IBM Watson Financial Services

Leveraging Cognitive Technology Capabilities for Risk & Compliance

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IBM Risk & Compliance Cognitive Solution

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Annual Spending on Regulatory Compliance

Regulatory fines and sanctions: $160B+
Costs of addressing compliance: $99B
Approaching $270 Billion
Opportunities to Improve Regulatory Compliance with Cognitive

**Regulatory Change Management**
- Address constantly changing regulations and manage control requirements more effectively

**Know Your Customer**
- Streamline customer due diligence and remediation activities

**Anti-Money Laundering**
- Enable more effective identification and investigation of suspicious transactions

**Conduct Surveillance**
- Identify potential misconduct more effectively

*Training Watson on obligation identification & tagging*

*Assisting with solution design; providing IP accelerators based on customer engagements & PRR BPO; applying processing expertise*

*Guiding expansion beyond trade to broader conduct issues*
Providing End-to-End Regulatory Compliance

Capture Regulatory Changes & Obligations

Define Policies, Procedures & controls

Governance, Risk, and Compliance

Cognitive Processes Transformation

Know Your Customer*
Anti-Money Laundering*
Payment Fraud
Conduct Surveillance
Financial Risk
Security & Cyber risk

Assessments of Controls & Risks

Monitoring & Testing
Regulatory Compliance Analytics

Watson enables effective determination of controls required & assessment of internal control coverage

Licensable components:
• **Regulatory Analytics** – based on Watson Cognitive Computing
• **Regulatory Library** – a reference library of regulations, guidance and controls
• **Regulatory Compliance Management (RCM)** – a control, governance and visualization platform based on IBM OpenPages
Watson Regulatory Compliance for Regulatory Change Management

With WRC’s capability to **integrate all data, facilitate mapping**, and **perform concept-search** across federated platforms, the solution can enable a transparent, actionable **Regulatory Change Management Process**.

- **Change Comes In**: New or updated regulation or a regulatory event, such as a speech, comes in.
- **Notifications Triggered**: All owners in the effected compliance chain are notified of the applicable change.
- **Compliance Gap**: Compliance Lead identifies potential compliance gaps.
- **Legal Requirements**: Legal SME interprets legal requirements.
- **Respond**: Impacted object owners respond to compliance committee and either an action is taken to remedy gap OR an issue is created.
- **Track**: Program lead tracks the issues through its lifecycle.

... and see the **end-to-end impact and resolution** of the change.
Conduct Surveillance with Cognitive

Go Beyond Rules

- Proactive
- Behavior
- Machine Learning

Leverage behaviors and machine learning to proactively identify abnormalities and potential misconduct without pre-defined rules.

Take Holistic Approach

- eComms
- Activity
- Trade
- Voice

Integrated analytics, focused on total conduct across activities and channels. Provide a **360° view for understanding** Trader and Employee behavior.

URL: Understand, Reason and Learn
Surveillance Insight for Financial Services
Correlates across channels, applying cognitive & machine learning to proactively identify abnormalities and potential misconduct

- Fuse insights to detect suspicious activities
- View linkages with instant drill-down & playbacks
- Build employee profiles with personality & behavior traits
- See alerts & investigations from continuously updated risk models

Transactions
- Order
- Trade
- Execution
- Reference

Communications
- Email
- Chat
- Voice

External
- News
- Social

Reduced cost of employee non-compliance & misconduct
Faster detection of sophisticated scenarios
Risk based prioritization of alerts and reduced false positives
Impact of eComm on Collusion

**Collusion**
- Alert ID: 1494257285219
- New
- 85%

**Reasoning Graph**
- Start date: Apr 19, 2017
- End date: May 14, 2017
- Intent To Communicate Offline
- Intent To Manipulate Stock
- Event Proximity
- Communication
- Past Violations

**Evidence**

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Applying Cognitive to Accelerate Due Diligence

Financial Crimes Due Diligence with Watson
Utilizes cognitive computing technology to screen, extract, and link relevant content from structured and unstructured data sources to improve understanding of entities and related risk and dramatically reduce the time it takes to complete KYC activities.

Reduce compliance costs and enhance client on-boarding information and negative news reviews by using cognitive-powered robotic automation to streamline due diligence processes and ongoing screening requirements.
Applying Cognitive to Improve Alert Management

Financial Crimes Alert Insight with Watson
Utilizes data from historical cases, better understanding of entity risk, and machine learning capabilities to streamline the alert triage process, reduce false positives, accelerate disposition of alerts, and improve decision-making.

Accelerate alert investigations by using data from historical cases, better understanding entity and network risk, and applying experience-based machine learning.
Principles for Trust in the Cognitive Era

- We believe AI’s purpose is to **augment human intelligence**
- We will be **transparent** about when and where AI is being applied, and about the data and training that went into its recommendations.
- We believe that our **clients control and own** their data and the related insights
- We are **committed to helping** students, workers and citizens acquire the skills to **engage safely, securely and effectively** with cognitive systems, and to do the new kinds of work that will emerge in a cognitive economy.