



autologyx

Relational Data: What is it and why does it matter?

**WHITEPAPER**





Think of your business data as a massive spreadsheet. Each row representing a different entity...Now, imagine a network of connected spreadsheets instead. This relational setup makes finding and organising data a breeze.



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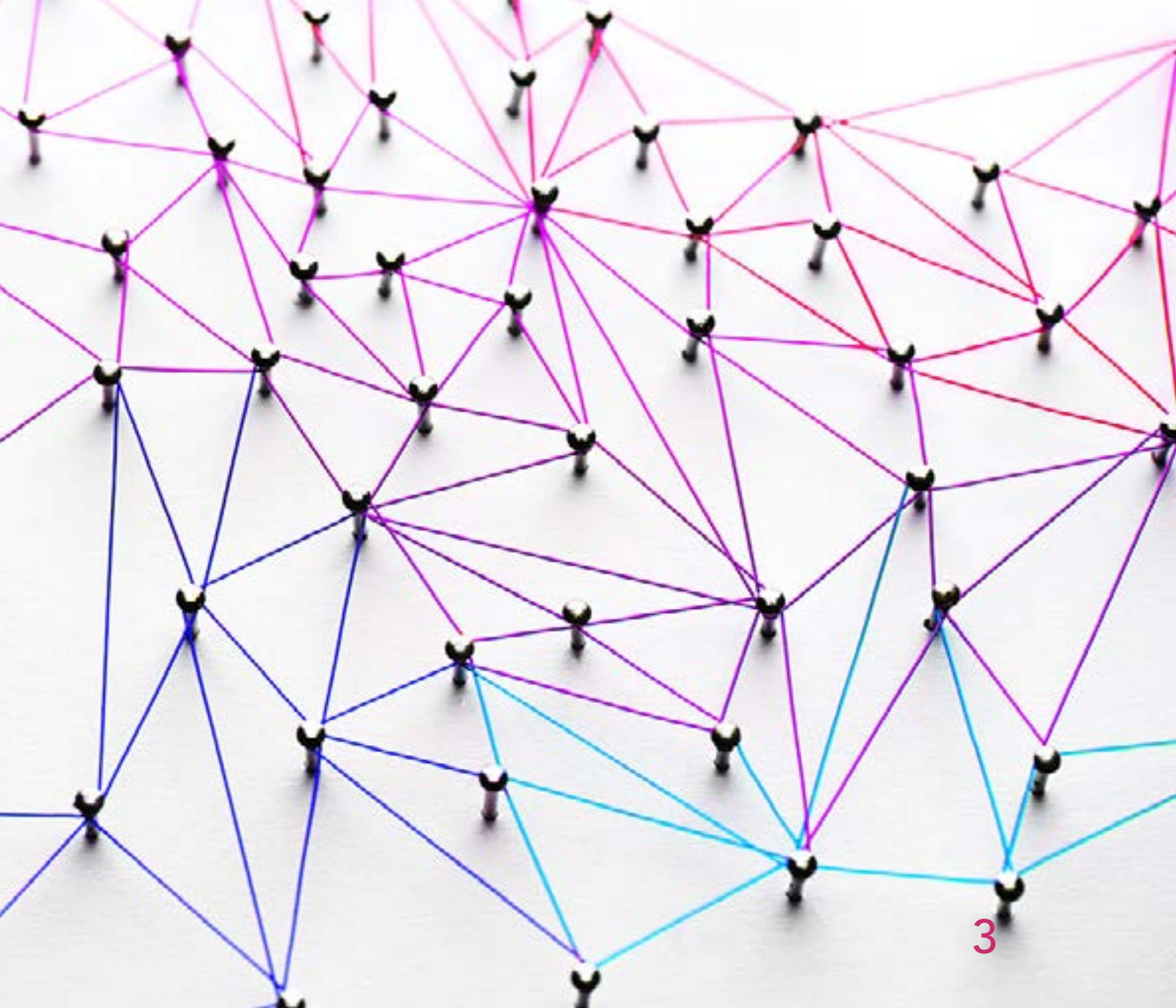


In today's ever-evolving business landscape, efficient, scalable, and adaptable technology solutions are imperative. At Autologyx, we recognise the pivotal role that relational data structures play in unlocking the full potential of workflow automation for businesses across industries.

Traditional flat-file data management systems, akin to unwieldy spreadsheets, are no longer sufficient to meet the demands of modern enterprises. Instead, we advocate for a paradigm shift towards interconnected relational databases, where data is organised in a network of linked spreadsheets, each representing distinct entities such as clients, projects, or matters.

This whitepaper delves into the transformative power of relational data structures in driving workflow automation, with a particular focus on the legal sector.

By examining the inherent advantages of relational databases in terms of efficiency, accuracy, flexibility, and scalability, we illustrate how businesses can leverage this technology to optimise their processes and maximise outcomes. We conclude with a tangible example of contract remediation and repapering to demonstrate the real-world impact of relational data structures in enhancing end-user experiences and client outcomes.



## Unlocking workflow automation: Relational data's vital role

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Here at Autologyx we understand the importance of relational data structures when designing and building technology solutions for your business. So, what's the status quo? Most businesses rely on technology that offers a flat file type of data management. Think of your business data as a massive spreadsheet. Each row represents a different entity whether it be client or project or matter, and each column holds a specific type of information, like name, address, or history narrative.

This setup works fine for small operations, but as your business grows, managing this giant spreadsheet becomes a headache, with an ever-increasing number of columns, subject areas, divisions and business units. Whilst it is structured data, it doesn't offer flexibility and scalability when thinking about business process automation.

Now, imagine a network of connected spreadsheets instead. You have one for clients, another for projects or matters, and another for history narratives. Each spreadsheet is linked through unique identifiers, like client IDs. This relational setup makes finding and organising data a breeze.

Why does this matter for automating business processes?

## EFFICIENCY

With relational databases, you can fetch and manage data much faster. For instance, if you need all the matters for a specific client you simply follow the link from the client to their matters.

## ACCURACY

Keeping data in separate but linked spreadsheets reduces the chance of errors. With flat-file storage, you might accidentally enter customer info twice or mess up copying it around. Relational structures store data just once, minimising mistakes. Or with a large amount of data points on one record you might accidentally select the wrong piece of data.

Essentially, relational data structures streamline data management, making it more efficient, accurate, flexible, and scalable. And since business process automation hinges on data, these benefits are key.


By combining a relational data structure and the matter data with our workflow engine, you can build real-time processes that use this data to organise work, track obligations and maximise client outcomes.

## FLEXIBILITY

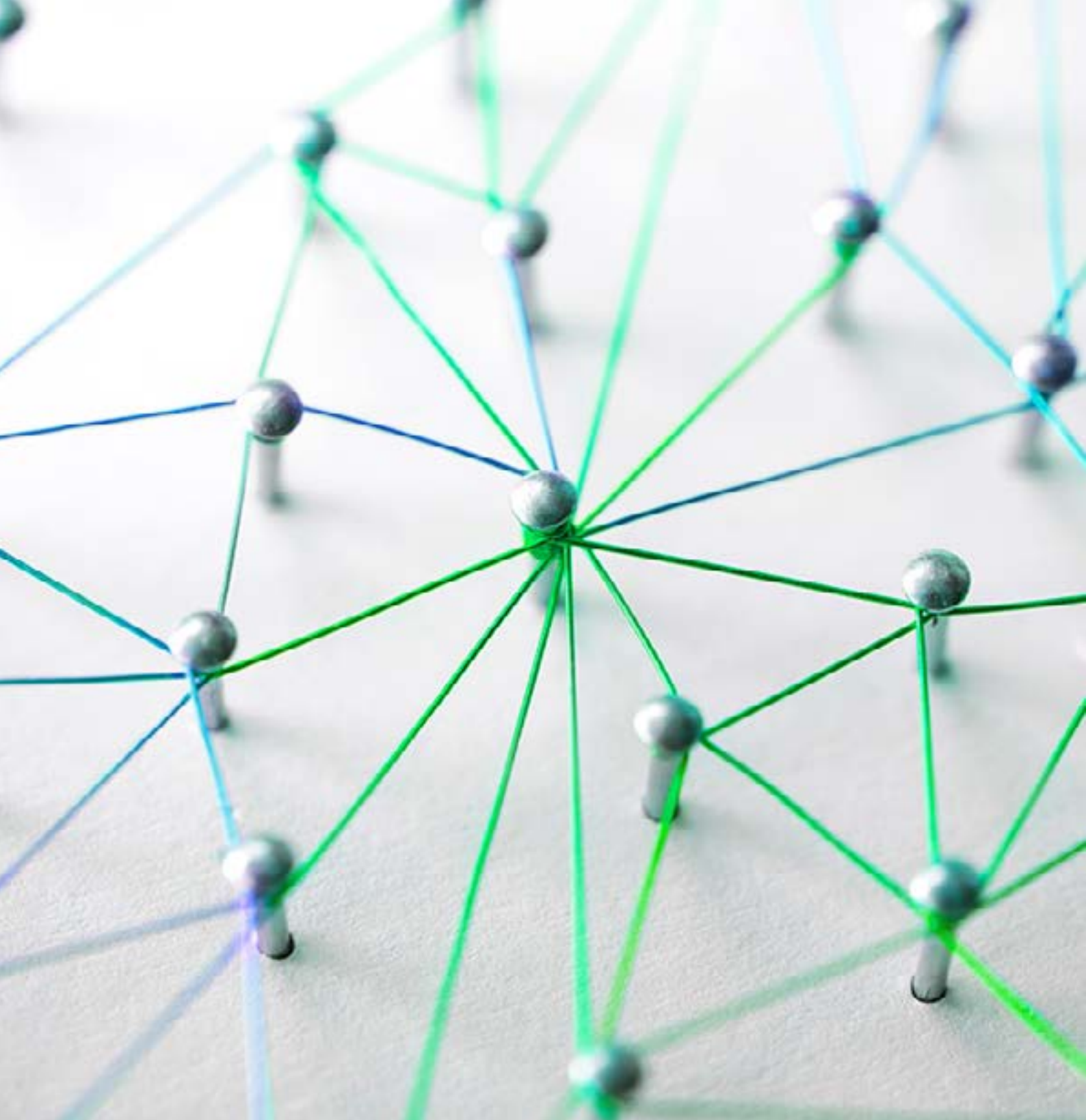
You can add, remove, or change data without disrupting other parts of the database. In contrast, every tweak in a flat-file could affect many rows and columns, risking errors.

## SCALABILITY

As your business grows, relational databases handle larger data volumes gracefully. A giant spreadsheet, on the other hand, quickly becomes unwieldy.



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## Legal process automation: enabled by relational data

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In the previous chapter we discussed the importance and benefits of relational data in business process automation, but how do these generic benefits translate to our legal clients and their requirements.

So here is a more detailed view of the benefits of the use of relational data structures within your technology solutions for legal use cases.

## COMPLEX RELATIONSHIPS

Managing legal work often involves complex relationships among multiple entities like individuals, corporations, and government bodies. Let alone the relationships between documents like contracts, laws, or case precedents. Relational databases excel at representing these complex relationships, making it easier to keep track of how everything is related.

## DYNAMIC DATA

Laws and regulations can change over time, and new cases can set new precedents. Relational databases allow for easier updating and modification of records, enabling legal databases to stay current with minimal disruption to the existing data.

## COMPLEX VS VOLUME WORK

Often automation efforts in legal have focused on work types that are high volume and low in complexity however the nature of relational data structures allows for the benefits of process automation to be leveraged in more complex, lower volume work

The way relational data structures handle data makes them a valuable tool for legal process automation. They can significantly streamline the management of legal information, making legal processes more efficient and reliable.

## ACCURACY AND CONSISTENCY

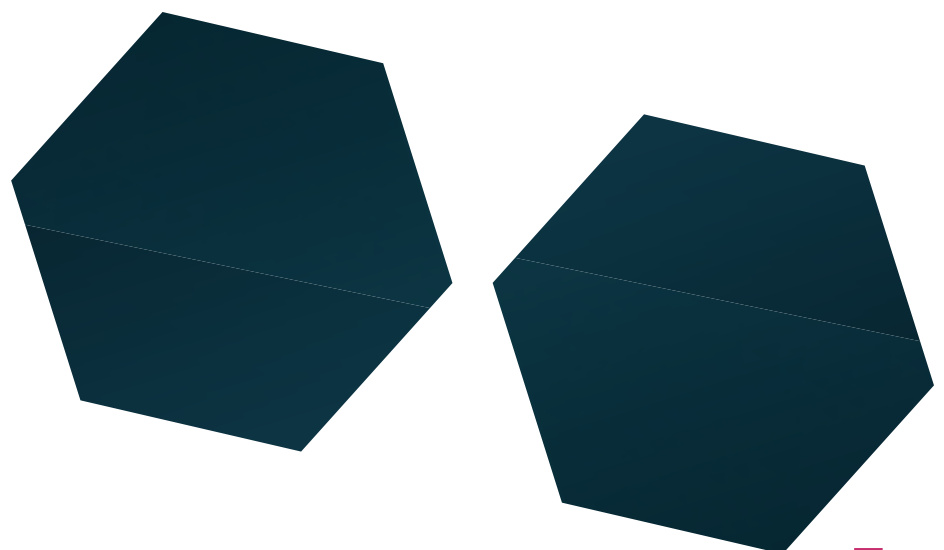
Legal work requires a high degree of accuracy. Mistakes can lead to negative outcomes for clients or even legal consequences. Since relational databases have mechanisms to avoid redundancy and inconsistency (unlike flat-file databases), they can help maintain data accuracy and consistency.

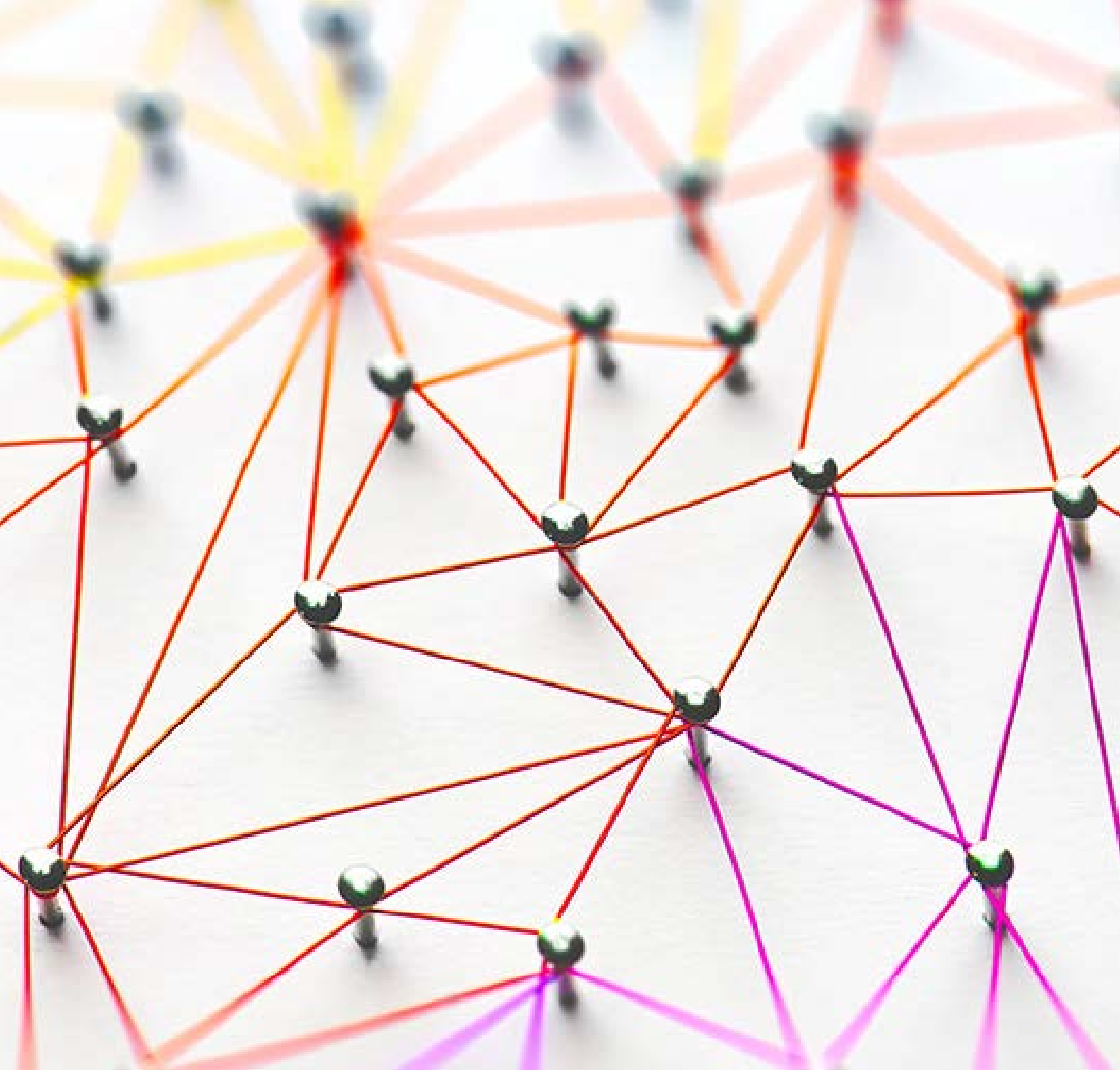
## INTEGRATION WITH OTHER SYSTEMS

Legal process automation often involves integrating various software applications or tools to streamline workflows. Relational databases provide a standardised framework for data storage and exchange, facilitating seamless integration with other systems.

## AUDITABILITY

Legal is a highly regulated industry and as such it is often important to have a clear record of actions taken, documents submitted, changes made, etc. for auditing purposes. The structure of relational databases can help in maintaining a well-organised, easily traceable record of all actions and documents pertaining to legal work of all kind.





## Relational data put to work: a tangible example


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In this chapter we're looking at the last layer of benefits for the use of relational data structures - a specific use case.

Contract remediation and repapering is a complex and challenging work type and is often broken down into smaller parts due to its complexity. How do relational data models and structure assist in the delivery of an improved end user experience and outcome for the client, beyond enhancing efficiency, accuracy, and compliance?

Here's how.





By linking related contracts and clauses, legal professionals can quickly identify dependencies and prioritise remediation efforts, streamlining the overall process.



### EFFICIENT DATA ORGANISATION

Contract remediation and repapering involves reviewing, updating, and renegotiating volumes of contracts. Relational databases provide a structured framework for organising contract data, including key terms, expiration dates, parties involved, and any required amendments. By linking related contracts and clauses, legal professionals can quickly identify dependencies and prioritise remediation efforts, streamlining the overall process.

### STREAMLINED WORKFLOW AUTOMATION

Contract remediation involves a series of tasks, including contract analysis, negotiation, drafting, and execution. Relational databases support workflow automation by enabling the creation of standardised templates, predefined approval workflows, and automated notifications for key milestones. Embracing workflow management and document automation capabilities further streamlines the contract repapering process, reducing manual effort, reducing errors and accelerating turnaround times.

### SCALABILITY AND ADAPTABILITY

As the volume and complexity of contracts increase, relational databases offer scalability to accommodate growing data storage and processing needs. Whether repapering a few dozen contracts or thousands of agreements, the relational data model can scale to support the evolving requirements of contract remediation initiatives. Additionally, the flexibility of relational databases allows for seamless integration with third-party systems, such as contract management platforms or electronic signature solutions, to enhance collaboration and streamline contract execution processes.

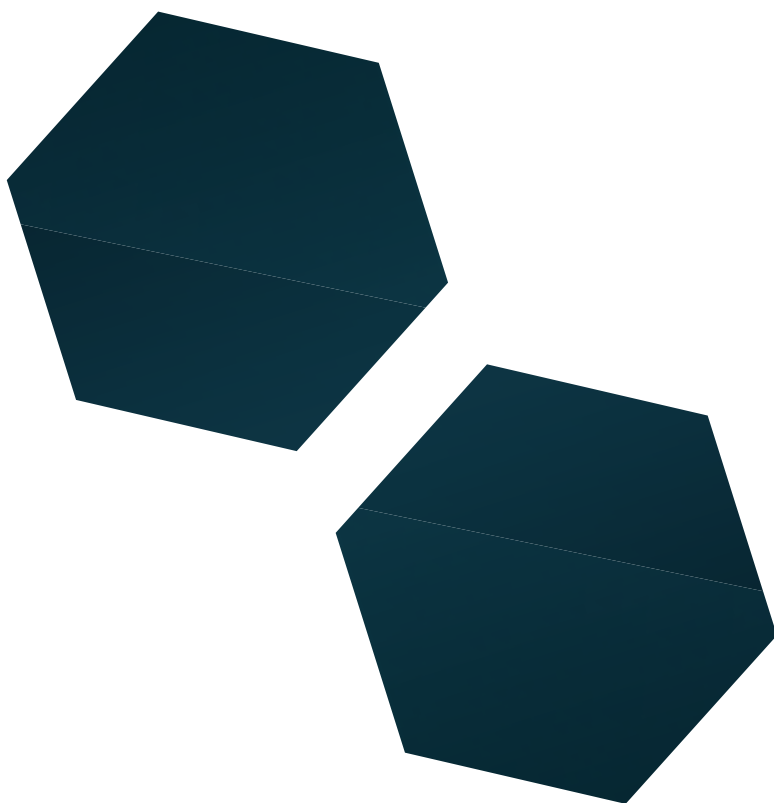
## COMPREHENSIVE RISK MANAGEMENT

Contract remediation often requires identifying and mitigating legal and financial risks associated with outdated or non-compliant contracts. Relational data models facilitate risk assessment by providing a holistic view of contract relationships, obligations, and liabilities. Legal professionals can leverage data analytics and reporting capabilities to identify high-risk contracts, monitor compliance status, and prioritise remediation efforts based on predefined risk criteria.

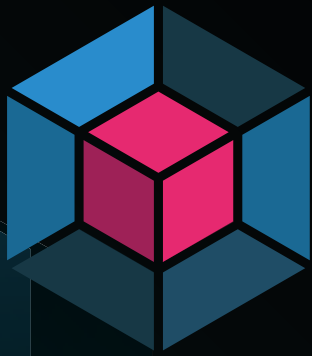
## SECURITY

Contracts are always sensitive, and different levels of access may be needed for different users. Relational databases can provide robust security features, including access controls, to help protect your data.

In summary, relational data structures provide a robust foundation for contract remediation and repapering initiatives. By facilitating efficient data organisation, ensuring accuracy and consistency, enabling workflow automation, supporting risk management, and offering scalability and adaptability, relational databases empower legal professionals to effectively navigate the complexities of contract remediation while mitigating risks and ensuring compliance with regulatory standards.



In conclusion, the adoption of relational data structures emerges as a cornerstone in the quest for streamlined and effective workflow automation, particularly within the legal domain. By embracing the interconnectedness and versatility offered by relational databases, organisations can revolutionise their approach to data management, empowering stakeholders to navigate complex relationships, ensure regulatory compliance, and mitigate risks with confidence. As showcased through the case of contract remediation and repapering, the benefits of relational data extend far beyond mere efficiency gains, encompassing comprehensive risk management, streamlined workflow automation, and enhanced security measures. At Autologyx, we remain committed to driving innovation and empowering businesses to unlock their full potential through the strategic integration of relational data structures and workflow automation technologies.



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## ABOUT AUTOLOGYX

Autologyx is a data centric platform that combines scalable process automation and workflow management with collaboration tools, harnessing the power of your data, to improve efficiency and elevate your firm's success.



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