

Case Study – Digital Signatures at Lismore City Council

October 17, 2018

Organisations have been transitioning away from paper for a while, but continue to create some records in paper because of misconceptions about signatures and official documents. This reticence to use digital authentication presents a barrier to conducting business digitally from start to finish.



To overcome such barriers and move into the digital signature space, Lismore City Council (LCC) decided to purchase digital signing capabilities to authenticate the originality of documents, reduce postage costs and improve the reliability of digital records. Their main concern was a consistent standard for signing documents to help prepare for future challenges in digital recordkeeping. This case study outlines the steps taken by LCC to implement digital signatures in the Development Assessment area.

Difference between a digital and electronic signature

It is important to identify the difference between a digital signature and an electronic signature in the context of this case study. In its [advice on electronic signatures](#) the Public Record Office Victoria provides these definitions:

- A digital signature is a cryptographic technique that creates a unique and unforgeable identifier in an electronic document. This type of signature can be checked by the receiver to verify the identity of the author and that it has not been interfered with.
- An electronic signature or e-signature on an electronic document is intended to perform the same purpose as a handwritten signature on a paper document. Types of e-signatures include applying a digitised image of a handwritten signature to a scanned copy of a document or a born-digital document, or a scanned copy of a wet (i.e. ink) signature.

Digital signatures at LCC

Lismore City Council decided to start the project in the Development Assessment area.

Business Impact prior to Implementation

LCC assessed where staff were using wet and electronic signatures.

Correspondence was sent out in many formats:

- printed and ink-signed before being scanned and stored as a PDF
- printed from a Word template containing an unauthorised image of a signature, without the knowledge of the owner of the signature
- wet signatures were applied to hard copy development application consents sent to applicants, but an unsigned PDF copy of the consent was saved into the electronic document and records management system (EDRMS)
- approved development consent plans, (sometimes received electronically), were printed, rubber stamped, and then scanned into the EDRMS.

They also discovered there were limitations to types of digital signatures used and several steps to insert a signature.

For internal processes requiring a digital signature LCC uses an Adobe Acrobat PDF fillable form.

Systems Used

LCC required the digital signature system to be compatible with existing systems and easily integrated with MS Office and TRIM. They also required the document to be a package inclusive with a digital signature as any changes would corrupt the signature. They purchased CoSign, Trapeze and Secured Signing (Cloud-based) systems:

- CoSign integrates with Trapeze that integrates with TRIM
- Secured Signing integrates with email
- signed documents received in Outlook can be registered in TRIM using an Add-In.

Challenges

LCC faced a number of challenges:

- the CoSign software did not support a big file size upload for an image of a stamp with enough detail. Trapeze imaging software was purchased to stamp plans before digital signing using the Secured Signing (Cloud-based) program.
- there was no guidance about which documents required signatures so it was necessary to produce a clear set of criteria to identify documents that did require digital signatures.

Benefits after the implementation of digital signature tool

A digital signature tool allows for higher security and easier tracking of documents. The following specific benefits were also gained:

- electronic receipt of development applications
- savings in time and costs. Since documents and plans can be digitally signed at a client's computer by technical staff, administrative support staff spend less time preparing documents (and particularly plans) for signing. While this saving of staff time does not directly translate into costs savings (as salaries are fixed), it frees up staff to perform other duties that would need to be budgeted for
- fewer processes requiring staff to sign, email and capture documents in the EDRMS
- a reduction in postage and stationery costs through the use of email to send out official documents
- the development of a clear set of criteria to identify documents requiring signatures
- the development of an authorised signer list eliminated incorrect people signing documents
- the review of existing document templates
- an increase in the use of TRIM because of the built-in TRIM digital Signature tool for approving internal reports
- the positioning of the Records Unit as the driver of change in current record keeping trends.
- external stakeholders appreciated the timeliness of receiving approvals by email.

External stakeholders appeared uninterested in being able to authenticate signatures using this technology. On launching the pilot project to digitally sign development consents and conveyance certificates, LCC contacted frequent customers to offer support in authenticating digital signatures in outgoing documents. This included creating and sending customers detailed instructions on how to trust a signer's security certificate in Adobe Acrobat and MS Windows. While some customers appeared willing to follow these instructions, most inclined to do so. Those customers that did attempt to follow the instructions did not seem concerned when the identity of a signer could not be automatically determined. Based on this experience during the pilot, LCC did not attempt to educate the general public about authenticating digital signatures and trusting security certificates when they expanded the project to digitally sign all outgoing correspondence.

Lessons Learned – What would LCC have done differently?

LCC learned a few lessons during the implementation of the project:

- complex processes are best delivered in smaller chunks for easier comprehension.
- project implementation of digital signatures requires careful timing and project planning as staff are very busy.

- staff were reluctant and reticent to trial new technology and this created issues for a successful deployment.
- LCC would not have attempted to sign MS Word documents initially.

What has LCC not done yet?

The initial business case identified costs associated with producing ink signed documents on letterhead and posting. LCC has not measured the costs of the process after using digital signing.

Conclusion

LCC has been successful in the implementation of digital signature tools using CoSign and Secured Signing within the Development Application area with a 100% rate of adoption. The implementation is progressing across the rest of Council but has taken an enormous amount of patience, commitment, strategic alliances, and constant change management. LCC has used some issues to their advantage by turning them into solutions, e.g. the creation of a clear set of criteria to identify documents requiring signatures and an authorised signer list. A pivotal success factor is that the Records Unit has been identified as the channel of change at LCC.

We would like to thank Tim Robertson of Lismore City Council for sharing their learnings with us!

Author: Ann Naidoo