

E Judiciary: a Step towards Modernization in Indian Legal System

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Abstract

E judiciary a step towards modernization in Indian legal system: Indian legal system having a hoary past under different rulers though underwent metamorphosis but the basic structure of it did not alter to a great extent. During the period of East India company changes took place to have a modern judicial system. After independence the old system continued to a great extent under the frame work of Constitution of India and Indian judiciary became a unified pyrimidicle structure. The modern India while has the said structure the information and communication technology has virtually paved a new line of thinking in modernizing Indian judicial system. An overall review of the development in administration of justice till now achieved and the things to be achieved are going to be considered in the light of artificial intelligence and its use in sentencing process. Video conferences from jail to court, court to court, court to witnesses are some of the innovative study, which is going to be discussed.

In the field of legal education the technological impact is also going to be discussed. The paper intends to have a study under three different groups such as a study with reference to past computerization, the present stage of computerization and how it has to evolve in future. Ultimately to have a scientific empirical analysis to have a look as to how the computerization in judiciary has become an effective tool to bring down the pendency of cases and to reduce the delay. What course of action is to be resorted to have technology friendly courts?

Introduction

Judiciary in India has a hoary past since a long time. Among the Nations of Asian Continent, it may not be out of context to say that administration of justice in India has a historical background of nearly 5000 years. Different Rulers from time to time had governed the affairs of the State and had administered justice by resolving disputes. Even during medieval period, the same trend continued more or less on similar pattern. The modern setup of Indian judiciary traces its immediate existence to the advent of British rule in India. The courts were established at Presidency towns by East India Company and subsequently followed by British Parliament¹. Further in the native states, the judiciary was functioning under the aegis of the local rulers, gradually adopted the same pattern.

Structure of Judiciary in independent India

In independent India, after adopting “for ourselves²” the Constitution, steps were taken to have a unified or integrated judiciary with a pyramid type structure having the Supreme Court³ as the Apex Court of the land with administrative total independence and the High Courts⁴ at the level of each State and sub-ordinate judiciary⁵, nay District Judiciary⁶ at the level of the Districts⁷, subject to control and supervision of respective High Courts.

¹Constitutional history of India by M. P. Jain

² Preamble to the constitution of India- We the people of Indiahaving solemnly resolved to constitute India in to a Sovereign, Secular, Democratic Republic and to secure to all its citizens JUSTICE; social, economic and Political., LIBERTY of thought, expression, belief, faith and worship, EQUALITY OF status and Opportunity, and to promote among them all FRATERNITY ASSURING Dignity of Individual and UNITY AND INTEGRETU OF NATION, in our Constituent Assembly this 26th day of November 1949, do here by ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

³Article 124 constitution of India

⁴Article 214 constitution of India

The Supreme Court is the highest court of the country having judicial authority, while the High Courts have both administrative and judicial power in respect of the affairs of the district judiciary. The constitutional role of both Supreme Court and High court may be said to be that of two brothers. Though the High Court has vast power⁸ yet the Supreme Court is like an elder brother, having certain plenary powers and powers of extraordinary nature. Article 142 of the constitution of India envisages that the ruling of the Supreme Court binds all courts in India and therefore all courts including High Courts are bound by the decision of the Supreme Court. Both the Supreme Court and high court are the court of record⁹ and have powers to punish persons for the contempt of court.

In the hierarchy of the courts, as referred to above, among the District Courts further classification is noticeable by having courts for civil and criminal justice. At the level of the civil justice system, the civil judge junior division finds a place at lowest point of the hierarchy. The civil judge senior division presides as an appellate court and also court of original jurisdiction. Above the civil judge, senior division, the district court acts as a link between the High Court and the courts sub-ordinate to the District Court. The District Court possesses not only both appellate and original jurisdiction but also administrative control, subject to the overall control of High Court, in respect of courts subordinate to it. Similarly, in criminal side, the court of judicial Magistrate first class, Chief Judicial Magistrate and over which the session courts are constituted. Any order passed by the sub-ordinate judiciary is appealable to the High Court and Supreme Court. Sub-ordinate judiciary is bound by the decisions of the not only Supreme Court of India but also the respective High Courts to which the Court is under control.

Work Load and Ratio of Judge and Common Man

After India attained independence, not only there is an explosion of population but the pendency of cases has grown in a multidimensional way. The back-log of cases has grown and ultimately it has virtually over-burdening the judiciary¹⁰. Some of the jurists and judges have commented that probably to clear the outstanding pendency; another 320 years are needed¹¹.

India has 15,000 judges as against the sanctioned strength of 17,641 including 630 High Court Judges. This works out to a ratio of 10.5 judges per million populations¹². The mounting arrears of cases in Courts, particularly in District Courts and High Courts, have been a cause of great concern¹³.

⁵Article 235 constitution of India

⁶ The word district judiciary is used keeping in view the observation made by FNJPC report, where in it was stated that use of phrase subordinate judiciary conveys a wrong signal and needs to be rechristened.

⁷ Some of the authors say that it is not a pyramid like structure but a structure having horizontal nature where the high court and supreme court have appellate power over the sub-ordinate judiciary, and as such it is appropriate to not to call a judiciary having structure like a pyramid.

⁸The high court can issue writs and orders not only for the violation of the fundamental rights but also for the violation of constitutional and statutory rights. The Supreme Court can issue the writs only when there is a violation of Fundamental rights. However the Supreme court has certain extraordinary jurisdiction to decide the dispute between State and Centre, State and State, references by the President of India, special leave to interfere with reference to any order passed by any court or tribunal where there appears to be a substantial injustice being caused, notwithstanding as to whether an appeal against the said order lies or not, to do substantial justice.

⁹Article 129 with reference to Supreme Court and Article 214 with reference to the High courts.

¹⁰ Some critics say that the judiciary in India is over burdened and the days are not too far that it may collapse on account of its overweight unless some remedial steps are taken. Justice BB Malhotra Judge Allahabad High Court, in an article "Court Management" published [J.T.R.I. JOURNAL – First Year, Issue – 3 - Year – July – September, 1995]

¹¹Indian judiciary would take 320 years to clear the backlog of 31.28 million cases pending in various courts including High courts in the country, Andhra Pradesh High Court judge Justice V VRao said.Courts will take 320 years to clear backlog cases: Justice Rao - India - The Times of India.One estimate is that if the Indian courts were not to take more cases from today and dispose off the cases at the present rate, then, it may take nearly 300 years to clear the present back log of 30 million cases pending in the various courts of IndiaVittal

¹² The present strength is around 19000 including 18000 judges of courts subordinate to High courts.

¹³In 1985, there were 1,24,02,216 cases pending in the subordinate courts. The Judge strength in 1985 was 9,232. In 1995, the pendency of cases increased to 2,06,46,592; whereas, the number of Judges in 1995 was 10,652. Thus, increase in number of judges has not kept pace with increase in number of cases. During the period 1985 and 1995, the overall Judge strength increased by about 15.4% as against the increase in the pendency of cases by about 66.5%. FNJPC REPORT VOL I

The objective of bringing about the reduction in the time period of disposal of cases and to reduce the existing pendency of cases in a time bound period is of paramount importance¹⁴.

Former Chief Justice of India Dr. M.N. Venkatachaliah indeed had pointed out that, the disillusionment with the judicial system has led to a dangerous increase in janadalats or kangaroo courts in many parts of the country. It is time the county took a serious and comprehensive look at the entire legal system with special attention to tackling the problem of backlog. Too much time has gone by and too little has been done to sort out a problem that undermines the rights of litigants and accused, damages the credibility of the judiciary, and weakens the very basis of the democratic order.

The judges are to decide not only the disputes but also have to act as administrators in administering the affairs of his court and should act as good managers. The lack of administrative capability and facilitating the judicial work in a time bound manner had virtually created a situation of poor management of resources. The judicial productivity and quality of justice, as Dr. Madhava Menon has stated, had reached a bad shape¹⁵.

Need for a New Look?

E-Governance is the key word in every department of life today. It increases productivity, enhances transparency and accountability, reduces red tape and corruption in administration.

Technological Developments in the field of information and introduction of computers have made a turning point in the history of human civilization. It has brought about a sea change in all fields of human activity. It has resulted in enhanced efficiency, productivity and quality of output in every walk of life. The information technology has been advocated in the western countries for the last two or three decades. This scenario gained alarming thoughts to have technology combined in administration of justice.

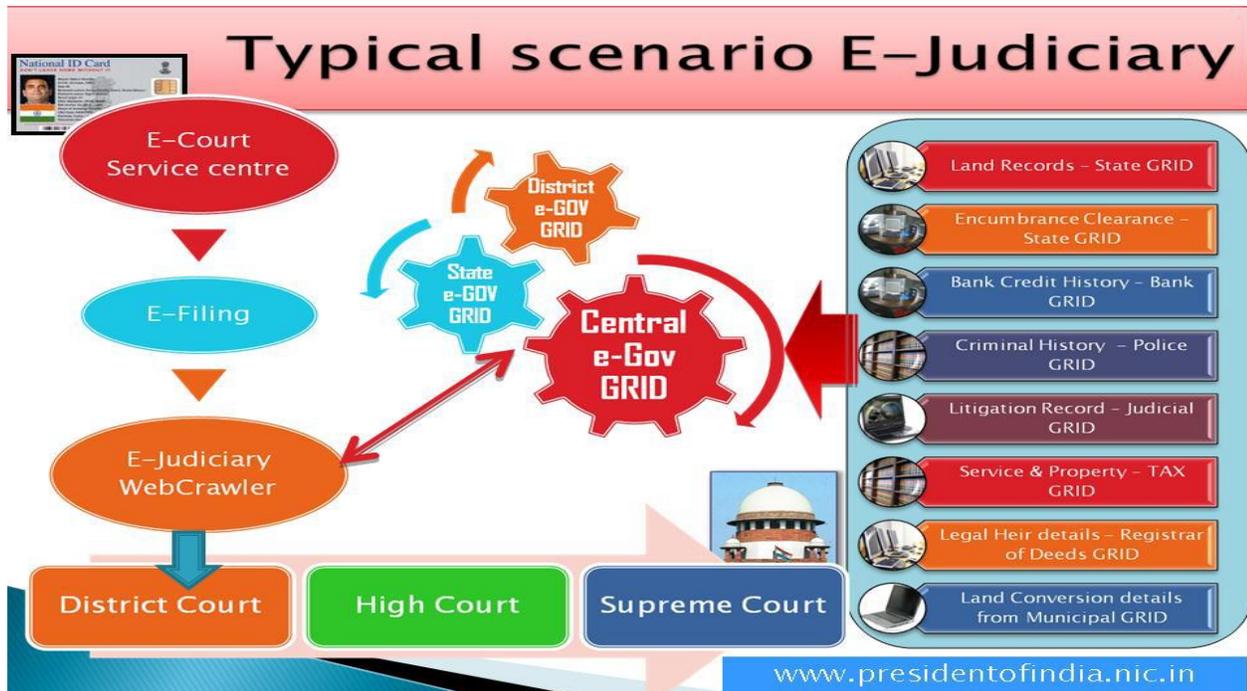
Former President of India, who himself is a technocrat had stated about introducing of technology in courts had stated that:-

Technology is definitely an essential element of change in all spheres of life. The human element involved also is an important factor. If technology is properly used, it can bring about tremendous changes for the betterment of life. Any change we contemplate is for speedy justice delivery mechanism keeping in focus the quality, transparency and public accountability¹⁶.

¹⁴JTRI JOURNAL 2012 STRENGTHENING THE JUDICIARY TOWARDS REDUCING PENDENCY AND DELAYS- Justice P. Satashivan.

¹⁵ State of Justice an agenda for change Dr.MadhavaMenon The Hindu news paper dated 8th July 2001.

¹⁶Dr,A.P.J.AbdulKalam



At first, at the level of the Supreme Court and High Court, the technology was pressed into service and the cases were tried to be disposed off expeditiously¹⁸.

¹⁷ President Bharatratna Dr.A.P.J.Abdul Kalam stated: Let me unfold the scenario. A litigant comes with his with all the documentary evidence which he possesses. E-Court Service Centre helps electronically to identify a civil lawyer to present his case. The lawyer files the case with a prescribed format in the e-Court. Once the case is filed, the e-Court web service agent crawls across the state and central e-governance grid and collects the relevant land records registry and gets the encumbrance certificate details of the litigants and the defendants. If necessary, it also collects the credit history of the parties from the banking grid, criminal record if any from the police grid, litigation records if any from the other courts, property tax and service tax payment data for the particular disputed land from the State e-governance grid, legal heir verification from the Registrar of Deeds and classification and conversion details of the particular land from the district e-governance grid. The judicial officer now

has the documentary evidence submitted by the litigant and defendant and the certified and authentic documentary evidence collected from various government units which have relevance to this case on the fly in front of him. This will enable the judicial officer to apply his or her mind objectively with optimal examination and cross-examination of the witnesses leading to taking a fast decision in the particular case.

Linkage with NeGEP (National e-Governance Programme): This entire process happening in the network speed reduces the time gap in judgment. Affected party can go online for appeal with the judgement giving reasons and further documentary evidence to the higher court electronically if required. Higher courts get the entire data electronically and they can apply their legal provisions to entertain the case based on its merit and give their verdict without loss of time. The entire e-governance framework should facilitate the case to flow digitally in a secure environment with digital signature across the various stages within the court and across the courts. The data collection and verification with different respondents cutting across various institutions and individuals takes place in a seamless interoperable manner through the e-governance grid data collection mechanism. This data is presented in the form of text, audio, video right from the FIR, interrogation, enquiry, arguments and judgments. The case object is flowing digitally from District Courts to High Courts and High Courts to Supreme Court in a seamless fashion. The other horizontal and vertical e-governance grids such as police grid, banking grid, institutional grids, state grid and central government grid will assist the e-judiciary electronically and facilitate the decision making process in a transparent manner. Basically, in an e-judiciary environment, a case object is traveling into various stages of judicial process and creates Meta data in each stage of the judicial process, thereby creating a foot print of data about the case. An ICT legal expert system assists the advocates and the judges with the legal provisions, previous case history, previous judgment details in various courts thereby helping them to arrive at a decision based on the spirit of the legal provisions. Hence a fully operational e-Governance GRID is vital for the success of E-Judiciary.

List of Business Information System, Filing Counter Computerization, COURTNIC, JUDIS, Supreme Court and High Courts pending Cases on IVR, display boards, and Cause Lists on Internet, are some of the positive steps which were taken in a consistent manner over a period of time. These things indeed have a very high impact in not only making the institution of judiciary at higher level a people friendly but also has cut the expenditure on the exchequer. The transparency affected has brought about a friendlier environment between the Bench and bar¹⁹.

The pendency of cases which was virtually at a level of peak during 1987, that is earlier to the introduction of computerization at Supreme Court had reached a considerable low level by 2003²⁰.

Computerization of District Judiciary across the Country

This experimentation which had been done at the level of High Court and Supreme Court needed to be implemented at the level of the Trial Court, as majority of cases were and are pending. The steps were taken to implement computerization at the level of the Trial Court. The same was done with an active association and involvement of National Informatics Centre, and also the zeal exhibited by progressive minded judges like Justice G. C. Bharuka²¹, Justice Yatindra Singh²², and Justice MadanLokur²³. The State of Karnataka implemented at first the concept of computerization as a model state even at the level of taluk courts²⁴.

¹⁸ Ever since NIC took up computerization in Supreme Court in 1990, many applications have been computerized which have impact on masses i.e. litigants. Following are some of the applications which have been successfully implemented at Supreme Court and 18 High Courts and these applications have either direct or indirect impact on the masses. <http://indiancourts.nic.in/courts/itinjud.html>.

¹⁹ Advocates are able to receive the Cause lists almost immediately after courts hours

Advocate can generate their own casuists which will contain only their cases, thus avoiding them to go through hundreds of pages to locate their cases

As the application is available on Internet, the litigant public can easily find out whether their cases are coming for hearing or not, without bothering the advocates

Some courts are considering to reduce the generation of copies of Cause lists, as most of the advocates are dependent on the Internet version of Cause lists, thus the courts can save good amount money on annual basis

²⁰

year	institution	Disposal	pendency	Courtesy
1989	27469	21400	106027	Supreme court registry.
1990	28488	25238	109277	
1991	32501	35341	106437	
2002	44052	42439	24335	
2003	50394	47979	26750	

²¹ Computers are not new to the Indian courts. Towards the end of 1989, one low-end computer was installed in Supreme Court of India for caveat matching. Immediately thereafter, in 1990, I initiated the process of court computersation in Patna High Court, as a sitting Judge at Patna High Court. On my transfer to Karnataka in 1994, I undertook to introduce ICT in the entire judiciary of the state of Karnataka. All the 600 courts in the Karnataka state located up to the taluk level were computerized. All the judicial officers and court staff were trained. There was a complete automation from filing of a case to grant of a certified copy. Digital production of under-trial prisoners by video-conferencing was made possible in all the three court-complexes at Bangalore, which was later extended to six more districts in Karnataka. Through the Karnataka judiciary website, cause lists of the High Courts and district courts was made available online, a day before, for the first time in the country. The system created has subsequently been adopted in different states in India.

²² Worked to get the High court of Allahabad computerized.

²³ Worked to get the courts subordinate to High court of Delhi computerized.

²⁴ Enhancing productivity through computerization—Karnataka Experience by Justice S.R.Bannurmath. The Author Dr. S. B. N. Prakash as a District Judge had an opportunity to work as first Central Project Co-ordinator of Computerisation Project in the State of Karnataka and he worked for two spells in that Capacity.

Steps Taken to Implement the Policy of Computerization at District Level Judiciary

Chief Justice Lahoti, the then chief justice of Supreme Court of India, and Prime Minister had a joint meeting and decided that certain positive steps are to be taken under the aegis of Supreme Court and accordingly a high power committee was constituted. Thus the

The process of computerization in the Indian judiciary could be probably categorized into 3 phases²⁵, such as that of, identification of location and procuring the site for developing computerization. The second stage being concerned mainly to that of procurement of hardware and software needed to meet the computerization. The third stage was that of to bring about the further developmental activities to make computerization to meet the needs of the common man.

The first e-committee was constituted to undertake the work. The said committee was headed by justice Dr.G.C.Bharuka. Much of the mapping work was done by the committee on a war footing basis. The places were identified and as many as 3500 complexes having sub-ordinate courts to the extent of the 20,000 courts were identified. Working simultaneously at number of sites was really a herculean task and the same was done in a methodological manner. The committee worked out a detailed plan and program as to how the computerization should be done across the country. District judges and in some cases senior Civil judge (Senior Division) were identified and posted as nodal officers with a designation as “Central project co-coordinator” at the level of the high courts. They acted as a link between the High court and e committee and also were responsible to implement the plan in an effective manner.

Preparedness with Software

The software development is an important task and the same was done in association with National Informatics Centre. National informatics centre of Karnataka region under the guidance of experienced senior judge²⁶ had prepared customized software called ‘litigation management system’. Now the same is replaced with a latter developed version such as that of “Case Management System” as developed by National Informatics Centre, Pune²⁷. The technical skill of Indian software developers is utilized.

Network and its Expansion to the Rural Setup

The internet and network is more important in having the technology to function in a proper manner. If these things are not there then the use of desk top or laptop would be only to replace a traditional typewriter. Therefore in the State of Karnataka steps are taken at many of the courts to have dedicated line. The services of Indian telephones are availed of. The OFC is used to have quick transmission wherever it is needed. The best utilization of technology in developing Local area network, Wide area network, State Wide area network has been put in to an effective use.

Administrative Setup and Preliminaries

Whenever a plaint is instituted in a court capturing certain information like name of the parties, nature of the case, subject matter of the dispute, relief claimed, generation of order sheets, preparation of summons is an important work. Earlier these steps use to take lot of time and there by much wastage of man power use to be there. The litigant public had no opportunity to know the details at which stage the consideration was needed.

²⁵ As visualized by e-committee

²⁶ Justice Dr.G.C.Bharuka

²⁷ Justice Dr.G.C.Bharuka says, This software was conceived and designed solely by me. You will find mention of this fact in my book "Rejuvenating Judicial System Through E-Governanace And Attitudinal Change" at page 158 (Designing Dispute Resolution System). Subsequently, two young software engineers were recruited by the High Court on its rolls for carrying out the coding under my supervision and guidance. This is how "LMS" surfaced and successfully deployed in Bangalore City Courts. NIC had no role to play in this exercise. In 2002 a team of officials under the leadership of Justice Chauhan (then a senior most District Judge) from Bombay High Court came to KHC to study the ICT implementation in Karnataka. On their request, I shared the entire structure of LMS with them. On that basis the software CIS was developed at Pune by the NIC team, which is now being implemented across the Indian Judiciary under the E-Courts project with some modifications. Unfortunately, CIS has many fundamental deficiencies.

These mechanical works is now done through the use of technology. The collated information has virtually facilitated the office to generate summons and notices almost instantaneously. The movement of papers and organized arrangement to track the said movement was established.

Recording of Evidence

Trial courts are the courts which basically record the evidence on disputed facts and render judgment by applying the principles of law. Recording of evidence correctly in a transparent way is an essential task. The old pattern of recording by hand and later development of getting it typewritten in open court has now given way to a system of using the technological means to record the statements of the witness in open court. Besides this the high end printers are now installed with network connection and as such the litigant public and members of the bar representing parties can have the printouts without much delay.

Providing Individualize Lap Tops

After the completion of the said stage to a major extent, the procurement of the hardware and software started and as such not only software has been developed but also standardized software was procured. Each of the judicial officers was provided with Laptops, Printers individually and training was given to make them more computers friendly. Besides the judicial officers, the clerical and administrative staff was trained as to how they should use the computers on a network basis. The network was developed at the level of LAN, WAN, SWAN and also an attempt to have national grid have data bank. Providing individual lap tops with broad band facility has made it possible to have access to internet and to have the window open to the world at large to have a broader vision in deciding a case in an effective manner. In fact this is a part of e-courts implementation project as projected by the National Informatics Centre.

First Information Report and Technology

First Information Report is a document prepared by police organizations in Bangladesh, India, and Pakistan when they receive information about the commission of a cognizable offence. It is generally a report lodged with police by any person having social concern. Section 154 of Cr pc deals with reference to First Information Report. The delay in submitting First Information Report to the Magistrate would invariably inure benefit to the accused as a doubt would be created in the mind of the court as to whether the said document is a tailored one or otherwise. The delay in transmission of the report could be solved by submitting the same through the use of technology. The steps are now taken to transmit First Information Report online. As an experiment in the State of Karnataka now the transmission of First Information Report to the court of District judge is undertaken. By utilization of the technological program there will not be any delay which gives rise to unwanted arguments and also would prevent any loss of time. In due course the steps have to be taken to transmit them from the jurisdictional police station to the court of Magistrate with in whose limit the offence had been reported.

Heeding towards Third Stage Development

The third stage has an important stage under which the computerization has gone to the level of various stake holders such as litigant public, judges, and ministerial staff of the court, advocates and various other governmental agencies.

The digital signature is provided for each of the presiding officers and to high court judges and their personal assistants. The judgments are now authenticated with digital signature. In the state of Karnataka, at the level of High Court, the practice of scanning the judgments and archiving is now done away with. On the other hand the digitized copies are now stored with authentication.

The similar practice is to be extended even at the level of the subordinate courts. Likewise an important step which requires to be taken is that of insisting advocates and litigant public to file their pleadings and documents in the form of soft copy, preferably by using PDF technology. This should be insisted as additional information without dispensing with the existing hard copy system. Indeed the computers and the technological development have percolated in India even at rural level. When once such a step is taken it would facilitate to have effective paperless courts on a later date.

The cause list system is now gradually dispensed with at the level of high courts. Karnataka high court has saved nearly utilization of one lakh sheets of paper every month.

Kiosks and People Friendly Environment

Access to justice and transparency in judicial process are very important. An informed citizenry is always a good asset. To achieve this motto the kiosks and information centres are established. Through these centres one can have the needed information about the stage of the proceedings. Some of the high courts and district courts are web hosting the judgments of even subordinate courts²⁸. SMS alert, IVRS to know the status of cases are now being introduced. The mobile technology in this context is used to a great extent.

Provisions to provide certified copy of judgments of the High court should be made available by utilizing the services of trial courts or even through pay pals or pay gates. The utilization of internet banking, credit and debit cards should be encouraged. Wherever it is possible the maximum utilization of e-banking should be provided, instead of asking the litigant public to make any payment either by way of demand draft or banker note.

Tools to prepare judgment: the preparation of judgment is the job of a judge when the parties or their respective advocates complete their job. For this work the judge has to rely on several things.

Legal Tools

Under e court project, the access to online journals like that of All India report, Supreme Court Cases are provided. The judgments of the Supreme Court are available on line. The judgments from 1950 till the date are now available at the click of mouse. Some of the high courts are web hosting the judgments of high courts, but the access to the judgments should be more user friendly than the present system of a tedious nature, which is not in a people friendly nature.

Language Tools

India is a country of diversity. The regional language plays a prominent role. The preparation of judgments, reference to documents and recording of evidence many a time requires reference to the local or regional languages. To facilitate the courts to have this working system the language tools are used. This has rendered work of judiciary to be more efficient and people friendly. The software as developed by center for Development of Advanced Computing could be used²⁹.

Video Conferencing and Judicial Administration

What one had not conceived in mind earlier is now possible. The brick and mortar, physical presence and discussions across table are gradually giving way to new things in view of technological development. Video conferencing facility and teleshopping are now playing a prominent role the present day world. Judiciary cannot keep itself away from these changing phenomena.

Videoconferencing is not a new technology; it has been used since the 1970s in different places in United States of America. Videoconferencing works like a telephone call, except with the addition of a video image streamed between parties. In a court setting, videoconferencing may be requested by any party in a case. In its simplest form, the remote party and the party in the courthouse sit in front of television screens topped with a camera and microphone. The video and audio is then broadcast over telephone lines or a broadband connection. Each viewer will see the opposite party on their respective screen. As the ability to compress and transmit video and audio data increases, the speed and quality of videoconferencing also increases. Early models had audio/video synching issues and low-resolution images³⁰.

Videoconferencing is the wave of the future³¹. Effective use of this technology is in use to some extent. To begin with the link between jail and courts were established at selected cities and court complex³².

²⁸The high court of Karnataka is yet to take a positive decision in this context.

²⁹The Centre for Development of Advanced Computing (C-DAC) has made pioneering contributions in developing Indian language tools with natural language processing, and in evolving script and font standards through its GIST technology, to enable and spread use of computers in various languages. It accordingly took up the initiative of developing important governance solutions in Indian languages, which impact Government and the citizens both.

³⁰Videoconferencing in the Courtroom: Benefits, Concerns, and How to Move Forward Daniel Devoe and Sarita Frattaroli

³¹Meghan Dunn & Rebecca Norwick, *Report of a Survey of Videoconferencing in the Court of Appeals*, Federal Judicial Center 17(2006), available at

http://www.fjc.gov/public/home.nsf/autoframe?openform&url_l=/public/home.nsf/inavgeneral?openpage&url_r=/public/home.nsf/pages/1105.

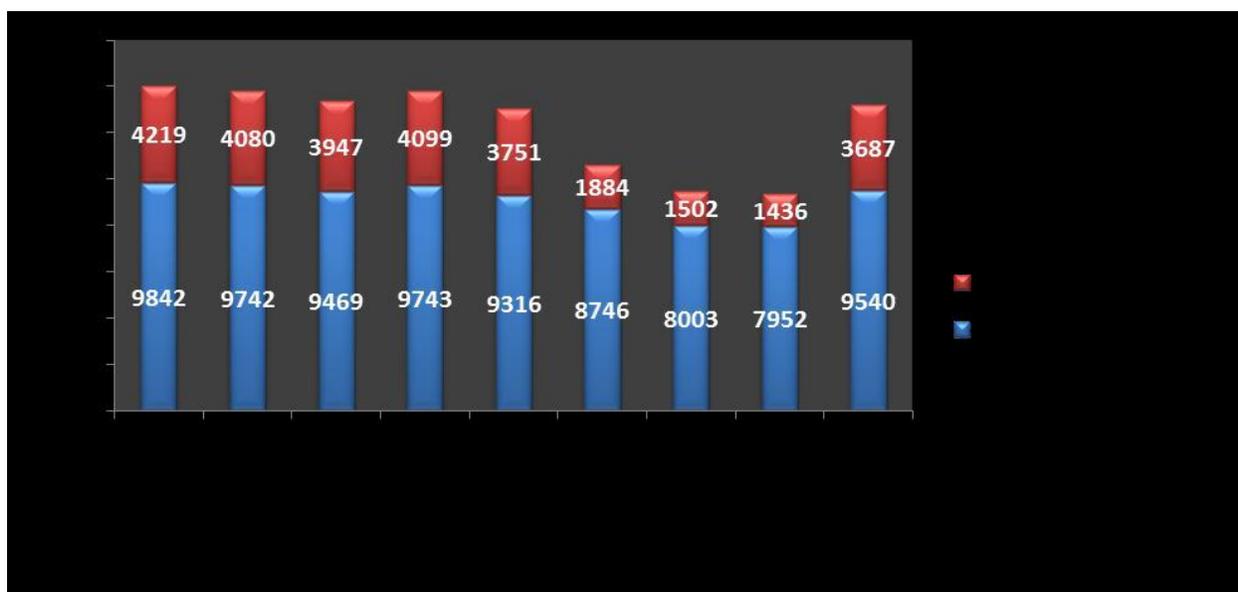
This facility is to be extended even in respect of civil cases³³. From 2003 till 2005 that is within a span of two years the High Court of Karnataka was able to save amount to a tune of Rupees ninety three lakhs eighty three thousand five hundred and forty one. Since then, it is under various stages of completion and functioning at the rest of the jails in the State. Video conferencing project titled e-mulakat started at BirsaMunda central jail, Hotwar, in April 2012³⁴. In case if virtual court rooms as established in Singapore is established in India then videoconferencing will have a major role to play.

Video conferencing system is now put in to active use in bringing about an ‘integrated criminal justice system’³⁵.

E-court and Paperless Administration

National informatics centre has projected a Project Charter for e-courts. The e Court concept is further developed to bring about a paperless court and in this context, first paperless court of India is established at New Delhi. This has brought about a tremendous savings not only for the State exchequer with reference to under trials but also to litigating public who otherwise could not afford loss of time, work and money. What was once considered as a distant dream in India, that is the establishment of e-courts, indeed has now become a reality to some extent. No more it is a mere dream but a sign of progress and prosperity. The first e-court is established at National Capital Delhi. In days to come the same would have to be established at other places of country.

A following report generated by National informatics centre indicates as to the progress with reference to that of e-courts in the country. The said report could be reproduced as under.



Red color indicates status of taluka courts while blue colour indicates the district courts.

A monthly progressive report as prepared during the month of November 2013 is as under.

³²The video conferencing facilities have been provided to have interlinked between the jail and court, with reference to under trial prisoners. Some of the courts have even used this facility of video conferencing facility for the purpose of recording evidences of the persons of witnesses staying abroad.

³³In few cases the courts at Bangalore in the state of Karnataka used these facilities in civil cases.

³⁴ Telegraph e-edition Calcutta. Thanks to Kabir’s efforts, 47 inmates under probation will no longer have to commute long distances to various district headquarters for their court hearings. Instead, these will be held through satellite videoconferencing from February-end, a facility provided by home department with technical support from JAP-IT. Videoconferencing will be provided at the top floor of the two-storey building. The inmate and magistrate concerned will meet onscreen, eliminating safety and travel hazards, fuel cost and the efforts of police escorts to take and bring them back. Overall, the service will also help speed up the wheels of justice for these women, it is hoped.

³⁵ An integrated criminal justice system will have an effective network between court, prison, police station, crime scene capture, examination of crime scene, recording of evidence, release status of convicts on parole, bail orders, accused details as where he is located, medical treatment for the accused.

Total approved courts under e Courts project – 14,249 courts

1. Site Preparation

- ▶ Total Sites where Site Preparation is completed – 2,649 CCs (14,061 Courts) – 99% of 14249 courts
- ▶ Incremental change for Hardware installation in November – 0 CCs (0 Courts)

2. Computer hardware for district & subordinate courts:

- ▶ Total Sites where Hardware has been ordered – 2,583 CCs (13,822 Courts) - 97% of 14,249 courts
- ▶ Total Sites where Hardware has been installed – 2,523 CCs (13,416 Courts) - 94.1 % of 14,249 courts
- ▶ Incremental change for Hardware installation in November – 0 CCs (0 Courts)

3. LAN installation at district & subordinate courts:

- ▶ Total Sites where LAN has been ordered – 2,590 CCs (13,842 Courts) - 97.1% of 14,249 courts
- ▶ Total Sites where LAN has been installed – 2,427 CCs (13,067 Courts) - 91.7% of 14,249 courts
- ▶ Incremental change for LAN installation in November – 23 CCs (115 Courts) – 0.8% of 14,249 courts
- ▶ LAN installation completed at 23 CCs (115 Courts) in November: Allahabad – 8 CCs, Andhra Pradesh – 3 CCs, Maharashtra – 3 CCs, Gujarat – 1 CC, Tamil Nadu – 7 CCs, Bihar – 1 CC

4. CIS Software installation at district & subordinate courts:

- ▶ Total Sites where Software has been installed – 2,404 CCs (13,227 Courts) - 92.8% of 14,249 courts
- ▶ Incremental change for CIS installation in November – 8 CCs (16 Courts) – 0.1% of 14,249 courts
- ▶ CIS Software installation completed at 8 CCs (16 Courts) in November: Gauhati – 1 CC, Gujarat – 6 CCs, Punjab & Haryana – 1 CC

Future thinking and steps to be taken

The concept of e-courts could be thought of in two environments such as the court with brick and mortar concept, which is the courts in reality, and virtual courts.

The first e court established at New Delhi as a paperless court is not a virtual court but a real court; where in the use of paper is dispensed with.

Virtual courts will have no court hall, no timing of a specific nature, but will have an environment of lawyers, judges, parties and witnesses having meeting and exchange of documents by utilizing the facility of video conference, exchange of documents through Electronic Documents interchange, use of digital signatures. The technological improvements like Skype, face time, while could be used to have one to one look among different stakeholders simultaneously and also otherwise, to have discussions dialogues, the exchange of documents could be done by discoveries, interrogatories, and admissions which are available in the existing laws.

Virtual courts while has got a great effect in a positive manner in cutting the expenditure, as investment on building, storage, management of time in a modern racing society, it functions on 24x7x365 rather than having access at a limited time slot but has got certain disadvantages in developing and underdeveloped countries. The people may not accept wholeheartedly in a conservative society. The level of literacy is yet another important factor to be taken note of.

The virtual courts as developed in U.K. are almost a hybrid type of total paperless courts and conceptualized virtual courts. Though the police and the governmental authorities appreciate this new phenomenon³⁶ there appears to be a strong opposition from a section of members of bar appearing in criminal courts.

³⁶The ministers witnessed the video technology in action when they visited a Police station in North Kent and a virtual court in Chester. They saw how it allowed for swifter and more effective court hearings, benefitting victims, witnesses and saving valuable police hours.

Virtual courts allow a defendant, charged in a police station, to have their first hearing held over secure video link from the magistrates' court. This can happen within hours of being charged and if the defendant pleads guilty, the court can often sentence on the same day.

The same equipment allows police witnesses to give evidence in court via the police station, an initiative known as 'Live Links', freeing up time to carry out frontline duties rather than travelling to and from court.

Courts Minister Jonathan Djanogly said: 'The expansion of virtual courts clearly demonstrates the Government's commitment to working with local police and the courts to ensure speedy and effective justice.

'Not only do they enable the quick resolution of cases they also save time as defendants do not need to be transferred between prison and the court.'

The virtual courts could be tried in cases of commercial transactions and in high level arbitrary proceedings where much of the transaction is documented.

Legal Education and ICT

Without proper education the divinity in a person will not come out. Swami Vivekananda stated that education is a process of unearthing the hidden features in a person. Education is a multifaceted aspect. It is not mere reading or writing or viewing a computer. It is a process of personality building.

Education is regarded as a basic infrastructure for an all-round development of a country. Indeed, it is integrally linked with the development process. In the post-Independence era, the education policy of the Government of India has been so framed as would provide free and compulsory education to all children at least up to the elementary stage. Keeping pace with the fast-growing field of Information Technology (IT), where the sky seems to be the limit so far as employment is concerned, a law student cannot neglect the information technology.

Imparting legal education is one of the noblest professions. The legal education does not mean to study the texts of law in its bare form, but it involves something more, that is to have economic social and political aspects. If need be a lawyer has to know the intricacies of medicine and engineering. The expose of truth is a thing which comes out from different types of information a person has gathered. The information gathered at different point of time if is used at appropriate time in a required manner then it would become a knowledge with wisdom.

The legal education is not only mean to generate good lawyers but it is intended to have proper citizens for the future Nation. They shall have concern regarding the human values and social requirement.

The ICT helps in acquiring knowledge and interact with the needy people by the students. The ICT makes a person not only with heal but would make him a person with heart and even vice-versa.

To have inter-disciplinary studies the ICT plays a positive role. The students at law school environment would not restrict them to a bookish knowledge but would enable them to have the knowledge from all walks of life. The digital library, digital archives, usage of information technology with care and caution if future and to do research the ICT.

The intervention of ICT has really made the globe a village. What could not have been even imagined could now be seen without much difficulty in these days of technology and technological changes. The students, teachers and persons concerned with the study of any system of knowledge cannot remain in an isolated world. This applies more particularly with reference to the students prosecuting legal education.

The legal education brings about the personalities as administrators, businessmen, lawyers, judges, and even legislators. To cater the need of one and all in a developing society the study should be focused with the background of information technology.

Professor Lakshminath³⁷ says:-

The prospects are bright both for teaching and research in the application of computers. Interdisciplinary studies in the area of law and computers would provide a meaningful interaction between the legal academics and technologists. Computers can be best used in two ways, to assist the legal profession.

Nick Herbert, Minister for Policing and Criminal Justice, said: 'Live links frees up valuable police time and resources to carry out their frontline duties and ensure crimes are dealt with more quickly and effectively.

This is important not only for the local police force but for victims and witnesses.'

Technology extended

The virtual courts initiative began in May 2009 in London (Camberwell Green) and Kent (Medway) and is now being extended this month to other locations in these areas as well as to Cheshire and Hertfordshire.

Live links, which is currently in use in Kent, London and Hertfordshire, is quickly expanding to other police force areas with Cheshire being the next area to implement the initiative.

The initiatives form part of a wider policy to digitalize, streamline and make the Criminal Justice system more efficient. By spring 2012, the entire criminal justice system is required to go digital, with secure electronic transfer of case files between the police, prosecutors and courts becoming the norm rather than the exception.

More than 1400 people have appeared using the virtual court system in Kent. Live links was introduced in July and in the first 24 cases, more than 100 hours of police time have been saved.

³⁷ Vice chancellor of Chanukya National law school Patna and Chancellor of Andhra Pradesh Law University, Vishakapattanam

One is the information retrieval system which can be developed with the help of law faculty and the computer science department. The second area in which computers can very usefully be employed is artificial intelligence system with which several types of stereotype cases can be decided with the help of computer programmes to arrive at more objective and quicker decisions. The law faculty should actively engage in collaborative research with the computer science department. This needs to be pursued vigorously to design meaningful computerized programs as alternative dispute settlement mechanism.

³⁸Digital Revolution:

The digital revolution offers significant opportunities to those who provide legal assistance and education to low-income people and communities. New technologies enable us to create higher quality work product, conduct better research, work more collaboratively, learn more readily, and – most important – serve clients more effectively. Clients and advocates alike can find relevant information on the Internet, programs can use a variety of new management and evaluation tools, and everyone can communicate more easily.

In the past 10 years, our society has experienced a “digital revolution”, the implications of which is as stunning as those of the industrial revolution, yet is even more remarkable because these changes are happening in a fraction of the time. Beginning with the affordable personal computer and taking a giant leap forward with the creation of the internet and the web browser, this revolution has changed how we work, play, communicate, learn, and obtain goods and services.

Yet the pace of change has not been the same in all sectors of society. Technology use by the middle and upper class and by the West is significantly ahead of use by poorer people and people of color, a gap that some observers have termed the digital divide. On a corporate level, this gap looms equally large between the private sector and the nonprofit sector.

These technological advances have:

- a) Enabled greatly expanded access to legal information for both advocates and clients through internet and e-mail technologies;
- b) Expanded access for clients by using telephones for screening, obtaining basic client information, referrals, and providing brief advice and services, and also by posting information on the Internet;
- c) Enabled better case management and data collection, along with automated templates for document creation;
- d) Improved communication between lawyers and clients through new telephone technologies, cell phones, and video conferencing;
- e) Facilitated staff and volunteer recruitment through e-mail and the Internet;
- f) Provided new avenues for outreach to clients and the public;
- g) Increased training opportunities for advocates; and
- h) Created a greater sense of community through e-mail and the Internet.

The uses of new technologies by the equal justice community in three functional categories can be discussed as follows:

- a) Improving program and office management;
- b) Increasing access to assistance and information for advocates; and
- c) Improving client education, preventing legal problems, and assisting prospective litigants.

In addition to educating clients and communities about resources, the Internet can also provide people with information about their legal rights and about how to solve legal problems on their own when they are unable or unwilling to obtain an attorney. At the most basic level, brochures and manuals can be posted on websites, which is an efficient distribution and production mechanism.

Moreover, the potential of web technology exceeds simply improving access to what otherwise might be available in print. Computer can help pro se litigants create attractive, properly formatted and persuasive court forms and pleadings.

³⁸“Digital Revolution and Artificial Intelligence – Challenges to Legal Education and Legal Research” By Prof. Dr. A. Lakshminath, Vice chancellor of Chanukya National law school Patna and Chancellor of Andhra Pradesh Law University, Vishakapattanam

Computerized templates can use branching logic to take clients through the process of analyzing their case and providing the appropriate information to the court. Video screens can be used to show clients how to navigate through the courthouse, or even how to present their case. Audio files can present information in spoken form for clients who can't read (due to illiteracy or disability or whose language (such as Navajo). These programs can be made available at courthouse kiosks, libraries, and anywhere a client can obtain access to the Internet.

A multifaceted effort, including education, scholarship, resource development, and collaboration, can serve as a powerful catalyst for change, even when the total amount of resources available is relatively small.

Digital Revolution and Artificial Legal Intelligence:

The gizmos of the digital age owe a part of their numeric souls to Dennis Ritchie [1941-2011] and John McCarthy [1927-2011], the machine whisperers.

When Mr. McCarthy and Mr. Ritchie first developed an urge to talk to machines, people still regarded the word 'digital' as part of the jargon of anatomy. If they no longer do, that is because of the new vernaculars invented to cajole automatons into doing man's bidding. In 1958 Mr. McCarthy came up with the list-processing language, or LISP. It is the second-oldest high-level programming language still in use today – one whose grammar and vocabulary were more perspicuous and versatile than the machine code early programmers had to use. A little over a decade later Mr. Ritchie created C. C fundamentally changed the way computer programs were written for the first time it enabled the same programs to work, without too much tweaking, on different machines; before, they had to be tailored to particular models.

Much of modern software is written using one of C's more evolved dialects. These include objective C (which Apple favours), C# (espoused by rival Microsoft) and Java (the choice for a host of internet applications). Mr. Ritchie and his life-long collaborator, Ken Thompson then used C to write UNIX, an operating system whose powerful simplicity endeared it to the operators of the mini-computers which were starting to proliferate in universities and companies in the 1970s. Nowadays its iterations undergird the entire internet and breathe life into most mobile devices, whether based on Google's Android or Apple's iOS.

UNIX spurred the development of mini-and later microcomputers, Mr. McCarthy always argued that the future lay in simple terminals hooked up remotely to a powerful mainframe which would both store and process data: a notion vindicated only recently, as cloud computing has spread.

As for LISP, Mr. McCarthy created it with an altogether different goal in mind - one that was to talk back. Intelligently, LISP was designed to spark this conversation, and with it "artificial intelligence", a term Mr. McCarthy coined hoping it would attract money for the first conference on the subject at Dartmouth in 1956.

In 1962 he set himself the goal of building a thinking machine in 10 years. He would later admit this was hubristic. Not that technology wasn't up to it. The problem lay else where: in the fact that "we understand human mental processes only slightly better than a fish understands swimming." An intelligent computer, he quipped, would require "1.8 Einsteins and one-tenth of the resources of the Manhattan Project" to construct.

Neither was forthcoming. Mr. McCarthy continued to tinker away at a truly thinking machine at Stanford. He never quite saw his dream realized. Mr. Ritchie had more luck. "It's not the actual programming that's interesting," he once remarked. "It's what you can accomplish with the end results."

Bar and its Role

The judicial system of a country would be incomplete if there is no participation of Bar. Bench and Bar like two wheels of a chariot. The Bar has a role not only to provide personnel for future judiciary but also have to defend the interests of their clients. When computerization was started the Bar members were much relented to use the technology but now the things are changing gradually and are now coming out with an openness that ICT is to be considered as a part of life. In deed justice Ram Mohan Reddy of Karnataka High court had lamented that to the effect that how can we think of e-courts if advocates are not ready to adopt, cause-list provided in electronic form and object to the stopping of supply of cause list in printed form.

Some of the advocate have replaced the practice of using manual typewriter and on the other hand are using the computers to perform the work as was done by the said typewriters The office of each of the advocate should be computerized and the advocate to become computer friendly to make use of the systems. Now they are able to use the technology to have cause list and to know the display board position. This is only at a level of rudimentary nature³⁹.

Of course the use of lap tops, I-Pads, e-books, and other devises have brought in a concept of having mobile libraries by using the digital media, and there by it has reduced the burden of ecological imbalance. But this is not done on a large scale and needs to be attended to.

Bar Council of respective State, and if need be Bar associations, Advocates Academy, should give practical effective training to make the members of the Bar to respond in a positive way. Reorientation programs should be of an effective nature,

Conclusion

The information technology has paved its way and has made a firm inroad in to the judicial field of the country. Article 14 of the constitution while guarantees the right of equality the article 21 imposes a moratorium that the life and liberty cannot be deprived otherwise than the just, fair and reasonable procedure established by law.

In this context how far the further development of artificial intelligence could be used to impose appropriate sentence in a criminal case, speedy disposal of cases by using proper software are all the area which needs consideration.

As observed by Prof Lakshminath, Disruptive legal information technology and emerging Electronic Legal Information (ELI) may arise as the 4th cornerstone in face of the challenges, the other three being (i) Lawyer (ii) dissemination of law and (iii) Judiciary. Electronic Legal Information (ELI) refers to (i) an integrated Electronic Law governing civil procedures and other areas of substantive law, (ii) electronic legal document filings and evidence and (iii) electronic court case status information. ELI is transforming the existing cornerstones to their virtual existences, which take on new capability to face the challenges of high costs, delay and complexity.

For this purpose the days are not far off that we may have to translate all our legal texts from what so ever language it is in to the digital language as understood by the computers and systems akin thereto. The law as a constant need to be understood as in digital form to find out where there is deviation and so also to find out the degree of deviation. When the deviation is too much then the person could be considered as a deviant and appropriate rehabilitative steps or even if need be penal actions in accordance with constitutional goals could be taken to make the Rule of Law a reality than to allow the things to be governed by Rule by law.

³⁹ Meanwhile, K. Sridhar Rao, High Court judge, told the advocates that discontinuation of cause-list in printed form would help the court to avoid “wasteful expenditure” of Rs. 50 lakh annually. The High Court has been uploading the daily cause list on its website from past many years apart from providing updates on cause list through mobile phones to lawyers from the past couple of years.

Mr. Ram Mohan Reddy said there were plans to provide updates of cases to lawyers through their registered mobile phones, sending court notices through e-mail to government departments, etc. If lawyers were to object for mere stopping of supply of printed cause list, then how could the High Court move ahead in the era of technology to fasten the process of litigation, he asked.

Some advocates welcomed the change but wanted time to adopt to the new system, claiming that the April 12 deadline fixed by the court to stop the supply of cause list in printed form was too short.

Meanwhile, judges pointed out that the only difficulty for lawyers would be to change their mindset, and assured that the court would organize sessions at different courts in the city to create awareness about shifting towards computerized system and obtaining the case lists through mobile phones The Hindu dated 06/04/2013