

Analysis:
AI, Machine Learning

Machine Learning Powers Contract Review

On Monday 18th September 2017, ThoughtRiver officially launched "Review": an Artificial Intelligence contract review solution that can assess legal contracts an average of 60 times faster and 30 percent cheaper than the typical paralegal. It is based on a Contextual Interpretation Engine, "Fathom" which fuses machine learning and deep legal expertise and it comes onto the market following extensive early adoption testing at leading international legal brands, such as Eversheds Sutherland, and ongoing trials with several multinational in-house legal departments including BT. CEO Tim Pullan speaks to The Robotics Law Journal.

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REVIEW WILL HELP TO REDUCE THE BURDEN OF COMPLIANCE AND REGULATORY ISSUES SUCH AS GDPR WHICH CAN RESULT IN FINES OF UP TO 20 MILLION EUROS OR FOUR PERCENT OF THE COMPANY'S GLOBAL REVENUE

RLJ: Can you give me a quick history of how ThoughtRiver came together as a company?

Tim Pullan: I founded a predecessor business in Singapore whilst heading up Taylor Vinter's Asian office to look at legal innovation. This produced a range of products such as a Data Protection Compliance product.

ThoughtRiver "Review" an Artificial Intelligence (AI) contract review solution was developed in 2012-13 and we decided to launch a business and start building it in 2015.

What is the business problem that Review is addressing?

Many of the risks in business lie in contractual undertakings. But most big corporations can't afford to pay lawyers to review every contract they sign. Businesses need to prioritise contract reviews, but there's no easy or reliable way of doing that without reviewing each contract individually. Review gives businesses a way of automating the process of assessing contracts and prioritising them in a more scientific way, and therefore managing contractual risk.

How does Review work and how was it developed?

Review works by using AI & Natural Language Processing to detect contractual points of meaning based on an extensible contract description framework we have built. It then uses rules and machine learning to overlay risk ratings on identified positions in order to generate an overall risk score and risk rating.

Review was developed conceptually by a small group of legal and software engineers and then partly financed by founders. There was an injection of capital in May 2017, where the company received \$1m in investment from a group of investors that included former Vodafone UK CEO Guy Laurence and Michael Findlay, chairman of Morgan Sindall and former co-head of

investment banking for Bank of America Merrill Lynch.

What advantages does it provide law firms?

Review has the ability to reduce cost to serve and also enable them to increase penetration in client accounts by giving them service propositions which previously would have been uneconomic. Contracts are processed 60 times faster and 30 percent cheaper than traditional paralegals.

Can you tell me about the early trials at Eversheds Sutherland? How did that come about, how was Review used, and what sort of data did you get from it?

Eversheds Sutherland had looked around the market and the only technology that filled their requirement was ours, with its integrated interpretation and risk evaluation capability.

Eversheds Sutherland setup a sub-division, ES Ignite, in response to the disruptive IT possibilities that are becoming more and more apparent within the legal sector. ES Ignite's focus is to streamline the time constraints and economic demands of in-house legal work, based on best practice developed in over 20 years' experience of delivering high-volume commoditised legal work.

ES Ignite were looking for a technology based contract review solution to absorb workload in the rest of the business and improve throughput, workflow, and quality.

After a period of testing by ES Ignite, they identified gaps in functionality leading to ThoughtRiver to further enhance the technology. Eversheds Sutherland believe ThoughtRiver now provides exactly what they are looking for in terms of contract analysis software, some of its key advantages being:

- The fact that it can quickly and efficiently review both single and bulk contracts
- It effectively provides another "legal team" to increase capacity
- The triage that ThoughtRiver makes possible enables highly

efficient resource allocation for those contracts that do need attention

- The speed and efficiency of ThoughtRiver aligns to the need for fixed fee working and cost efficiencies in the managed service space

What effects will automating these tasks have on law firms and big companies? Will staff have to retrain at all to focus their skills elsewhere?

ThoughtRiver is automating the drudgery aspect of contract review. For others, it will free skilled resources

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to focus on more valuable tasks and generate opportunities for new types of services and advice. We are not putting lawyers out of business, just deploying them in more values-added tasks.

Another feature of Review is that it can "anonymise" documents so that they're compliant with data protection laws. How does it achieve this?

Review uses Natural Language Processing and machine learning to identify key words, phrases and passages that are at risk of making the document traceable. There are different levels of anonymisation depending on the requirement. If we remove all personal data the document is by definition not subject to data protection law. This will be particularly helpful when trying to reduce the burden of compliance and regulatory issues such as GDPR which can result in fines up to 20 million Euros or four percent of the company's global revenue.

Are there any other features like that that Review can accomplish or will be developed further in the future?

Many. We have a bulging roadmap of R&D projects to build on the current foundations. Watch this space!

What else is on the horizon for ThoughtRiver and Review?

International expansion. Almost half of our new business enquiries are from the US today and we also have a lot of interest from Asia.