

# Speech recognition: an essential tool for the modern legal professional

Many law firms and corporate legal departments are rethinking their internal practices to stay competitive. Speech recognition can play an important part in enabling firms maintain market leadership and attract the best talent.



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# Introduction

Legal firms and corporate legal departments spend considerable time and money on documentation. Producing accurate, often technically complex documents including briefs, contracts, case materials, and records of client communication is a necessary part of their work.

Traditionally, legal firms rely on a mix of internal support staff and external transcription services to help produce documentation. This can be expensive, and does not always deliver documentation as quickly as either legal teams or their clients would like.

An in-house document production solution based on speech recognition is faster to use than transcription services, can free up time and can help legal firms and corporate legal departments be more financially efficient.

A cloud-based speech recognition solution deployed as Software as a Service (SaaS) brings workflow advantages such as the ability to: work on documents from different locations (work, home, or client offices, for example); share working versions of documents with other people for collaborative working, updating or editing; and share access to standardised words, phrases and even document templates for speed and ease of document production.

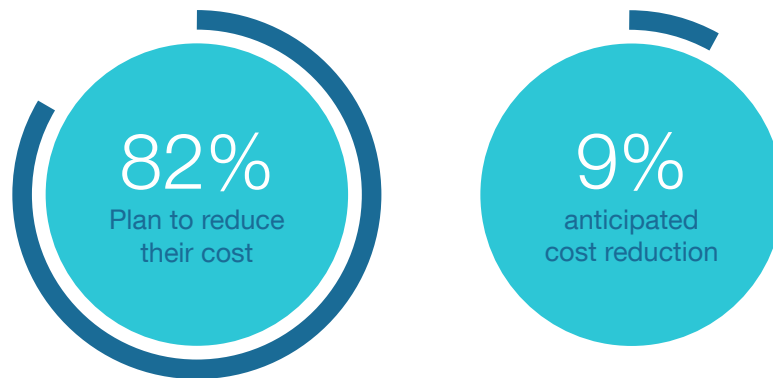
There are also advantages for data security through end-to-end encryption, regulatory compliance through the service provider's adherence to regulatory frameworks, and ease of deployment which is centralised by the provider.

In this document you will learn more about how Dragon can help your legal firm meet its document production requirements in a cost efficient, time efficient way.

# The **effect** of legal documentation on staffing costs, productivity and billable hours

As in many other sectors, legal firms function in an increasingly competitive business environment. Corporate legal departments, too, need to justify their budgets and find ways to improve efficiencies.

Research by EY found that corporate legal teams are under pressure. The EY study found that **82% of businesses globally planned to reduce legal function costs** over the next 24 months, with a **9% cost reduction** anticipated for European firms.



Among the areas that can come under consideration for making financial savings are:

- Reducing operational costs, including cutting staff
- Steering staff towards work that is directly billable, and away from support tasks
- Maximising the time qualified staff can spend on work which uses their specialist skills, and freeing them up from tasks which don't use those skill
- Speeding up the production of documentation of all kinds, both to save costs and increase time-efficiency

For example, imagine:

- Completing detailed briefs and contracts in a fraction of the time it would normally take – because speech to text software creates documents up to three times faster than typing.
- Using the skills of support staff to proof read, fact check and add value to documentation instead of producing it from scratch by transcribing speech recordings.
- Giving legal professionals the freedom to produce their own documents quickly, including when they are in the field, between meetings or even when they are on site with clients.

Imagine a scenario where a client meeting involves an hour's discussion, a break for lunch, and then immediate access to a transcript the client can read and sign off. Imagine this as an everyday occurrence for all clients rather than a special service offered to a key client.

This is a world away from asking clients to wait a few days for a transcript to be emailed for their approval.

# Digitalisation of the legal practice

The legal sector grew up and matured before the technological revolution, and while some segments of the sector, and some practices, have embraced new technology, there are other segments and practices which are still using their traditional ways of working.

But the legal sector is under pressure to turn to new technologies.

Legal firms exist in a competitive sector, where both clients and staff are free to shop around, and where cost-efficiency is an important factor in continued success. To build and maintain market leadership law firms should consider the technologies they use, and take advantage of those which can help them.



**Pressure to adopt lawtech is building from a number of sources including the need for greater efficiency; increasing workloads and complexity of work; the evolving demographic mix of lawyers toward younger and more ‘tech savvy’ personnel and, most importantly, greater client pressure on costs and speed.**

## The modern workforce

Today’s workforce is accustomed to using digital tools in everyday life for normal activities like shopping, banking, entertainment and keeping in touch with friends.

Workers expect their use of technology to extend to the workplace, and can become frustrated when tasks and processes are difficult or slow despite there being technological solutions available that could ease these pain points. Younger, talented people are increasingly looking for roles that make use of different technologies to help them do their jobs. The Deloitte Global Millennial Survey 2019 found that 49% of millennials think technology will augment their jobs.

For some workers, the use of – or absence of – different technologies at work can be a reason for selecting – or rejecting – a particular employment opportunity.

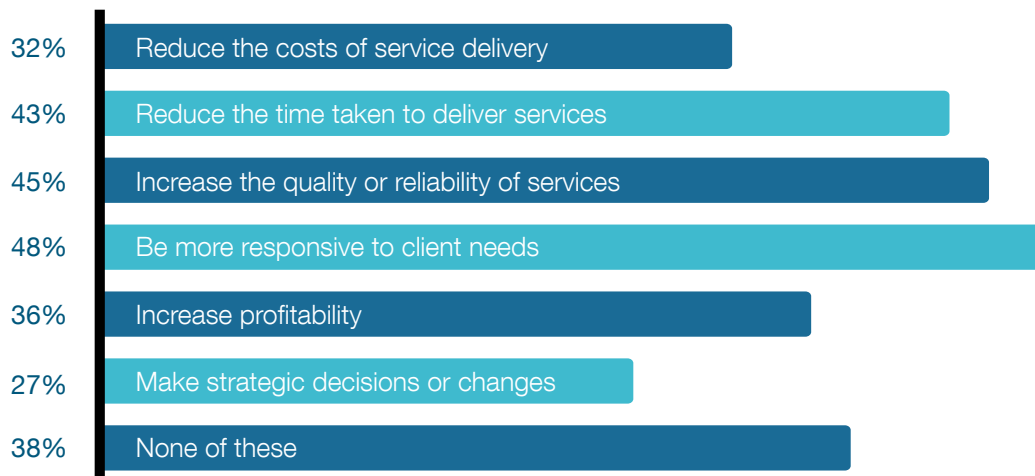
## Meeting client expectations

The clients of a legal practice might use a range of different digital tools and services in their home and working lives. When they buy services, they rightly expect efficient fulfilment. When they are being billed for time spent, they want that time to be used efficiently, so that they derive maximum benefit.

The UK Legal Services Board, the oversight regulator of legal services in England and Wales surveyed legal service providers and found that:

- 62% agreed that clients expect them to use technology in delivering legal services
- Over 71% thought technology can make it cheaper to deliver legal services

Taking a broad definition of technology that ranges from cloud to custom built apps the survey found several benefits were cited by legal service providers:



## The value of cloud

Organisations are increasingly turning to cloud based applications and Software as a Service (SaaS) to help them find ways to improve productivity while accessing the latest technologies and getting the best return on their investment.



There are specific benefits to using Nuance speech recognition software in the cloud. These include:

- The ability to share documents with colleagues easily for joint or collaborative working
- Shared bespoke and specialist vocabularies are stored in the cloud, so they can be created once then accessed by all who need them
- Secure end to end 256-bit encryption for data both while it is in transit and when it is at rest
- The latest software and security patches are applied as soon as they are available reducing the administrative burden for in-house IT support personnel
- Easy addition of new seats as an organisation grows and flexes
- Regulatory compliance – such as with GDPR – is assured
- Low bandwidth requirements when working from home or in the field, so that productivity can continue at times when cloud access is challenged

# Traditional legal methods versus speech recognition

The legal sector has been open to new technologies in the past. Using shorthand to make notes and recording onto digital tape recorders for transcription are two examples. These technologies gained broad acceptance because they created obvious, tangible productivity gains over previously used methods.

Today, many legal firms use external or internal resources to provide transcription and other services. Secretaries and trained, skilled paralegal staff perform a wide range of duties including transcription, drafting legal documents, conducting client interviews, and carrying out research.

Legal professionals are more used to typing their own materials without support staff than in the past, but this may not extend to the full range of documentation, such as producing transcripts of client interviews.

There are two general approaches to document preparation in use today, third party transcription and direct input. Each has its drawbacks:

## Third-party transcription

A lawyer dictates into a telephone or digital recorder, and the audio is sent out for transcription or transcribed in-house by a secretary or legal assistant.

Outsourced transcription can be expensive and time consuming. Delays in getting transcripts can slow down proceedings, impact client satisfaction, and cut into profits.

In-house transcription can be more cost efficient, but there is still a delay before a transcript is available. The ebb and flow of work volume might mean that delays are longer at some times than at others.

For both outsourced and in-house transcription there can be multiple back-and-forth communication as drafts are reviewed, edited and updated, before a final, clean copy of a transcript is arrived at, resulting in:

- **Delays in document production.** A revision might sit on a legal professional's desk waiting for an edit, and then again on the transcriber's desk while they work on something else. Over several back-and-forth sessions, this can add many hours to document production.
- **Workflow issues.** The legal professional is required to regularly break into other work at unpredictable times to focus on editing a transcript. That has knock-on consequences for workflow management, and can potentially affect overall quality of work as a legal professional has their concentration interrupted.

## Direct input

A lawyer types their own documents.

This can be incredibly time-consuming depending on the typing ability of the lawyer, and the amount of time they can find for completing their own transcriptions. Even where the policy is for self-creation, legal professionals with a disability or a repetitive strain injury may require an outsourced transcription service.

# How speech recognition can assist

Speech is our natural form of communication. We learn to speak naturally, when we are young. We form sentences easily, and can express ideas verbally.

Typing is a learned skill. While many of us have some measure of typing skills, accurate, error free typing for untrained typists can be much slower than speaking, and even a trained typist will type slower than we can speak. An average, untrained typist might achieve 40 words per minute. A paralegal or legal secretary might be expected to have a minimum typing speed of 60 words per minute. We speak at about 130 words a minute. Untrained typists are much more likely to have a lower accuracy rate, reducing their typing speed further.

Typing holds us back.

## Personalised vs speaker - independent speech recognition

An increasing number computer services offer speech recognition. This can now be found in both the Apple iOS and Android operating systems as well as in Microsoft Windows. But there are key differences between generalised speech recognition systems and those which are personal to each speaker.

Personalised, speaker-dependent solutions adapt to each person's voice and language. Over time they learn about an individual's speech patterns, improving accuracy as they go.

Personalised speech recognition can also be customised to particular vocabularies. In the legal sector, which has its own sub-vocabulary of terms, this can be very useful.

# Comparing traditional transcription and speech recognition

## Using traditional transcription

Total time:  
**2-6 hours,**  
depending on workload



1. The lawyer dictates a three-paragraph memo and gives the tape to a secretary.



2. The secretary listens to the tape and types in the text.



3. The secretary hands off a draft to the lawyer in 1-2 hours, depending on workload.



4. The lawyer switches gear, reads the draft memo and provides edits.



5. The secretary reviews the notes, gets clarification from the lawyer and types edits.



6. The secretary hands off the memo to the lawyer in 1-2 hours, depending on workload.



7. The lawyer switches gear again, reads the memo, and provides approval to the secretary.



8. The secretary prints and send the memo.

## Using speech recognition

Total time:  
**30 minutes - 1.5 hours,**  
depending on workload



1. The lawyer dictates a three-paragraph memo into a digital handheld recorder or PC microphone.



2. Nuance Dragon imports the recording from the device when synchronizing with the PC for automatic transcription.



3. The secretary proofreads the text against the audio file.



4. The secretary sends the document to the lawyer for approval, in 15 min. to 1 hour, depending on workload.



5. The lawyer switches gear, reads the memo, and provides edits.



6. The secretary prints and send the memo.

# The importance of accuracy in legal documentation

Documentation in the legal sector must be accurate at all times. This is important because cases depend on accurate information. Records of client conversations must be detailed in their reporting of what was said. Legal matters must be recorded with precision. It is also important because regulatory compliance requires accurate documentation.

Dragon speech recognition has a number of features which help legal firms and corporate legal departments achieve the level of accuracy they need. Importantly, as well as improving document accuracy, these features also increase document production speed.

## Continuous learning

As a personalised speech recognition solution Dragon learns about an individual speaker over time. It learns the words and phrases they use, and this can include specific phrases and words used in a legal context. This helps with accuracy.

## Customised vocabulary

Dragon can be customised with vocabulary that is specific to an industry. This can be especially useful for practices which operate in particular vertical sectors. It will be important that all references are consistent, and all spellings accurate. So, for example, a legal practice specialising in the pharmaceutical sector might need regular use of a specialist vocabulary.

## Ongoing training

On an ongoing basis, and at any time, those using Dragon can make sure its vocabulary is up to date and correct any inconsistencies or issues that might occur. For example it is possible to:

- Add new words or customise the vocabulary, for example as new staff members join to make sure names are recognised and spelled correctly, and as new acronyms and specialist terminology come into usage.
- Delete items from the vocabulary, such as where there might be different spellings of a word to avoid ambiguity, or where one particular form is preferred over another – such as using ‘vs’ instead of ‘versus’ when the latter is spoken.
- Indicate precisely how individual terms or phrases should be formatted, including using bold, capitalisation, italics and underlining, and specifying alternate written forms for various contexts
- Analyse an individual’s written documents to update the user profile based on writing style and words used

# Key advantages of speech recognition for the legal sector

Legal professionals already use Dragon speech recognition to dramatically reduce the time it takes to create everything from briefs and contracts to case documentation and correspondence.

Legal firms and corporate legal departments can also deploy speech solutions more broadly to streamline workflows and speed up document production without having to change their current business processes or existing technology infrastructure.

There are many benefits to using speech recognition within a legal setting. These include:

- Faster document creation. With speech several times faster than typing document creation is quicker when you speak.
- Streamlined processes, saving time. Removing time-consuming editing and correction processes can radically improve document creation times.
- Freeing up lawyers, legal secretaries and paralegals to focus more of their time on billable work.
- Reduced interruptions created by multiple back-and-forth editing rounds, allowing professionals to focus on discrete tasks.
- By reducing document production time and increasing billable time, profitability can grow.
- Improved customer service as clients get served more quickly with documentation, and processes are faster and more streamlined. This increases customer satisfaction and enhances reputation.
- Greater assurance that documentation is accurate, complete and timely, ensuring compliance and reducing risk.
- Reduced administrative burden for the IT support team by selecting a solution that is easy to deploy and maintain, and centrally managed.



## Documentation challenges



Multitude of reports, meeting notes, emails, forms and more



More time to spend on administration and less time on customers and clients



Staff working overtime to manage workload



Staff retention and risk of MSC related claims



Administration is done in a timely manner to ensure accuracy



Inaccurate documentation leading to governance and compliance concerns



Need for costly transcription services



Increased overheads

## Personal Speech Recognition implemented



Increase in customer focused/core business activity

Documentation time reduced by up to 33%

Reduced risk of MSD claims & potential costs to business



Reduced cost of overtime

Reduced risk of compliance with more accurate documentation

Transcription costs reduced or removed

Staff fulfilment & greater retention



Support staff with workplace injuries, visual impairment or language disabilities

# The Dragon family of products for the legal business

## **Dragon Anywhere Mobile** - Voice recognition software on the move

Use your phone to dictate text. Round-trip to other Dragon products using cloud, share personalised commands and customised texts with other Dragon products. The perfect companion to desktop Dragon.

## **Dragon Anywhere Group** - Thin client on - premise solution

All the benefits of Dragon voice recognition software designed for deployment across the business. Share custom words, standard texts and pro-forma documents for faster productivity, leverage Nuance Management Centre for optimal use of licenses.

## **Dragon Professional Group** - Designed for shared access

Bring mobile dictation software to the enterprise, and give mobile teams on-the-go access to cloud-based, professional-grade speech recognition using standard documents and texts, and the ability to work efficiently anywhere.

## **Dragon Professional Anywhere** - Thin client on-premise solution

All the benefits of Dragon voice recognition software designed for deployment across the business. Share custom words, standard texts and pro-forma documents for faster productivity, leverage Nuance Management Centre for optimal use of licenses.



## Checklist for choosing a speech recognition solution

When considering a speech recognition solution, ask potential providers these questions:

-  What deployment models are there?
-  Can the speech recognition dictate directly at my cursor in my case management systems?
-  Do I have to install and manage the software myself or can I get it as a service?
-  How quickly can the software learn subject-specific vocabulary?
-  How many users can work with the software at the same time? What scaling options are there?
-  Can the software be integrated into existing workflows? How complex is the integration?
-  How is the software structured? Does it have to be installed on every client or is there a central server component?
-  Can the speech recognition software automate repetitive tasks by the creation of voice commands?
-  Can the solution be installed on a local server without the cloud?
-  How secure is the software? Are transmissions and storage encrypted?
-  How long does the installation take? How costly is maintenance?
-  Are all data privacy issues observed? What certifications and evidence are there for this?
-  How accurate is speech recognition? Can the software adapt to individual speakers?
-  If the software is provided as a service (SaaS) from a public cloud, what certifications can the cloud provider provide? Is the data encrypted during transmission and storage? Are the data centres in the European judicial area?

# What to look for when choosing a speech recognition solution

The following criteria are particularly important when deciding what to purchase:

## Speed

Your spoken text should be transcribed almost in real time. Speech recognition, which “ponders” after each sentence means you lose your train of thought and will delay the creation of the text rather than accelerate it.

## Security

During dictating, sensitive information is often passed on and processed. Make sure that the communication between the components of the solution is protected by a strong 256-bit encryption. Strong encryption should also be used when storing data.

## Scalability

You will only be prepared for the future if the speech recognition solution can be quickly and flexibly adapted to increasing needs without sacrificing performance.

## Integration capacity

The solution you choose should be installed locally as well as seamlessly integrated into existing thin client infrastructures, virtualised environments and workflows.

## Accuracy

Speech recognition is of little help if the transcribed document is full of errors and has to be post-processed. Therefore, make sure it has a proven high recognition rate. Current market leading programs can correctly recognise up to 99 percent of dictated text.

## Customisable

The software should be quick and easy to adapt to the conditions and requirements of your environment. This ranges from training on individual speaker profiles and the technical vocabulary commonly used in your industry to integration into existing workflows, for example in document or approval management.

## Flexible deployment

Depending on requirements and budgets, deployment via a public or private cloud is possible. In some cases, direct installation of a local desktop solution can still make sense today. The provider should therefore offer you all the options and not restrict your freedom of choice with a small selection of deployment and licence models.

## Easy to install and maintain

Speech recognition software is of little use if the time and productivity advantages are negated by complex, time-consuming and labour-intensive administration. Therefore, make sure that the solution of your choice is easy to configure and install. In addition, automatic updates reduce the administrative workload.

## Data privacy

When processing personal data, European General Data Protection Regulation (GDPR) requirements must be observed. When choosing a cloud solution, make sure that the provider's data centres are located in the European judicial area and are certified according to common standards such as ISO 27001. The German Federal Office for Information Security (BSI) Cloud Computing (C5)<sup>13</sup> requirements catalogue also provides a valid basis for assessment and decision-making.

Nuance Communications (NASDAQ: NUAN) is the pioneer and leader in conversational AI innovations that bring intelligence to everyday work and life. The company delivers solutions that understand, analyse, and respond to people – amplifying human intelligence to increase productivity and security. With decades of domain and AI expertise, Nuance works with thousands of organisations globally across healthcare, financial services, telecommunications, government and retail – to empower a smarter, more connected world.



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