LexisNexis®

Nexis® Solutions

Risk Revolution

Manage Evolving Risks Effectively with Big Data

Earlier this year, the International Institute of Enterprise Risk Practitioners (IERP), highlighted a megatrend in risk management, labeling it the "Permacrisis." Rather than the anticipated post-pandemic "Great Reset," crises have continued to manifest with unfortunate regularity.

> The predictability of crises has become increasingly elusive, requiring a dynamic approach to risk management."
>
> - Ramesh Pillai, iERP Chairman of the Board of Governors [1]

What has become predictable are the top risk concerns.

According to a recent report from NC State University Poole College of Management the top 5 concerns remain focused on:

- ↓ Economic volatility: Declined slightly y-o-y
- ↓ Talent shortages: Declined slightly y-o-y
- ↑ Cyber threats: Up from 15th to 3rd y-o-y
- ↑ Third-party risks: Up from 17th to 4th y-o-y
- ↑ Increased regulatory changes & scrutiny: Up from 16th to 5th y-o-y. [2]

Looking more closely at the risks on the rise, it's clear that risk management professionals have their work cut out for them. Cyber threats are becoming more sophisticated and more prevalent as bad actors take advantage of technology to accelerate attacks. Third-party risk and heightened regulatory risk exposure also go hand-in-hand.

From increasing use of sanctions to address conflicts in Eastern Europe and the Middle East to a growing number of directives targeting corporate sustainability, organizations need a clear line of sight into potential risk red flags across the business, including extensive third-party networks of customers, business partners and suppliers on which they rely.

The more detailed knowledge an organization has of the risks it faces, the more informed and strategically effective its decisions can be. Fortunately, collecting, structuring, and analyzing relevant data and leveraging AI-empowered technologies can improve risk awareness and shorten response times.

Take a deeper dive into current and emerging risk considerations and how the right data sets and technologies can keep your due diligence, monitoring, and risk analysis focused and efficient so that you can manage evolving risks effectively.

Leveraging Big Data to **Improve Risk Visibility**

The increasing globalization of business, alongside the growth in digital communications, is resulting in vast digital corporate ecosystems where the performance of third, fourth, and even fifth party contacts and suppliers can have a negative risk impact on the organization.

There are complex and often opaque interdependencies between a business, its customers, suppliers, and partners.

Escalating regulatory environment adds to the pressure, as companies wrestle with regional variations and the global reach of regulations like the Foreign Corrupt Practices Act (FCPA), the General Data Protection Regulation (GDPR), and a growing raft of anti-money laundering legislation. In addition, Environmental, Social, and Governance (ESG) regulations are on the rise too.

On March 15, 2024, the Corporate Sustainability Reporting Directive and Corporate Sustainability Due Diligence Directive (CS3D) received approval by the Council of the EU. Implementation of the regulation will begin with a phased-in approach over the next 3-5 years. Even without regulatory pressure, however, the reputational risk of falling short on ESG expectations is significant, directly impacting investor, employee, and customer confidence in an organization.

This constantly changing ecosystem demands that organizations manage risk on a day-to-day, and sometimes hour-to-hour, basis.

If the challenge is growing exponentially, the tools to meet it are also evolving. Collecting, managing, and analyzing of big data—from internal systems, the Internet of Things (IoT), and alternative data providers—offers strategic risk management advantages to organizations as they turn to artificial intelligence to proactively identify, manage, mitigate, and prevent risk.

Risk Management: **The Quest for Perfect Knowledge**

Risk management focuses on spotting factors or events that could negatively affect an organization and assessing the probability of their occurrence.

By predicting their impact and subsequent effects, organizations can take action to prevent the risk, reduce and mitigate it, or transfer it via insurance. In this way the organization establishes its risk posture, namely the amount of risk it is prepared to accept to meet its business objectives.

Big data and analytical processing power enabled by cloud computing makes this more achievable. The vast universe of information on everything from company performance, consumer trends and economic, political, and social activity to climate change and weather conditions offers a rich dataset for businesses to mine. When cross-referenced with a company's own data from client records and transactions, businesses can uncover patterns, trends, and connections that would previously have been impossible to uncover.

Moreover, generative AI offers powerful potential on the future of risk management work—allowing for quick summarization or report generation so that risk management professionals can spend less time combing through data and more time analyzing it for meaningful insights.

> In our fast-paced world, the risks we have to manage evolve quickly. We need to make sure we manage risks so that we minimise their threats and maximise their potential."
>
> **- The Institute for Risk Management**[3]

Source Variety Available from Nexis® Data+

Nexis Data+ API solution offers a multitude of data sources relevant to risk monitoring and analysis, including:

100K+

Global news sources including premium print, broadcast, and web sources

1.5+ Million

PEPs, their family members, and close associates

37K+

ESG ratings for companies in Europe, Asia, and North America

1,400+

Sources of Sanctions, Watchlists, and Blacklists

489+ Million

Public and private companies including legal entity data for 165 million companies and 220 million executives in 130 countries

50K+

Legal intelligence sources

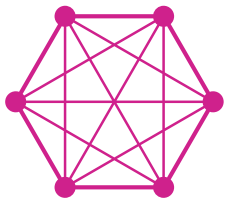
LexisNexis enriches data with index tags and other metadata to allow for more targeted data calls. Our enrichments make it much easier to reduce the noise to uncover the most relevant data according to your risk considerations.

With this information, organizations can predict and plan for previously unforeseen incidents and potential disruptions. Analyzing historical and current data allows organizations to gain a more comprehensive and real-time picture of the risk environment than has been possible to date.

By using big data to underpin risk and compliance activities, businesses can become more agile, intelligence-led entities, proactively identifying emerging risks.

In today's fast-paced corporate environment, this can be turned to competitive advantage across several key areas of operation from compliance to supply chain management

Four Stages of **Big Data Analytics**

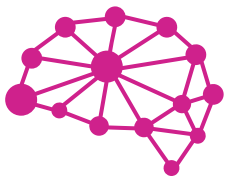


Descriptive Analytics

Descriptive Analytics use data to describe what has occurred in the past to make assumptions about the future.

Prescriptive Analytics

Prescriptive Analytics goes a step beyond prediction and prescribes actions aimed at preventing or mitigating risks.



Diagnostic Analytics

Diagnostic Analytics cross-references data from a variety of sources to identify why an event occurred and its potential outcomes.

Predictive Analytics

Predictive Analytics use historical and current data, statistical algorithms, and machine learning to anticipate future risks and opportunities.

Addressing a Growing **Compliance Challenge**

The global regulatory environment has grown in scope and intensity in recent years. Compliance has become one of the most critical areas a business must address if it is to minimize the risk of legal action, fines and the reputational damage associated with a breach of regulations.

Legislation regarding to bribery and corruption, terrorist financing and data privacy, for example, place significant burdens on organizations to ensure their operations are compliant. Moreover, it is increasingly clear based on recent prosecutions and court decisions that corporate leaders, including board directors, may be held accountable for compliance failures that take place because of their own actions, lack of oversight or both.

A survey of more than 500 global board members found that:[4]

79% believe enhanced risk management will be imperative to protect and grow their organizations in the next five years

55% admit to difficulties in adapting risk management to keep pace with changes in business strategy

This has led to rapidly increasing costs associated with managing compliance risk.

Lifting the Compliance Burden with Data Analytics & Automation

In this evolving regulatory environment, leveraging risk-aligned data sets and AI —particularly emerging generative AI capabilities around data summarisation and report generation—can accelerate your time to insight.

Put simply, computers can accurately record, cross-reference, and analyze vastly larger quantities of data and variables than their human counterparts. Companies increasing will use generative AI capabilities to interrogate their records and spot compliance issues earlier, so they can move from a reactive to a proactive risk management posture and prevent or neutralize threats before they become a problem. Automating previously manual, time- consuming processes by summarizing data or generating reports helps to reduce costs, improve compliance efficiency, and free up human resources for tasks that require emotional intelligence and decision-making.

Case In Point: Credit Suisse

The adoption of big data analytics has been particularly successful in the heavily regulated financial services sector. Credit Suisse deployed an advanced data analytics platform in 2017. It moved from a manual, human-led system to a technology-led approach to finding suspicious transactions and potential fraud. Since deployment, the bank has seen a 45-fold increase in the number of productive alerts generated by its predictive monitoring system and a 60% faster time-to-resolution, despite the enormous increase in data volumes. This has been achieved at a fraction of the cost of historical compliance activity, which had been rising continuously over the previous three years.

The platform is also tuned to offer visibility of Credit Suisse's complex network of relationships with clients, and to support the assessment of new international clients. This includes identifying and assessing politically exposed persons (PEPs)—those who have connections with governments. Compared to earlier practices, assessment of PEPs is now around 60% faster at 40% lower cost.

"Over the past two years we have gone from a human-led approach to compliance, where we were carrying out periodic checks, to a technology- led approach in which we are continuously monitoring activities across the bank to enable earlier prevention and detection."

- Lara Warner, Head of CCRO and Member of the Executive Board of Credit Suisse[5]

Improving Efficiency & Accuracy with **Robotic Process Automation**

One of the biggest advantages of artificial intelligence and machine learning is the ability to perform repetitive tasks with consistent accuracy.

This has distinct benefits when it comes to compliance activities such as customer, vendor, and third-party screening. This activity requires the aggregation of disparate data sources including internal systems and external sources such as watchlists, sanctions data, and PEPs information. It is a time-consuming process that is prone to human error.

Robotic Process Automation (RPA) eliminates these errors, automatically collecting, storing, and analyzing data from regulatory agencies such as the FSA and law enforcement agencies like Interpol as well as from internal datasets, with a high degree of accuracy.

RPA allows organisations to have a much higher degree of confidence in their current risk exposure because, rather than offering a point-in-time assessment, the position can be continuously watched, and issues flagged as soon as they occur.

Employing RPA also means organisations can divert employees to higher value tasks, while remaining confident that their risk mitigation process is robust.

There are challenges to implementing RPA, mainly around data quality and the preparedness of existing systems to support automation, as Liz Jordan, managing director Deloitte Risk and Financial advisory explains: "RPA's heavy reliance on data to automate compliance processes makes data quality paramount. It's also critical to determine whether technology infrastructure has the capacity to accommodate RPA, and that existing systems are compatible with the new automation tools and system security can be maintained in the automated environment."[6]

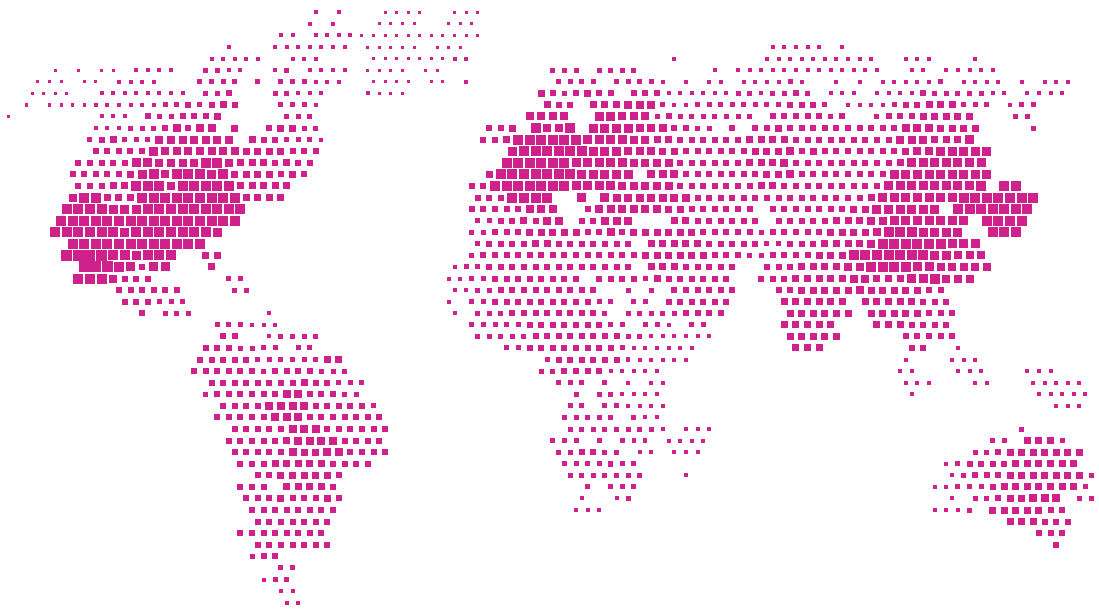
Improving Efficiency & Accuracy with **Robotic Process Automation**

Case In Point: Global Bank Uses Risk Data API to Accelerate Adverse News Monitoring

With clients in 50 different jurisdictions around the world, a global bank found it increasingly difficult to keep pace with its compliance obligations including entity due diligence and ongoing risk monitoring.

Now, the risk management team uses pre-and post-search filters with enriched data for targeted adverse media screening. The bank has the option to connect to non-news data too: Company sources that surface critical beneficial ownership data, ESG ratings, sanctions and watchlists, PEPs, biographical references, and legal data—all of which can be delivered via a flexible API.

RPA can be used to automate due diligence and monitoring, freeing up resources. Risks flagged by the RPA process are then escalated to risk analysts and other decision makers. In addition, the reports generated can be used for AI applications.



Hunting the "Needle in a Haystack" with **Forensic Data Analytics**

While vast amounts of data can deliver deep insights, sheer volume can cause problems for businesses seeking to identify suspicious activity that could constitute compliance risk—particularly when dealing with historical transactions. This is where Forensic Data Analytics (FDA) comes into its own.

Data scientists use FDA and build algorithms to rigorously mine transactional data and discover patterns that indicate issues such as money laundering and fraud. Given enough historical data, they can model, quantify, and forecast risk, helping companies move toward the prescriptive analytics stage where they can put measures in place to protect their business and prevent fraud.

A further application for FDA is in highlighting data privacy compliance risk by identifying where data is stored across the business, how it is managed and who has access to it. This is particularly valuable considering the GDPR and other data privacy laws.

FDA can be applied across all areas of business risk and compliance to identify gaps in governance and compliance controls and help companies achieve greater transparency.

Pinpoint & Manage Risk **in the Supply Chain**

Supply chain integrity and resilience is a major challenge for today's organizations.

Supply chains have become more complex, multinational, and spread across multiple jurisdictions. They are exposed to multiple risks—from operational, compliance and reputational risks to physical and cyber security hazards. Managing beyond Tier 1 risk is a considerable undertaking in which insights gained from big data analysis are the key to proactive management and improvement in supply chain transparency, sustainability, and resilience.

Minimizing Supply Chain Disruption Risk

Digitization and the rise of the Internet of Things (IoT) has made supply chain management a far more accurate and responsive activity as businesses can now integrate real-time information about factors such as weather conditions, transport logistics and stock inventories with insights gained from predictive analytics that anticipate shifts in customer demand and the future availability of raw materials. This allows companies to see risks earlier and respond more quickly, cutting reaction times from weeks to just minutes.

In a world where incidents such as extreme weather events, for example, are becoming more frequent, the ability to predict and react to changing situations with an intelligence-led strategy is a considerable commercial advantage.

Assessing & Improving Environmental & Social Governance

Monitoring partner performance in areas of environmental and social governance (ESG) can be achieved through analysis of datasets from global news sources, social media posts, regulatory agencies, and public company information to gain an objective perspective on risks and achievements.

The insights gained from this analysis can be used to inform partner selection and as a lever in partner management to improve supply chain transparency and support businesses in their efforts to continuously improve ESG performance.

Pinpoint & Manage Risk in the Supply Chain

Case In Point: ESG Risk Monitoring & Analysis

A Software as a Service (SaaS) company with offices in the UK, US and Spain needed high-volume data to support automated ESG risk monitoring and analysis it conducts on behalf of its clients. But the company found the constant need to wrangle messy, unstructured data frustrating. Impressed by data organisation and enrichments that enable customised data calls based on individual client needs, the company turned to Nexis Data+. With the ability to conduct ongoing monitoring and advanced filtering to focus on ESG-related topics, the company now pulls in timely news data from 100,000 global sources to improve ESG risk awareness among its clients.

Gaining Visibility of Third-Party **Cyber Security Risk**

The data generated, stored, and managed by businesses creates significant compliance, reputational, and financial risk.

A critical aspect of data privacy is its symbiotic relationship with cyber security. Section 32 of the GDPR states organisations must demonstrate they are "processing personal data in a manner that ensures appropriate security of the personal data, including protection against unauthorized or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organizational measures."[7]

This means companies need to be confident not only of their own cyber security, but also that of third-party providers or subsidiary organizations that are connected to their digital ecosystem. This is particularly important given the growing prevalence of the cyber-crime tactic of "island hopping" where cyber criminals make a breach in a vendor company and use its access privileges to infiltrate the network of their ultimate target.

Historically compliance has been achieved through point-in-time screening via questionnaires and interviews, as part of supplier contracts. However, the speed at which a business' cyber defense posture can change as a result of emerging threats means this is no longer a sufficient process. Companies need to understand their cyber risk exposure in real time through continuous assessment of third-party performance throughout the supply chain.

Big data is helping to achieve this through security ratings services—tools that analyze objective, comprehensive cyber security data and build an independent picture of an organisation's performance.

Businesses can continuously monitor this picture over time to inform decisions about the level of access that partner has to critical systems and data. Any major change in the organisation's posture, as the result of a new vulnerability or emerging threat, is visible to partners, who can adjust accordingly. This is particularly valuable in mergers and acquisitions, where cyber due diligence is becoming as critical as financial and legal due diligence in understanding the risks associated with the transaction.

Making Big Data Work for **Your Organization**

The volume and complexity of business risk in today's digital corporate environment goes far beyond manual management.

To gain the most effective knowledge needed to navigate compliance, supply chain and security risks, alternative datasets and AI-powered data analytics offer significant benefits.

As it gains currency in organizations, big data is revolutionizing risk management by making it more nuanced, comprehensive, and effective, as businesses are operating from a far stronger position of knowledge. This enables them to proactively manage and mitigate risk, identify future areas of concern using predictive analytics, and use risk appetite strategically to achieve business objectives.

The primary risk in big data analysis itself lies in poor data quality and difficulties in integrating disparate internal and external datasets to gain the complete picture. However, as its application in risk management increases and technologies evolve, we are likely to see businesses prioritizing data integrity to improve performance.

Unlock the potential of big data and AI-enabled risk management technologies with a recognised leader in data aggregation and distribution: LexisNexis®.

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