Genie Comes Out of the Lamp – The Legal Aid Bureau's Journey into a Completely Paperless Environment

On 29 February 2016, the Legal Aid Bureau launched its new case management system, GENIE (Green ENd-to-end paperless process supported by Intelligent E-system). This replaced the Bureau's previous case management system LAMP (Legal Aid Management Portal). With this, the Bureau, which registers over 9,000 applications for legal aid, advice and assistance each year, became the first "law firm" in Singapore to go "paperless" on such a big scale. This article sets out the Bureau's experience in using technology to create a fully electronic workplace, and how this has helped us increase our efficiency and reduce manpower costs.

Before Genie: the Need to Move Away from Physical Files

LAMP was implemented in 2005. It functioned as an electronic case management system, and was used largely for administrative activities such as processing contribution payments and the registration of cases. However, it was not possible to draft documents on LAMP, and it was also cumbersome to store and retrieve any documents stored in it. Thus, the Bureau continued to maintain hardcopy documents in physical files. This meant that:

 no more than one officer could work on a file at the same time;

- 2. the full information on a file could only be obtained by checking both the physical file and LAMP, shared drives where drafted documents were stored, and e-mails:
- the physical file needed to be retrieved by human record keepers whenever information on the file was required or someone wanted to work on it: and
- 4. it was difficult to monitor statistics and track trends in the Bureau's cases, since much of the data was in hard copy form.

With over 9,000 new applications a year and over 10,000 paper case files being stored in the file cabinets in the Bureau's premises,¹ there was a pressing need to create digital files, in order to solve the above problems.²

The Genie Journey

In June 2013, work started on the GENIE project. The design, development and implementation of the project took about two and a half years. We envisioned an environment which would not just solve the problems listed above, but give added benefits to our officers, our Applicants, our Assigned Solicitors and the general public.

The key milestones of the GENIE project are set out below:

Date	Activity	Remarks
3 June 2014	Award of Tender to Vendor (novaCITYNETS Pte Ltd)	_
June 2014 to January 2016	Design and Development of Phase 1 (GENIE Case Management System)	Brainstorming, getting ideas and buy in from LAB officers and related departments (e.g. Finance), working with vendors
July 2015 to January 2016	Phase 1 User Acceptance Testing (UAT)	Users had to test the system to ensure that its functions met our business requirements
30 November 2015	Soft Launch of GENIE	Document Management function of GENIE was rolled out for users to get used to working on electronic documents, but they still had the hard copy documents to rely on, for security
29 February 2016	Launch of Phase 1	No more hard copy documents!

Date	Activity	Remarks
April 2016 to December 2016	Design & Development of Phases 2 & 3 (E-services and Business Intelligence)	Brainstorming, getting ideas and buy in from LAB officers and related departments (e.g. MinLaw Community Legal Services Division), working with vendors
October 2016 to December 2016	Phases 2 & 3 UAT	Users had to test the system to ensure that its functions met our business requirements
23 January 2017	Launch of Phases 2 & 3	-

Table 1: Key Milestones of the GENIE Project



What Genie Does

The casework processes which are now done/stored in GENIE include:

- 1. Registration of cases and means testing;
- 2. Attendance notes of telephone calls and meetings with the Applicant and other parties;
- 3. All correspondence related to the file;
- 4. Drafting and storage of court and other documents;
- 5. Court attendance notes with most hearings attended by lawyers just using a laptop without any physical files or printouts of documents; and
- 6. "Billing" (i.e. assessment of contribution payable by the Applicant,³ monitoring of payment).

Any hard copy documents sent to the Bureau (e.g. correspondence from a third party) are scanned into GENIE. E-mails sent to the Bureau or sent out from the Bureau relating to a file can be stored into the relevant GENIE case-file at the click of a button.

On 23 January 2017, further improvements were made to GENIE in the form of the Applicant e-Portal ("AP Portal") and the Assigned Solicitor e-Portal ("AS Portal"), which enable our Applicants and Assigned Solicitors⁴ to interact with the Bureau online.

GENIE also incorporates the use of Data Analytics and Business Intelligence functions which enable us to monitor the work of individual case officers and also track trends for all our cases.

Genie Successes

The following are a few illustrations of how our aspirations for GENIE have come to fruition:

1. Everyone Works Faster and More Easily

With GENIE, the turnaround time for doing work on each file is much faster than in the past, as:

- a. Multiple officers can access and work on the same case concurrently, unlike pre-GENIE days, where only one officer could work on the file at any one time and others who wanted the file had to wait until he finished.
- b. GENIE is a "one-stop" place for information on a file. All e-mails, correspondence, court documents, attendance notes and other information related to a file can be found on GENIE. Officers do not have to spend time hunting around different places for file information. The information is also stored and sorted in a way that makes it easy for the user to find what he is looking for.

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- c. Communication between the Bureau's officers for all case-related matters is now instantaneous through GENIE. Officers can send messages to each other through GENIE. These messages are stored in the system as a permanent record of the activities on the file. This is in contrast to the past where such communication was usually by writing minutes in the physical file and routing it to the recipient.
- d. GENIE is available to officers who want to work off-site. They can now access all their files through their laptops instead of having to carry physical files around.

"Our work processes are more efficient now as tasks are sent and received immediately. GENIE also makes it convenient for us to work outside the office – I can review case documents at home or at court without having to lug the files around."

Ms Joan Pang, Assistant Director

"It is faster to search for case information and documents in GENIE than in a physical file. When I go into a case in GENIE, I can see the case information at a glance. Searching for documents is also easy as there is a preview of each document in the case folder."

Ms Cindy Chen, Legal Executive

2. Manpower Savings: No Need for Registry Staff, No More Lost Files

Given that the Bureau opens thousands of new legal aid files each year, we needed as many as 5 registry staff to perform administrative functions such as collecting and distributing the files and recording the movement of the files. Post-GENIE, we no longer require any registry staff. In addition, we no longer have the problem of lost files!

3. Use of Standard Templates to Take Instructions

GENIE has incorporated standard templates for certain subject matters (e.g. divorce and Mental Capacity Act applications) for our Legal Executives (LEs) to record the Applicant's instructions during the first client meeting. As these templates provide guidance to the LEs on the necessary information that they need to obtain from the Applicant, they are especially helpful to new LEs and ensure that all the key information is obtained for each

matter. This avoids unnecessary follow-up calls to the Applicants, which would inconvenience them.

4. Going to Court Paperless: No Need for Bulky Files or Missed Court Dates

With GENIE's e-briefcase function, our Legal Officers (LOs) can now go to court with just a laptop instead of bulky physical files.⁵ The e-briefcase is a software client installed in all LOs' laptops which allows LOs to access all the case documents in court without an internet connection and record court attendance notes electronically.

When the LOs return from court and connect back to the GENIE system, the court attendance notes are generated as a PDF file and automatically uploaded into the case folder. The details of the next court date are also automatically synced into our court calendar in GENIE, ensuring that all court dates are monitored.

5. Use of Business Intelligence: Monitoring Individual Efficiency and Identifying Trends

GENIE also has Business Intelligence and Data Analytics capabilities which allow us to track the efficiency of individual officers, as well as broader case trends. Those holding management roles are able to monitor officers' individual caseloads, see the speed with which they complete their files, their mediation settlement rates, and so on. Contribution collection rates and status can also be monitored for individual files, as well as across files. The Bureau can also leverage on the statistics generated to identify trends which may be useful in the review of policies to better assist our Applicants.

The AP Portal and the AS Portal

The AP and AS Portals allow the Applicants and Assigned Solicitors to communicate with the Bureau electronically. Any activity done through the Portals is also immediately and automatically tracked and updated in the respective case folders in GENIE, without the need for an officer to input the information manually.

Prospective Applicants can also check on their eligibility for LAB's help and make an application online without the need to travel to the Bureau. Private solicitors who wish to volunteer their time and services with us can also register online.

A summary of the key functions of the AP and AS Portals is as follows:

ed Solicitor can do			
re & accept case ment invitations			
e the progress of ed cases			
Submit and receive documents			
Send enquiries and receive replies			
Update personal particulars			

Table 2: Key Functions of the AP and AS Portal

The AP Portal reduces the need for our Applicants to contact or attend at the Bureau, or call the Bureau for case information. The AS Portal allows our Assigned Solicitors to liaise with us more efficiently and conveniently, thus expediting the cases for our Applicants.

"I like the Portal – user friendly, paperless, able to work anywhere, no file to return upon completion, savings on costs, for instance, online storage instead of warehouse storage."

> Ms Lim Lay See (Messrs LS Lim Law Practice), **Assigned Solicitor**

"The AS Portal is a step in the right direction as it is both an efficient and user friendly system. I have personally found it convenient to access the Portal wherever I am and also find it easy to download the documents into my work folders."

> Ms Dharma Jayaram (Messrs Dharma Law LLC), **Assigned Solicitor**

Change Management: Getting People to Embrace a Paperless Environment

One of the main challenges in transiting into a fully paperless environment was changing the mind-set of officers who were used to a paper environment. We invested a lot of time and effort in our change management activities to ensure that our officers embrace the new way of working.

1. Phased Roll-out Approach: Transiting One Step at a Time

We designed a phased roll-out approach instead of a "big-bang" approach, so as to build the confidence of our staff in working electronically. Therefore, we had a three-month transition where officers got used to working on electronic documents, and at the same time, got used to the idea of having GENIE instead of LAMP. Before we launched GENIE on 29 February 2016, we soft launched the Document Management function on 30 November 2015, where officers would work on electronic documents in GENIE alongside physical files. Officers were given a three-month period to transit at their own pace. They were urged to start "converting" to the new way of working during this time, i.e. relying on electronic documents instead of the physical files.

Once they were acquainted with the idea of having to work on GENIE, we then launched the system on 29 February 2016. Upon the launch, we stopped the circulation of paper files as everything could be done electronically. This gave officers no choice but to use GENIE exclusively for their work.

"It was difficult to switch at first as it is a paradigm shift. But once you have made the switch, the speed of work is amazing."

Mr Louis D'Souza, Senior Deputy Director

"As I grew up in the pen and paper era, the switch to a paperless work environment was initially challenging. However, as GENIE was launched in phases, there was sufficient time for me to gradually adapt to the changes. Now, I find that GENIE helps me to complete my work faster as I can gather all the information easily without having to flip through thick paper files like before."

Mr Victor Lim, Deputy Director

After we gained the buy-in from our internal staff, we then rolled out our AP and AS Portals on 23 January 2017. Having almost a year of experience of working electronically, we were better able to anticipate what was required to educate the Applicants and Assigned Solicitors on the use of the Portals, and to encourage their use.

Involvement In Every Stage: Forging a Sense of Ownership

Throughout the development of GENIE, we involved all our staff at various stages, from the senior LOs to

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the filing clerks. We organised brainstorming sessions to gather their suggestions and feedback. We also scheduled them to take part in the UAT phase, where they had to test out the developed system and check that it met their needs. In this way, GENIE was developed jointly through everyone's efforts.

3. Training: Leaving No One Behind

Before each stage of the phased roll-out, we conducted many training sessions for our officers, including our Finance department colleagues and other support staff. In fact, we had a full six days' worth of training just before the launch on 29 February 2016, with each day focusing on particular roles and functions. Where necessary, we catered for additional sessions for particular officers who had difficulties using the new functions.

Blocking of Schedules

To allow our officers to get used to the new system, we also blocked the first two days of launch where no appointments or court hearings were scheduled on 29 February 2016 and 1 March 2016. Our officers could then focus on using GENIE without having to worry about meeting and serving our Applicants at the same time.

New Technology - Same Mission

The Bureau first started operations in 1958, with all the officers working with pen and paper and physical files, with a typing pool to type official documents. Almost 60 years later, the typing pool is gone, the physical files are gone, and all officers are armed with laptops, and 2 large screens each. However, the nature of the work and the Bureau's mission remains the same.

The volume and demands of the Bureau's work have risen significantly through the years, from an average of 2,510 case registrations in the 1960s to 6,874 in the 1990s, and 9,053 in FY 2016. These challenges are anticipated to continue. In the past few years, the Bureau has been actively trying to harness technology to do our work better and faster, in order to meet the challenges of the future. The adoption of GENIE is one major step in this effort, which furthers our mission to provide quality legal aid, advice and assistance to persons of limited means.

Lim Hui Min

Edmund Chew Senior Assistant Director

Director of Legal Aid



Yvonne Goh

Assistant Director

Please e-mail us at Edmund CHEW@lab.gov.sg or Yvonne GOH@ lab.gov.sg if you would like more information about GENIE.

The Legal Aid Bureau offers legal representation in a wide range of civil matters including divorce, monetary claims, custody of children, estate matters and claims for compensation in personal injury or medical negligence cases. Additionally, the Bureau is supported by a panel of some 600 volunteer lawyers, known as Assigned Solicitors. These lawyers handle cases that require special areas of expertise such as cases involving Syariah Law, or cases where both parties are legally aided and the Bureau's lawyers are conflicted from doing the cases.

For further information, please refer to our website at https://www. mlaw.gov.sg/content/lab/en.html>.

Notes

- In June 2013 when we started on the GENIE project, there were about 10,500 paper files stored on-site. This does not include the files in circulation with our officers and other files which were stored offsite.
- After we had the idea of going paperless, we engaged KPMG in 2012 to conduct a Business Process Re-engineering (BPR) Study to review and improve our organisation structure and processes. Some key recommendations were made from the study which were subsequently incorporated and implemented in GENIE, such as having a single place where all information is input and captured, an algorithm to automatically assign cases to officers based on language and subject-matter, and automatic sending of SMS notifications to Applicants to remind them of appointments and court mediations.
- 3 Under section 9 of the Legal Aid and Advice Act (Cap. 160), the Director may require an Applicant to make one or more contributions in one lump sum or by instalments.
- Assigned Solicitors are solicitors from private practice who assist the Bureau with our
- For complex cases with voluminous documents, the LO will still prepare and bring hard copies of the documents to court as the court will usually request for hard copies during the hearings for such cases. For cases where the Other Party is in person, we will also need to prepare hard copies to serve on them.