

Technology for Courts in the Asian Region

-The Singapore Experience

Judge Koh Juat Jong
Singapore Subordinate Courts

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Introduction

1. Knowledge-based economy and globalization will be the key characteristics of the world in the next millennium. The information revolution, epitomized by the leaps and bounds in the Internet technology and usage, has changed the society in many ways and to an extent much more profound than we ever realize.
2. The Judiciary cannot but keep up with the advance in technologies. In the words of the Honourable the Chief Justice of Singapore Yong Pung How at the Introduction of the Singapore Subordinate Courts' Seventh Workplan 1998/1999:

“A first class judiciary should lose no time in upgrading its business and trial adjudication models and its human resources to deliver justice in the new digital environment.... The Courts have little choice; either plan and purposively implement technology change and provide judges and administrators with the skill sets to function effectively in this new environment or risk being stampeded into adopting hastily concocted and ill-advised technology expedients and operating modes through the pressures of public opinion.”

3. Singapore has been proactive in promoting the use of information technology for many years. Strategic Information Technology (IT) plans were formulated at the national level to steer the country in harnessing IT as part of the economic and social development strategies. The public sector has been actively engaged in the use of IT in various functions, either internally in its work flow and administration or externally in its services to the public.

Use of Technology in the Singapore Courts

4. The Singapore Judiciary (comprising both the Supreme Court and the Subordinate Courts) has been exploiting, intensively and extensively, the benefits of information technology in many aspects of its internal administration and operational processes. It is also actively encouraging and promoting the use of information technology in the trial processes. This paper will set out the more significant aspects of the usage of technology in the Singapore Judiciary.
5. The areas may be broadly classified as follows:
 - Case management
 - Public services
 - Courtroom and chamber proceedings
 - Judicial decision support
 - Judicial administration
 - Corporate services.

Case Management

6. Case management systems have long been considered the “backbone” application for court administrations. Generations of case management systems have been developed, on mainframes and subsequently, client-server platforms. With the advent of technology, new-age case management systems leverage on document imaging, electronic filing and automated workflow technology, revolutionising the whole process of case management, from registration to disposal of cases, bringing the courts a step closer to the vision of a paperless court.
7. Since the 1980s, the Singapore Judiciary has been implementing in phases various case management systems. Some examples are the Civil System, the Criminal System, the Admission of Advocates and Solicitors System, the Taxation System, the Divorce System, the Writs of Execution System, the Tickets and Summons System etc.

8. They allow the progress of the proceedings to be tracked and managed. A typical system will include the input into the computer system the key details of the case, such as the case number, parties' name, name of solicitors, case type, stage of the case, outcome of the hearing etc. Some systems allow the generation of standard letters and notices (for example, to inform parties of the date of hearing) and the compilation and printing of hearing lists. They provide the tools to the court staff to carry out many routine operational tasks more quickly and efficiently.
9. To augment the Civil System, a **Differential Case Management (DCM) System** was also implemented to facilitate the management of time lines for civil cases. The DCM system prompts the courts on civil cases that have actions due based on the timeline they are assigned.
10. In recent years, the case management system has extended its reach to outside agencies which was responsible in initiating the cases. For example, the **Small Claims Tribunals System** which records the claims lodged at the Tribunals is integrated with the electronic public services to capture the Internet filing of claims directly into the System. Another example is the Subordinate Courts case management system for regulatory offence cases, **Tickets & Summons System 2000 (TICKS 2000)** recently launched in June 1999. TICKS 2000 has strategic electronic links to 17 external prosecuting agencies. These links streamline the flow of information between the agencies and the Subordinate Courts. For example, the traffic police send their charges electronically to the courts prior to the court hearing, and after the court hearing, the adjudication results are sent back to the traffic police electronically to update their system.
11. The Singapore Judiciary is also constantly improving on existing systems and striving for better integration in its systems at all time. A new criminal case management system, called the **Singapore Case Recording and Information Management System (SCRIMS)** has just been implemented in August 1999 in the Singapore Subordinate Courts. SCRIMS automates the processing of a criminal case from registration to appeal outcome. It replaces five previous application systems which automated different stages of the criminal case

process: the Criminal Case Management, Subpoena, Bailor, Warrant and Magistrate's Appeal systems.

Electronic Filing System

12. The Judiciary has also embarked on the launching of the **Electronic Filing System (EFS)** for civil matters. When fully implemented in 2002, it will provide four main services: the electronic filing service, electronic extract service, electronic service of documents and the electronic information service.
13. EFS will allow court documents to be filed electronically from the comfort of a lawyer's office. There is no longer the need for physical paper filing at the registries during office hours. There will also be a facility to allow lawyers to serve documents electronically at the touch of a button on other law firms, obviating the need for process servers for this purpose. In addition, EFS will enable lawyers to obtain extracts of case information from the court files electronically. With the electronic information service, electronic search services in respect of all types of civil proceedings covered by EFS will be made possible.
14. On-going arrangements are being made for law firms to be equipped with the hardware, software and communication infrastructure such as the ISDN line to make them EFS capable. Ultimately, every law firm, regardless of size, may be equipped with EFS to allow them to tap its conveniences. Extensive training to use the system continues to be provided for all lawyers and their clerks.
15. The ability to file documents from remote locations will reduce the labour intensive nature of modern litigation by reducing reliance upon court clerks and process servers for the manual filing and service of court documents. With electronic documents stored within a central database, sophisticated document management and litigation support systems are made possible. With EFS, multiple parties have simultaneous access to court documents, previously accessible only to the judges. Problems associated with the administration of vast amounts of paper such as the misfiling and loss of documents, delays in the retrieval of files and the shortage of storage space would soon be alleviated.

16. For lawyers who have not caught up with technology in time, they will be able to make use of service bureaus jointly operated by the Singapore Academy of Law and a private IT company to file their documents or conduct searches electronically.
17. The EFS will pave the way for greater use of information technology in litigation practice. When fully implemented, it will change completely the manner in which civil cases are conducted by bringing about a paperless court transforming the way litigation lawyers will conduct business in the courts.

Integrated Criminal Justice System

18. The Singapore Judiciary is one of the key participants in the flagship project of the Attorney-General's Chambers in the **Integrated Criminal Justice System (ICJS)** project. This is an undertaking to link up the agencies involved in the criminal justice process, namely the Judiciary, the Attorney-General's Chambers, the Ministry of Law, the Ministry of Home Affairs and other law enforcement agencies.
19. This project aims to develop a system which will integrate the case management systems of all agencies involved in the prosecution of offences, to allow data and documents to be shared amongst the various agencies. Such integration will result in greater efficiency through the sharing of information on-line. Studies have been made to improve the criminal justice process and the standardisation of data to facilitate ease of information exchange.
20. The first phase of the system, which deals with Preliminary Inquiry cases involving 6 agencies, including the Judiciary, is targeted to be implemented by the year 2002.

Public Services

21. Enhancing public access to justice is a primary concern of all judiciaries. Information Technology offers a plethora of ways in which to enhance public access to court services. The technologies, which enable the delivery of virtual court services, include: multimedia kiosks, Internet and intelligent voice response systems.

22. Kiosks

➤ *Information Kiosks*

User friendly multimedia **information kiosks** have been installed in both the Supreme Court and Subordinate Courts premises to provide lawyers and members of the public with general information as well as details of hearing lists, court operations and floor plans of the court buildings. These information kiosks are linked to the operational systems of the courts, thus ensuring accurate and up-to-date information.

➤ **Automated Traffic Offence Management System (ATOMS)**

The Subordinate Courts have developed **ATOMS**, an interactive multimedia kiosk application for members of the public to pay a composition fines for minor traffic offences. If the statutory period given to pay the composition fine has expired, the offender can still plead guilty to the offence and pay the fine at a kiosk before the specified date.

Launched in 1996, ATOMS is the first court service to be available 24 hours a day, seven days a week, at kiosks throughout the island. To cater for our multi-lingual society, a Mandarin version was launched in April 97. Today, approximately 25% of cases eligible to use ATOMS make use of the electronic service. Thus reducing the number of court appearances by a quarter.

23. Internet

➤ **Internet Website**

Both the Supreme Court and the Subordinate Courts have informational **websites** which provide historical background and the organisation structure of the Courts. The Supreme Court website also contains the weekly law notices and hearing lists and speeches delivered by the Honourable the Chief Justice of Singapore. The Subordinate Courts website also provides visitors with a virtual walk-through of the Subordinate Courts building.

➤ **Small Claims Tribunals Electronic Filing System (SCT EFS)**

As of 1 Sep 1997, claims can be lodged at the Small Claims Tribunals via the Internet. Claimants who regularly lodge claims, such as the Town Councils, can use the web-based system to enter the details of the claims at their offices and transmit these claims electronically to the Small Claims Tribunals. The web-based system also provides a consultation calendar to notify the claimants of available consultation dates and times to facilitate them in booking time slots for consultation.

This system eliminates the need for regular claimants to make trips to the Tribunals to lodge the claims and it saves the Tribunals staff from having to enter claim details into the operational computer system. This saves time and effort on the part of the claimant as well as the Tribunals staff, and also improves data accuracy.

24. Interactive Voice Response Systems

➤ **Small Claims Tribunals Teleresponse System**

The Small Claims Tribunals has a telephone information service which provides information on the:

- types of claims that can be lodged
- location and operating hours
- procedures for lodging of claims
- way proceedings are conducted at the Tribunals

as well as a fax-on-demand service which faxes the claim forms to the requestor.

➤ **Small Claims Tribunals Admission Of Claims by Telephone (SCT ACTS)**

Respondents to a claim filed at the Small Claims Tribunals can admit to a claim via telephone using interactive voice response (IVR) technology and also attend a consultation or hearing conducted by telephone.

For every claim lodged, the respondent will receive the claim and consultation notices together with a pin mailer that contains a secret PIN (Personal Identification Number), the numeric telephone claim reference number and instructions to admit the claim by telephone.

The system provides instructions in 4 languages (English, Mandarin, Malay and Tamil) to cater for Singapore's multiracial society.

Security is ensured through the combined use of the PIN, the unique telephone claim reference number and an automatic recording made of the Respondent voice when he admits the claim. The PIN is deactivated once the respondent has admitted to a claim.

With the introduction of this system, members of the public can admit claims anywhere (so long as there is a telephone), anytime. For the Small Claims Tribunals, this system reduces counter traffic, and helps save manpower.

Courts and chambers Proceedings

Video Conferencing

25. Video conferencing has becoming increasingly pervasive, its growth fueled by improved technology, lower cost, and the industry adopting open standards. Video conferencing is used extensively in the Singapore Judiciary. It provides a convenient means of communication between persons in different locations.

➤ Testimony of Witnesses

Video conferencing facilities are used to allow vulnerable witnesses to give evidence away from the court room, thereby saving these witnesses from any emotional trauma they may otherwise suffer in having to appear in court together with the aggressors. These include victims of rape or family violence and child witnesses. Video conferencing facilities have also been used to allow witnesses in foreign countries to testify without the need to be physically present in Singapore.

➤ Bail Video Link

In the Subordinate Courts, a video conferencing link is established between the Criminal Mentions Court and the Remand Prison. Each day, bail applications are heard using these facilities. This not only saves time and effort, but also eliminates the security risks involved in transporting people between prisons and the courts.

➤ **Remote Chamber Hearings**

Some chamber hearings are also conducted using video conferencing facilities. This enables lawyers to make certain ex-parte applications via video conferencing.

➤ **Remote Hearings and Consultations**

In the Small Claims Tribunals, consultations and hearings are also conducted remotely, with the Registrar or Referee located at the main office, and the claimant or respondent at any of the branch offices. This makes it convenient for the claimants and respondents to attend the hearings and consultations because the branch offices are located in the heartland of suburban homes, whereas the headquarters is situated downtown.

➤ **Remote Interpretation Services**

Interpreters situated at the main Subordinate Courts complex are also able to provide interpretation services to litigants at the Family, Juvenile and Civil courts which are located at a different campus. This maximises the use of scarce interpretation resources and enhances the service level to the litigants.

➤ **International Co-mediation**

The Subordinate Courts recently instituted the Court Dispute Resolution International (CDRI) regime which provides a broader dispute resolution process for civil cases with cross-border elements. This regime involves cross-border, real time co-mediation with judges from other countries such as Australia and the United Kingdom, made possible through the use of video-conferencing technology.

Recording System

26. All the court rooms in the Supreme Court and an increasing number of court rooms in the Subordinate Courts are equipped with microphones and audio recorders to record the proceedings in court. Digital recordings are also currently being studied.

Technology Court

27. The first Technology Court was officially launched in 1995 in the Supreme Court. It is equipped with an array of facilities including computers, video-conferencing system, computer based recording transcription (CBRT) system, litigation support system for case presentation and integrated AV system which incorporate remote control cameras, microphones, visualisers, and a large rear-projection screen. The Subordinate Courts have also equipped a hearing chamber with the full technological facilities.
28. Presently, the Court of Appeal and the Chief Justice's Court have been fully equipped with computers, flat screen terminals and other equipment to allow hearings for all Magistrates' appeals and Court of Appeal hearings to be conducted using electronic documents. The Supreme Court judges and registrars, lawyers and prosecutors have been given training for such hearings.
29. With the implementation of the EFS, all the civil hearing courts in the Supreme Court and the Subordinate Courts will be equipped to facilitate the hearing of cases using information technology.

Judicial Decision Support

30. In the quest to dispense justice expeditiously in accordance with the law, the quality of Judicial decisions is fundamental. Therefore, computer systems which support judicial decision-making play an important role in the administration of justice.
31. The use of a text search database system called **IMPRESS (Information Management and Precedence Resource System)** to capture the past judgements of all cases in the Supreme Court and

Subordinate Courts has proven to be an invaluable tool for judges to research past cases.

32. It is said that the network is the future. In Singapore, **LawNet**, an integrated wide area network for the legal community to share information, access prevalent legal literature, and carry out legal transactions such as electronic filing, has become an indispensable information highway for the legal community. For example, the Legal Workbench module of LawNet facilitates legal research by providing one-stop access to the:

- Statutes Database
- Subsidiary Legislation
- Case Law Database
- Singapore Parliament Reports
- Treaties and Conventions

Judges are able to access the Legal Workbench from the computer workstation in their offices to aid them in their legal research.

33. Judges are also able to access a CD-ROM library for legal materials in Singapore, Malaysia, the UK, the USA, Australia and Canada etc.

34. In the Subordinate Courts, knowledge sharing among Judicial Officers is enhanced by a **Sentencing Guidelines System** which provides benchmark sentencing information on-line, and a **Judicial Officers Database** which is a central repository for working papers and compendiums prepared by Judicial Officers.

35. All Judges and Court staff are also able to communicate with each other via the Judiciary email system which is linked to the civil service wide email network. Indeed, email is the norm for communication within the Judiciary. Internet access is also available from the workstations so that the whole wide world of information on the Internet is available to the Judges.

Judicial Administration

36. To facilitate the court administration functions, a **Diary Management System (DMS)** automatically schedules hearings in the Civil Division. This system maintains a diary of all judicial officers' availability, interfaces with the Civil case management system and generates the duty roster and hearing lists.
37. The hearing lists are automatically displayed on the Subordinate Courts' information kiosks and the **Electronic Queue Management System (EQMS)** in the public waiting areas. The EQMS displays on an electronic notice board, up-to-the-minute information of cases being heard in each chamber, and what are the cases next in line for hearing.
38. In a further attempt to improve service to the public and to safeguard the interest of the counter staff, public counters in the Subordinate Courts main complex are equipped with **Digital Audio Recording** systems to record the dialogue between counter staff and the public. This provides evidence in investigations into complaints lodged by the public, allowing the courts to take a suitable course of action speedily.
39. To manage the vast number of historical paper records accumulated over the years, the Judiciary has started on a project to microfilm these old case files, with a computerised system, the **Judicial Microfilm System (JMS)**, to index, track and retrieve the microfilm as and when needed. Once the records have been microfilmed, the paper records can be removed, thereby freeing up valuable floor area.
40. To manage the physical files, the Subordinate Courts have a computerised file tracking system called **Kardex** which interfaces with the filing compactors to ensure efficient file movement tracking.

Corporate Services

41. The corporate services required in the courts are no different from any other well-structured organisation. IT applications which automate corporate services, such as financial management, personnel management, procurement and so on, are not difficult to come by and are definitely worthwhile investments.

42. The Subordinate Courts have a number of systems to help make the daily chores of administration less tedious. For example, we have an **electronic leave application and processing system** which automates the entire process from leave application by the staff, routing the application for the necessary approval, to informing relevant parties. The system is developed on the well-known Lotus Notes software.
43. Leveraging on collaboration software, the Subordinate Courts disseminate information through the use of **Electronic Bulletin Boards** and hold strategic conversations through the use of **On-line Discussion Databases**.
44. For financial and personnel management, the Judiciary uses the civil service-wide **Financial Accounting System** and **Central Personnel Information System**. The use of these systems provides seamless integration with the Ministry of Finance and the Public Service Division, which oversee the financial and personnel affairs of the civil service respectively. It also streamlines the reporting procedures for these matters.

Conclusions

45. Having the right equipment and technical know-how is only part of the story. Technologies can always be bought. The more important part to bring about a success in the use of technology in the courts is the mindset of the judges, court administrators, lawyers and the litigants.
46. The speed at which information technology has developed has been overwhelming for many, especially the older ones amongst us. But we must come to realize that the world will not wait for us and if we do not get on the information highway, we will be left behind and that will indeed be a great loss. I once heard someone commenting that it gave him a great sense of security by just feeling the texture of the paper and holding the pen. We must get away from that security blanket. The Judiciary cannot function in the old models when the rest of the society, be it the commerce, banking, or the government, has changed in the information age. We will not otherwise be able to

serve our constituents effectively. Judges have to go back to school to learn about the use of technology lest we become irrelevant.

47. Having said so, it must always be the guiding principle that technology is but only a servant of the justice system, as aptly put by the Honourable the Chief Justice of Singapore at the Technology Renaissance Courts Conference in 1996:

“Whatever changes the future brings, we must always remember that justice must be assisted, not dominated, by technology. Technology alone does not improve the system. It is people, assisted by technology, who make the justice system work.”

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