ELM Solutions

Amplify your legal operations with data science

Wolters Kluwer

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Introduction

What is data science?

Data science is a multidisciplinary field of business that uses scientific methods, processes, algorithms, and systems to extract knowledge and insights from noisy, structured, and unstructured data. It allows companies to apply knowledge and actionable insights from data across various application domains. At first glance, it seems like a complex trending buzzword, but data science enables businesses to use data-driven solutions and empowers people to make confident business decisions.

Do I need data science for my legal operations?

Absolutely YES. Every business has data and tons of it, and it tells the story of where you have been, where you are, and where you are going. As a result, data science has a place in every business vertical and is advancing rapidly in the legal industry. The good news for the legal industry is that the advances in artificial intelligence (AI) and machine learning make more data-driven solutions possible for insurance claims and corporate legal departments.

Applying data science and advanced AI technology to your legal operations builds transparency into your legal process. This transparency gives you complete visibility into your legal spending. When you have visibility, you can learn insights to help you drive better billing outcomes, improve billing compliance, and improve the efficiency and productivity of daily activities. Legal departments can bring significant improvements to various internal processes and workflows while also standardizing their internal data to improve decision-making accuracy by implementing these valuable technologies.

Data science vs. big data

Organizations need big data to improve efficiencies, understand new markets, and enhance competitiveness. In contrast, data science provides the methods or mechanisms to understand and utilize the potential of big data promptly.

Big data has developed rapidly over the last few years because it now provides long-term enterprise value. Enterprise businesses with big data can apply data science to extract meaningful information that will help the organization make better decisions rooted in fact vs. instinct. Big data is characterized by its velocity, variety, and volume (popularly known as three V's). An example of a data science method is artificial intelligence to analyze big data.

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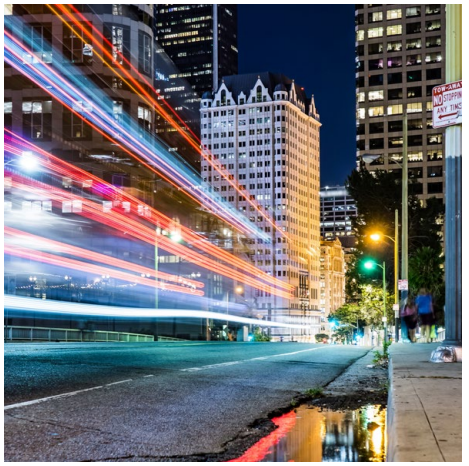
The three V's of big data



Volume, velocity, and variety are the keys to understanding how we can measure big data and how different big data is compared to traditional data types. By fully understanding these concepts, you can get a better grasp of how big data can open doors for your business and how it can be used to your advantage.

Volume

Volume is the amount of data that exists for analysis. There is no cap on the amount or no magic number to reach. One example of this is Facebook. Every day, 2.9 billion users log into Facebook and share about four petabytes of content per day, the equivalent of 1 million gigabytes. These users spend about an hour or so daily sharing content. An example of a voluminous amount of data in the legal industry is LegalVIEW®, the world's largest database for legal invoice performance data, which houses about six terabytes of data, the equivalent of almost 4.5 million 3.5-inch floppy disks.

Variety

Variety is the format of data or diversity of data types. Historically, data variety was an Excel, CSV, or Access file. Now, that format can be PDFs, videos, text, and more. Having variety allows you to collect data from multiple sources to understand a problem and make smarter, more informed decisions. Variety can also include data from different industries and segments, such as insurance and corporate legal departments from varying sectors.

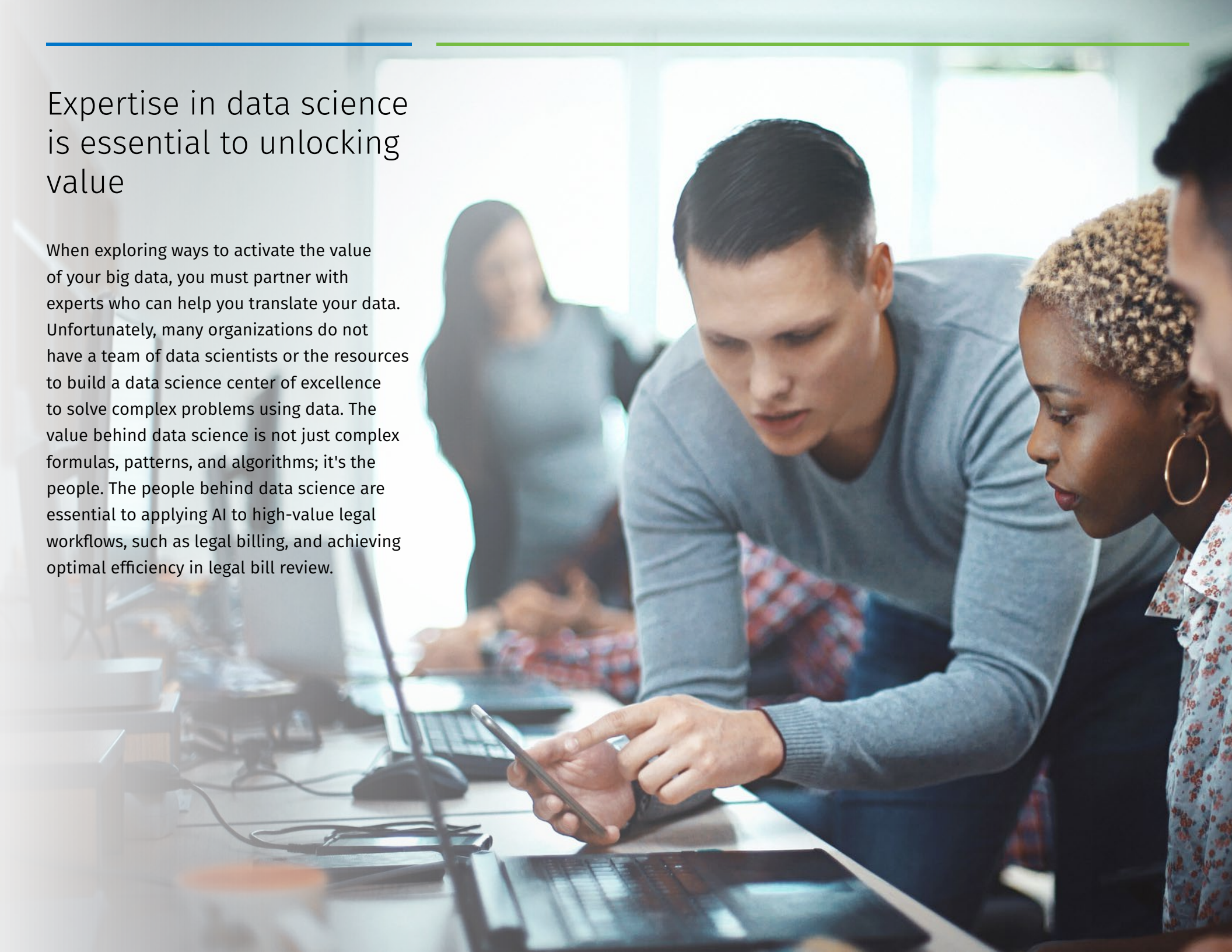
Velocity

Velocity is how quickly data generates and how quickly that data moves. Speed is an essential aspect of big data for companies that need their data to flow rapidly, so it's available at the correct times to make the best business decisions possible. In addition, investing in AI-powered technologies can contribute to how quickly data is processed.

Having a high volume and variety of your data, coupled with an optimal velocity, allows data scientists to derive more value from your data while also allowing the scientists' organization to become more customer-centric. The three V's of big data are important because they determine the quality of the output and recommendations of your AI model.

Expertise in data science is essential to unlocking value

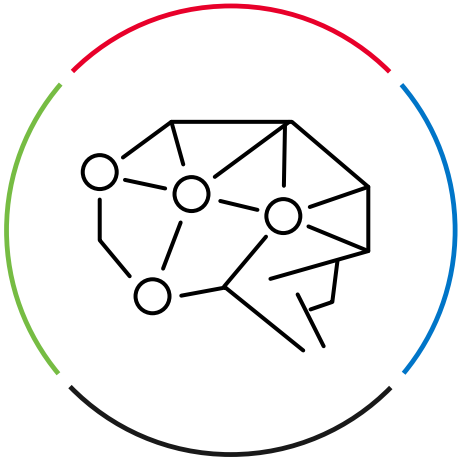
When exploring ways to activate the value of your big data, you must partner with experts who can help you translate your data. Unfortunately, many organizations do not have a team of data scientists or the resources to build a data science center of excellence to solve complex problems using data. The value behind data science is not just complex formulas, patterns, and algorithms; it's the people. The people behind data science are essential to applying AI to high-value legal workflows, such as legal billing, and achieving optimal efficiency in legal bill review.



Choosing the right AI service provider for your big data

So, you are probably wondering what kind of AI service provider experts do I need? How do I know if the AI service provider has a legitimate data science team? If the team begins building an AI model without understanding your goals and objectives, you may want to start your search again. AI modeling is the creation, training, and deployment of machine learning algorithms that emulate logical decision-making based on available data. There are steps to the process before getting to an AI model and valuable output.

The first step is having the right people with a critical skillset: Data empathy. Understanding your needs and wants through empathy will guide the data analysis. This will enable data scientists to create better, more useful data science products. Data empathy focuses on understanding the data. It considers the subjectivity introduced by humans into the data collection process and identifies biases. Three experts play a crucial role in ensuring your big data translates to successful business outcomes and actionable decisions. A data science team comprised of all three functions will set your organization up for success.



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The three experts needed to unlock the value of your data

1. **Process design experts** gather your pain points and visualize how to solve them by interviewing you and your team to understand the parts of your job that don't work well and make it hard to complete. They have a high level of empathy and are very intuitive about the requirements needed to simplify and reduce the complexity of workflows. In addition, they are masters of user interfaces and customer experience.

2. **Domain experts** work with the process design experts and continuously provide requirements for the AI model based on customer input and best practices of various domains to allow for feedback. In addition, these experts label data appropriately to enable data scientists to build a custom AI model.

3. **Data scientists** translate the data sets and understand the input to create a suitable model with the appropriate features based on the customer's pain points.

It's vital for data scientists to understand the client's needs and not start with a preconceived one-size-fits-all AI solution. Data scientists have UI/UX design experience. They are strategic design experts.

Unstructured data challenges for the legal industry

Across every industry, data science is being used to guide and develop better decision-making and business insights. However, its use in the legal industry is relatively new, mainly due to skeptics in the industry and an unwillingness to spend on new technology. In addition, the intuitive knowledge from years of law practice and case management is not easily documented and found. One area that is not as nebulous and a great place to apply data science methods like AI is corporate legal billing and compliance.

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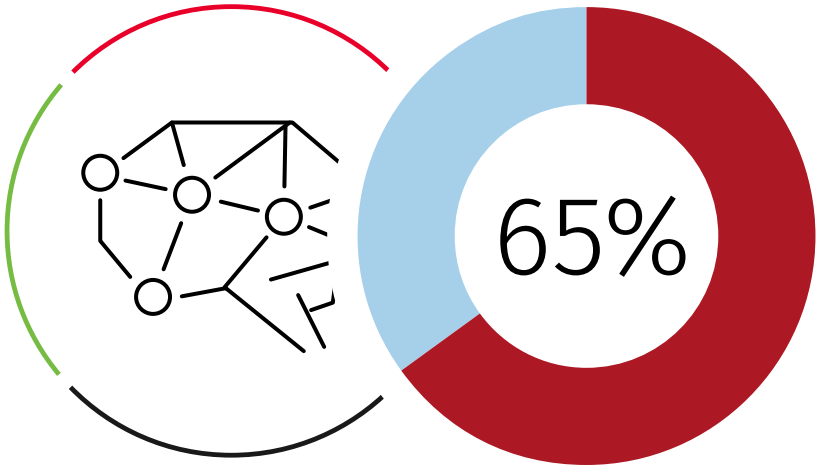
AI for legal billing

According to the 2020 Law Department Operations Survey, 65 percent of legal departments use AI or some data science method for billing and spending management.

Lawyers and other timekeepers in law firms frequently make intuitive decisions about billing when entering time and reviewing pre-bills for approval. In-house counsel regularly makes similar decisions when reviewing invoices from their outside counsel. Corporate legal departments want to know if the logged work hours and expenses are excessive. Law firms must exercise billing judgment to prevent "excessive, redundant, or otherwise unnecessary" charges and costs.

Suppose corporate legal departments standardize billing data through automation or AI technology. In that case, law firms can more easily rely upon and use their billing data to gain valuable insights into staffing and training needs. In addition, with data-driven applications, corporate legal departments can use billing data to improve billing guidelines and maximize collection rates, thereby significantly improving law firm profits without charging clients more money.



→ Legal departments use AI or some data science method for billing and spending management.

Data-centric approaches to legal spend

Using a data-centric approach to legal spending significantly decreases the time and resources required to review in-house and outside counsel bills. However, data-driven applications also provide greater transparency and predictability for the company's external counsel partners. Law firms and corporate clients are modernizing their legal operations with AI-powered technology to automate billing-related activities to achieve costs savings.

In addition, applications like LegalVIEW BillAnalyzer Guideline Benchmarking also use advanced data-related technologies to allow both in-house and outside counsel to comply with billing rules more easily. For example, corporate legal departments are increasingly specifying the kinds of activities their outside counsel law firms can charge. These limitations are usually outlined in contractual documents called billing guidelines.

Data-driven applications like TyMetrix® 360° and Passport® plus LegalVIEW BillAnalyzer use AI and human expert review to allow billing rules to be set for time and expense entries to automate compliance. If any billing entry fails to meet the activated billing guidelines, the item will be flagged for review or automatically adjusted. Automatic alerts for violation billing guidelines provide compliant bills, fewer invoice rejections, and happy clients.

Additional data-based application features, such as dashboards and reporting, should exist, allowing firms to integrate them into their existing billing systems easily. Compatibility with various self-hosted and locally installed systems should also be a significant factor when researching data-driven applications.

Conclusion

Applying data science via AI-powered legal billing for legal operations is happening right now for law firms and corporate legal departments. It provides a much more efficient and straightforward solution to stop spending leakage, lower costs, increase operational efficiency for corporate legal departments, and increase law firm revenues and profits. People who regularly use technology from Facebook, Apple, Google, or Amazon are already interacting with data-driven technology. Although the legal industry has challenges with structured data and tribal knowledge transfer, there is still an opportunity to apply data science and implement data-driven legal billing applications to automate legal bill reviews with incredible speed, accuracy, and predictability.

Applying data science provides a much more efficient and straightforward solution to stop spending leakage, lower costs, increase operational efficiency for corporate legal departments, and increase law firm revenues and profits.

Contact us to learn more about how data science and AI-powered solutions can add value to your organization.

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ELM Solutions

Wolters Kluwer's ELM Solutions is the market-leading global provider of enterprise legal spend and matter management, contract lifecycle management, and legal analytics solutions. We provide a comprehensive suite of tools that address the growing needs of corporate legal operations departments to increase operational efficiency and reduce costs. Corporate legal and insurance claims departments trust our innovative technology and end-to-end customer experience to drive world-class business outcomes. Our award-winning products include Passport®, TyMetrix® 360°, CLM Matrix, and the LegalVIEW® portfolio of legal analytics solutions, based upon the industry's largest and most comprehensive legal spend database, with more than $150 billion in invoices.

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