

The Evolving Role of Electronic Case Management Systems

Fourth Judicial Seminar on Commercial Litigation 2013

Designing and Implementing the Integrated Electronic Litigation System in Singapore

1. Overview

The Integrated Electronic Litigation System (“eLitigation”), launched on 2 January 2013 in the Supreme Court, heralded a new era in the evolution of electronic case management systems in Singapore.

This paper will highlight the following areas:

- a. Principles underpinning eLitigation;
- b. Efficiencies achieved by eLitigation;
- c. Issues in moving towards eLitigation; and
- d. Possible future developments to eLitigation.

2. Precursor to eLitigation: Electronic Filing System

The predecessor of eLitigation was the Electronic Filing System¹ (“EFS”). Launched on 1 March 2000, EFS provided 4 key services:

- i. Electronic Filing Service;
- ii. Electronic Extract Service;
- iii. Electronic Service of Documents Service; and
- iv. Electronic Information Service.

In 2003, the Chief Justice of Singapore set up an EFS Review Committee to “devise a holistic approach to integrate the use of technology in the litigation process, harnessing the benefit of experience gained through the implementation of the EFS since 2000.” On 29 September 2003, the EFS Review Committee released

¹ See “Frequently Asked Questions on EFS” at <<http://info.efs.com.sg/default.htm>>.

the Report of the Review of the Electronic Filing System (“EFS Review Report”). The EFS Review Report analysed the strengths and issues of EFS. This was followed by an Electronic Litigation Colloquium, out of which flowed the Electronic Litigation Roadmap² (“the Roadmap”). The Roadmap laid the conceptual foundation for the future development of the next generation of electronic case management systems, which was the foundation of eLitigation.

3. eLitigation: Key Underlying Principles

eLitigation is designed around four key underlying principles: (i) making information smarter; (ii) building a holistic case management system; (iii) consolidating different systems to streamline case management and (iv) enhancing accessibility for all users. This paper will examine each of the key underlying principles in turn.

a. ***Information becomes smarter***

eLitigation is built on a model of smart information, representing an evolution from the filing of *documents* to the filing of *information*. In EFS, documents were digitised and the information in the resulting PDF documents was not structured and could not be re-used. Such information was not “smart”. The eLitigation system is built on the use of dynamic electronic court forms for documents filed in the litigation process instead of documents in PDF format. Front-end users now input information directly into the electronic forms, which can then be harnessed to auto-populate other court documents. Information stored within the eLitigation system as textual information includes:

- i. Information relating to particulars of parties and their legal representation;
- ii. Information that is usable at multiple stages (such as prayers for relief in summonses that are re-used in the Courts’ electronic minute sheets, and again when the draft order of court is generated);
- iii. Information on hearings (such as hearing dates and outcomes).

² See “Electronic Litigation in Singapore: a Roadmap for the Implementation of Technology in the Litigation Process” at http://www.lawnet.com.sg/legal/ln2/comm/PDF/Electronic_Litigation_Roadmap_Paper_2005.pdf

It is not practicable however to design an electronic form for every document that may be filed in the litigation process. We therefore identified court documents which contain information that can be re-used. These became the prime candidates for transformation into electronic forms, as the use of smart information also allows for automatic processing by the system. The storage of textual data creates a bank of information that can be utilised by the system to generate other court documents. For instance, party information is used by the system to automate the creation of new documents to be filed in a matter, registrar's notices, email alerts and SMS notifications. Additionally, hearing outcomes can be used by the system to automate the process of fixing new hearing dates. eLitigation also leverages on its bank of information to auto-populate draft orders of court: as the information is now smarter, the system can utilise data (such as prayers for relief) entered by law firms to generate other documents such as draft orders.

It is worth adding that with eLitigation, we took the opportunity to carry out a litigation process re-engineering of existing court processes. To this end, we identified otiose documents that previously served a purpose when records were kept on paper in books and files, but are no longer relevant when the same are stored electronically. For example, we identified documents that previously existed merely as a receptacle of the court stamp, an indicium that filing fees had been paid. These have been removed completely since all filing fees are collected electronically. The changes were numerous as can be seen from the amendments to the Rules of Court that were required to pave the way for the launch of eLitigation. In this way, we were able to cut away some steps in the litigation process. This level of procedural innovation is made possible only because of the way we were able to re-use information.

b. ***Holistic case management system: case-centric system***

eLitigation is designed as an entire case management system, as distinct from a mere repository of documents. With eLitigation, the case management system has the capability to use metadata (i.e. data about data) to make the system smarter.

The eLitigation system integrates many hitherto disparate systems. As at May 2013, the following are some significant case management functions which have been integrated into eLitigation:

- i. Document Filing (previously via EFS);
- ii. Scheduling (previously via Applications and Cases E-Management System (“ACES”));
- iii. Conducting hearings electronically via features like electronic minute sheets, hearing pre-fetch and automated queue calling via integration with the queue management system (“CDMS”); and
- iv. Judgment Publishing (previously via Judgment Information and Management System) (“JIMS”).

This integration of the different electronic systems greatly streamlines case management processes by reaping the benefits of synergy – information no longer has to be manually transferred by case management officers from one electronic system to the other. This enhances efficiency by saving time and costs.

c. Consolidation to streamline the system

eLitigation has consolidated the functions of hitherto discrete systems into one complete integrated case management system. This increased connectivity results in increased efficiency. For instance, lawyers now enjoy greater flexibility in the selection of hearing dates through a Calendaring and Hearing Management Module. In the previous EFS, there was no function for lawyers to select hearing dates and they had to write letters to the registry to make a request for hearing dates.

Judicial officers can now use the electronic form hearing minute sheet to select the adjourned hearing date for a subsequent hearing, which eLitigation will automatically input into the Calendaring and Hearing Management Module. (Previously, registry staff had to input the hearing date manually into ACES.) Additionally, with a single click in eLitigation, judicial officers can call waiting parties into chambers for hearing, open the electronic case file and generate the relevant minute sheet for the hearing in question. Previously, these functions were controlled

by three different electronic systems which had to be separately initiated. It is thus evident that consolidation has resulted in savings of time and costs for all parties.

d. *Enhanced accessibility*

eLitigation offers an easy to use web-based service which allows users online access 24/7. No special software is needed as eLitigation leverages on the national single factor authentication service SingPass³, enabling secure and customisable access to eLitigation regardless of where the user is. There is now no need for smart cards or card readers as access is via SingPass.

eLitigation allows users full access to all documents in a case. This is a significant paradigm shift. Lawyers who represent a party to the case have access to an online case file for as long as the case remains active. This obviates the previous practice of having to conduct index searches or apply for inspection of a case file to see what documents have been filed into the court's case file.

We have also taken another significant step in making information more accessible. For lawyers who are not involved in the case, they may apply through eLitigation to inspect the case file. Once permission has been granted, they will be able to carry out the inspection from the comfort of their own offices (or even homes) instead of through a handful of machines in the court registry. Further, they will be able to save a soft copy of any document of interest instead of making a separate application for this, as was the case under EFS.

This group of changes creates enhanced access to the courts' case file. Lawyers are adjusting to this new shift in paradigm. The diligent lawyer who checks his case file daily will not be easily surprised.

4. Effects of eLitigation on stakeholders

³ "SingPass, which stands for 'Singapore Personal Access', is the national access system for online government transactions. With a single password, Singapore residents can access government systems providing a range of services including a person's Central Provident Fund accounts, registering a company online, and filing income tax returns." See <<https://www.singpass.gov.sg/sppubsvc/abt-us.html>>

a. Supreme Court (Back-end users)

i. Judicial officers

eLitigation creates a centralised repository of information for judicial officers to operate on. The consolidation of multiple functions enables different aspects of a matter to be reviewed through a single system. eLitigation further enhances efficiency through the automation of numerous functions (for instance the partial automation of the scheduling of hearings), which simplifies the workflow and increases productivity. eLitigation pre-populates the hearing minute sheets with orders that could be made by the judicial officer based on the orders prayed for by the applicants, and allows the judicial officer to compose orders for the parties' verification directly, if so desired. eLitigation also enhances accessibility for judicial officers: the "Pack-n-go" function allows judicial officers to download case files into their own hard drives, and access court documents on personal electronic devices. For instance, judicial officers can read court papers easily on personal tablets, even when they are outside of the office.

ii. Registry staff

eLitigation enhances efficiency for the registry staff by saving manpower through the automation of routine tasks. The shift to eLitigation results in a reduction in the number of tasks which had to be performed manually. For instance, previously, hearing dates had to be fixed manually. With eLitigation, in appropriate circumstances lawyers can select hearing dates and judicial officers can assign these dates directly without going through the registry staff as intermediaries.

Furthermore, the automation of routine tasks by the system frees registry staff from labour-intensive manual functions. For instance, certain categories of standard summons will now be automatically accepted and automatically fixed for hearing by eLitigation, without the registry staff having to process them at all. Additionally, draft orders which are identical to the prayers in the summons will be auto-accepted by the system – this saves man-hours on the part of registry staff (who used to process

the documents) and judicial officers (who used to check the draft orders manually to ensure they tally with the summons.)

b. *Law firms (Front-end users)*

The implementation of eLitigation results in enhanced efficiency for law firms, the front-end users, by saving time and costs and increasing flexibility. First, the shift away from a document-based system obviates the need for the laborious process of printing out hard copy pleadings and scanning them manually into PDF format for filing on EFS. Second, the implementation of standard forms for summons saves drafting time and ensures consistency across the board for the most commonly filed types of summons. Third, party details and case numbers will only have to be entered once for the same matter. Fourth, the electronic service of court documents between eLitigation users (also known as one-click File-and-Serve) allows instantaneous service of documents and notification to lawyers. (Prior to EFS, documents had to be served physically, and then processed by the firm's court department before the lawyer was even notified that the document has been served.)

The eLitigation interface also enhances efficiency by giving the lawyer a better overview of the case. By allowing lawyers access to the case file, at one glance a lawyer can have a birds-eye view of the history and all the developments in a case. Additionally, eLitigation enhances proactive management of case files by allowing lawyers to sign up for e-mail and SMS reminder alerts once new documents have been filed in the case file. Technology is thus harnessed to ensure that lawyers are consistently kept up to date on the latest developments in the case via different modes of electronic communication.

eLitigation has also enhanced flexibility for lawyers in terms of filing court documents. Filing can now be completed online or saved in draft form for submission at a later time. Lawyers also enjoy greater flexibility in the selection of hearing dates through a Calendaring and Hearing Management Module.

5. Potential issues in moving to electronic litigation

As with any transition in technology and operating systems, a movement towards a new electronic case management system such as eLitigation could raise many transition issues. This portion of the paper will highlight certain potential issues and discuss possible mitigating steps.

The first issue that may arise is the need for a significant capital outlay and operational costs financing to kickstart and support such a huge project. Both the source and availability of funding will naturally be preliminary issues which need to be addressed before investing in an electronic case management system. A possible solution would be to look towards joint public-private sector financing models, to provide a feasible and sustainable source of capital to support such a financially significant investment.

Apart from securing funding, it is also important that experienced and IT-savvy judicial officers and registry managers are part of the team that works on the development project. Equally important is a policy of actively engaging members of the Bar in the planning, requirements and testing phases to ensure that the system contains features that are relevant to all stakeholders.

The second issue that may transpire is the initial increased costs in the short term for back-end users when transitioning to the new system. Such costs could include, for example, costs of setting up, costs of increased rejection rates of court documents in the short term due to unfamiliarity with the new system, costs of overcoming technical difficulties, and the passing of such costs by law firms onto their clients. Such initial teething issues can be mitigated by adopting a phased rollout, utilizing preview phases, investing in pre-launch training and preparing a strong technical support team which is equipped to handle a potentially large number of requests for assistance in the initial post-launch stages.

The third issue which may have to be considered is the need to ensure that electronic forms are sufficiently robust and flexible to cater to the multitude of proceedings. The number of potential applications that litigants may take out are highly diverse, and the electronic forms must be readily adaptable so that they can be easily tailored to the specific application. If the electronic forms are not sufficiently

flexible to cater to unusual applications, litigants with unusual or uncommon applications may find their ability to bring applications unnecessarily stifled.

The fourth issue that may arise is the need for security and authentication. The eLitigation system is built on the foundation of the SingPass infrastructure, an authentication system used to transact services with Singapore Government agencies. Any security concerns arising from a web-based service are thus addressed by the fact that the SingPass in itself is already highly secure. In the absence of such infrastructure, additional costs will have to be incurred to set one up to address the security concerns in an online electronic case management system. It may still be necessary to fall back on hardware (such as a smart card reader) to ensure the security of the system.

The final and perhaps the most important issue is the need for the broader environmental conditions and Information Technology (“IT”) infrastructural framework to first be in place before an electronic case management system can be successfully implemented. In our view, the high take-up rate for eLitigation is due mainly to the presence of the following factors in Singapore: high computer literacy rate amongst users, the willingness of users to adopt and adapt to the new technology, high broadband penetration rate, stable and high-speed broadband infrastructure and strong IT support systems. Where these preconditions are not present, even if an electronic case management system is developed, the actual take-up rate might not be very high due to broader societal and environmental factors which result in a resistance to technology.

In Singapore, the implementation of eLitigation has been greatly facilitated by the high computer literacy of the population, strong IT infrastructure and the wider government promotion of IT and infocommunications through agencies such as the Infocomm Development Authority of Singapore. Additionally, when EFS was first launched in 2000, it was made mandatory for all parties to utilize electronic filing. Although it took some time for lawyers to adjust to the idea of electronic filing, the mandatory usage of EFS resulted in a paradigm shift in the legal profession’s attitude towards technology, and equipped lawyers with a higher degree of familiarity and comfort in using electronic case management systems. This laid the foundation

for a much smoother transition to eLitigation, as all stakeholders were already accustomed to the idea that technology is deeply embedded in the litigation process.

5. Future Developments

Looking ahead beyond electronic case management systems, it is possible to envision certain trends and trajectories.

We are already working on a cloud-based electronic-discovery platform⁴. Electronic case management systems deal with documents prepared for litigation. Electronic discovery platforms handle documentary evidence. Both must integrate in order to facilitate more efficient trial preparation and even trial presentation.

Another possible future evolutionary step would be the creation of a mobile-device friendly version of eLitigation (for instance an eLitigation App) to facilitate usage on tablets and smart phones, in view of the proliferation of mobile devices in Singapore.⁵

So far, much of our attention has been focused on technology leading up to trial. There is much room for implementation of technology within the courtroom, beyond our present video conferencing facilities, Digital Transcription Service and the use of eLitigation to retrieve documents from electronic case files and projecting them onto our public screens. The next phase of emphasis will be on how we can harness technology to facilitate advocacy from various perspectives. We have some experience in this regard in our Court of Appeal, which has adopted a paper-less hearing system since July 2011. We hope to use this experience in designing a system for trial.

6. Conclusion

⁴ See “Electronic Discovery Software as a Service: Call for Collaboration” at: <http://www.sal.org.sg/Documents/eDiscovery_CFC.pdf>

⁵ Singapore is among the top in the world in smartphone penetration rate and mobile broadband penetration (150% as of March 2012). See “The State of Broadband 2012: Achieving Digital Inclusion for all” at <<http://www.broadbandcommission.org/Documents/bb-annualreport2012.pdf>>

In conclusion, the launch of eLitigation marks an exciting new era in the evolving role of electronic case management systems in Singapore. Harnessing the power of technology has allowed us to reap great efficiencies in the saving of time and costs for all stakeholders. The possibilities for the next phase of evolution are boundless, and it remains for us to continually anticipate new advancements in technology and leverage on them to further enhance case management in the Supreme Court of Singapore.