alumni and organization of convocation on time every year.

Conclusion

The paper here, as a first ingredients reflects personal aspects such as category wise officers, H R records and its maintenance online, flexibility in vertical educational growth, transparency of service rules including performance appraisal of individuals posting of pay & perks direct to the bank alongwith monitoring of income tax deduction.

In all of these ingredients, both institutions have fairly favourable opinions by the constituent officers of study accept in some area, where T1 has edge over T2.

Similarly, the second category of responses were related with organizational systems of T1 & T2. They include paperless office in present era, achievement of better lab facilities through application of ICT, availability of office orders through electronic mode and time schedule well before start of semester, electronic maintenance of records of alumni and organization of convocation on time. In this category as reflected above the main thrust was to find out quantum of usages of various tools of ICT since the two institutions under study are technical ones and wonders of application of ICT in T1 & T2 may very reflect such systems in other educational organization of the country on extrapolation basis. It was found that T1 is quite ahead of T2 in various application areas of ICT which at the time of conceptualizing the study was expected as T1 is unitary institution. In another important aspect of various purchases in target institutions T1 is again 20% more progressive as compared to T2.

Similarly, thus it can be concluded that with the help of micro level analysis. We can reflect accurate picture of various other aspects including present ones. However,

macro level results are very productive for various technical institutions of the country.

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References

- [1] S.G.A. Smeenk, R.N. Eisinga, J.C. Teelkan and J.A. C./M. Doorewaard "The effects of HRM practices and antecedents on organizational commitment among university employees", The International Journal of Human Resource Management 17 :12 December 2006 2035 -2054
- [2] Jay Liebowitz (2002) "The Role of the Chief Knowledge Officer in Organizations, Research and Practice in Human Resource Management", 10 (2), 2-15
- [3] S. H. Singh, "Government in the Digital Era and Human Factors in E-Governance", In Proceeding of the Regional Workshop on E-government, Sana'a, 1-3 December, 2003.
- [4] R. H. Abdullah, S. Sahibuddin, R. A. Alias & M. H. Selamat, "Knowledge Management System Architecture For Organizational Learning With Collaborative Environment", International Journal of Computer Science and Network Security, Vol.6 No.3A, March 2006.
- [5] M. A. Huselid, S. E. Jackson, R. S. Schuler, "Technical and Strategic Human Resource Management Effectiveness as determinants of firm Performance", In Academy of Management Journal, Vol.40. No.1, P. 171, 1997.
- [6] Gary N. Mcleanand Dominic G. Kamau " Human Resource Development and Vocational and Technical Education", Finland, 22-25 September 1999
- [7] R. Natarajan, "The role of Accreditation in Promoting Quality Assurance of Technical Education" Int J. Engng Ed. Vol.16, No.2, pp85-96, 2000
- [8] Halimah Awang " Human Capital and Technology Development in Malaysia, International Journal Vol 5, No 2, 2004
- [9] Mary Mathew, "HR Outsourcing in India: The Organized and the Unorganized Sector", 23rd International Labour Process Conference, Mumbai
- [10] Seema Shah, J.N. Mishra, "A frame work of Technical Education–An Analytical Approach", International Journal Scientific Research Publishing, Journal of Service Science and Management, 2008-communicated.



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