crime&tech

UNIVERSITÀ CATTOLICA del Sacro Cuore

FOR AML/CFT AND THIRD-PARTY DUE DILIGENCE
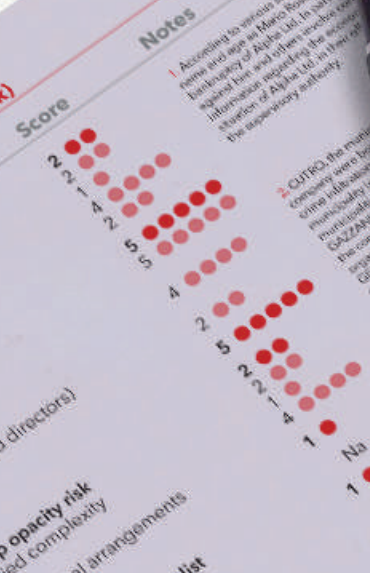
www.crimetech.it

Crime&tech offers the widest global portfolio of risk indicators for AML/CFT and third-party screening.

The risk indicators are based on models developed in our research projects.

They can be associated to **legal entities** (companies, corporate vehicles) and the **individuals** linked to them (shareholders, beneficial owners, administrators)

Company Alpha srl
Address Beta street, 20133 Milan
Sector Sector: H - Transport and logistics

TERRITORY RISK	● ● ● ● ○
SECTOR RISK	● ● ● ○ ○
OWNERSHIP STRUCTURE RISK	● ● ● ● ●
POLITICAL EXPOSURE	● ● ● ○ ○
ADVERSE EVENTS	● ● ● ● ●
FINANCIAL ANOMALIES	● ● ○ ○ ○
OTHER RISKS	● ● ● ○ ○

OVERALL RISK ● ● ● ● ○

Company

Legal entities
- Firms
- Legal arrangements
- Corporate vehicles

Natural persons
- Shareholders
- Beneficial owners
- Administrators

1
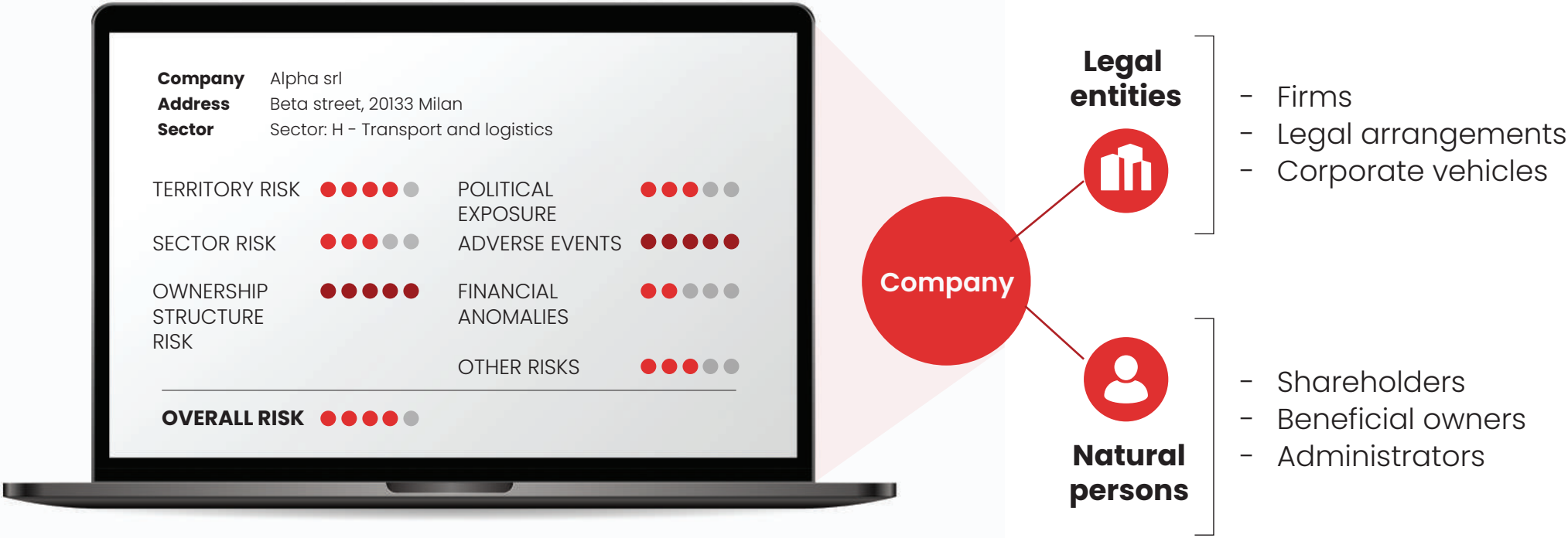
Crime&tech risk indicators

They allow to:
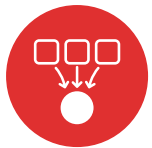
Incorporate the risk-based approach promoted by anti-money laundering (AML) and anti-corruption regulations

Move beyond traditional risk assessment approaches based solely on the check of 'compliance lists'

Cover firms at a global level (220+ countries, 400M+ firms), allowing to tackle the transnational nature of organised and financial crimes

Cover different risk dimensions, such as territorial risk, sector risk, ownership structure risk, financial and accounting anomalies, and other risk factors

Focus not only on "who" controls a firm, **but also on "how"** control takes place - the operational context, the whole corporate structure and its links

Reduce the information over-load by condensing high volumes of data into synthetic risk scores
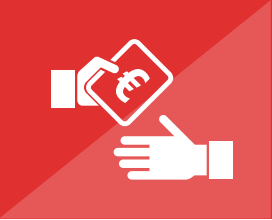
End users and use-cases

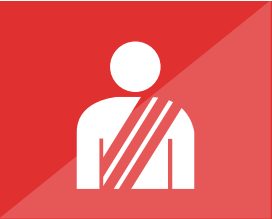Crime&tech indicators can be used by different players for many purposes:

Obliged entities for AML/CFT due diligence

Private companies for on-boarding, reputational due diligence and on-going monitoring of counterparts

Law enforcement agencies for organized crime, money laundering, corruption and tax fraud investigations

Anticorruption agencies for public procurement integrity checks

Competition authorities for cartel detection and procurement fraud investigations

Supervision authorities for risk assessment and monitoring of geographic areas and business sectors at high risk

Our portfolio of risk indicators

More than 20 different indicators, constantly evolving, and including among others:

Ownership structure

- Anomalous complexity of ownership structure
- Ties to opaque corporate vehicles and legal arrangements
- Lack of information on beneficial ownership
- Anomalous shareholding patterns
- Anomalous frequency of board rotations

Territory & Sector

- Firms in municipalities with high mafia risk
- Partners, BOs, or directors from municipalities with high mafia risk
- Links with high-risk countries (*several specifications*)
- High-risk economic sectors

Other risk factors

- Anomalous characteristics and background of BO/directors
- Anomalous frequency of name and address changes
- Anomalous date of incorporation
- High-risk legal forms (*country specific*)

Political exposure

- Shareholders, Beneficial Owners or Directors
  - Politically Exposed Persons
  - Local Administrators (in several EU countries)

Negative events

- Enforcement events
- Adverse media
- Sanctions
- Sanctioned professionals
- Mentions in Offshore Leaks (e.g. Panama Papers, etc)

Financial anomalies

- Shell company indicators
- Anomalies in the income statement
- Anomalies in the balance sheet
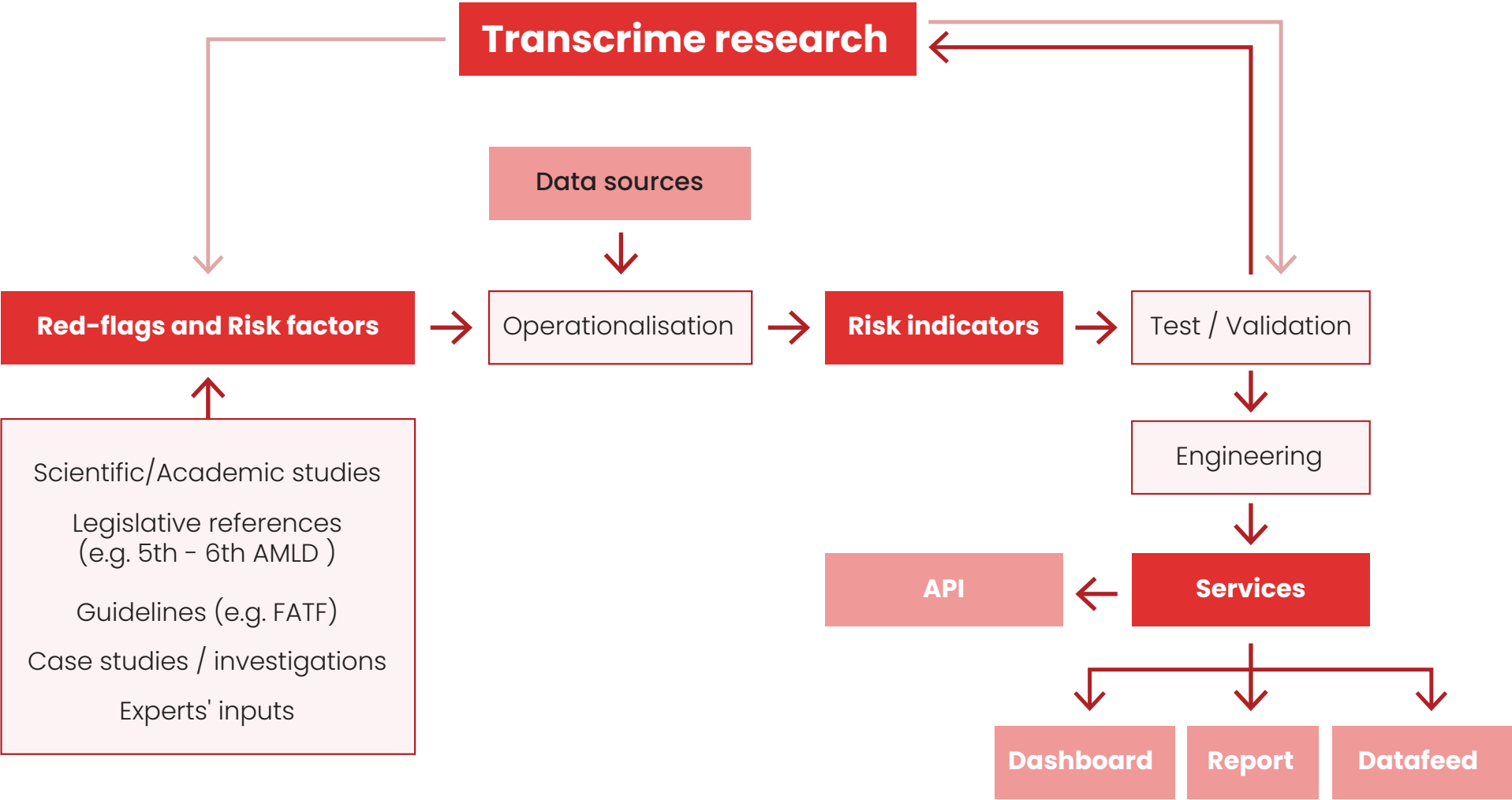- Anomalies in cash flow

Countermeasures

- Anti-mafia white lists
- AGCM Rating
- Certifications (e.g. SOA)

Process and methodology

The indicators are developed using frontier analytical approaches, and following the research activities carried out by Transcrime and Crime&tech in previous research projects.


Transcrime research

Data sources

Red-flags and Risk factors → Operationalisation → Risk indicators → Test / Validation

Scientific/Academic studies

Legislative references (e.g. 5th – 6th AMLD)

Guidelines (e.g. FATF)

Case studies / investigations

Experts' inputs

Engineering

API ← Services

Dashboard   Report   Datafeed

Delivery channels

Crime&tech indicators can be accessed through **four delivery channels**:

1

Webservices

though API connections to customer applications
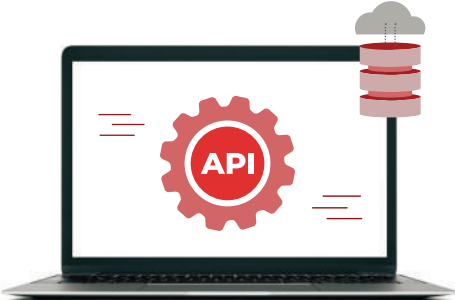
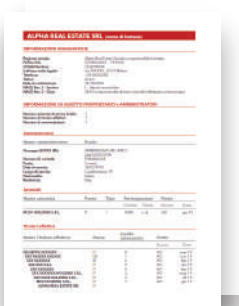**2**

Customised platforms

RISK MASTER
RISK VISIONER

3

Customised reports

on companies and/or individuals

4

Datafeed

Through integration of flat files the customer can integrate into its applications

Scientific validation

The indicators are validated in their predictive power in several international scientific publications.

Crime&tech risk indicators have shown strong predictive power in identifying firms (and owners / directors) later affected by sanctions and judicial measures. In a test conducted on a sample of 13.4M million of firms and owners, **ownership risk indicators** correctly predict **82.6%** of firms affected by sanctions and **88%** of firms with partners affected by judicial measures.

> ### Discover the selected list of publications on the TOM webpage
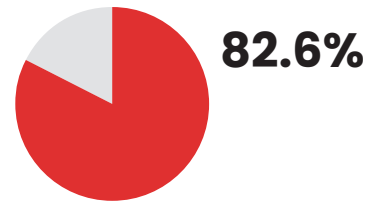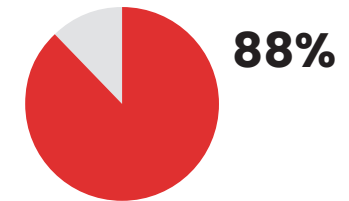
tom
THE OWNERSHIP MONITOR

TOM – The Ownership Monitor
is an excellence R&D hub launched by Transcrime and Crime&tech, for the analysis of business ownership structures.

Discover more:
https://www.transcrime.it/en/tom-the-ownership-monitor/

82.6%

Correct prediction of firms affected by sanctions

88%

Correct prediction of firms with partners affected by judicial measures

	True Positive Rate	True Negative Rate	Overall Accuracy	AUC	Precision
SANCTIONS ON COMPANIES	82.6%	83.5%	83.1%	0.904	0.834
ENFORCEMENT ON COMPANIES	65.2%	76.4%	70.8%	0.785	0.734
SANCTIONS ON OWNERS	88.7%	84.7%	86.7%	0.921	0.923
ENFORCEMENT ON OWNERS	87.8%	92.7%	90.3%	0.921	0.923

Institutional validation

Crime&tech risk indicators have been developed and validated within international research projects involving numerous public authorities at international level and private companies
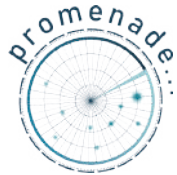
Law Enforcement Agencies	Anti-Corruption Authorities	Competition and Market Authority and other Public Authorities	Private enterprises and civil society
Europol	ANAC - National Anti-Corruption Authority, Italy	ADLC - Autorité de la Concurrence, France	Banks and AML obligated entities
Anti-Mafia Investigative Directorate	AFA - Agence française anticorruption, France	CCRL - Competition Council of the Republic of Lithuania, Lithuania	Companies in various fields (e.g. energy, IT) for supplier and third party control
Guardia di Finanza	OPLC - Prevention and Fight against Corruption Office of the Balearic Islands, Spain	UOHS - Urad pro Ochranu Hospodarske Souteze, Czech Republic	Organisations of investigative journalists (e.g. OCCRP, IRPI, RISE)
CNP - Cuerpo Nacional de Policía, Spain			
BFP - Belgian Federal Police, Belgium	ANI, Romania	National Anti-Mafia Directorate	*...and others*
DCPJ - Direction Centrale de la Police Judiciaire, France	DNA, Romania	Lombardy Region	
ANABI - Romania	NCPA - Network of Corruption Prevention Authorities of the Council of Europe (GRECO)	ORGA - Agency for the management of confiscated property, Spain	
...and others	*...and others*	*...and others*	

Data sources

Transcrime and Crime&tech possess in-depth knowledge of key data sources used in compliance/due diligence. Crime&tech indicators are calculated exploiting the following data sources (among others):

Corporate data	Compliance lists and negative events	PEP and Local Administrators	Other sources (among others)

Transcrime

- Joint Research Centre on Innovation and Crime (www.transcrime.it) of the Università Cattolica del Sacro Cuore
- Largest crime research hub in Europe
- Established in 1994
- 200+ research projects funded nationally and internationally
- Focus: organised crime, money laundering, financial crime
- Established network among European Law Enforcement, FIUs, Anti-corruption Authorities
- Approach: sociology, statistics, economics, forensic accounting, law, IT

Crime&tech

- Spin-off company of Transcrime – Università Cattolica del Sacro Cuore (www.crimetech.it)
- Risk models, risk indicators, IT applications for the assessment and prevention of criminal risks
- Processing of multiple data sources (official stats, judicial files, open sources, company data)
- Frontier AI approach (machine learning, text-mining, big data scraping)
- Certified ISO/IEC 27001:2013
- Partner of solution providers and data providers

From Transcrime **RESEARCH** → to Crime&tech **SOLUTIONS**
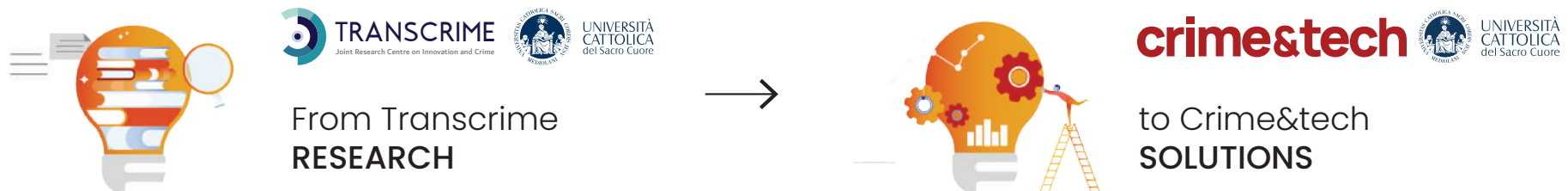
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🐦 Crimetech2015

ISO/IEC 27001:2013 certified