

WFE Webinar

Risk Intelligence for Exchanges and Regulated Market Operators; Persistent Sanctions Screening Solutions, AI and Digital Risk Mitigation

Date:September 19, 2024 **Time:**13:00-14:00 BST



Risk Intelligence for Exchanges and Regulated Market Operators; Persistent Sanctions Screening Solutions, AI and Digital Risk Mitigation



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AGENDA

1. What is Digital Risk - An overview of disparate factors.
2. What is Risk Intelligence (RI) - How Risk is assessed, scored and quantified.
3. Simple v Complex - Handling complex Risk algorithmic scoring
4. Sanctions - Understanding Risk in entity, identity, and asset definition (OFAC, LEI, ISIN and more)
5. Batch Screening v Persistent Screening - New paradigm in Risk monitoring.
6. Black, White and Grey Lists - And the anomalies they create.
7. Future of Artificial Intelligence and Risk Intelligence - Understanding additional corpus of data.
8. Demo of Persistent Sanctions Screening toolset - Sample data only.
9. Conclusions

About pTools

- pTools provides Market Information services to stock exchanges and related organisations including LOUs, NNAs, CSDs, CCPs and central banks.
- We deliver packaged software, bespoke solutions, outsourced and support services for applications including Risk Intelligence, Persistent Sanctions Screening, LEI and ISIN issuance, corporate actions and announcements processing, ESG validation, asset tokenisation and listing.
- With offices in Dublin, London and Bangalore, pTools' clients include LSEG, Qatar Central Bank and Strate South Africa. pTools works across technologies with specific capability in AI and NLP, blockchain and notarisation, digital risk mitigation/sanctions risk scoring and data quality management.
- pTools delivers solutions on-Premise, on-Cloud and as-a-Service. pTools is a long-term partner of the World Federation of Exchanges, is a member of GLEIF Vendor and Services Providers Relationship Group, and has additional partnerships with leading global technology providers.

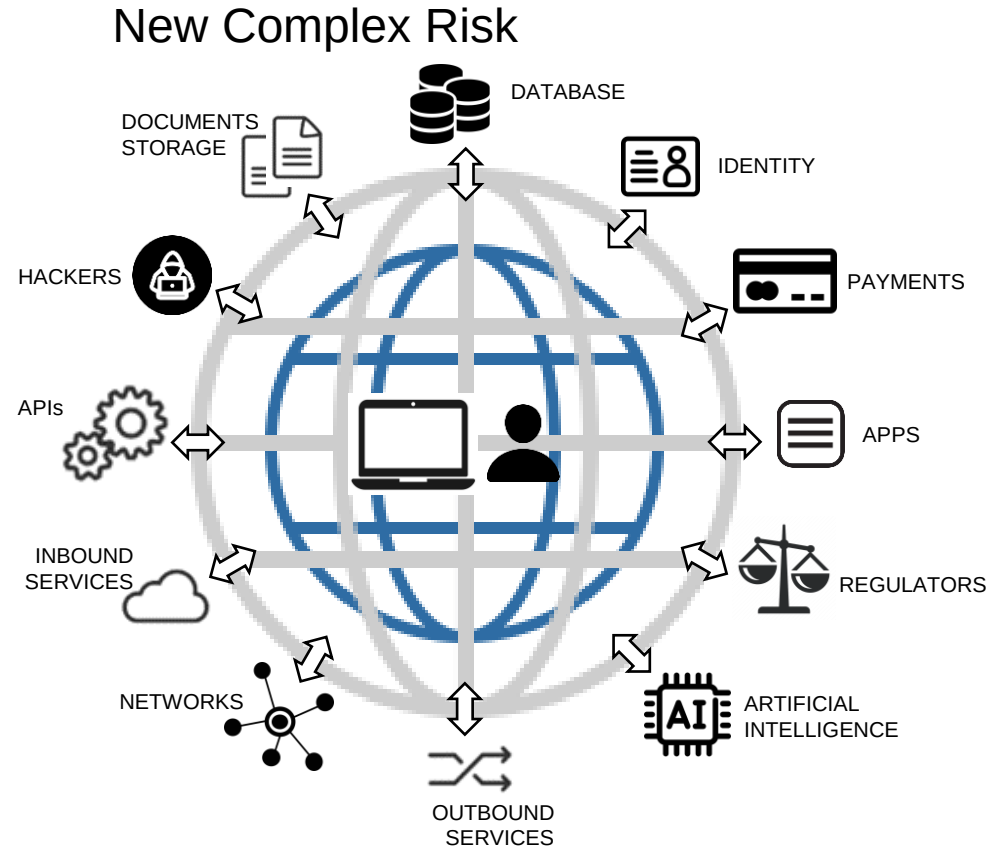
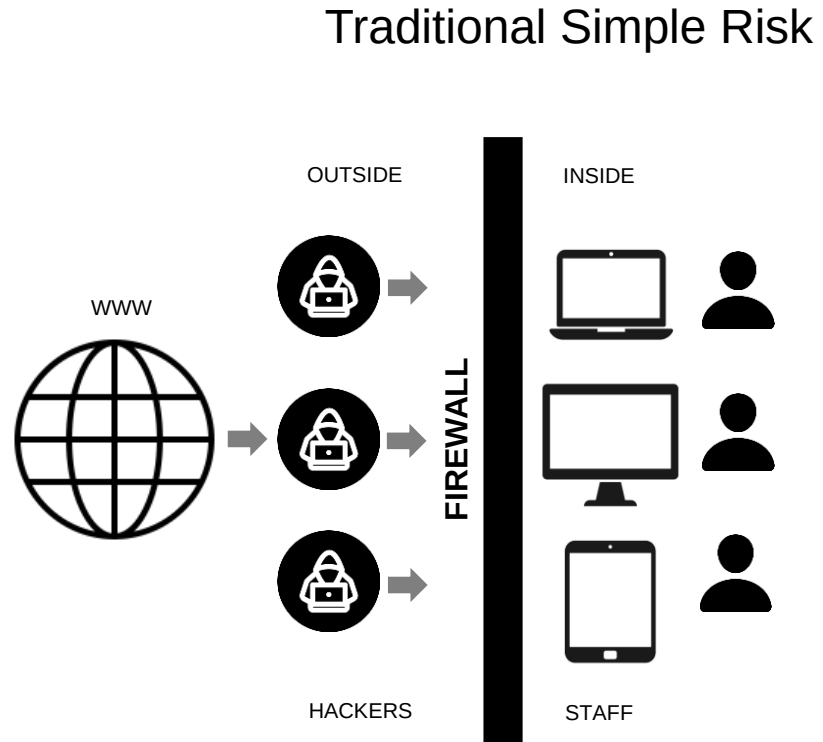
[1] - What is Digital Risk - An overview of factors

1. Traditional cyber security: anti-virus, phishing, malware, ransomware
2. New data integrity and data quality regulation and reporting
3. Process impact of misaligned individual, entity and asset identification and verification
4. New and legacy KYC/AML validation
5. New and legacy Sanctions Screening processes
6. New Personal Responsibility and Reporting regulation and compliance

[2] - What is Risk Intelligence (RI) - How Risk is assessed and scored/quantified.

1. Wholistic view of Risk across applications processes for Exchanges
2. Visualization of complex data/risk insights in a manner that humans can easily understand
3. Data analytics dashboards, risk scoring, red/amber/green escalations and workflows
4. Data driven management and data quality regulatory reporting

[3] - Handling New Complex Risk and Algorithmic Risk Scoring



[3] - Risk Scoring



Risk scoring for entity, identity, data, origin, network and more, enables better escalation and risk mitigation for sanctions, fraud, AML, data quality and reporting.

REGISTRATION RISK REFERENCING

→ Legal Formation Country*:

Risk Level

Medium

The country entered does not match the country resolved from the IP address.

Country Code Entered:
JM
JAMAICA

Country Code Resolved:

IRELAND

Internet Service Provider:

Liberty Global B... 

Location:

Waterford, Munst... 

Tor Exit Node:

Pass 

Proxy / VPN Blacklist:

Pass 

Internal Blacklist:

Pass 

AI DOCUMENT ANALYSIS

→ Authorisation Letter*:

Risk Level

Low

Only some of the data input was found in the File

Company Name

 Half Moon Resort 3

National ID Number

 8206275228089 1

Requester First Name

 Patrick 2

Requester Surname

 Patterson 2

Requester Email

 george.mathews-2@ptools.com 0

Requester Phone Number

 18765551234 2

File Scanned

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Authorisation Letter
Half Moon Resort
5 Main Street,
Ocho Rios,
Jamaica
Phone: 18765551234

Date: July 15, 2024

To Whom It May Concern,

I,   Manager at Half Moon Resort, hereby authorize George Mathews, holder of ID number 8206275228089 and reachable at george.mathews-2@ptools.com, to act on behalf of Half Moon Resort for the purposes of (specific purpose of authorization, e.g., making reservations, handling customer requests, signing contracts, etc.).

This authorization is valid from [start date] to [end date], unless revoked earlier in writing.

If you have any questions or require further verification, please do not hesitate to contact me at 

Previous

Next

LEI RISK SCORE

Risk Level

Low



General Description

Legal Entity Number is checked against global LEIEX database for invalid information or expiry of validation

Risk Description

LEI number 213800QAUUUP6I445N30 is in an has an **ACTIVE** entity status

LEI Number: 213800QAUUUP6I445N30

Entity Status: ACTIVE

Registration Status: ISSUED

Validation Status: FULLY_CORROBORATED

Next Renewal: 15/09/2024

View full details of this LEI [click here](#)

DOMAIN RISK REFERENCING

→ Website*:

Risk Level

Low

The website is valid

Website Entered:

ptools.com

IP Address Resolved:

52.211.215.78

Internet Service Provider:

amazon.com Inc

Organisation:

Pass

Internal Blacklist:

Pass

ADDRESS RISK REFERENCING

→ Legal Formation Address*:

Risk Level

Low

Address Entered:

23 Riverside, South Church, Bishop Auckland, GB-BDF, DL14 6XT, GB

Address Resolved:

23 Riverside, South Church, Bishop Auckland DL14 6XT, UK

Map

Satellite

PHONE RISK REFERENCING

→ Phone Number*:

Risk Level

Medium

The Twilio service found the phone number, but its registered user does not match the details input.

Country Code Entered:

JAMAICA

Country Code Resolved:

JAMAICA

Phone Number Entered:

18765551234

Localized Phone Number:

(876) 555-1234

Phone Network Carrier Name:

Digicel Caribbean

User Identity Match:

false

Call Forwarding Active:

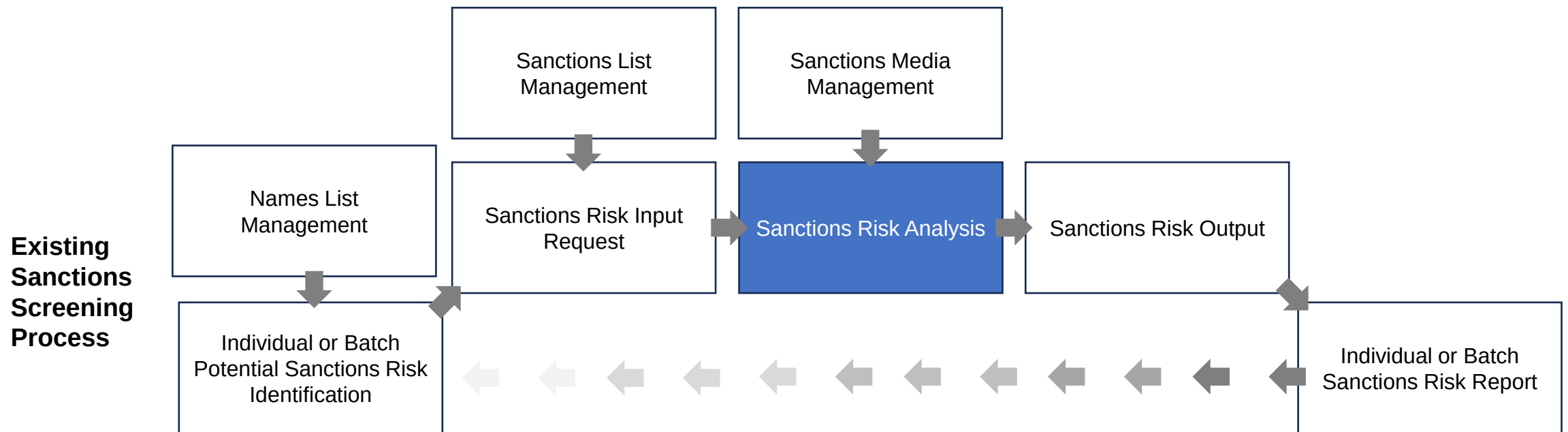
false

[4] - Sanctions - Understanding Risk in entity, identity, and asset definition (OFAC, LEI, ISIN and more)

- i. Sanctions and global watch lists relate not only to 'individuals' but also company 'entities' and also certain 'assets' including vehicles, aircraft, boats etc.
- ii. There are multiple lists reflecting and affecting different territories; geographic, national and global.
- iii. Examples include; Office of Foreign Assets Control (OFAC) sanctions list; EU Consolidated Financial Sanctions list; UK Sanctions list; United Nations Security Council (UNSC) Consolidated sanctions list; Interpol list; FBI US and UK MET lists.
- iv. The process of matching these lists with correlated data for Company Registration, Assets (e.g. IMO), Entity (e.g. LEI), Financial Assets (e.g. ISIN) and additional data in 'real time' is a significant challenge.
- v. Additional data relates to regulated news and also web and other sources associated with a corpus of data relevant to each organization.

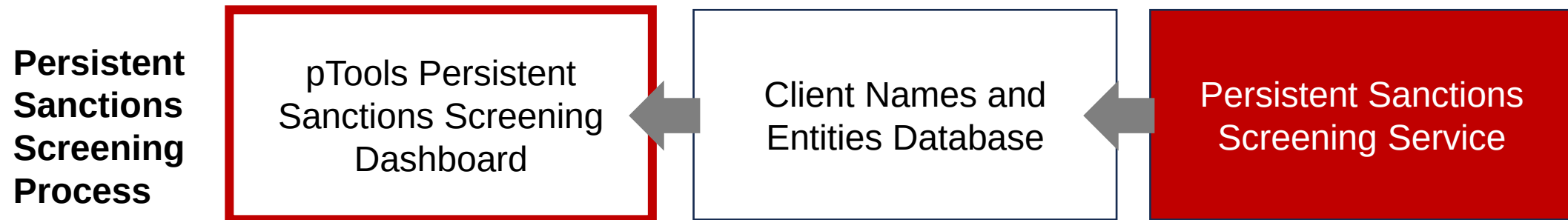
[5] - Batch Screening v Persistent Screening - New paradigm in Risk monitoring.

With just 5000 individuals, entities and assets a manual Batch screening process of 25 per day will take a year or more and recursive errors may span multiple years.



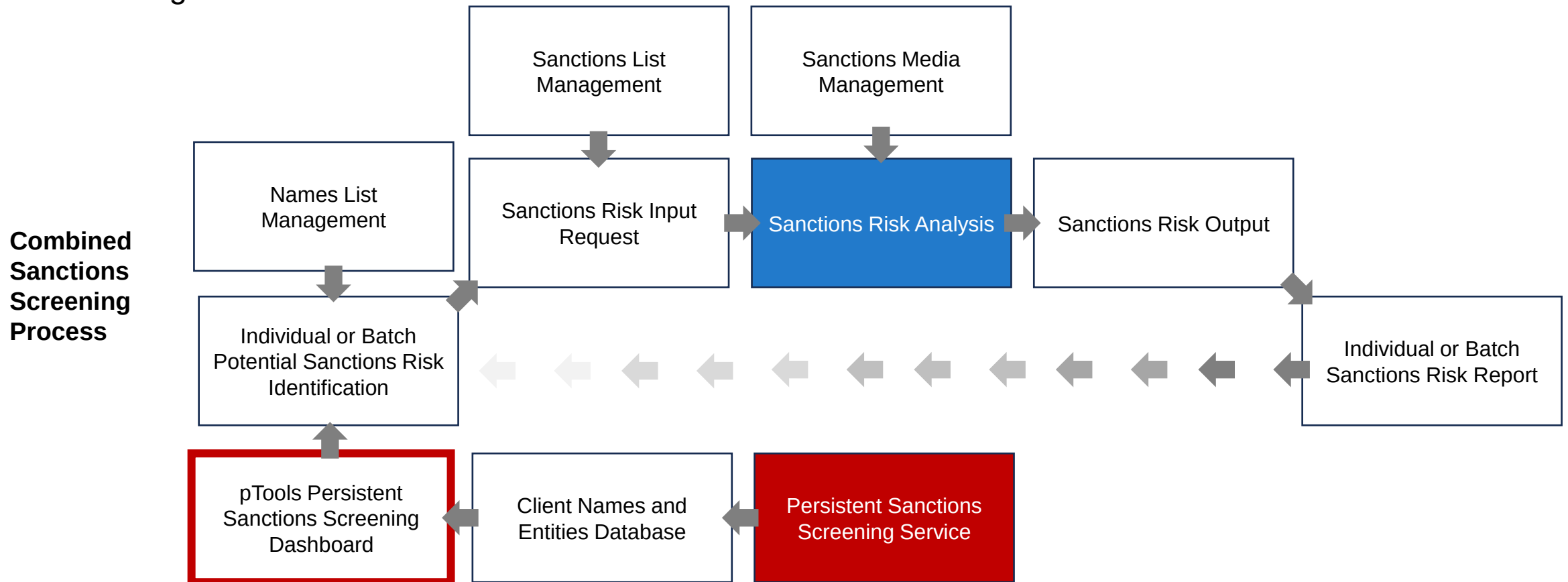
[5] - Batch Screening v Persistent Screening - New paradigm in Risk monitoring.

One current Persistent screening process addresses a variable data set of 2.7million items nightly, with a recursive error span of no more than one day.



[5] - Batch Screening v Persistent Screening - New paradigm in Risk monitoring.

We believe that manual Batch screening and automated and Persistent screening work best together.



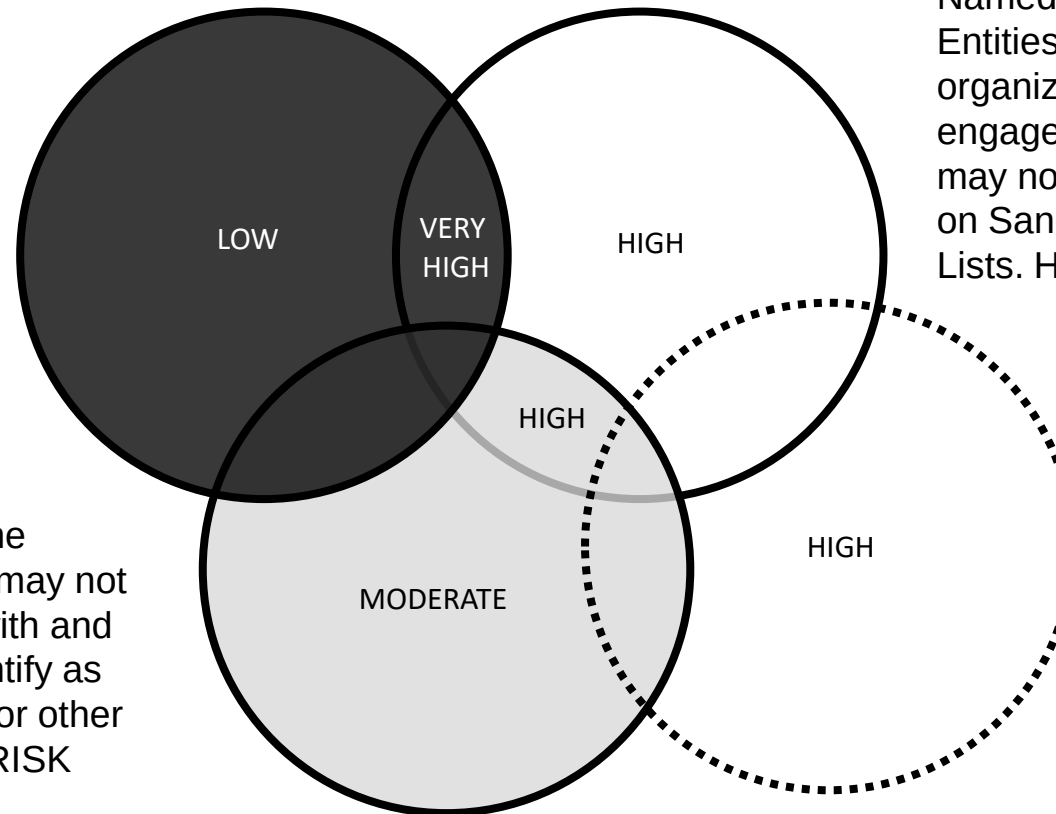
[6] - Black, White and Grey Lists - And the anomalies they create.

Black List

Named Individuals
Entities, or Assets the
organization chooses not
to engage with and
identifies as being on
Sanctions or other Lists.
LOW RISK

Grey List

Named Individuals
Entities, or Assets the
organization may or may not
choose to engage with and
may or may not identify as
being on Sanctions or other
Lists. MODERATE RISK



White List

Named Individuals
Entities, or Assets the
organization chooses to
engage with and may or
may not identify as being
on Sanctions or other
Lists. HIGH RISK

Anomalies

Named Individuals
Entities, or Assets the
organization may not be
aware of or may chose not to
be aware of and to otherwise
engage with and may or may
not subsequently identify as
being on Sanctions or other
Lists. HIGH RISK

[7] - Future of Artificial Intelligence and Risk Intelligence - Understanding additional corpus of data.

- i. Current 'practical' use of AI in Risk Intelligence relates document analysis, extraction and correlation with application process data.
- ii. Additional sentiment analysis and authentication of documents and images and other elements.
- iii. Further development of corpus of data relating to Individuals, entities and assets within any Exchange and applications process.
- iv. Automation of company registration look-ups and analysis/correlation with process data for verification and risk scoring.

COMPANY REGISTRATION

Section 4 - Significant Personnel / Companies

Section Risk 48%

Select one or more options to describe the person / company involvement

Director(s) 58%

First Name Helen

Surname MALONE

D.o.B 05/04/1960

Nationality British

Mobile +445345345 80%

Email helen@gmail.com 0%

Select one or more options to describe the person / company involvement

Director(s) 62%

First Name

Companies House - Officers & PSCs - Active

TAYLOR, Amy Victoria

In Form In Files Active Officer

Correspondence address 17, Regency Crescent, Christchurch, Dorset, England, BH23 2UF

Role director Date of birth October 1982 Appointed on 16 August 2013

Nationality British Country of residence United Kingdom Occupation Housewife

Mrs Amy Victoria Taylor

In Form In Files Active PSC

Correspondence address 17, Christchurch, Dorset, BH23 2UF

Notified on 16 October 2017 Date of Birth October 1982

Nationality British

Nature of control ownership of shares 75 to 100 percent

Companies House - Officers & PSCs - Resigned/Ceased

HORNER, Rupert Howard Milton

In Form In Files Resigned Officer

Correspondence address

IDENTITY ANALYSIS AND RISK SCORING

Presenter ID or Passport*

Risk Score 33% Score

Low 0-25% Medium 25-75% High 75-100%

The data below requires review.

Created Date

Modified Date

Surname Match Presenter's horacek

First Name Match Presenter's pavel

DOB Match Presenter's 25/06/1975

Valid 22/02/2023

Nationality Match Presenter's Czech

Gender On Passport Male

File Properties

Reject Escalate Accept

DOCUMENT / SENTIMENT ANALYSIS

Payslip Document*

Risk Score 33% Score

Low 0-25% Medium 25-75% High 75-100%

The data below requires review.

Created Date 27/04/2021 14:13

Modified Date 27/04/2021 14:13

Uploaded Date 10/06/2021 08:22

Create Date Match Modified Date

Modified Date Not Matching Uploaded Date

Company Name Found GLOBAL MEDICAL COMMUNICATIONS (UK) LIMITED

File Properties

Reject Escalate Accept

DATA EXTRACTION

Issuer Name ☒ JPMorgan Japan Smaller Co T

Document Date ☒ 22/11/2019

TIDM or ISIN ☒ JPS

LEI Code ☒ 549300KP3CRHPQ4RF811

ISIN ☒

Dividend Amount ☒ 4.3p

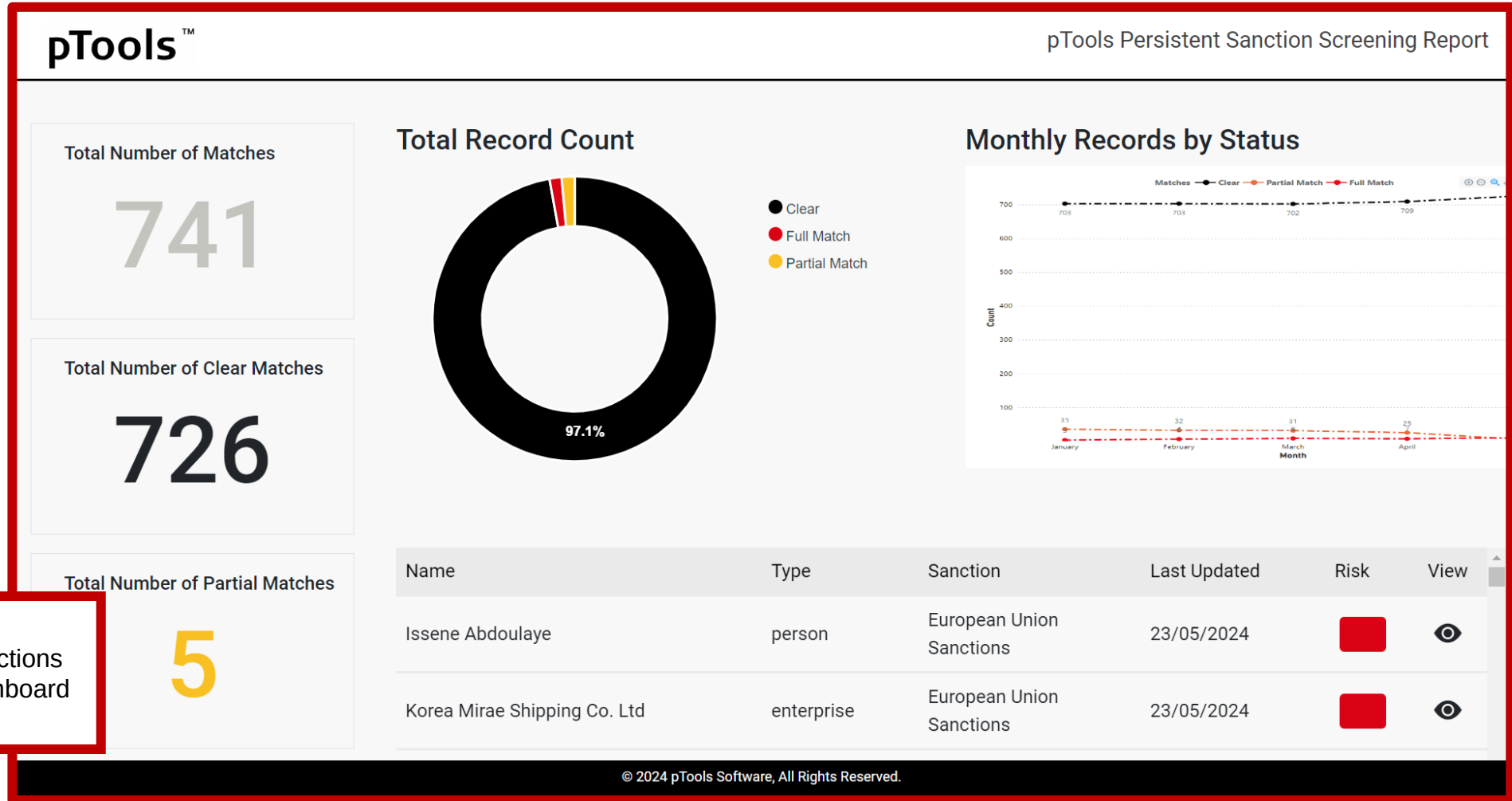
Ex-Date ☒ 10/10/2019

Record Date ☒ 11/10/2019

Dividend Type ☒ Quarterly

Pay Date ☒ 07/11/2019

[8] - Demo of Persistent Sanctions Screening toolset - Sample data only



Persistent Sanctions
Screening Dashboard

[9] - Conclusions

- i. Risk Intelligence and Risk Mitigation is evolving and is multi-faceted and dynamic in terms of impact on regulated information processes.
- ii. The scale and scope of this Risk is complex and can not be readily understood by human data handlers.
- iii. New tools for Data Analysis and Data Visualization and Data Risk Scoring are needed within applications processes.
- iv. Use of advanced technologies including AI, Risk Algorithm, Notarization are needed as well as real time Data Registry integration.
- v. Persistent Sanctions Screening represents an important aspect of this new requirement for better analysis in real time of complex risk and regulatory requirements.
- vi. Sanctions Screening is also a developing aspect of how organisations manage diverse risk within individuals, entities, assets and territories across the global financial system.

WFE Webinar

Thank you.

For further information contact suraj.pandey@ptools.com

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