Significant developments in data analytics and artificial intelligence are shaping the face of regulatory compliance, government investigations and enforcement, according to analysis from global law firm Herbert Smith Freehills.

The firm today released its series *The Byte of Big Data: Investigations and Enforcement*, which shines a spotlight on how misconduct is monitored in the age of big data and explores how businesses need to prepare for this new era.

Herbert Smith Freehills partner Jeremy Birch said advances in data analytics and machine learning offer significant potential for businesses in terms of monitoring supply chains, business partners, employees and customer transactions for suspicious activity and misconduct. But the advancements also led to complexities for businesses across jurisdictions.

“We know that big data has changed the way business is done, but it’s also changing the face of white collar crime and, as a result, how misconduct is detected, investigated and prosecuted,” Mr Birch said.

“These advancements in data analytics will create growing pressure from regulators on businesses to enhance their abilities to monitor, detect and report misconduct.

“Companies now face more complexities in meeting compliance expectations, conducting internal investigations and managing government agencies during enforcement.
“As regulators and law enforcement agencies increasingly rely on advanced data analytics for monitoring and surveillance, the risk is growing that they will detect misconduct by employees and customers that has gone undetected by a company’s own internal systems. Businesses will come under pressure to develop their methods of internal monitoring while at the same time ensuring that their use of data is both compliant and ethical.”

In this series, Herbert Smith Freehills highlights issues organisations should be focusing on. These include how big data is used to fight financial crime, regulators monitoring of misconduct, digital forensics, big data and modern slavery, and how predictive analytics can prevent employee misconduct.

“For businesses, data provides significant commercial opportunities and the ability to reduce compliance costs through data analytics,” Mr Birch said.

“Whether it is monitoring employees, supply chains or customer transactions, there are opportunities for a more efficient and effective compliance function.”

The Byte of Big Data: Investigations and Enforcement series can be accessed [here](#).

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