

Networking of Paperless Offices in Technical Institutes of India

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Abstract

The paperless office is an ideal situation for all managerial aspects in any organization. Several studies have been conducted in this field and none concluded that there is a possibility of any organization to become fully paperless. In the present contribution authors have focused on two technical institutes of India which are premier in nature and it was expected that such institutes will show right path for others to move upon to become a paperless organization. However, the study shows that it is only a dream and can become reality if the rules and regulations established several years ago are modified accordingly. The opinions and perceptions were sought through well designed questionnaire from faculty members, officers and support staff of the two institutes. In case of Technical Institute P1 the opinion for adoption of paperless office is about 65% whereas in Technical Institute P2 it is slightly better. In almost all the items related to usages of IT tools & techniques, electronic communications and maintaining of records electronically, e-functioning of laboratories, e-library thorough use of Internet and others the officers opinion is slightly reversed in comparison to that of faculty members. The support staff more or less have expressed similar opinion and are in favour that only 50% office part should be paperless. The networking of available paperless activities is excellent in both institutes. The training and upgradation of knowledge in the area of application of ICT tools are very much essential for having nearly paperless office of any institution. The advantages like easy storage, time savings, user friendly, security, efficiency and accessibility will be achieved if continuous efforts by all the human resources working in any organization are streamlined.

Keywords:

Paperless offices, Networking, Information Technology, Efficient Communication, Best Practices, Internet Services, Digital Era

1. Introduction

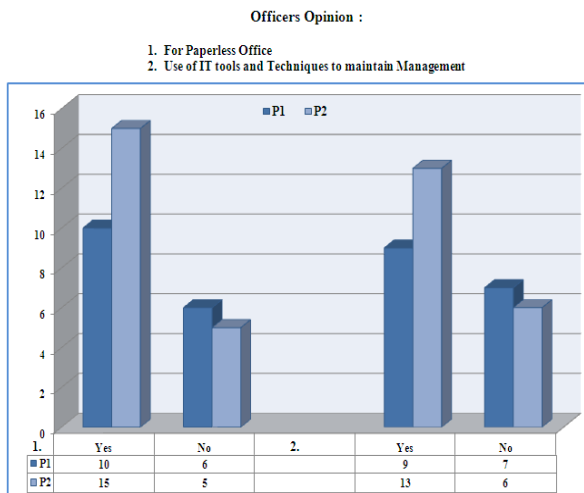
The aspirations of the society with the dynamic growth of technology are found coherent in a very positive direction. It has been observed since long that whenever there is a product of some latest technological innovations it would be for the benefit of the people at large. However, this

expectation has been generally found contrary to the products of the technology since most of the research conducted in educational institutions is for academic interest of the faculty members and researchers. The prototype testing of the research contribution is confined to laboratories only in most of the cases. This is very natural since vertical growth and incentives of the researchers are mainly measured on the number of paper publications, patents, copyrights etc. There are a very few products which become beneficial for societal purposes. With the development of information technology the society expected that all tools, techniques and products of IT will be beneficial for the societal upliftment. The society has got numerous advantages and is enjoying fruits of IT revolution. The life is becoming easier, distance has no meaning, communication, living conditions and other related facilities are getting advantages of such revolution. The management of organizations such as industries, companies, defense, space and educational institutions are becoming IT savvy. However, the slogan which started since 70s for paperless offices in various organizations could not get proper momentum. The reasons vary from organization to organization. In the present work a case study has been undertaken for two premier technical institutes (named as P1 and P2) of India to find out perceptions & views of human resources belonging to these institutes for paperless offices and its networking. The literature survey was conducted extensively for finding out earlier work in this area. There has not been much work before 1990s. However, the authors have contributed a lot [1-4] to study management issues related to academic institutions in Indian context. The technology had always promises to be a vehicle for developing conducive academic atmosphere in educational system. The applications of such technologies are easier in such institutions as compared to others in this field. There are initiators & builders of new and appropriate technologies for various management skills to achieve better and user friendly results. In present case some of the researchers [5-8] have contributed appreciably including some suggestive steps for becoming any organization paperless. Myths and misgivings are some of the issues dealt with by these contributors.

Some of the other contributors [9-13] have mentioned that it is pre-require to first understand what information technology can provide and also the users have to be well trained in handling the management of the tools for paperless system.

The methodology adapted for finding out the networking of paperless offices of two technical institutes consists of developing well thought and vetted questionnaires, its distribution to human resources at the level of faculty, officers and support staff working in these institutes, filled up format collection, statistical analysis and interpretation alongwith analysis of results.

The authors of this paper have shown data analysis in 11 graphs. The numbers of items reflected for studying the paperless offices are also eleven. The description of analysis and results are mentioned as under:



Technical Institutes- P1 & P2
Fig-1.1 Fig-1.2

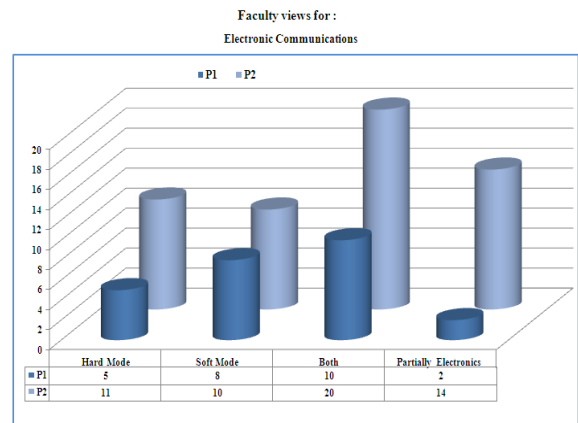
Fig. 1.1 shows the responses of two questions of management of human resources of P1 and P2 by officers and staff engaged for the purpose. They are supposed to be skilled persons having various knowledge of the rules and regulations related to management. It starts from assessment of the requirement in various organizational wings, recruitment, policy and planning for retention, vertical growth, financial packages, work assignment matching with capabilities and superannuation benefits. They also plan strategies for implementation, communication and redressal opportunities from various human resources working in the organizations. The questions of making the office paperless or uses of papers are also decisive aspects at the level of officers and supporting staff. Therefore, in the present contribution stress has been given on opinions and perceptions of both responsible components of the management.

In case of opinion for paperless office more than 65% officers agreed for paperless management whereas others

do not appreciate such office in case of P1. On the contrary in case of P2, 70% were in favour of paperless office and only 30% differ for such arrangement. These opinions were expected because the human resources working for long have developed certain habits of discharging their duties and putting the papers in that manner. However, progress has been observed in both P1 and P2 and in coming years there may be further improvement in the direction of managing paperless office.

Fig. 1.2 shows the usage of IT tools and techniques for maintaining records and other management which is another important aspect related with the paperless issue. The study shows that about 63% officers are using such tools and techniques in P1 whereas rest still favour for use of older techniques.

In case of P2, 70% officers agreed and 30% did not perceive for uses of such techniques in managing the human resources of their organizations.

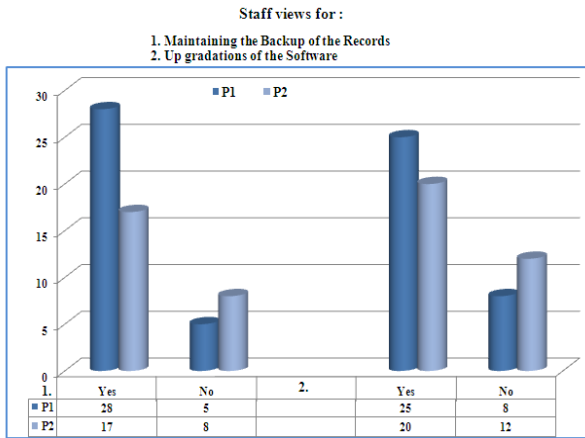


Technical Institutes- P1 & P2
Fig-2

Fig.2 reflects that communication is an essential need for all human resources. In older age technologies were not much developed as compared to today. Therefore, specific messengers were sent from one place to other place for delivery of letters and other important documents. Sometimes trained Pigeons were also used for such purposes. Slowly society has developed postal departments for sending letters, messages and packets from one place to other. The telegram was also invented for sending short messages. From 19th century to beginning of the present century there has been a tremendous development in this area. With the advent of Information Technology, distance has squeezed and communications are being sent within fraction of seconds from one corner to another corner of the globe. This area is an important ingredient in case of paperless office. The opinions were sought from the faculty members of P1 and P2 about e-communication. In case of P1, 20% are in favour of hard mode, 30% for total electronic system, 60% agree for combination of both hard and soft modes

and only 10% are in favour of partial electronic communication. Whereas in case of P2 35% are interested in present system, 30% for electronic system, 55% for both aspects and 45% for partial e-communication. Thus, the situation seems that majority of faculty members do not favour paperless office in the institutes, although it was expected that the faculty of technical institutes will be very progressive, visionary and adoptive in latest technological innovations [14].

of products. There is encouraging replies from both institutes by officers about use of latest IT tools being used in the equipments. About 90% officers agree with this policy. This is very interesting that although officers are not directly involved in the field, even there, they have realized the need of the faculty members and technical staff which is normally lacking in several cases.

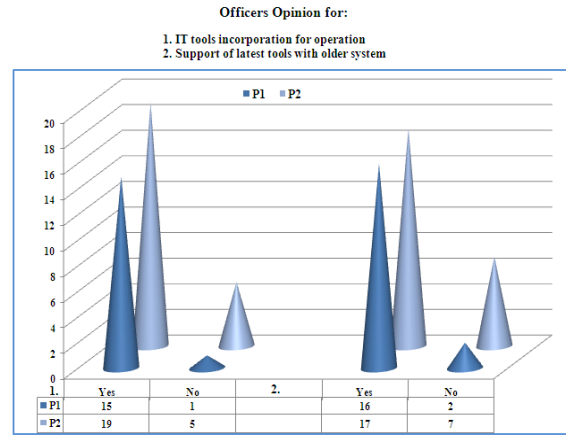


Technical Institutes- P1 & P2
Fig-3.1 Fig-3.2

Fig. 3.1 Generally the personal records, the financial registry and administrative matters are dealt with all in hard mode. Although, it takes a lot of space, time consuming, poor accessibility, insecurity and in the long run possibility of spoiling the records. Some institutes keep backup of the same which again is a difficult task. The opinions of support staff who are the main custodian of records were sought. More than 80% are in favour of maintaining backup of the records. This is true in case of electronic records as well. Similarly, in P2, 60% agree for such policy (Fig. 3.1).

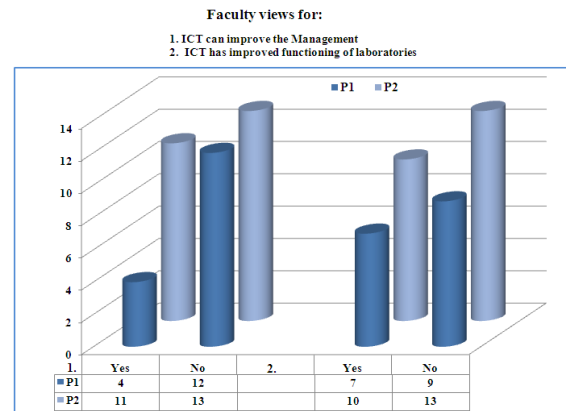
Fig. 3.2 relates with the fact that the technological developments are very fast and the softwares used for operation of various technological tools and machines become obsolete with the advancement of technology. A few institutes have a policy of upgrading of softwares concurrently with the advancement of technology. An opinion was sought from the support staff and more than 82% agree for upgradation of softwares and rests disagree with this in case of P1. Whereas in P2, 70% agree and 30% do not agree for upgrading the softwares.

Fig. 4.1 depicts about the opinion of incorporation of tools necessary for running the equipments. This is an important point and the institutes are expected to be very fast in such aspects otherwise they will be far behind in development



Technical Institutes- P1 & P2
Fig-4.1 Fig-4.2

Fig. 4.2 provides the question of using latest tools in old equipments for student laboratories and research work. With the advancement of technology they become obsolete very soon. The institutes do not have sufficient financial resources to replace the equipments after every 4-5 years. Therefore, if there is any possibility of using the latest tools in older equipments then financial situation of the institutes will be not affected much. In case of opinion of officers 88% agree with this possibility in P2 whereas about 70% have shown their interest in P1. This is due to the reason that P1 was established in 20th century whereas P2 in 21st century.



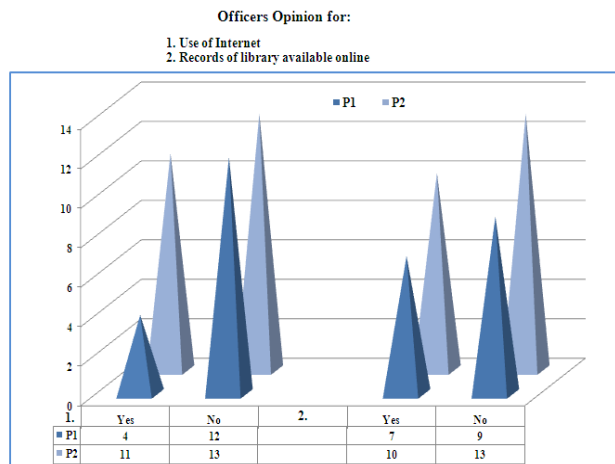
Technical Institutes- P1 & P2
Fig-5.1 Fig-5.2

Fig. 5.1 represents a similar case for moving ahead to the paperless office by the use of ICT for improvement of management. Unless ICT tools and technologies are used extensively in management, it will be difficult to achieve the objective of making any office paperless. In this context faculty were consulted and it is discouraging that only 30% of P1 agree for the use of ICT in improving the management of the institute. Whereas in case of P2 about 50% agree and favoured for ICT uses in management to improve it further.

Fig. 5.2 dealt with laboratories whether meant for students at graduate and postgraduate levels or being used exclusively for researches are very important segment of delivery of knowledge. Their periodic upgradations with the discovery of new experiments are essential. In the present electronic era the laboratories require very little space, the equipments are user friendly, cost effective and time saving, if ICT is used in various laboratories. Several institutes are practising such tools and are getting very good output with such usages. In case of technical institutes P1 about 45% agree that ICT can improve functioning of the laboratories. In case of P2 almost similar opinion has been given by the faculty members. It may be concluded that although it is apparent that ICT can enhance and improve not only laboratories but other infrastructure. However, such percentage of opinions expressed in the present study reflects the need of training and generating awareness of uses of ICT technologies [15-16].

Therefore, usages of ICT in management system are as essential as any other thing. This provides availability to work 24 hours from anywhere at any time. In case of delivery of education, it also plays an important role for effectiveness and efficacy in the two institutes. The officers are hesitant in using internet in management. This may be the reason that they are accustomed with the earlier system of managing the records which is reflected by the opinion expressed in P1 and P2. Only 20% agree in P2 and 50% agree in P1 for uses of internet in their management system.

Fig. 6.2 reflects that the Library of any organization is a source of knowledge, information, precedences and future scope of developing knowledge. In earlier times the records were maintained only on leaves which had no chance of reproduction and distribution. With the development of electronic knowledge resources by using various tools of maintaining library it has become very convenient for any learner to move from one place to other place with relevant literature of library. This has provided comfort and convenience to anyone. The online journals and books have also made easy access to those interested in reading and gaining knowledge in their specialized field. Most of the organizations, particularly educational ones are maintaining e-library so that at any particular time all interested students and faculty members can access the same book which was not possible about two decades earlier. In the opinion of officers only 45% agree for e-library in both institutes. This may be because of the reason that they have very little to consult through electronically in the library. They are friendly with the hard copies of books of rules or other similar literatures.



Technical Institutes- P1 & P2
 Fig-6.1 Fig- 6.2

Fig. 6.1 relates that the **w.w.w.** facility was made public by USA in early 1990s. Since then internet has played significant role in shaping the society and has entered in every aspect of life of individual. Even a child of three years wishes to play with the games available at internet.

2. Conclusions

The present study has been undertaken through case study technique by selecting two premier technical institutes of India. They have been named as P1 & P2. The main objective is to find out whether these institutes have policies and implementation strategies of adopting paperless office in view of latest IT revolution. The well designed and focused questionnaires were floated to faculty members, officers and support staff of P1 & P2 to provide their views alongwith perceptions about moving to paperless system from age-old traditions & management techniques. There were major 11 items through questionnaires reflecting quantum of usages of IT tools, electronic communication and maintenance of records in traditional manner or by modern techniques, upgradation of softwares with dynamic growth of technology, ICT tools incorporation in various managerial sectors, ICT customization for existing older equipments and management of laboratories with recent tools, level of

use of internet and developing e-library. These are certain crucial factors which provide assessment of level of achieving paperless office. It is discouraging that almost all human resources of P1 & P2 are not fully convinced for paperless system. The main reason is that their rules and regulations are being applied as they existed before development of IT tools. In case the rules are modified, it is expected that in future time to come most of the management work may be paperless. The only encouraging aspect is that whatever fraction of paperless system is in operation its networking is quite satisfactory in both institutes.

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