EDM Webinar

Solving Complex Financial Crimes leveraging Next-Gen Knowledge Graphs

A conversation with:

- **Rebecca Lee**, Chief Impact Officer, OpenCorporates Ltd.
- **Boris Kusovski**, Director – Financial Markets Strategy, Senzing Inc.
- **Reginald Mathews**, Co-Founder and CTO, DataEconomy Inc.
- **Mike Meriton**, Moderator, Co-Founder and COO, EDM Council

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EDM Council

Moderated by **Mike Meriton**
Co-Founder & COO, EDM Council

- Joined EDM Council full-time 2015 to lead Industry Engagement

- EDM Council Co-Founder & First Chairman (2005-2007)

- EDM Council Finance Board Chair (2007-2015)

- Former CEO GoldenSource (2002-2015)

- Former Executive for D&B Software and Oracle

- FinTech Innovation Lab – Executive Mentor (2011 – Present)

Reginald Mathews
Co-Founder and CTO, DataEconomy Inc.

- Reginald ("Regi") is a Co-Founder and CTO of DataEconomy

- A technology strategist and a core engineer with 20+years of deep experience in Data & Analytics space

- Previously the Head of Data & Analytics for Banking and Financial Services at Tata Consultancy Services where he handled 53+ clients with an annual deal target of $200M

Old SCHOOL : Current Financial Crime Investigation Process

- Current Investigation is **highly Manual, time consuming and error prone** due to :

  - **Data Siloes;** collecting and integrating data is a nightmare

  - Unable to solve cases due to the **complex / hidden relationships** and **connections** across entities, events, geographies, relationships, etc.

- Higher **False-Positives** and **False-Negatives** due to limited know-how of customer and counterparty data

- Lack of matured investigative & analytical tool:

 - **Interactive visualizations** that can demonstrate multi-dimensional networks and impacts

Investigators

Financial Crime

Fraudster

99% of Financial Crimes remain Unsolved

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NEW SCHOOL : **Financial Crime Investigation using Knowledge Graphs Technology**

Graph is a game changer technology and proven to solve complex problems related to Networking of people and events

1. Bringing all data together – Consolidate Financial Crime related entities into a Knowledge Graph using EDMC FIBO Ontology

2. Bringing all the complex relationship together - Establish deep complex relationship across entities in a many-to-many fashion.

3. Enriching Counterparty Data using External Data Sources tying it together using Identity Resolution

4. Interactive Visualization - Highly interactive visualization to track flow of funds, expand hidden relationship across entities

5. AI & ML – FIBO Ontology Provides better ML capability to detect / predict new patterns
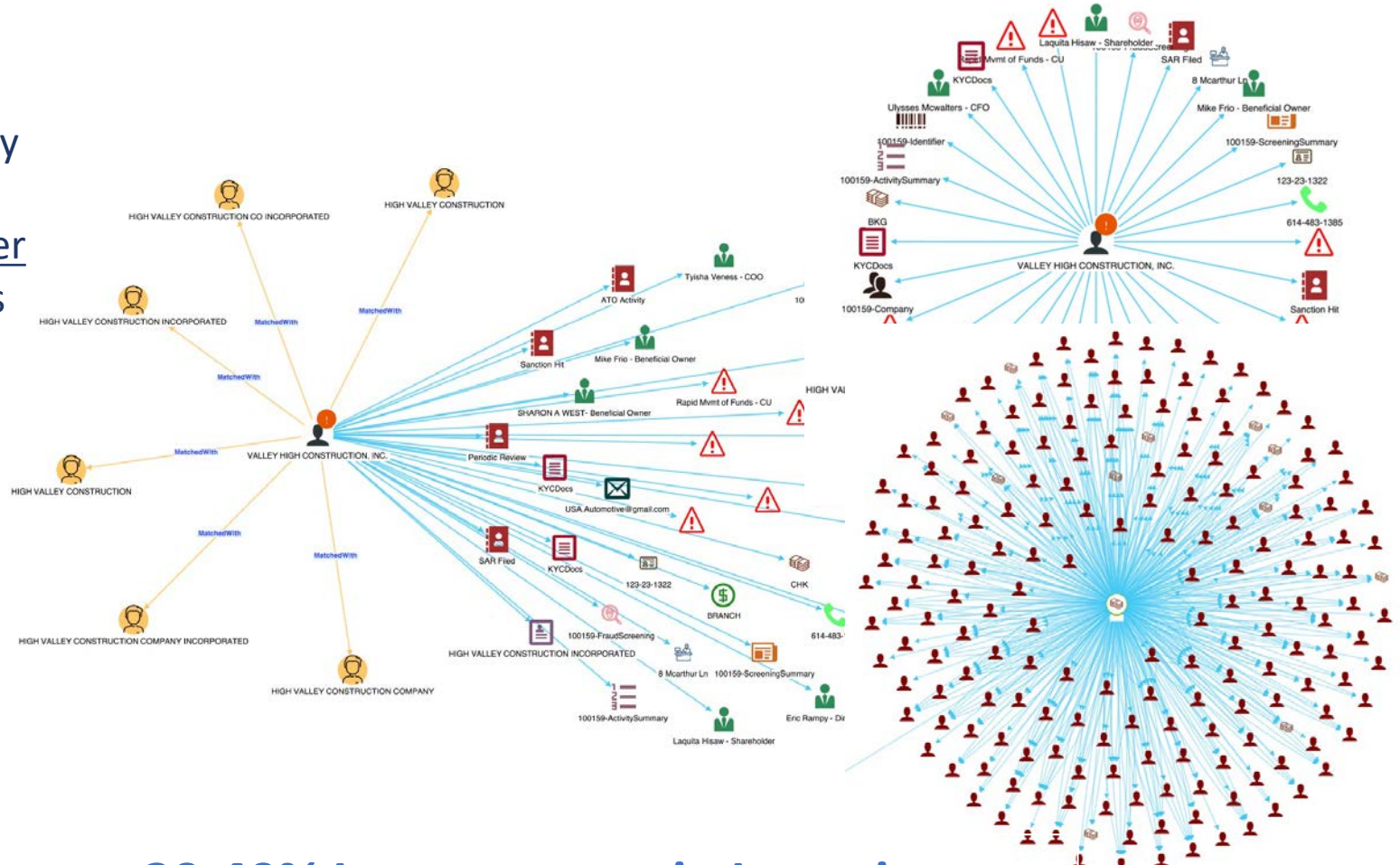
30-40% Improvement in Investigator Productivity, $5-10 M Save / Year

Today's panel

Moderator

Mike Meriton
COO & Co-Founder
EDM Council

Rebecca Lee
Chief Impact Officer
OpenCorporates Ltd.

Boris Kusovski
Director – Financial
Markets Strategy
Senzing Inc.

Reginald Mathews
Co-Founder and CTO
DataEconomy Inc.

EDMCouncil

opencorporates

Senzing

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Questions?

FCC Knowledge Graph

Resolve and reveal hidden relationships
for effective investigation and operational efficiency

~40%*

Functions

AML		KYC	Fraud	Market Surveillance
Customer & Payment Screening Hit Investigation (Sanction Screening)	**Alert Review/ Case Investigation/ Special Enquires** (Transaction Monitoring)	KYC Onboarding Review, Periodic Reviews & Accelerated Reviews	Customer & Payment Screening Hit	Case Investigation & Pattern Detection

Capability

Graph Traversal / Link Analysis Intuitively travers node/relationship with filters, combine/expand nodes/relationships	**Investigation Graph Algorithms** Identify Customer's hidden relationships leveraging graph algorithms	**Capture Story as evidence** Narrative functionality to capture graph & case narrative within tool	**Enrich insights with External Data integration** Marries internal customer, entity data with external sources to gain holistic insight for customer	**Pattern Matching Algorithms** Identify new potential patterns and see exposure for FI

Personas

FCC Operations (Alert Reviewer & Investigator)	**FCC – Risk Mgmt. Team** (2nd LOD)	**FCC – 3rd LOD** (MRMG, Internal Audit)	**FCC – Analytics** (Data Scientist, AML Risk Mgmt.)

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Save $5,361,750.00* Annually on AML Investigations

FCC KNOWLEDGE GRAPH

Particulars	Questionnaire / Inputs	Parameters
Number of Alerts Generated / Month	Avg # of alerts generated per month	15000
	% of alerts promoted to Cases for investigation (Alert to Case ratio)	10%
Cost to Bank	What's per hour cost of an FTE/Contractor for Alert Reviewer?	$25.00
	What's per hour cost of an FTE/Contractor for Case Investigator?	$40.00
	Avg # of net workdays for FTE/Contractor per Month	20
Time to Review Alert	How long does an Alert Reviewer take, on average per alert (in minutes)?	60 minutes
	Time spent in alert review % distribution against -	% Distribution
	a. Data Collection	65%
	b. Analysis	25%
	c. Decision & Narrative	10%
Time to Investigate Case	How long does a Case Investigator take, on average per case (in minutes)?	200 minutes
	Time spent in Case Investigation % distribution against	% Distribution
	a. Data Collection	40%
	b. Analysis	40%
	c. Decision & Narrative	20%

Following are not quantified into the savings:
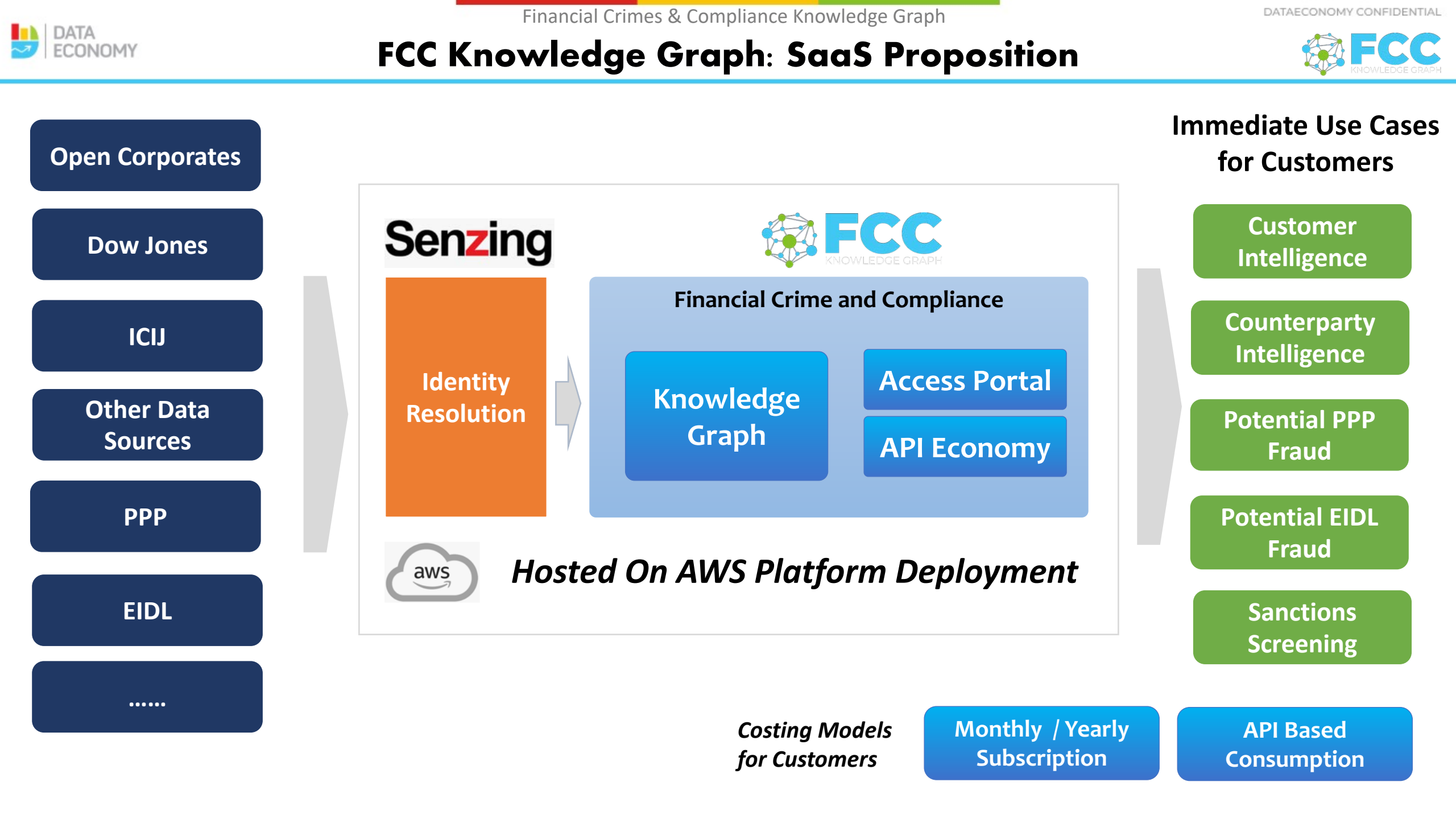Loss avoidance due to financial penalties failing to identify a real AML case | Identifying future upcoming cases which could lead to AML | Perpetual KYC cost savings; and more

* Estimated savings are based on the econometrics calculator developed by DATAECONOMY in partnership with EDMC as part of their OKGSL initiative to advance Graph technology in the investigation space

Save $8,268,750.00* Annually On Perpetual KYC

Particulars	Questionnaire / Inputs	Parameters
Number of Reviews /Month	Avg # of reviews conducted per month (Onboarding, Periodic Reviews, Accelerated Reviews)	7000
Cost to Bank	What's per hour cost of a FTE/Contractor for Customer Review?	$25.00
	Avg # of net workdays for FTE/Contractor per Month	20
Time to Review Alert	How long does review takes, on average per customer (in minutes)?	250 minutes
	Time spent in customer review % distribution against -	% Distribution
	a. Data Collection	60%
	b. Analysis	30%
	c. Decision & Narrative	10%

* Estimated savings are based on the econometrics calculator developed by DATAECONOMY in partnership with EDMC as part of their OKGSL initiative to advance Graph technology in the investigation space. These could vary by FI depending upon process maturity within KYC landscape and comprise of CDD/ EDD reviews

FCC Knowledge Graph: SaaS Proposition

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Open Corporates

Dow Jones

ICIJ

Other Data Sources

PPP

EIDL

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Senzing

Identity Resolution

FCC KNOWLEDGE GRAPH

Financial Crime and Compliance

Knowledge Graph

Access Portal

API Economy

aws

Hosted On AWS Platform Deployment

Immediate Use Cases for Customers

Customer Intelligence

Counterparty Intelligence

Potential PPP Fraud

Potential EIDL Fraud

Sanctions Screening

Costing Models for Customers

Monthly / Yearly Subscription

API Based Consumption

Thank you

FOR MORE INFORMATION:

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