



IT and inn--vation

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Introduction	2
IT - helping you innovate	3
Why are we interested in IT innovation?.	4
Case studies	5
How is IT influencing innovation in the market?	7
How can you keep information secure?	10
Tips to keep information secure	11
Conclusion	13

Introduction

We are committed to helping solicitors and law firms develop their businesses in new ways. An innovative legal sector is essential for delivering the efficient, affordable services the public needs.

One key element of this is making the best use of information technology (IT) to help you deliver their services.

This report shows you:

- how IT can help your firm compete and grow
- why we are interested in firms' use of IT
- firms that are using IT to support innovations
- how you can make the most of your IT, while making sure your data is protected.

An essential element of legal practice is how information is communicated, understood and applied.

IT can be a powerful tool to make working practices more efficient, and for introducing new ways of delivering services.

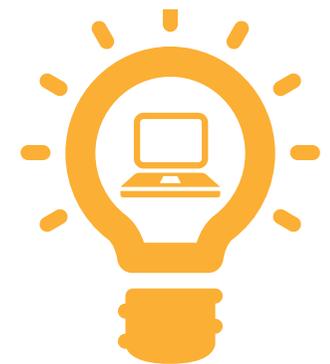
Using technology to support legal work can help drive the innovation that helps firms compete and thrive. It can help you to reduce your costs and provide you with better information.

At the same time, it helps empower consumers with the knowledge they need to make the best choices, as well as reducing the price, which can be a major barrier to access.

Crispin Passmore
Executive Director, Policy



Using technology
to support legal
work can help drive
innovation



IT - helping you innovate

Creative use of IT can support new ideas and help legal work become more efficient

Helping you do business

- Automating expensive and time-consuming tasks can help reduce costs
- Developing 'virtual assistants' to deal with legal processes can help clients solve legal problems
- Analysing large volumes of complex data can save hours of work on each case¹
- Using artificial intelligence (AI) to analyse large volumes of documents can free up time for legal analysis and practice, saving time and money.²

Improving client and solicitor communications

- Online services can help clients and solicitors work together to solve problems, produce documents and progress cases
- Using smartphone apps to provide instantaneous communication can help share information between client and solicitor.

Deep data analysis

- Using AI to analyse the merits and precedents in a case can improve case management³
- One system has claimed to reduce the time taken to decide the viability of a case from 20 days to 20 minutes

- Deep data analysis can help to analyse an opponent's history in litigation, giving insight into their likely stance and tactics as well as the prospects for settlement.⁴

Reducing costs to the client

- Video or telephone conferencing can make it easier for people to attend meetings or Court hearings, reducing costs and travel needs⁵
- Online dispute resolution systems are used in the Netherlands⁶ and proposed in England, and can help reduce the financial cost of legal cases.⁷

1. [The impact of technology](#), Legal Futures, 2015

2. [The impact of technology](#), Legal Futures, 2015

3. [How big data can improve the practice of law](#), Datafloq, 2015

4. [Big data: too much information](#), Law Society Gazette, 2015

5. [Proposal on the provision of court and tribunal estate in England and Wales](#), Law Society, 2015

6. [Rechtwijzer 2.0](#): technology that puts justice in your hands, HiiL, 2015

7. [Briggs lays out vision for lawyer-free online courts](#), Legal Futures, 2016

Why are we interested in IT innovation?

Demand is driving rapid change in the legal market. Solicitors and law firms are responding by introducing new services to meet the needs of their clients. However, there are still serious barriers to accessing a legal system that is, in the words of the Lord Chief Justice, “unaffordable to most”.⁸

Technology-led innovation can make a big difference in helping firms provide more affordable, high quality services.

We want to support firms to grow and develop. Regulation should pose as few barriers as possible to the introduction of new working practices.

Our ongoing reform programme and initiatives such as SRA Innovate are encouraging legal services providers to respond to the changing market in new, creative ways.

We are also considering creating an ‘innovation space’ to help existing firms develop their businesses and encourage new firms to come into the market. Our thinking is at a very early stage, but we hope to provide a safe space within which regulated firms and individuals can prototype innovative products, services, business models and methods of delivery with support around how our regulation interacts with their ideas.

In addition to the resources that we provide online, we have also set up a virtual reference group that you can join to help us develop our thinking.⁹

If you want specific advice from us about an innovative idea, IT related or otherwise, then please contact our Professional Ethics team.



Contact us

www.sra.org.uk/home/contactus.page

8. [The Lord Chief Justice's report 2015](#), Judiciary Office of England and Wales, 2016

9. [SRA Innovate, SRA, 2016](#)

Case studies



Tailoring case management systems to encourage use

“We identified two barriers to running efficient legal processes. One was the complexity of cases dealt with by large law firms, where it can become very difficult to ensure that all individuals are aware of how their work fits in or to control the costs.

The other was that our customers felt that standard case management software was hard to learn and operate, particularly compared to the apps they voluntarily use in their personal lives.

As a result, we are introducing a new system intended to streamline communication and improve performance while providing a simple, inviting and intuitive interface like consumer apps offer. We believe this will help make law firms work more effectively by making it easier and more rewarding for staff to use the systems.”

Legal IT provider



Laying the foundations for private statute analysis

In 2014, the Arts and Humanities Research Council began a project that aimed to digitise the entire UK statute book into a format suitable for automated analysis. The intent was to publish the data in a way that allowed independent researchers to work effectively with it, and this £550,000 project underpins the legislation.gov.uk website.¹⁰

This sort of initiative permits data analysts to understand trends in legislation, and to identify repeating patterns in statutes that can be re-used to improve the legislative process and help lawyers interpret the system more effectively.

With the increasing power of artificial intelligence to undertake this type of analytical task, the usefulness of these databases for solicitors will only increase. The ability to immediately access the whole body of UK legislation, with the support of automated tools to find appropriate rules, represents a big improvement in public access to justice.

10. [Legislation.Gov](http://legislation.gov)



Collective effort to produce better ways of working

“As a community of legal tech startups, we met with a law centre that provides free and independent advice, often to very vulnerable clients with complex needs. Improvements in IT could help them meet those needs better and more efficiently, helping it assist its clients.

Working with the centre, we identified areas where better technology could help, and to support this we will be running a weekend “hackathon”. Here we will pit teams of programmers against one another to come up with creative solutions.

Possible outcomes could include automated translation systems for consumers who face language barriers, or technology to help people better navigate legal information.

We believe that this approach will produce novel solutions that a single team may not have come up with. It will also help the law centre provide better and more efficient services to its often vulnerable clients. If these approaches work well, they could readily be introduced into other legal advice clinics, improving their services too.”

Technology providers



Providing legal support online

“Families and small businesses can find legal services expensive, and often too complex and difficult to access. We use technology to overcome these issues and help small businesses grow by providing simple advice and affordable services.

Through a monthly plan, our customers can:

create customised contracts online

access simple legal information, and

discuss their legal issues for free with our network of on call solicitors.

Members also receive a discounted rate for further solicitor advice, and low cost pay-as-you-go options are available.”

Legal provider

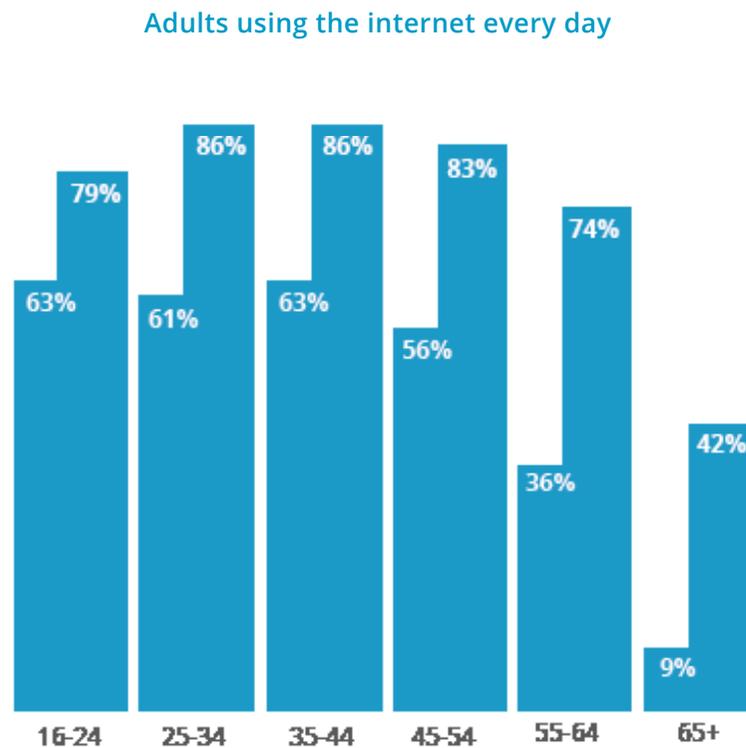


How is IT influencing innovation in the market?

The digital divide is shrinking

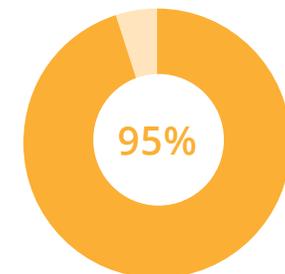
Not everyone has access to the internet, and those people who do not are more likely to be vulnerable. Added to this, older and people with a disability have notably less access. This represents an important consideration concerning the use of online services, particularly if you want to provide access for a wide range of people.

However, the digital divide is shrinking thanks in part to the increase in affordable devices that allow access to the internet.

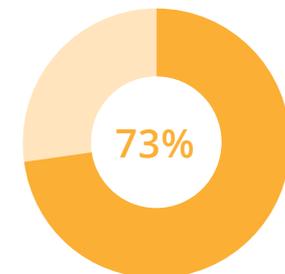


Source: Office for National Statistics¹¹

Adults with a disability using the internet regularly



under 25



All ages

11. [Internet users 2015](#), Office for National Statistics, 2015

IT driving innovations

Just under a third of solicitors' firms surveyed in 2015 said that the availability of better IT has driven innovation in their business.¹² It is clear that developments in information systems outside the legal services market can encourage new working practices in law.

Supporting new ways of working

As law firms seek to innovate, they are increasingly seeking out the technology that will help them to make the changes they want to deliver. Over half of firms responding to one survey stated they wanted new technologies to support mobile working. This is reflected in

OVER **30%** 
of **businesses** want
online legal services

firms' priorities – a quarter said they wanted better case management systems and many were looking to move information to the cloud.¹³

The use of cloud computing can help both mobility and cost. The ability to access secure firm systems from anywhere makes flexible working practices, such as on-demand staffing and dispersed firms, easier to set up. Over four fifths of businesses that have switched their IT systems to cloud provision reported cost savings.¹⁴

Advice online

With over a third of businesses and almost half of individual consumers saying that they want online legal services, there is a clear demand that firms are seeking to meet.¹⁵

In 2013, website development was only the fourth highest priority for law firms wanting to make changes. By 2015, firms were more likely to be implementing web services than they were to be changing any other aspect of their practices.¹⁶

At the most complete end of this trend, we see firms offering online-only legal services, and a rise in do-it-yourself services in fields such as divorce and will writing. However, providing information online is not an all or nothing affair, and some firms offer traditional services alongside online ones.

ALMOST **50%** 
of **consumers** want
online legal services

12. [AI and the law tools of tomorrow](#): a special report, Legal Business, 2015

13. [Legal technology](#): future horizons, International Legal Technology Association, 2015

14. [How lawyers will modernise their firms in 2015](#). Law Technology Today, 2015

15. [Unbundling a market](#): The appetite for new legal services models, Allen & Overy, 2014, [UK Legal Services Market Report 2015 – Press Release](#), IRN Research, 2015

16. [Brave New World, LexisNexis Bellwether Report](#): 2014, LexisNexis, 2014

Some firms are introducing significant innovation in digital service delivery. These make a genuine difference in the service provided, by looking at consumer needs. For example, linking a conveyancing website to a loan comparison site for rapid mortgage quotations.

Artificial intelligence

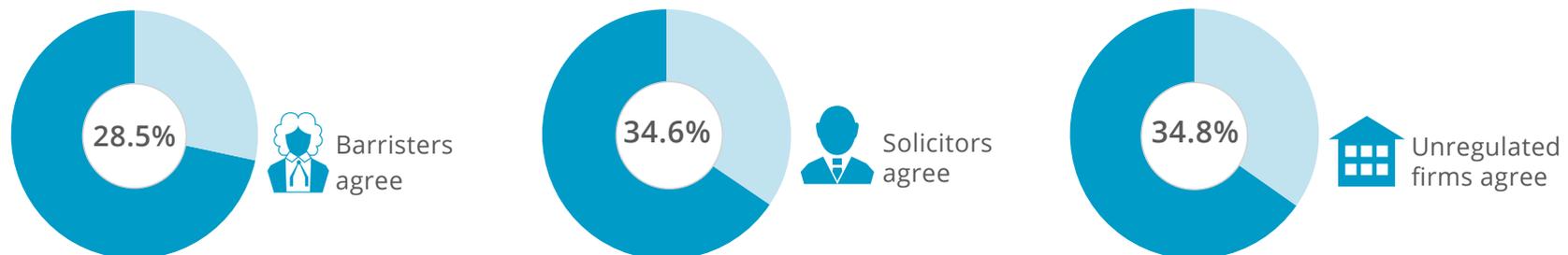
AI refers to IT systems that are capable of analysing information in ways that would otherwise require a human, not to the science fiction concept of conscious computers.¹⁷ An

increasing number of firms are using systems such as IBM's 'Watson' to automate aspects of their work and to produce new insights.¹⁸

The fact that computers process information so fast means that AI systems can analyse huge volumes of legal data and produce results much quicker and for a cheaper cost. A significant use is to automate otherwise time consuming tasks such as document discovery in major cases.¹⁹ More advanced roles include analysing patterns in case outcomes or analysing the background to a case.²⁰

There is ongoing debate as to how far AI will change the work of solicitors.²¹ At present, it can replace very specific parts of a broader legal process; it assists, rather than replaces, human legal effort. The constantly increasing power of computers means that the role of AI in professional work such as legal practice will grow.

The availability of better IT has driven innovation in their business



17. Those are likely at least thirty years away if they are possible at all, taking simply computer capacity into account.

18. [IBM lays out massive potential for Watson in the law](#), Legal Futures, 2015

19. [Armies of expensive lawyers, replaced by cheaper software](#), New York Times, 2011

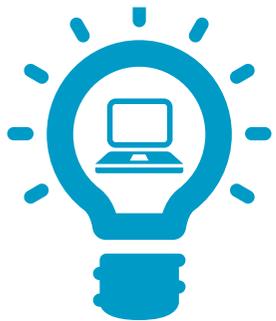
20. [Role of artificial intelligence in law](#), Raconteur, 2015

21. [The impact of technology](#), Legal Futures Insight, Legal Futures, 2015

How can you keep information secure?

We know that stories in the media about cybercrime can be unsettling. The government, however, are of the view that following straightforward steps can protect you from most threats.²² A sensible goal is to be a harder target.

The simple tips on the next page should help.



The Safe Harbour: an update

It is important to comply with the Data Protection Act when storing personal data, for instance when using cloud computing. As we discussed in our 2013 Silver Linings paper on cloud computing, firms based in the EU have previously been able to store data with US companies because of the Safe Harbour agreement.²³ This agreement has been important since US data protection rules are not otherwise equivalent to those in the EU.

In 2015, the European Court of Justice declared the Safe Harbour decision to be invalid.²⁴ The implication of this finding is that European businesses cannot rely on the Safe Harbour when sending information to the US. The long-term position remains unclear. At the time of writing, it appears that the major cloud providers are putting systems in place to enable European customers to store data with them.²⁵ Firms should remain aware of this developing area of law and take advice if necessary when considering information systems that would require the use of US data storage.

22. [Cyber security guidance for business](#), GCHQ, 2012 (updated 2015)

23. [Silver Linings: cloud computing](#), law firms and risk, SRA, 2013

24. [The Court of Justice declares that the Commission's US Safe Harbour Decision is invalid](#), Court of Justice of the European Union, 2015

25. [US and EU in data privacy clash](#): what you need to know, CNBC, 2015

Keep passwords secure

and not easily guessable, and make sure that staff can only access systems and files that they need.



Keep software updated

and make sure you are using a supported version. This particularly applies to browsers and antivirus.



Train staff

including non-fee earners such as finance and administrative personnel.



Set up a crisis management process

in your firm. This does not have to be over-complex.



Report attacks immediately

to your bank, your insurer, relevant regulators and to the police.



Follow usual ID verification steps

in response to a request from a client, other firm or supplier for a change of bank details. Do not rely on a simple email or phone call.



Even sophisticated “ransomware”–harmful programs that seek to encrypt data and offer the security key in exchange for a ransom–can in most cases be defeated by keeping backups that are not routinely connected to the main computer system.²⁶ This security measure is open to all businesses.

For most attacks, the ‘cyber’ label may be a distraction. Activities such as ‘Friday afternoon fraud’ more resemble confidence tricks than the popular idea of hacking.²⁷ Most malware similarly depends on tricking a user into agreeing to install it.

The consequences of cyberattacks can be severe:

- Financial harm to yourself or to clients
- Theft or loss of sensitive client data
- Reputational damage

- Potential breaches of the Data Protection Act
- Potential regulatory breaches.

Further information is available in our Risk Outlook.²⁸

For more detailed advice, you may want to consider the materials produced by the government’s Cyber Essentials scheme.²⁹

It is not possible to avoid risks to information by avoiding IT, as paper documents have their own problems. The Information Commissioner warned in 2014 that they were seeing a troubling number of data breaches from solicitors and barristers.³⁰ Their express concern, however, was legal businesses’ reliance on print material.

Put simply, you cannot encrypt a paper document. The appropriate use of IT can therefore help to reduce the risk of data loss or leakage.

Case study: an archive fire

In July 2006, a fire in a storage company warehouse destroyed the building. Many large law firms had been using the company to store archived client files and business records, all of which were lost.³¹

A fire in a data centre holding electronic archives would have been unlikely to result in irrevocable loss of information.³² This is because data providers usually back up electronic data, which is an elementary step. Without large amounts of flammable paper on site, such a fire would also be less likely.

26. For instance storing backups on hard drives that are otherwise kept in safe storage, or on “versioned” cloud storage. [Risk Outlook 2015–2016, SRA, 2015](#)

27. For further details, see our [Risk outlook 2015–2016, SRA, 2015](#)

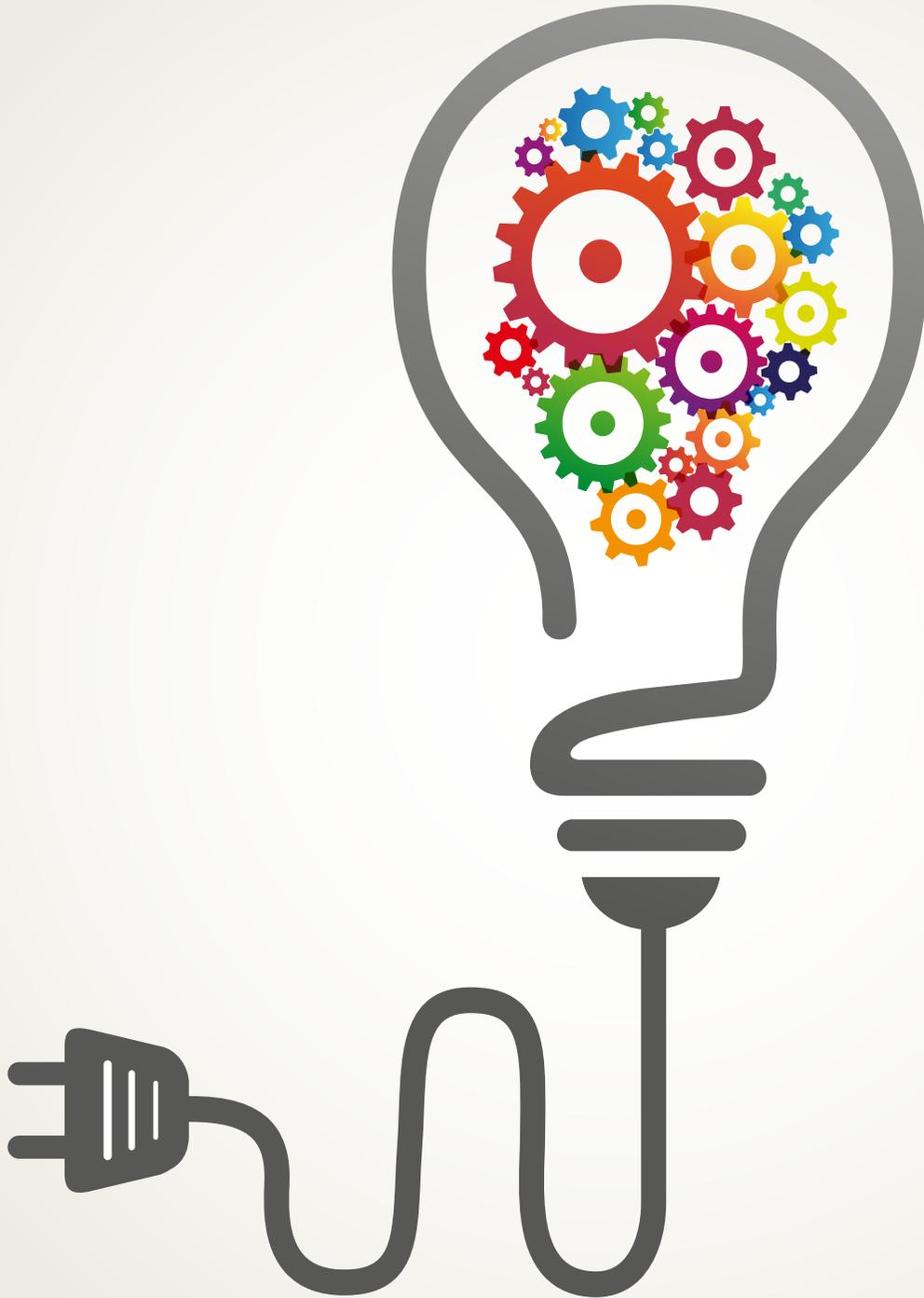
28. [Risk outlook 2015–2016, SRA, 2015](#)

29. [Cyber Essentials scheme: overview](#), Department of Business Innovation and Skills, 2015

30. [Information Commissioner “sounds the alarm” on data breaches within the legal professions](#), Information Commissioner, 2014

31. [The paper monster](#), The Journal of the Law Society of Scotland, 2006

32. We can find no case in which a fire or other disaster affecting a major IT provider’s data centre has caused a significant and permanent loss of stored data, as opposed to a temporary interruption in service.



Conclusion

IT has a lot of power to drive innovation, competition and growth. The firms we regulate are increasingly using technology to inspire and support new ideas and ways of working.

These new practices and systems have the potential to help make it easier for the public to access the justice system.

There is considerable potential for innovation to help the firms we regulate compete in a changing market, and deliver the more varied, accessible and affordable services that the public needs and wants.

We believe this more competitive, available market will benefit both firms and everyone using legal services.