Managing legal documentation more efficiently
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Introduction

The time and cost involved in documenting case and client information, contracts, briefs and other legal materials is staggering. Traditional reliance on administrative support staff and outside transcription services drags down productivity and eats into profits. Many law firms and corporate legal departments are rethinking their internal practices to stay competitive:

– How can you reduce staffing costs, make staff more productive, and steer them toward more billable duties?
– Why are you paying a qualified legal secretary to type a document when he or she could be doing more productive work that leverages a stronger skill set?
– How can you improve transcription turnaround time to eliminate the bottlenecks that hamper efficiency and weigh down service?

Imagine detailed briefs and contracts created entirely by voice in a fraction of the time. Consider the efficiencies gained by using support staff to proofread documents instead of keying them in from scratch.

Thousands of legal professionals now leverage speech recognition solutions to dramatically reduce the time it takes to create everything from briefs and contracts to case documentation and correspondence. Law firms and legal departments can deploy speech solutions broadly to speed document turnaround, lower transcription costs, reduce dependencies on support staff and streamline repetitive workflows — without having to change current business processes or existing information systems.

This white paper discusses some of the legal profession’s most pressing cost and productivity issues and how speech recognition can:

– Speed document turnaround: Dictate and format documents 3x faster than typing with a legal language model that is 99% accurate out of the gate
– Eliminate document bottlenecks: Streamline workflows with a fast, accurate dictation, powerful transcription and third-party correction features
– Increase profitability: Reduce the documentation effort so attorneys and support staff can focus more time on billable work
– Save on transcription: Decrease or eliminate reliance on outsourced transcription services for significant cost savings
– Automate repetitive workflows: Consolidate multi-step processes into single voice commands to drive new levels of efficiency
– Improve client service: Spend less time on documentation and more time on delivering exceptional service to clients

How does speech recognition work?

Speech recognition solutions like Nuance® Dragon® Legal Group enterprise-ready speech recognition software, uses the human voice as the main interface between the user and the computer.

While relatively simple to use, speech recognition software is a highly sophisticated technology that leverages “language modeling” to recognize and differentiate among the millions of human utterances that make up any language. Using statistical models, speech recognition programs analyze an incoming stream of sound and interpret those sounds as commands and
dictation. This process of interpretation is called speech recognition, and its success is measured by the percentage of correct interpretations.

Dragon is an example of a speaker-dependent speech recognition system. Dragon creates a voice profile for each user of the system that contains information about the unique characteristics of each person’s voice along with a customized set of words, known as a vocabulary, and user-specific information including software settings and personalized voice commands.

When Dragon users create and train their user profile, Dragon starts with models based on the analysis of thousands of voices and texts, which are then customized for the way they sound (acoustic model) and the words and phrases they use (vocabulary and associated language model). This approach accommodates users with varying accents and speech patterns. The software employs the customized user profile to guess the words spoken. Every time an individual uses Dragon and corrects his recognition errors, the software updates his user profile to enable better recognition accuracy over time.

Even those who have evaluated speech recognition software in the past may want to consider taking another look at the technology. Recent advances have yielded significant increases in performance, accuracy, and ease of use. The net result is that lawyers can create contracts, briefs, and emails three times faster than typing or traditional transcription. In fact, thousands of legal professionals use speech recognition today to get more done in less time.

Each organization—and even the individuals within each organization—uses speech recognition for different purposes, based on their responsibilities, workflow, preferences, and other applications used. Speech recognition users include partners, associates, corporate counsel, judges, legal researchers, court reporters, law students, paralegals, mobile professionals, people with disabilities, transcriptionists, assistants, and other support staff.

**Speed document turnaround**

Law firms rely heavily on expensive paralegals, legal secretaries, or outside services to transcribe the many documents required for legal proceedings—client memos, contracts, motions, briefs, discovery and deposition summaries, and more.

There are essentially two approaches to document creation in place today, and as case volumes and administrative costs continue to grow, each approach presents a unique set of drawbacks:

- **Third-party transcription:** a lawyer dictates into a telephone or digital voice recorder, and the audio is sent to an outside transcriptionist; alternatively, the recording may be sent to an in-house transcriptionist,

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**Where is speech recognition in use in legal environments today?**

- Creating documents, including contracts, briefs, motions, notices, pleadings, memos, etc.
- Managing email
- Summarizing documents
- Streamlining third-party transcription
- Increasing accessibility (helps with injuries, dyslexia, etc.)
- Boosting general office productivity
secretary or legal assistant. Out-sourced transcription is simply too expensive and time consuming, slowing down proceedings, impacting client satisfaction, and cutting into profits. Although in-house transcription may be more cost-efficient than outsourced efforts, there is still a lengthy and unproductive back-and-forth of review cycles with support staff.

- **Direct input:** The lawyer types the information himself. Some individuals can’t type, or prefer not to, either because they are untrained as typists, have a disability, or wish to prevent the development of a repetitive stress injury. Firms and corporate departments with limited staff require attorneys to create their own accurate documents under tight deadlines. This may even be the case when an in-house transcription process is in place since many attorneys work late into the night – long after support staff has gone home.

**Dictation is three times faster than typing**

The speed, accuracy, and ease of use of today’s speech recognition solutions deliver an efficient alternative to traditional approaches for document creation. Simply put, most people can talk faster than they can type. Speech recognition enables legal professionals to create electronic documents at speeds of up to 160 words per minute — three times faster than typing. Users just talk to their computers and their words instantly appear in the full Microsoft® Office® suite, as well as Microsoft Internet Explorer®, Corel® WordPerfect®, and virtually all other Windows-based applications, including widely-installed case and practice management programs.

Lawyers can opt to work in whichever manner is comfortable and convenient to them. For instance, they can use a standard headset microphone, the built-in microphone on their system, or if they are more comfortable, a Bluetooth headset so they not only have their hands free to browse texts or notes on their desks, but can also cross the office to consult references as necessary while continuing to dictate.

They can also use the Nuance PowerMic, a robust, ergonomic handheld microphone featuring simplified, thumb-control operation (for dictating, editing, navigating, and reviewing documents using speech recognition), programmable buttons and integrated mouse functionality. It is ideal for legal professionals who are looking for new levels of dictation speed, ease-of-use and productivity.

And for those who choose to work on the go, they can capture notes using a digital voice recorder so they can record their thoughts for later transcription, or use tools such as Dragon Anywhere, our cloud-based, professional-grade mobile dictation solution, enabling them to create and edit documents of any length by voice directly on an iOS® or Android™ device and sync that content back to their desktop device when back in the office.

**How do lawyers benefit from speech recognition?**

**Transcription Workflow**

Speech recognition is particularly useful for attorneys and in-house counsel who are feeling the productivity pinch of the endless dictate - transcribe - review - edit cycle. Attorneys who are already dictating documents for others to transcribe can continue to do so without having to change their workflow. But with speech recognition the dictation is automatically transcribed,
jumpstarting the interaction with the legal secretary or assistant responsible for transcription.

With Dragon Legal Group, they can automatically transcribe into a selected directory with a specified profile and the audio portion of the dictation can be embedded in the document through the AFTA (Auto Transcribe Folder Agent) process. Storing the audio file with the automatically transcribed documents saves time and simplifies editing by the user or a third party. Lawyers can even include “voice notations”—spoken instructions for third-party editors that they don’t want transcribed—in Microsoft Word.

Dragon Legal Group also offers the ability to accurately transcribe another single speaker’s voice from pre-recorded audio files or from podcasts without having to create and train a profile using a recording of that single speaker reading pre-selected text.

**But is it accurate?**

Leading speech recognition tools can offer up to 99 percent accuracy right of the gate. Using specialty vocabularies can heighten accuracy even further. For instance, Dragon Legal Group has a legal-specific language model trained using more than 400 million words from legal documents.

Every law firm uses specific names, terminology, acronyms, or other vocabulary unique to its specialty or its client base. These unique terms are frequently used in court papers, correspondence, and other legal documents. To boost accuracy and further speed document turnaround, speech recognition software also allows legal professionals (or those who work with them, such as assistants, IT administrators, or trainers) to:

- Add new words or customize the vocabulary with employee names, acronyms, and specialized terminology frequently used in their firm or department
- Delete entries that could cause acoustic ambiguity (such as competing spellings)
- Indicate precisely how items should be capitalized and formatted, including alternate written forms for various contexts
- Analyze an individual’s written documents to update the user profile based on writing style and words used
- Import and export vocabularies as needed – in formats such as XML – for easy sharing of customizations across specific user groups, departments, or the entire organization.

If an organization uses particular names or terminology with a high degree of frequency, customizing the vocabulary across the entire enterprise can increase recognition accuracy so users and their support staff spend less time correcting errors. And multiple vocabularies can be created, and managed by administrators to meet employee requests.

**Workflow automation:** An enterprise deployment of speech recognition allows legal professionals to go beyond dictation to accomplish routine tasks more quickly and efficiently. One approach is to cut down on the number of steps it takes to complete a given task — without changing established business processes.

- **Open-ended custom commands:** Dragon Legal Group allows for custom command types that support open-ended dictation, letting you to end
the command’s name with any word or phrase in Dragon’s vocabulary, as opposed to a word or phrase from a defined list of command variables. This enables users to have, for instance, commands that search for given words within their company’s intranet (similar to the built-in search commands such as “search Wikipedia for...”).

- **Dragon templates:** Filling out forms and files that have fields can be a challenge, but Dragon Legal Group makes it easy to complete the task using your voice. With the ability to add variable fields to a template in any text document, Dragon Legal Group speeds and simplifies the process of filling in commonly used forms. You just have to say “next field” to navigate to each form field.

- **Macro Recorder:** Use Dragon’s Macro Recorder to record your keystrokes and mouse-clicks, and then save the series of actions under a single voice command. This is a great feature for instantly executing commonly-used tasks that would normally require a series of multiple commands or hand actions.

- **Step-by-step commands:** The Step-by-Step option in Dragon’s command-creation wizard lets you automate a series of actions (such as launching applications or invoking certain application features). This feature makes it easy to automate an action or series of actions with a single voice command, even if you’re not a programmer. Advanced scripting: Those with some programming knowledge can use Dragon’s VBA-like advanced scripting to voice-enable specific custom functions on the computer in order to better integrate with your existing applications and workflows.

### Consolidate multi-step processes into a single voice command

**Dragon Voice Shortcuts:** Most speech recognition programs allow users to speak standard commands that prompt the computer to perform an action. For example, the user says, “Start WordPerfect,” and the PC launches WordPerfect. The more advanced speech recognition programs, such as Dragon Legal, also enable users to collapse multiple tasks into single voice commands. For example, using the Dragon Voice Shortcuts for Email feature, a lawyer could simply say, “Send email to Client XYZ” and Dragon will launch the user’s email program, create a new email and put the name(s) the lawyer said into the “To:” box. Users can also search the Web or their desktop with a simple voice command such as, “Search the Web for global warming articles,” or “Find email about the Robinson appeal.”

**Boilerplate Commands:** Lawyers and the staff who support them spend a considerable amount of time creating and filing documents — many of which share standard elements. As a result, many legal secretaries and assistants find themselves entering the same information into these documents time and time again. Users can create text blocks—including commonly used phrases, paragraphs and even graphics—and insert them into documents or emails using a single voice command for faster, easier document creation. These custom commands can also contain variable “voice fields.” In this way, a single voice command creates a complete document that can be customized by navigating through each field to fill in variable information (e.g., the name of a client or a fee on a standard client letter or contract template).

**Macro Commands:** Repetitive tasks, such as data entry or form filling, can be sped up by using speech. In many cases, users who are unfamiliar with complex software programs are more comfortable “telling” the computer what to do rather than trying to master the interface. Macros can be created
to enable users to go from field to field by voice, or to perform a sequence of keystrokes or mouse movements. Even skilled typists are often slower at entering numbers and letters. Spreadsheets can be created and edited using voice commands. Accounting and time billing software can also be controlled by voice.

Automate Processes with Macro Commands Repetitive tasks take far less time when they’re automated with simple voice commands. With Dragon Legal, a set of abbreviated instructions can be given to the computer to complete repeatable tasks that would normally take multiple keyboard combinations and mouse clicks.

For example, legal professionals—or more typically the IT departments that support them—can use Microsoft Visual Basic® to build a single voice command that saves a contract, emails it to a standard list of recipients at the client company, and prints out a hard copy at both corporate headquarters and the appropriate regional office—all with a single spoken command such as “Complete Contract.” Repetitive tasks take far less time when they’re automated with simple voice commands. By simplifying multi-step processes that legal staff performs dozens of times a day, workflow automation can deliver significant productivity gains, especially when multiplied across hundreds of workers enterprise wide.

Increasing productivity for on-the-go employees

Many attorneys spend a significant amount of time traveling from location to location—client visits, depositions, court hearings, and more. Since most of these individuals already work long hours, it’s important that they use their time productively—no matter where their jobs take them. Speech recognition enables attorneys and other legal professionals to increase their productivity during travel time or when away from the office by dictating into a digital voice recorder or other handheld device for automatic transcription when the user returns to his PC.

With roaming profiles and preferences stored and synchronized in a central network location, users can dictate from different computers on the network without having to create and train new profiles and preferences at each location. Users can even continue to use Dragon even if the network is unavailable. If HTTP roaming is configured, the administrator can manage security by setting up username and password authorization for specific user profiles.

You can also easily integrate Nuance’s cloud-based, professional-grade mobile dictation solution, Dragon Anywhere Group, into the firm’s mobile documentation workflow, and enable mobile professionals to complete documentation requirements in real-time—by voice—via iOS and Android smartphones and tablets.

Managing a desktop deployment

A successful speech recognition deployment requires careful attention to user expectations, training, and customization. Some organizations choose to manage their own speech recognition installation, customization, and training, but most prefer to outsource this work to the software manufacturer, a system integrator, or speech recognition value added reseller (VAR).
Dragon Legal Group, along with Nuance Management Center, enables administration across multiple Dragon users to save time and reduce support needs. The enterprise-ready solution makes it easy for IT administrators in legal organizations to:

– Customize the installation and deployment to multiple computers
– Manage and maintain (modify, repair, upgrade, remove) Dragon and all associated user profiles and configurations

You can deploy Dragon to multiple desktops using the built-in Windows Installer (MSI) with customized options. Because all Dragon Legal custom commands and vocabularies can be shared, it’s fast and easy to push out customization updates as needed. The solution’s centralized administration features allow you to track which employees have created user profiles and control where they are stored to facilitate license management compliance. With control over all user configurations, you can more efficiently schedule maintenance tasks, such as tuning using the Acoustic and Language Model Optimizer.

The Nuance Management Center (available separately) also provides central user administration capabilities that allow legal corporations to easily enable and manage Dragon Legal Group deployments. It helps legal businesses use licenses more efficiently, better meet requirements for reporting accuracy, and centrally manage their Dragon deployments to save time and reduce operating costs.

User expectations and training

While most speech recognition systems can deliver high-performance dictation and application control capabilities right out of the box, upfront professional training and customization will enable lawyers and support staff to realize more significant productivity gains and cost savings and maximize their return on investment. Initial training speeds up the learning curve, instills confidence in users, reduces support costs, promotes the success of a pilot program, and maximizes your investment. Ongoing training support can familiarize staff with advanced features and functionality for continuous productivity improvements.

In addition, setting realistic user expectations has a critical impact on the success or failure of the speech recognition program. While speech recognition enables organizations to automate workflows without disrupting existing processes, there is still a component of change as employees adopt the new technology and transition to the new approach of dictation vs. typing.

If you have limited IT resources, need to support specific workflow requirements or just want to get up and running quickly with customizations, deployment and training, we have you covered. Nuance offers complete Professional Services tailored to your needs that can help you start realizing significant documentation productivity gains from Dragon for accelerated return on investment.

A real estate attorney asserts that Dragon Legal has dramatically changed the way he practices law. Whether he is in the office or on the road, Dragon enables him to zip through work that he formerly delegated to a paralegal for transcription. He is able to generate real estate documents, including policies with specific exceptions, from his office, car, or laptop. When he has several letters to compose, he uses Dragon to dictate drafts—with instructions included as voice notations—which he saves in a special file on his computer for follow-up by his paralegal. This approach enables him to focus more of the firm’s time on billable tasks for bottom-line results.
Nuance also offers maintenance and support programs that allow you to:

– Stay up to date with the latest version of Dragon, including major and minor releases with all related enhancements
– Resolve issues quickly and maximize user productivity with access to Dragon resources and customer support

Enterprise speech deployments consist of several components:

– Client software
– Professional Services (planning, installation, customization, training and support)
– Audio peripherals (headsets, digital recorders, wireless microphones)
– Enterprise resources (Server & storage resources, back end system integration, end-user support, data and profile maintenance)

**Personnel-related costs:** An ROI evaluation for speech recognition begins with a review of the intrinsic loss of personnel working on transcription tasks instead of on primary tasks, based on the average hourly salary.

But consider, too, the cost of other personnel-related items:

– Estimated annual cost of noncompliance with American Disabilities Act in computer operations (legal fees, lawsuit awards/settlements, lost business opportunities, etc.)
– Cost of computer-related RSI and similar claims
– Estimated annual loss of personnel productivity from RSI

Repetitive stress injuries are the single largest job-related injury and illness problem in the United States, as well as other areas of the world. While most RSI sufferers are able to find appropriate treatment and return to their positions, some become permanently disabled and are never able to use their hands to operate a computer again. Speech recognition helps to prevent injury before problems arise and can also help employees return to work sooner, reducing worker’s compensation, medical and replacement labor costs. Utilizing speech recognition, you can:

– Reduce the symptoms of RSIs and proactively prevent further injuries: Create legal documents and perform repetitive computer tasks—all by voice—to reduce and prevent the physical strain of typing
– Streamline legal documentation workflows practice-wide: Built with a specialized legal language model, enable staff to complete work 3x faster than typing with 99% accuracy for legal terms right out of the gate
– Significantly improve efficiencies while reducing costs: Improve document turnaround times, reduce transcription time and costs, while steering staff towards more productive, billable duties
– Increase individual productivity: Enable employees to resume daily work activities, many times more productivity than typing by hand.

Justify the expense

“I have used Dragon since 1995 and now almost all of my written legal work is accomplished through voice dictation instead of typing,” said attorney Joseph Field. “It is a great product that has saved me an incalculable amount of time.”
Return on investment

In most cases, enterprises that purchase advanced speech recognition tools such as Dragon Legal Group realize improved productivity and return on investment (ROI) almost immediately.

What makes this rapid ROI possible?

- It’s easy to use. For a sophisticated tool, Dragon is remarkably easy to use — allowing most users to be up and running in less than 15 minutes — leading to high adoption rates with minimal training and support costs.
- It saves time. Dragon enables users to create documents and emails three times faster than typing. Macros automate and streamline repetitive manual processes for productivity increases of up to 300%.
- It’s accurate. With recognition accuracy rates of up to 99%, Dragon allows users to quickly create detailed and accurate documents — without any spelling errors.

Attorney Joseph Fields took a hard look at what he was spending and found that rising administrative costs were eating away a large chunk of his firm’s profits. Like most practices, his firm relied on an expensive paralegal support staff to perform transcription tasks. Worse yet, the work kept piling up, and his staff never seemed to make significant progress reducing the backlog. Today, his firm uses Dragon Legal on a daily basis, saving more than $100,000 annually and improving service to clients.

When the benefits of Dragon are multiplied across dozens or even hundreds of legal professionals across an enterprise, the cost savings and productivity gains add up quickly.

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About Nuance Communications, Inc.

Nuance Communications is reinventing the relationship between people and technology. Through its voice and language offerings, the company is creating a more human conversation with the many systems, devices, electronics, apps and services around us. Every day, millions of people and thousands of businesses experience Nuance through intelligent systems that can listen, understand, learn and adapt to your life and your work. For more information, please visit nuance.com.