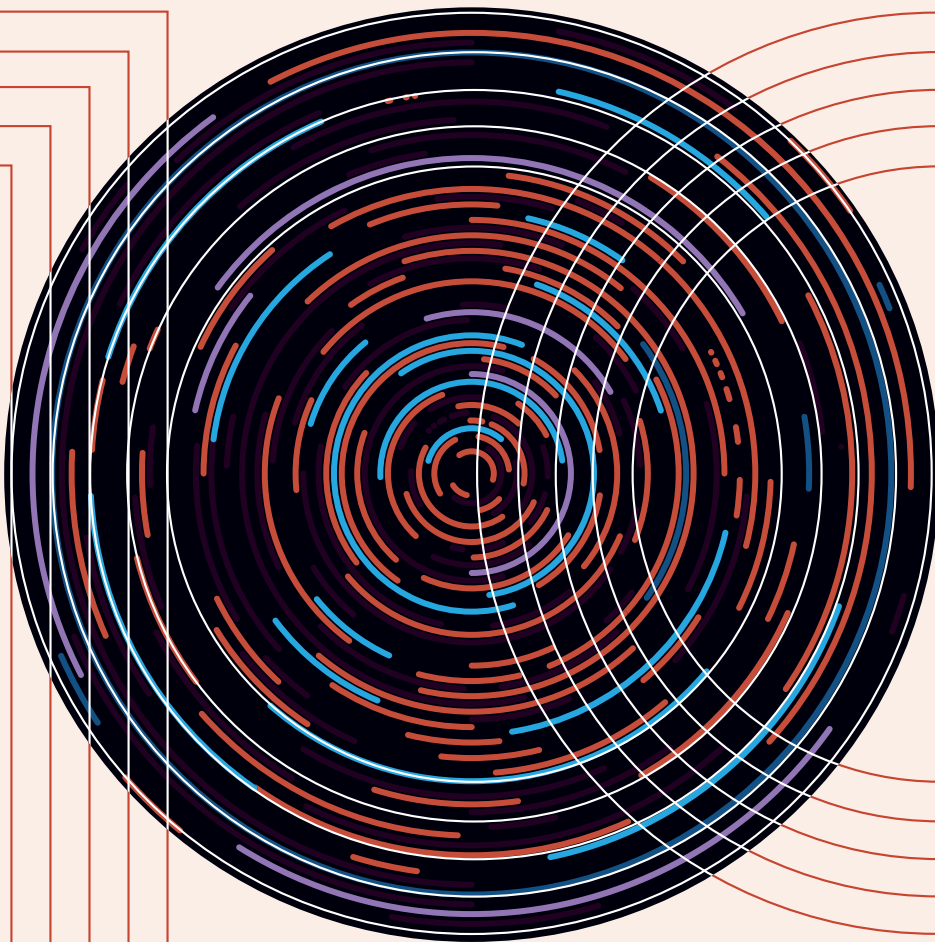


Winners' Review

Moody's
Analytics



Strategy **Moody's Analytics**

Moody's Analytics wins 10 awards in Chartis' RiskTech100® and moves two spots up the rankings to second place. The company combines deep risk expertise, expansive information resources and proprietary data with innovative technology to create industry-leading solutions. In recent years, Moody's Analytics has continued to expand its coverage, with particular strength in the banking book and a credit model it has now extended into climate risk.

Banking**Climate Risk****CECL****Credit Risk for the Banking Book****Enterprise Stress Testing****Model Validation****OpsTech: Securitization Services****Pricing & Analytics: Credit for the Banking Book****Pricing & Analytics: Credit for CLOs**

As well as the Strategy award, the company retains the top spot in several categories, including Banking, Credit Risk for the Banking Book, CECL, Enterprise Stress Testing and Model Validation. It also wins several new awards including Climate Risk, OpsTech: Securitization Services and Pricing & Analytics: Credit for Collateralized Loan Obligations (CLOs).

Moody's Analytics

- **Strategy**
- **Banking**
- **Climate Risk**
- **Credit Risk for the Banking Book**
- **CECL**
- **Enterprise Stress Testing**
- **Model Validation**
- **OpsTech: Securitization Services**
- **Pricing & Analytics: Credit for the Banking Book**
- **Pricing & Analytics: Credit for CLOs**

Moody's Analytics accelerates its winning streak in the RiskTech100® this year, moving up the overall rankings to second place, its highest ever position. It also takes home an impressive 10 awards, winning the Strategy category, retaining the Banking industry award, and winning eight further solution categories, including the inaugural award for Climate Risk.

The company continues to assert itself at the forefront of risk management, with solutions that help customers measure and understand risk more holistically. Its unique datasets, analytic tools and software enable clients to integrate risk assessment into their own strategies to help them adapt and grow. Helping clients achieve this more holistic sense of risk is a prominent feature of the company's current and future development plans.

Integrating data and analytics to generate insight

Steve Tulenko, President of Moody's Analytics, says, 'we are particularly proud of the Strategy award. We combine curated data with experience, expertise and analytics, enabling customers to leverage the investments they make in tech and infrastructure into making better decisions with those capabilities. The fact that we are not a pure software shop, or a pure tech or analytics shop, but a combination of capabilities, is something that really resonates with our customers.'

'What we are doing in Know Your Customer (KYC), credit analysis and the financial crime space is a great example of the integration of data and analytics to generate insight,' he continues. 'We help our customers gain a more comprehensive understanding of – and confidence in – the people and firms with whom they are doing business. Within financial crime, for example, we check to see if the company exists, and trace the corporate hierarchy back to the ultimate owner. Then we can dive in on that individual or entity with our screening and filtering tools to see if there is anything in their background worthy of investigating further.'

Greater appreciation of resilience

Tulenko reports that, in the face of coronavirus uncertainties, 2020 was one of the company's busiest ever years. 'Usage of our products increased across the board, not just within credit but across everything we do. Our goal is to create confidence by helping our customers to address uncertainty. Scenario-based analysis and analytic capabilities permeate many of our offerings, to give customers the ability to dimension that uncertainty,' he says.

Tulenko also notes that one important impact of the COVID-19 pandemic has been a greater

appreciation of the notion of resilience. 'Attitudes about risk management are shifting; people value a holistic sense of risk more today than they did a year ago,' he explains. 'Within credit risk, for example, this concept of resilience means looking upstream beyond the borrower and understanding who they are exposed to, who their suppliers are and where their revenue comes from. It also means examining non-financial factors, such as climate and social risks, to gain a fuller understanding of the sources of risks and opportunities, in a more qualitative way.'



Steve Tulenko, Moody's Analytics

The Climate Risk award reflects the firm's focus. Expanding its climate risk capabilities is a top priority for Moody's Analytics and one it has invested in significantly. 'We are really pleased to receive this award as it's an acknowledgement of our integrated, holistic approach to risk that looks beyond a simple review of the financial metrics,' Tulenko says. 'We think this more comprehensive approach is really important to the future of risk management.'

Extensive use of NLP

AI and machine learning (ML) continue to be incorporated into the company's products. Tulenko explains that several elements of AI are now becoming part of the fabric of the Moody's Analytics offering. 'For example, we are applying NLP technologies and expertise in the financial crime and credit spaces quite extensively for early-warning and filtering mechanisms. Advances in technology mean that it is now commercially viable for our customers to seek the answers to questions that they would never previously have been

able to consider. We are trying to create routines and approaches that our customers can leverage, and are modularizing these NLP capabilities to make them readily available across all disciplines,' he says.

Future focus

Looking to the future, Moody's Analytics is planning further developments within the areas of environmental, social and governance (ESG) considerations, commercial real estate, and small and medium-sized enterprise (SME) and private company information. 'We will continue making it easier for our customers to gain confidence

in the people and firms with whom they do business. That confidence will be gained through a more holistic understanding of their own resilience and an ability to control their own destiny,' Tulenko concludes.

Moody's Analytics Finishes #2, Wins 10 Categories in Chartis RiskTech100[®] 2021



Financial intelligence and analytical tools that help business leaders make better, faster decisions.

MOODY'S
ANALYTICS



How to cope with the persistent pressures and financial challenges caused by the pandemic

The global coronavirus pandemic caused unprecedented and seismic challenges for the financial sector in 2020, including a sudden shift to remote working, considerable market volatility, and significant future uncertainties. The cascade of impacts has meant that financial institutions (FIs) have had to rapidly reassess many aspects of their business.

As national vaccination programs bring hope for a return to some form of normality, we examine some of the central themes that have emerged from the pandemic, and the ways in which FIs can adapt to cope with the pressures they are under in 2021.

COVID-19 is accelerating existing market trends

In many respects COVID-19 has accelerated pre-existing trends, some of which were already moving fairly rapidly. However, the pandemic has served to quickly broaden their impact, and ensured an enduring and transformational impact on the sector.

While many issues have been brought to the fore, Chartis outlines three key areas:

- **Increased complexity of credit challenges.**

The dispersion of credit quality and hugely variable levels of resilience among firms can be seen across a broad range of industries. Andy Frepp, General Manager of Risk Solutions at Moody's Analytics, agrees: 'lack of homogeneity is a key challenge. The pandemic has clearly affected different industries in extremely different ways. While some sectors are always affected more than others in a crisis, there has probably been nowhere near as much dispersion as we have seen over the last 12 months.'

- **Rapid transformation to digital infrastructure.**

Companies are now all relying on digital, dispersed infrastructure. Internally, they have had to move rapidly to largely remote workforces accessing IT and software. Externally, their interactions with customers are increasingly digital. 'While this was true before COVID-19, the pandemic has rapidly accelerated this trend, moving us much closer to a largely digitized world,' says Sid Dash, Research Director at Chartis. 'This digital infrastructure brings new compliance and operational risks.'

- **The importance of supply chain and business interruption (BI) risks.**

The pandemic has exposed widespread elements of supply chain and BI risk and highlighted their seriousness. BI risks to services businesses were clearly underestimated. The crisis has underlined that physical asset risk is only one dimension of risk, as business operations have virtually ground to a halt in some sectors.

FIs must examine the lessons of the events of 2020 and understand how they can cope with the challenges they are now facing. Chartis believes the following areas to be key to success.

Organizational flexibility: a non-negotiable component

The rapid changes that were required as a result of the pandemic brought into sharp relief the extent to which *organizational flexibility* is a vital component of long-term success. Companies cannot afford to be totally reliant on one model or approach, without the ability to rapidly adjust in the face of market events.

Critical nature of analytics and analytical frameworks

Companies cannot afford to be too narrow in their thinking, and must ensure they have the right analytical frameworks in place to examine the choices they face. Equally, they will be dealing with other organizations that are undergoing considerable change themselves, which they need to understand.

Frepp explains that, 'while this may sound like nothing new, when you have these extreme shifts across different industries and businesses, and companies are trying to predict how and what will happen next, data and analytics become even more important. It may seem obvious, but it is critical.'

Rapidly getting to grips with digital risks

With the rapid acceleration to digital, companies need a much deeper understanding of the risks they are facing – beyond hacking and cyber criminals. Firms must be able to control their digital infrastructure and digital data a lot more efficiently. 'FIs need to understand the various dimensions of their customers' digital identities (whether wholesale, retail or SME). They need to be able to manage and control that data in an efficient way right throughout the customer lifecycle,' says Dash.

Equally, within digital risk there has traditionally been less of a focus on whether a business can distribute its infrastructure quickly. The pandemic has highlighted the issues that surround how to keep a regulated business running while the infrastructure is distributed, and the resulting impacts on productivity. Dash explains: 'a lot of FIs have probably misunderstood to what extent they can distribute different elements of their business. Anecdotal evidence suggests that it has been easier to be more agile on the wholesale side than on retail. Traders have adjusted much better, whereas retail banks and call centers have not adapted as well. It has highlighted that a lot of the process risk has not been very clearly thought through.'



Andy Frepp, Moody's Analytics

Frepp also stresses the importance of understanding digital risks. 'In 2020 we saw 10 years of change compressed into 12 months. This shift in the digitalization of financial services will continue in 2021, but compressing such substantial change into such a short timeframe holds considerable risks. Cyber-security risks are obviously vital to understand, but understanding the digital risks around how customers are interacting with organizations, and the associated strategic and business risks, is also critical,' he says.

Early-warning signals and the full credit lifecycle

The huge disparities in credit quality and in the resilience of different companies and industries mean that FIs must be much more aware of how their customers and counterparties are performing. 'For institutions that have been lending in certain affected sectors over the last 12 months, it's going to be pretty challenging in 2021. Much more granular early-warning signals need to be established,' says Frepp. 'FIs are also increasingly thinking about the full credit lifecycle. Historically, this might have been fairly fragmented and siloed within organizations. But our customers are now seeking much more clarity and being more holistic in the way they are thinking.'

Moody's Analytics, says Frepp, offers a complete solution across the full credit lifecycle. 'This allows for the digitization of workflows through our software, and brings the benefits of our world-class credit analytics and economic forecasting,' he explains. 'Traditionally most FIs have had to manage by looking in a rear-view mirror. Our technology and data enable them to look forward more. We can identify signals that help FIs manage issues before they arise, and provide early-warning signals if things start to deteriorate. Sentiment analysis is one such example, giving early-warning signals across a credit portfolio and helping to predict extreme situations.'

Understanding risk resilience will be vital

Companies need to be more cognizant of the risks they are exposed to going forward. Understanding the potential impacts of supply-chain and BI risks on productivity and profitability, and how these risks change as market structures shift, will be vital. It is clear that FIs need to handle these risks, along with climate and digital risks, in a much more quantitative, structured and organized way.

The concept of resilience will play an increasingly important role. FIs need to understand both their own operational and risk resilience and also the external risks in terms of their counterparties and investments.

'How effective are an organization's digital architecture and framework? What ESG considerations are there? Does the counterparty a company is working with have low operational resilience? Considering the operational and business-interruption risks a company may be carrying is vital, and scores based around companies' risk resilience will become increasingly important,' says Dash.

Frepp agrees: 'the last 12 months have brought this concept of a holistic view of risk front and center. Our ratings, scoring and analytics background means that Moody's

helps its customers understand and develop confidence in the people and firms with whom they are doing business. This extends from managing the risks of financial crime, or understanding the quality of suppliers and vendors, all the way through to integrating our climate expertise – a classic example being the risk of tsunamis in Asia and potential disruption to semiconductor supply chains. The way businesses need to think is pretty far-reaching. The pandemic and its resulting extremes have pulled this more to the fore.'

'A primary goal for us is helping our customers be more aware of what's coming. We are continually thinking about the risks and risk factors that might affect our customers in the future. For example, using our climate work as a leading indicator of other risks; helping our customers to manage risks today while also understanding potential future impacts,' he says.

Dash believes that 'the pandemic has revealed huge variances in levels of operational and risk resilience. A lot of companies are happy to declare "victory," but there are a lot of organizations whose productivity has been very significantly affected.'

'There will undoubtedly be winners and losers,' agrees Frepp. 'Some organizations will have seen the last 12 months as something they have "just got to get through" until life get backs to normal. But thinking that these changes are just a one-off is a dangerous attitude for businesses to have. Other companies will have adapted to these seismic shifts far more and will be much better positioned to take advantage,' he concludes.

