

FOCUS ON LEGAL PUBLISHERS AND SUPPLIERS: JUSTIS

Justis: at the Forefront of the Evolution of Legal Technology in the UK

Abstract: In this article, Masoud Gerami, Managing Director, and Aidan Hawes, Head of Commercial Development, offer an exploration of the history of Justis, and the influence the company has had on the delivery of legal information over its 30-year history. They describe the development of technology over this time, from the rise of optical media through to the features offered by today's online legal research technology, focusing on Justis' key milestones over this period. They discuss the range of innovations Justis has been responsible for, the changes in the legal research industry, and offer an insight into the future aspirations of the company.

Keywords: legal information providers; legal publishers; legal databases; Justis

ABOUT JUSTIS

Justis is a legal technology company based in London, specialising in legal research tools and legal content in the form of case law and legislation. From the beginning of the company in 1986, Justis has been at the forefront of the digital dissemination of legal information, from producing the first ever CD-ROM of case law in 1989 through to our current legal research platform, JustisOne.

Recently, we celebrated our 30th birthday, which involved looking back at the milestones from our history¹, alongside the more immediate achievements of 2017. Last year alone, we continued the development of JustisOne, our latest legal research platform, adding four key new features to support more efficient, effective legal research. To complement this development in our technology, we also entered into three exclusive partnerships to provide a wider range of legal material, increasing the content we offer from Ireland while adding New Zealand and jurisdictions across the Caribbean to the collections. These partnerships added 16 new jurisdictions to the content offered by Justis, meaning we now offer content from 26 jurisdictions; this makes JustisOne home to over 640,000 case law documents, and over 600,000 legislative provisions.

Alongside developing new features and expanding our content, we have also been working to support our customers from a range of sectors, including legal professionals, law schools and government departments around the world. Throughout 2017 our training team conducted over 300 training sessions, both on-site and online, to ensure that our customers are getting the most out of their Justis subscriptions. In July 2017 we also started an ongoing webinar series, with over 30 webinars being conducted to-date with different themes, to support a range of customer interests.

We have been looking forward to 2018 and beyond, and how the future additions to JustisOne which will further enhance the legal research process. We will also continue to expand our vast collection of content. Most immediately, we will be adding content from the EU to JustisOne, which will be particularly important as the United Kingdom leaves the European Union. Beyond this, we have a range of other additions in mind, both in the short and longer term. We are also working to better support the range of customers we have from across the globe, with a growing variety of online resources and the availability of webinars on-demand² demonstrating progress towards that.

All of these recent achievements, and the plans Justis have for the future, would not be possible without the expertise and knowledge of the dedicated individuals and teams at the company. Justis has been at the forefront of innovations in legal technology since our inception. We have been responsible for large changes in how legal materials are accessed which came to be seen as commonplace, and are continuing to break new ground in how technology may be used to enhance the process of legal research.

THE HISTORY OF JUSTIS

In 1989, we published the first CD-ROM of legal material to be published in the UK, making European Union law available on optical media, allowing legal practitioners to access and research European Union law with ease with a digital interface instead of using numerous hard copy volumes. Rather than being a simple database based on the CELEX numbering system, it was developed as a fully functional platform, built to provide a comprehensive research tool allowing for a more efficient way to

conduct legal research involving European Union law than had previously been possible.

Following this, in 1991, we published the first CD-ROM of UK case law, making the Weekly Law Reports available in digital format for the first time. Our previous experience with the CELEX numbering system highlighted that using the same approach again would not be appropriate to deal with the different format of a law report, and so we worked on developing a new search interface specifically designed to allow for efficient case law research. Throughout the 1990's we published numerous other products on CD-ROM, including the Law Reports and the Weekly Law Reports, utilising the potential for large amounts of data which could be distributed in this format. These were produced with an awareness that large volumes of data are only as useful as the tools used to access and search them.

However, it wasn't just the volume of legal material which could be stored on a CD-ROM which made it an increasingly popular medium, but also because it made access to the law truly portable. By condensing innumerable printed volumes, which tied legal research to physical spaces, CD-ROMs of case law allowed the practitioners to have a large collection of legal information at their fingertips, whether in the office, at home, or when travelling.

As the industry adapted to CD-ROMs as a method of accessing legal information, a desire grew to have them updated as regularly as printed publications. This presented a challenge, owing to the static nature of the content on a CD-ROM, and the cost of producing updates. It was important to take into account the frequency of updates given the importance of having access to up-to-date resources when conducting legal research. The solution was to take advantage of internet connectivity as a method of providing digital updates, accessible through the interface used to access the content of the CD-ROM. This dual-approach to content delivery which was implemented by the Justis team and the technical methods of handshaking and communication which were added to the Justis CD-ROM search software were truly innovative.

Digitising the law: large-scale data capture

Beginning with an agreement with the Incorporated Council of Law Reporting for England & Wales (ICLR) in 1994 to publish the Industrial Cases Reports, we undertook our first major archive data capture task, which involved the mass manual scanning and keying of documents. As part of this, after determining that the Standard Generalized Markup Language (SGML) was inappropriate for the range of legal documents, we devised our own markup language, named Context Compound Document Format (CCDF), in order to interpret the range of reports we were capturing and

styles as they changed over time. While browsable content is taken for granted today, this process was designed to create that content from a hard-copy resource, with CCDF achieving this in a way which wouldn't have otherwise been possible. This is a process we repeated on other large projects, most notably making available complete archives of the Law Reports, the Weekly Law Reports, and the archive of UK statutes dating back to 1235.

This approach to making large collections available on CD-ROM is one that other case law providers also adopted. However, having led the industry with this form of document delivery, we started looking beyond mass, static archives on physical media, focusing on the growth of the internet use by businesses throughout the 1990s³. After a decade of establishing ourselves as specialists in the digital dissemination of legal material, and with the internet already playing a role in updating the CD-ROM content we were responsible for, we began working on a new generation of online legal research.

FROM OPTICAL TO ONLINE: THE CHANGING LANDSCAPE OF THE LEGAL RESEARCH INDUSTRY

In 1999, we launched our first online platform on the internet which offered online access to a database of case law on a subscription-based model. Drawing from our experience in digital information, online delivery, and detailed search platforms we aimed to offer the most intuitive legal research platform possible. As a new research service it made an impact on the industry, and this was acknowledged in 2000 when it won the Lotties award for 'Law Office Technology Newcomer of the Year'.

In 2003 we launched JustCite, an online legal information citator. This went on to have a profound effect on how the law was researched and remains unique as a concept. An online legal research tool without any full next documents seemed like something of an anachronism, but the features of the software led to a reputation which endures to this day. Built on a unique search algorithm that considers the relationships between cases, JustCite consistently returns the most relevant results and offers treatment information for a case at a glance. One of the ideas behind the design of JustCite was that many organisations already had access to vast databases through other case law providers, and it was developed to act as an interactive index for those online services. As the product matured, JustCite offered links to over 120 online services, including direct links to specific case law and legislation documents. The other unique feature of JustCite is its international coverage, bringing together material from many common law courts and jurisdictions.

As we have played a part in shaping the legal research landscape, the legal research industry itself has changed significantly since the birth of Justis in 1986. Where the

delivery of legal materials started to become more digital traditional publishers started to work with technology companies to disseminate their products in digital form. As the technology for online dissemination of legal information has advanced over the years, there have been two identifiable trends: Firstly, traditional publishers such as those that produce series of case reports have been moving towards delivering the content that they produce via their own online platforms. For example, a number of products produced by the ICLR which used to be available on Justis, Westlaw and Lexis have been (and are being) gradually withdrawn, and will only be available on ICLR's own online service. Secondly, there is an increasing focus on the availability of legal materials from a number of different jurisdictions, particularly from common law regions and where cross-jurisdictional links are important. Recognising the importance of this aspect of legal information research we have continued to add to our international collections. In the last year, we have reached agreements with The Bar of Ireland, the Incorporated Council of Law Reporting for Ireland, The University of the West Indies, and The Law Report based in New Zealand.

With online legal research platforms now being a prevalent method of accessing an ever-increasing volume of legal materials, considering the features those platforms offer is important. The majority of these platforms broadly offer the same functionality as our platform JustisOne. As platforms which provide a point of access to a large case law database this is perceived as an effective approach. With technology transforming other areas of legal practice⁴, we feel that legal research technology should offer features which would increase the quality and efficacy of research tasks.

INTELLIGENT LEGAL RESEARCH: JUSTISONE

It is the belief of Justis that legal research software should be offering more to support the process of conducting thorough legal research. This is particularly true in a climate where clients of law firms are increasingly resistant to being billed for legal research⁵, meaning that conducting research in a cost-effective way is increasingly important. This is what motivated us to develop JustisOne, our latest legal research platform. Launched in 2016, JustisOne builds on the features found in our previous online platforms, and includes a range of search and analysis tools which are designed to enhance the process of conducting legal research.

The approach taken by JustisOne is only made possible by the way in which we see legal materials. Rather than taking the items in our database as a collection of individual cases and legislative provisions, we instead consider them as an interlinked network of documents. This network is built upon the structure of citations, with established relationships based on the outcome of cases and the setting of precedent. In addition to this, there are numerous other items which are common across legal documents, such as litigants, judges, courts and subject terms. By identifying this network and mapping these items legal documents become data-rich resources, and we designed the tools in JustisOne to take full advantage of the opportunities that this approach allows for.

An example of a feature which would not be possible without this approach is the Key Passages feature, shown in Figure 1, in JustisOne displays the most subsequently cited passage of a case. This is made possible by taking into account the network of citations, and how they link

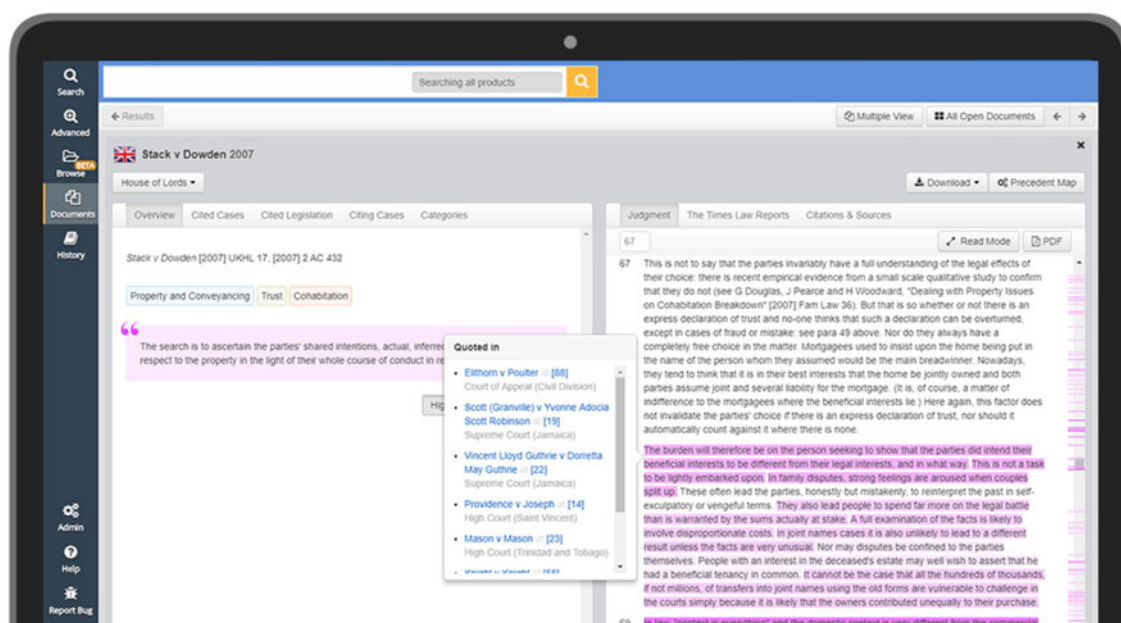


Figure 1. JustisOne's Key Passages feature.

to specific passages in case transcripts. By aggregating these citations we can display what is the most cited, and so the most influential, passage of a case. These passages are updated as new cases are added to JustisOne, meaning that these key passages can change over time, which allows for an accurate representation of the key arguments of a case at a glance. This enables legal researchers to determine whether the way a case is most frequently used is relevant for their needs. There is also a heat map which displays the frequency of other cited passages. To produce the same information manually would be incredibly time-consuming, as subsequent citations would have to be located, and cross-referenced.

In conducting thorough legal research it is vitally important to ensure that cases which are to be used as authorities in arguments remain current and good law. Rather than attempting to automate the process of determining case treatments our team of legally trained editors assign an appropriate treatment information to cases⁶. This has the benefit of giving our customers confidence in the assigned treatment types, and in JustisOne they also work alongside information extracted from cases in terms of citations and dates. These are displayed in search results to give an indication of the range of subsequent treatments a case has received, and are broken down where we display lists of citing and cited cases.

JustisOne also contains a tool which visualises treatment information over time in a clear manner. The Precedent Map, shown in Figure 2, displays all subsequent citations, arranged chronologically, with an indication of the treatment that the case being looked at has received. This allows practitioners to gain a greater understanding of the treatments that a case has received by placing any negative treatments within a temporal context; a case that has received 5 negative treatments over a 20-year period

may be worth considering further, while a case that has received 5 negative treatments in the last 2 years may not be. The Precedent Map also displays cases with common citations more prominently, guiding practitioners towards other cases which may be influential for their needs.

Tools like the Key Passages feature and the Precedent Map are only useful if practitioners can find cases that are relevant to their matter at hand. The cases in JustisOne are categorised using multiple terms from the world's largest legal taxonomy, containing over one-and-a-half million terms. This process is one which we automate, using a specific set of categorisation rules developed over a number of years to correctly identify and tag cases with appropriate categories. This is something which is at the heart of JustisOne's search engine as it works to make relevant cases easier to find, rather than relying on the person conducting legal research being able to match a specific category that a case might be assigned to on another platform. An additional benefit of this approach is that it also allows legal researchers to search for some highly specific terms which will, in turn, increase the accuracy of results.

There is a category Browse feature, shown in Figure 3, in JustisOne which allows users to specify one of forty-six top-level categories, and then from a range of increasingly specific sub-categories. This allows practitioners to explore the range of cases on JustisOne by practice area to determine an appropriate starting point for their research. They can then continue with increasing detail through up to nine levels of sub-categorisation to identify cases which may be relevant to the matter at hand.

Drawing from JustCite, and in recognition of the fact that many practitioners already have access to other online services, JustisOne is also designed with an index feature named Sourcelink. If practitioners want specific reported versions of cases, we provide links to such

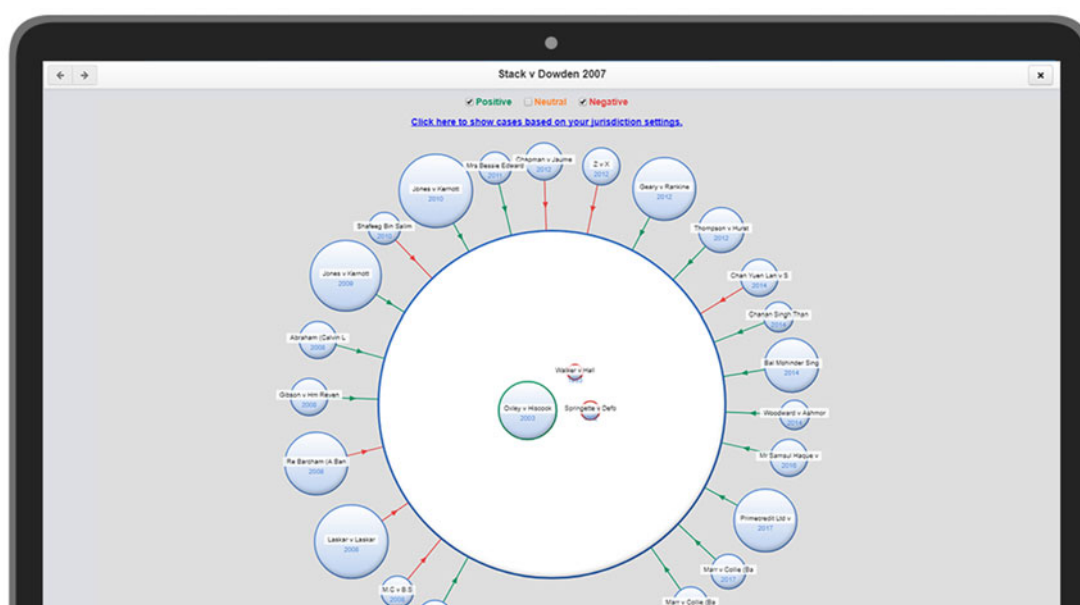


Figure 2. JustisOne's Precedent Map.

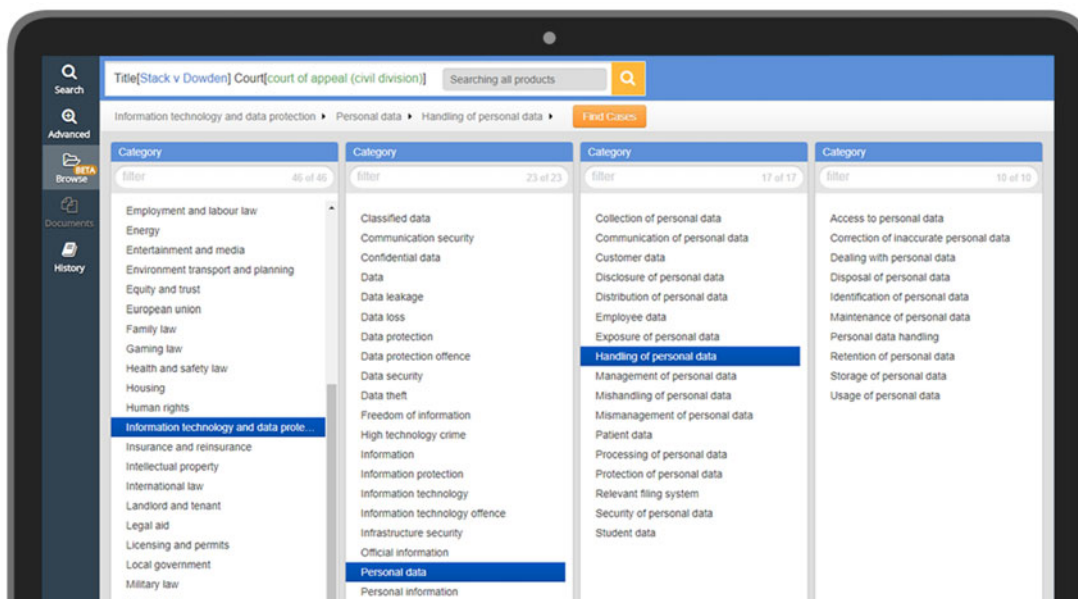


Figure 3. JustisOne's Browse feature.

cases on other online platforms (around 120 in total), both free and subscription-based. JustisOne also includes the index (meta-data) for cases that we do not offer the full text of. This enables practitioners to see their parallel citations, the treatment information of these cases, determine if they are current and good law, and provides a link to access them on other platforms. While other providers will typically only link to their own content, we do this as we believe that to conduct thorough legal research practitioners and academics should be able to access and find every relevant case.

A COMPREHENSIVE COLLECTION OF CASE LAW

The advanced search and analysis tools found in JustisOne are only one part of making for effective, efficient legal research, with the legal material they are being used to access being vitally important. JustisOne features a large collection of judgments from across 26 different jurisdictions, alongside many important reported series. Specifically, this includes the largest collection of UK superior court judgments available online, the largest collection of Irish case law and the largest collection of Caribbean cases. We also provide an extensive range of cases from Australia and Canada. In an industry with a tradition of focusing on reported cases, why have we taken the decision to provide large collections of judgments, both reported and unreported?

The importance of unreported judgments

The birth of law reporting can be traced back to the Year Books first published in the 14th century⁷, and has grown

into an industry since then. While the quality of earlier law reports may be questionable, since the founding of the Incorporated Council for Law Reporting for England & Wales in 1865 law reports in England and Wales have been published to a consistently high standard. However, there is an issue with law reports in that they are selective, and decisions need to be made on which cases are noteworthy enough to be reported. In the era of printed reports this was understandable; the constraints on cost and space were important considerations. In a digital era this selection continues to be applied as law reports are time-consuming and expensive to produce. It is also important to note that printed versions of most series of law reports are still produced, and so the physical constraints remain.

As reports remain selective, it is important to consider how many cases go unreported. Since 1999, 78.4% of superior court cases in the UK have gone unreported. This figure, which represents over 100,000 cases, should highlight the importance of considering unreported judgments⁸. The HM Courts and Tribunals Service recognise that unreported cases are increasingly important, and this is shown by their introduction of a neutral citation as an official way to refer to judgments in 2001⁹.

Equally persuasive are the statistics around how many cases are cited by unreported judgments since 2012, shown in Table I.

According to these statistics 44% of citations are made by cases that are not reported, and that means 44% of citations which may negatively treat a previous case may be going undiscovered. If legal research is only considering reported cases, how many potentially important precedent-setting cases are being missed?

Only by considering unreported cases can you be sure that your legal research is as thorough as possible,

Table 1 – Number of citations made by reported and unreported cases.

	<i>No. of citations made by reported cases</i>	<i>No. of citations made by unreported cases</i>	<i>% of citations in unreported cases</i>
SC/HL/PC	5,282	304	5
CA (Civ) & HC	18,984	17,513	48
CA Crim	1,854	2,738	60
Total	26,120	20,555	44

and that you are taking every relevant authority into account. When we say that JustisOne offers the largest collection of UK superior court judgments, it is because we searched extensively for physical records and archives across the country. Using the expertise in data capture that we developed in the 1990s and honed across the digital capture of numerous reported series, we conducted our largest data capture project to date. This involved digitising all the cases found in those records and archives to provide the most comprehensive collection of UK cases possible. This process was more sophisticated due to advances in Optical Character Recognition, and we performed rigorous random sampling to ensure that the quality of this data capture remained consistently high across a wide range of documents. It is our belief that this large collection of cases, combined with the suite of tools found in JustisOne, allows for thorough legal research to be conducted more efficiently than has previously been possible.

While other jurisdictions have different histories regarding law reports, we adopt the same approach across all the content that we offer. We also realise that certain jurisdictions look towards others for direction, such as jurisdictions in the Caribbean looking towards the UK. Rather than adopting an approach where each jurisdiction is ring-fenced JustisOne allows for full cross-jurisdictional research, exploring the citational relationship across jurisdictions where they exist and enabling direct side-by-side comparison in the same tab on the same screen.

FUTURE ASPIRATIONS

Making the law more accessible has been one of the driving forces behind Justis since our inception, and will play a large part in our future. This will include expanding the range of jurisdictions available on JustisOne, where opportunities arise and we feel that our approach can improve the legal research conducted by the legal practitioners who require that content. This involves an

awareness of the content itself, how it relates to the network of citations that is established by the legal materials we currently offer, and what other tools or features we could introduce by utilising the way the content is formatted and presented.

We also believe in making the law more accessible in other ways. While Justis is a commercial organisation, we recognise that access to legal materials is difficult, particularly in certain areas of the world. To begin addressing this, Justis has recently partnered with the Global Online Access to Legal Information (GOALI) programme, which is aimed at providing eligible institutions in developing countries free or low-cost online access to legal content¹⁰.

Justis has had a profound influence on the delivery of legal information, exploring innovative methods of digital dissemination which have been adopted widely afterwards, and through products such as JustCite which have transformed how some practitioners approach legal research. Our current flagship platform, JustisOne, with a focus on judgments, treating cases as data rich resources, and enhancing legal research has pushed the boundaries of what can be expected of a legal research platform. We aim to continue transforming what legal research involves, through a combination of software for doing things which are time-consuming for humans, and allowing practitioners and researchers to spend more time on the aspects of the process that they can bring their expertise to bear on.

Although JustisOne is now established as a complete legal research platform we will be working on it to improve its range of features, and by working closely with our customers. Whilst we have been responsible for a large number of innovations in the legal research industry, they have always been driven by the goal of enhancing the process of legal research, and to meet the needs of our customers. This approach is one that requires a flexible approach to innovation, and this has proven successful for Justis in the past. Our approach of treating legal material as data-rich resources allows for many possibilities, and it is our aim to keep exploring those possibilities.

Footnotes

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- ⁹ 'Guide to Neutral Citations' (*Inner Temple Library*) <www.innertemplelibrary.org.uk/research-and-training/guide-to-neutral-citations/> accessed 23 March 2018.
- ¹⁰ 'Global Online Access to Legal Information' (*International Labour Organization*) <www.ilo.org/goali/about/lang--en/index.htm> accessed 23 March 2018.

Biographies

Masoud Gerami has been with Justis since the inception of the company in 1986, becoming Managing Director in 2001. Throughout his time with the company, Masoud has been instrumental in shaping and driving the evolution and successful impact of technology on legal research for the past 30 years, and is responsible for many innovations and technological developments we now take for granted.

Aidan Hawes, Head of Commercial Development with Justis, has led the migration of customers to JustisOne, whilst focusing on customer satisfaction and retention. Aidan continues to collate and analyse customer feedback surrounding the advantages of legal technology, ensuring the development of industry-led research tools to further the capabilities of a diverse spectrum of clients.