CUBE

Understanding Automated Regulatory Intelligence

Contents

01
Executive Summary

A generation of global economic crises stretching from the 2008 financial meltdown to the Covid-19 pandemic has resulted in extensive reforms to markets.

New standards and new institutions have emerged to maintain the stability of financial systems, which has led to more complex and voluminous rules entering force, at a greater pace than ever. For compliance professionals, managing the seemingly unending cascade of regulatory change has become one of the most arduous challenges they face.

The increasingly digitised nature of finance has broadened the landscape compliance teams are expected to monitor, often without budget to do so.

These developments have led the compliance function to an inflection point in its history, where the limits of manual processes and oversight have been reached.

Traditional methods are becoming unsustainable due to the exorbitant costs involved, susceptibility to error, and the sheer volume of data that needs to be processed.

Since 2008, more than 40m regulatory issuances have been captured and categorised by CUBE's regulatory inventory, with trends showing a marked increase year-on-year in supervisory activity.

Significant spend on compliance controls is required to tackle historical issues, enhance policies, patch up legacy software, and keep pace with rising data management requirements.

To address these challenges efficiently, Automated Regulatory Intelligence (ARI) has emerged as the most effective way of managing the end-to-end regulatory change lifecycle.

This white paper will help compliance professionals gain a greater understanding of ARI, with insights into maximising its potential.

02
What is Automated Regulatory Intelligence?

Automated Regulatory Intelligence (ARI) is an advanced compliance management solution that uses artificial intelligence (AI) to streamline and improve the handling of regulatory information and compliance tasks.

ARI deploys machine learning, natural language processing (NLP), and other cutting-edge technologies to automatically gather, analyse, and interpret regulatory data from multiple sources.

Through automation, ARI assesses the impact of new regulations, updates policies and controls automatically, and ensures compliance more efficiently and proactively.

This powerful tool allows organisations to stay current with regulatory changes, eliminating the need for fragmented, manual processes.

By integrating ARI, businesses can enhance their compliance strategies, reduce the risk of non-compliance, and save valuable time and resources.
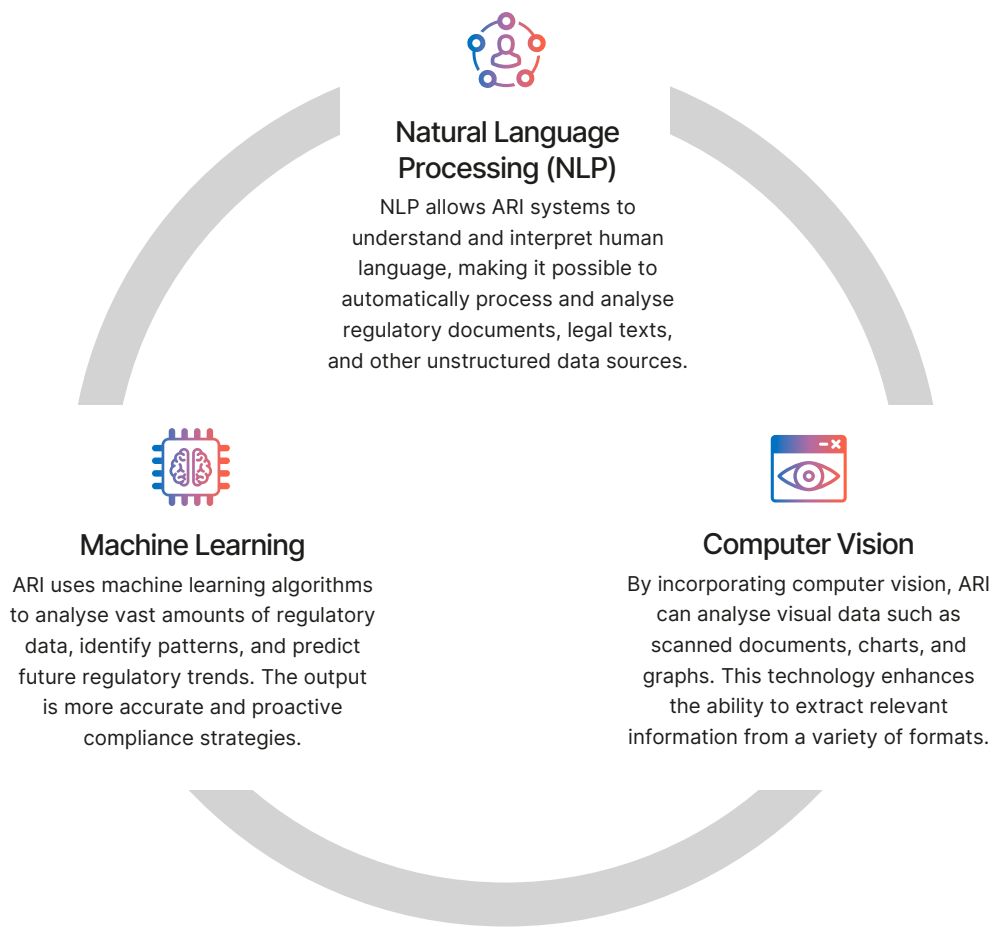
ARI allows organisations to stay current with regulatory changes, eliminating the need for fragmented, manual processes.

03
What aspects of Artificial Intelligence does ARI leverage?

ARI leverages various advanced AI technologies to optimise the entire lifecycle of compliance management.

Natural Language Processing (NLP)

NLP allows ARI systems to understand and interpret human language, making it possible to automatically process and analyse regulatory documents, legal texts, and other unstructured data sources.

Machine Learning

ARI uses machine learning algorithms to analyse vast amounts of regulatory data, identify patterns, and predict future regulatory trends. The output is more accurate and proactive compliance strategies.

Computer Vision

By incorporating computer vision, ARI can analyse visual data such as scanned documents, charts, and graphs. This technology enhances the ability to extract relevant information from a variety of formats.

These technologies work together under the banner of ARI to automate the collection, analysis, and interpretation of regulatory data.

Such advanced levels of automation help organisations stay alert to and ahead of regulatory changes, improve the management of compliance processes, mitigate risks associated with non-compliance, and do so with fewer resources.

04

The mechanics of Automated Regulatory Intelligence

ARI streamlines regulatory change management through a series of sophisticated processes. Here are some examples of how AI automates and enhances compliance efforts.

Real-time regulatory capture

AI engines capture every regulatory compliance issuance worldwide as it happens, delivering comprehensive and timely data collection.

Machine learning analysis

Advanced machine learning tools capture, enrich, analyse, and understand regulatory content. This enables the system to process and transform raw data into mission-critical information for regulated businesses globally.

Data enrichment and transformation

Captured regulatory data is processed, enriched, and converted into actionable insights. This transformation helps organisations maintain compliance with the latest regulations and policies.

Computer vision models

Intelligent models collect and structure regulatory data from every jurisdiction and in any language, ensuring clients have access to up-to-date regulatory inventories.

Key point identification

The AI identifies key points in regulatory content, notifying compliance teams of essential information in a targeted approach which saves time and resources by filtering out non-essential data.

Scalable architecture and cloud deployment

The architecture of the ARI system, along with serverless deployment in the cloud, is specifically designed to handle the volume, variety, and velocity of modern regulatory issuances.

Real-time processing within a unified platform

The entire ARI process is carried out in real-time within a single platform, providing seamless and continuous updates to compliance teams.

05

A step-by-step guide to the Automated Regulatory Intelligence process
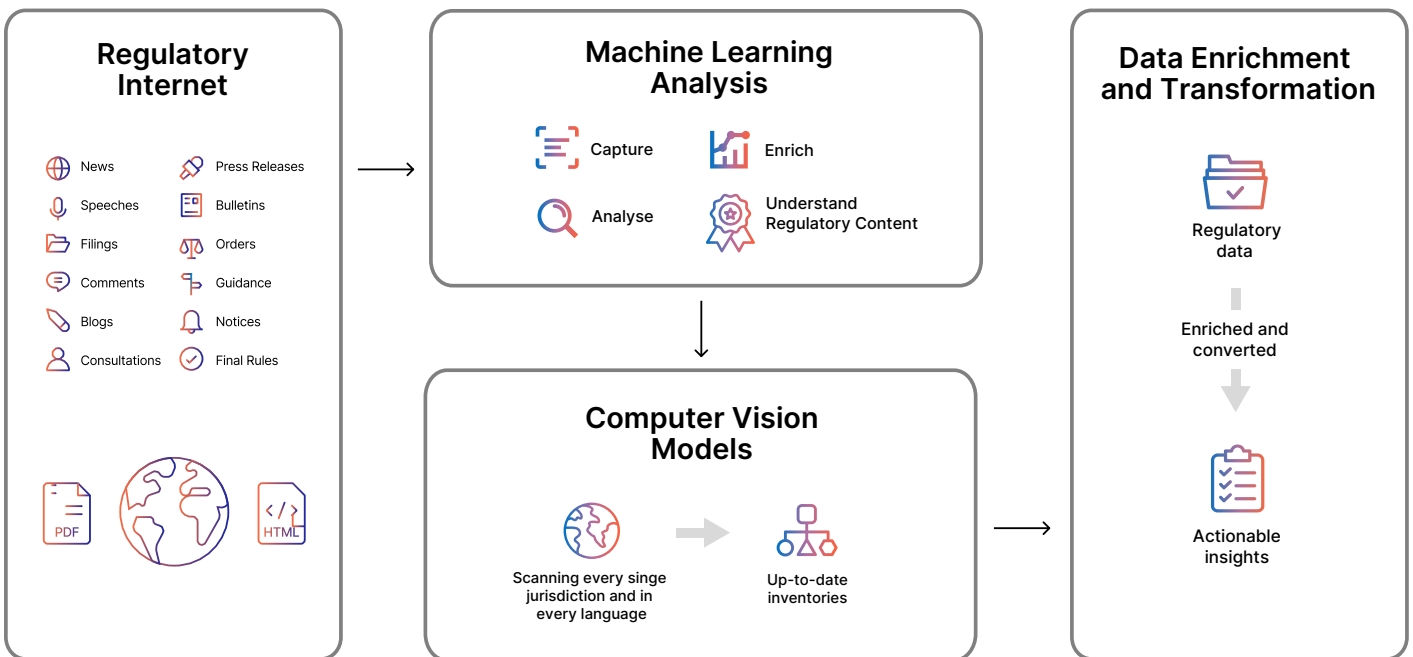
How CUBE's ARI system transforms regulatory issuances and data into actionable intelligence for regulated firms.

- Data collection models gather and structure regulatory data from every country, in any language, ensuring comprehensive coverage and accuracy.

- CUBE's ARI uses sophisticated, deep understanding NLP models to comprehend the syntax and legal vocabulary of regulatory texts.

- This understanding allows the system to provide translated, enriched, and user-specific actionable information to regulated firms.

- Data transformation engines convert unstructured regulatory data into structured, translated, and enriched content. It ensures that the data is in a usable format for further processing and application.

- Neural engines translate the content into data that is used to train CUBE's regulatory language model (RegLM). This ensures the model is finely tuned to the regulatory domain.

- NLP-driven content enrichment models identify crucial entries and citations, such as names, dates, and regulatory aspects.

- RegLM, the large language model specifically built for the regulatory domain, classifies content against CUBE's RegOntology, which classifies regulatory documents according to their topic, sector, and other such categories.

- Topics like conduct, financial crime, and Environmental, Social and Governance (ESG) are categorised within relevant sectors such as retail or investment banking, insurance, and wealth management.

- The system identifies obligations such as reporting requirements, disclosure, or verification details, and generates summaries of key points to streamline compliance tasks.

05

- This engine learns from user interactions with the data, continuously improving the relevance and accuracy of the information provided.

- Data from RegLM is stored in CUBE's proprietary knowledge graph, which captures and understands the relationships between entries. User actions are tracked, and the platform generates content recommendations tailored to the user's needs.

- These processes are carried out in real-time within a single platform, ensuring that compliance teams have immediate access to the most relevant and up-to-date regulatory intelligence.

Regulatory Internet

News
Speeches
Filings
Comments
Blogs
Consultations
Press Releases
Bulletins
Orders
Guidance
Notices
Final Rules

PDF | HTML

Machine Learning Analysis

Capture
Analyse
Enrich
Understand Regulatory Content

Computer Vision Models

Scanning every singe jurisdiction and in every language → Up-to-date inventories

Data Enrichment and Transformation

Regulatory data
Enriched and converted
Actionable insights

06
How Automated Regulatory Intelligence enhances compliance management

The implementation of ARI within the compliance function delivers numerous efficiency benefits for organisations. By automating routine tasks and eliminating time-intensive manual processes, ARI allows compliance teams to focus on higher-value activities like strategic planning and risk management.

Moreover, the predictive capabilities of ARI systems enable organisations to anticipate and prepare for regulatory changes. This reduces the risk of penalties and reputational damage, and delivers enormous cost savings. Below are some of the ways in which ARI can add new dimensions to compliance management.

Horizon Scanning

CUBE's AI engines have gained a deep understanding of the nuances of regulatory language through over a decade of training. They can be deployed across the entire regulatory issuance spectrum from consultations to speeches, proposals, memos and other non-legislative data to provide genuine insight for compliance teams wishing to understand emerging trends. Through real-time monitoring of regulatory updates, intelligent capture and personalised notifications, compliance teams are always informed of updates as they happen, anywhere in the world, at any time.

Obligations Management

Determining the requirements from regulatory updates can be time-consuming and often requires deep subject matter expertise. ARI automates the process, from monitoring global regulatory activity in real-time to automatically updating a business's policies and controls when relevant changes occur. CUBE's AI engines and matching algorithms automatically identify common obligations across different regulators and jurisdictions, saving compliance functions significant resources via streamlined regulatory change requirements.

06

Regulatory Profiling

Manual operations find identifying the most relevant content from large volumes of data a significant drain on resources. ARI simplifies regulatory change, generates efficiencies, and delivers tangible results, quickly. Powerful AI engines filter enormous datasets into a dedicated, specifically curated inventory of relevant intelligence, providing clients with complete control over the curation and granularity of regulatory content.

Regulatory Inventory

Manually managing updates to a regulatory inventory is inefficient, and prone to errors, which in turn presents a risk to a firm's downstream activities. A client-specific and personalised regulatory inventory powered by ARI delivers only what compliance teams need to see. This is delivered in a single source, centralised regulatory inventory which pulls data from every global regulatory body. ARI captures regulatory issuances, and matches them to the business' regulatory profile, so the business has a single, always-current regulatory data source housed in a single platform. ARI automatically updates internal policies and controls, significantly reducing the need for manual review.
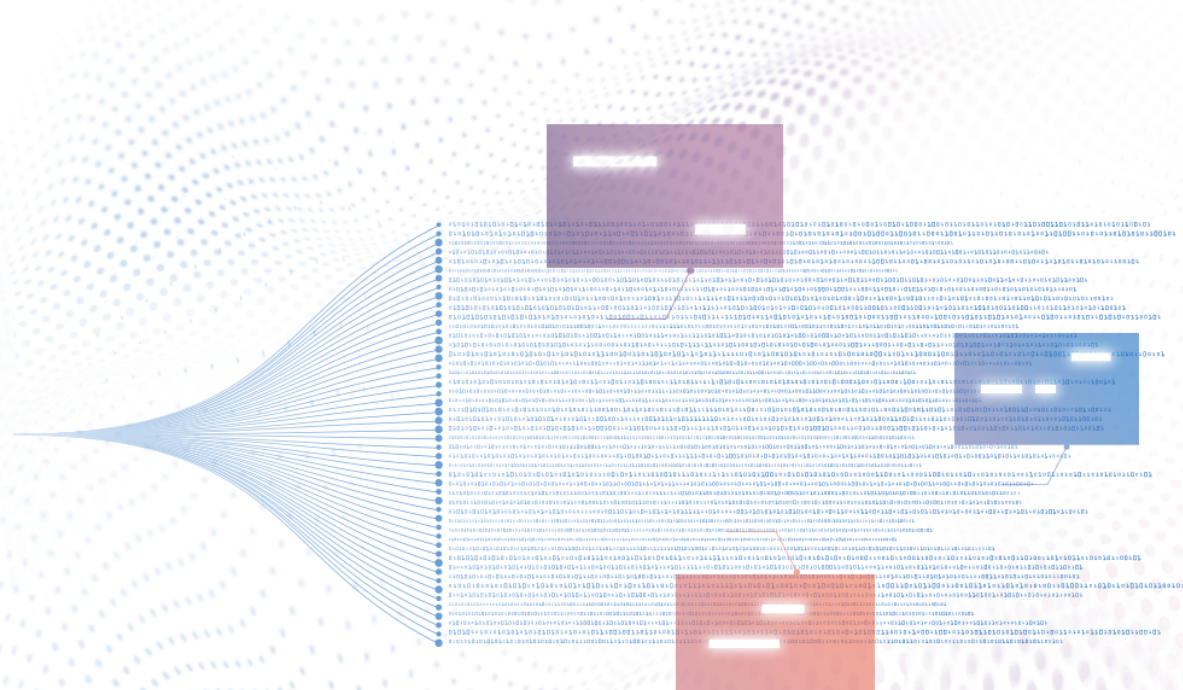
07
Conclusion

Automated Regulatory Intelligence is a revolutionary technology that can help organisations build a more robust, proactive and efficient compliance function.

This next-generation AI technology empowers compliance teams to stay ahead of regulatory changes, reduce complexities in processes, and respond to updates in real-time.

When applied to the regulatory change management process, ARI transforms complex regulatory issuances and data into clear, actionable insights.

Businesses can track, capture, and map every relevant regulatory obligation without missing important updates.

By freeing busy compliance teams to focus on strategic tasks, ARI significantly enhances efficiency and reduces the risk of regulatory breaches.

By freeing busy compliance teams to focus on strategic tasks, ARI significantly enhances efficiency and reduces the risk of regulatory breaches.

08
CUBE and Automated Regulatory Intelligence

CUBE is the market leader in Automated Regulatory Intelligence solutions.

Since 2011 we have built the world's most comprehensive and robust source of classified, and meaningful AI-driven regulatory intelligence.

CUBE's ARI solution delivers actionable insights into changing regulatory trends, suggests relevant topics that may of interest, and helps teams prioritise the right resources to tackle the regulation effectively.

With operations across Europe, North America, Asia, and Australia, CUBE serves a diverse and global base of customers and partners including the largest financial institutions in the world who leverage CUBE's RegPlatform to streamline their complex regulatory change management and compliance processes.

To learn more about ARI and how it can help your business, get in touch with us today: <ins>hello@cube.global</ins>.

CUBE is the market leader in Automated Regulatory Intelligence solutions.