



Building a better  
working world

# Analytics and AI in EY Discovery

Transforming data.  
Empowering counsel.

As businesses change the way they share and store information, digital forensics and data discovery procedures must also evolve to create meaningful relationships from within and across voluminous and varied data sets. At EY, we help organizations meet these challenges by bringing clarity and efficiency to every stage of the discovery process.

## Attorney-driven computing

By incorporating the professional judgment of counsel, we enable partial automation of the review process. Using visualization tools, we provide interactive dashboards to allow counsel to refine analytics in a user-friendly environment.

## Customized approach

We always start by assessing the needs of the organization or a specific matter to determine the appropriate mix of analytics and workflow. We have accumulated libraries of tested and proven analytics that we can modify for each engagement. This customized approach helps our clients leverage analytics technologies to their maximum effect.

## Informed and swift decision-making

We help you understand key facts early in the discovery process, enabling you to assess legal and regulatory risks and fine-tune your discovery strategy. This can result in time and cost savings and also help organizations effectively anticipate and mitigate future risks.

Making  
what's  
possible  
into  
reality

## Time and cost efficiency

Through automation governed by human intervention, we help clients process large volumes of data, find relevant information and produce it quickly, saving time and money. We also create reusable knowledge stores with linguistic rules that may be leveraged in future litigation.

# Where have we been in action?

We strive to apply advanced analytics and AI technologies to each phase of a matter, from collection validation and gap analysis, early case assessment, data processing, document review, production, depositions, evidentiary hearings, to trial preparation.



## Cross-border, multilingual investigation into financial accounting issues

A global manufacturing company engaged our firm to investigate possible accounting irregularities, spanning multiple countries with data in three languages. The team applied language identification to sort 2.39 million documents by primary language and then used predictive coding technology on each language subset separately. By training the automated predictive coding system with a combination of random samples and targeted searches focusing on key events and central actors, we identified 45,000 potentially relevant documents and eliminated the remaining two million documents due to low probability of relevance.



switching was possibly a part of a secrecy strategy. Finally, we extracted time, date, location and actor information from unstructured and structured data sources, including time and expense reports, browser history and personal emails to map out each suspect's location over time.



## Social network analysis supporting fraud investigation

While supporting a fraud investigation focused on senior executives, our team utilized advanced analytics technologies to identify opportunities for individuals to have conspired in person. We used emotive tone and social network analysis to characterize personal relationships between executives and identify hidden connections. We used foreign language identification to review multilingual suspects' emails, since language-

## Marrying unstructured data and structured data in regulatory response

Our firm was engaged by a financial services firm to review its process for generating 10 billion trade confirmations across multiple platforms and recordkeeping systems over a one-year period. Due to volume, manual review was impractical. Using custom analytics algorithms, trained and refined by counsel over time, our team connected structured financial data to associated confirmation correspondence delivered via emails or physical letters. More than 1.4 billion records were included in the reconciliation. The data formats included structured financial data, semi-structured transmission data and unstructured text strings, which required significant parsing and normalization using various analytics methods. With our help, the firm demonstrated to a regulator that it had conducted a thorough, fact-based reconciliation exercise involving all transactions on its trading platforms by the required deadline.

## EY | Assurance | Tax | Transactions | Advisory

### About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

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### About EY Forensic & Integrity Services

Dealing with complex issues of fraud, regulatory compliance and business disputes can detract from efforts to succeed. Better management of fraud risk and compliance exposure is a critical business priority – no matter the size or industry sector. With approximately 4,500 forensic professionals around the world, we will assemble the right multidisciplinary and culturally aligned team to work with you and your legal advisors. We work to give you the benefit of our broad sector experience, our deep subject-matter knowledge and the latest insights from our work worldwide.

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