

ACAMS[®] TODAY

The Magazine for Career-Minded Professionals in the Anti-Money Laundering Field

COMPLIANCE SOLUTIONS:

Combining cognitive computing with human intelligence



Historically, technology tools have offered solutions that provide conclusions based on the analysis of static data and transactional data associated with specific banking activities. The different types of data vary greatly. To name a few there is big data, data from diverse legacy systems, shared file data, disparate data files from incompatible systems, incomplete data, qualitative data, numeric data, unstructured data, data using competing terminology to describe the same activities, and more. To meet compliance requirements, financial institutions, their financial crimes and compliance leaders and their respective teams must have tools to make sense of it all. To meet the high bar of compliance, financial crimes units have often relied on increasingly larger teams of people to manually comb through reams of information in an effort to address the challenges with “tribal wisdom,” professional experience, human reasoning and brute force. Deploying and applying computing that can simulate the human thought process is now being considered by the financial crimes community. Deploying proven cognitive computing solutions may be the answer to help people become more efficient.

We have arrived at a place where cognitive computing platforms have been proven to help people make better decisions and they are quietly demonstrating real progress to support a variety of business requirements across many industry verticals. According to Allied Market Research,¹ the cognitive computing market is expected to reach \$13.7 billion globally by 2020 with natural language processing as the highest revenue-generating technology sector of cognitive computing. The growth of the global cognitive computing market will be supplemented by the increasing volume of large unstructured data across various verticals such as health-care, banking and financial, security, and IT and telecom.

With this progress, many organizations are beginning to feel the pressure to adapt and adopt to a new computing paradigm or risk falling down the backside of the curve. However, be aware and do not be fooled by broad-based reasoning systems that promise the world. To achieve the best success in the shortest amount of time, the organizational focus should be on purpose-built systems that deliver specific solutions that are designed to successfully support the most pressing business problems and quickly deliver real business value. One of the areas where cognitive

computing has already proven its value in banking is by helping to automate online customer support.² Once deployed, cognitive computing systems are able to quickly understand customer online requests, accurately retrieve and return company-approved answers and immediately improve call center performance to increase customer satisfaction.

Cognitive computing systems have long been the subject of much fanfare and attention. For the most part, organizations have sat on the sidelines waiting to see what the promised future would bring. But why do they wait? They wait because it continues to be a struggle to get beyond the strategic marketing and hype in order to identify proven solutions that will deliver on an out-of-the-box cognitive computing promise. Organizations continue to search for evidence that real-world applications can be deployed to deliver on the recognized value of cognitive computing without an enormous upfront investment of time and money exist. Companies are looking for solutions that deliver impactful wins and provide solutions that deliver immediate business value. A great place to look for real-world applications is the Cognitive Computing Consortium. The Consortium was co-founded by Sue Feldman, CEO of Synthexis, and Hadley Reynolds, principal analyst at NextEra

¹ <https://www.alliedmarketresearch.com/press-release/cognitive-computing-market-is-expected-to-reach-137-billion-globally-by-2020-allied-market-research.html>

² Customer support in banking. <http://www.expertsystem.com/customer/ing-direct/>

Research. It was founded to provide a forum for researchers, developers and practitioners of cognitive computing and its allied technologies and to develop a community of experts and practitioners for the exchange of ideas and information. According to their website, their goal is to promote and support research in cognitive computing by creating alliances between the research, academic and industry communities, via publishing research reports and practical guides on cognitive computing.³

Financial services and regulatory compliance

Due to increasing regulations, seemingly infinite oversight and scrutiny, and the resulting financial penalties (and reputational damage) if not in compliance, banks and their analysts are requiring more intelligence tools to meet the high and expensive bar of compliance. In these complex times, the financial services industry is struggling to ensure compliance as they find themselves hindered by the technological gaps associated with legacy keyword-based compliance solutions. To address these challenges, compliance analysts are looking for systems that are able to work fast, but also work on the principle of deep content comprehension, content context and content connections. They are looking for machines and technology with the ability to comprehend and make sense of data the way people do in real time. Compliance solutions must be able to help the analyst in their “thinking” process, support their effort to associate concepts and connect problems with solutions. They must do much more than search by keyword(s).

In addition, there is an increasing emphasis on integrating unstructured information analysis as part of an effective compliance solution, which translates into processing larger quantities of information in a shorter amount of time. Adding more people to increase speed and scale is no longer enough to ensure success. Speed and scale must be combined with more accurate and complete filtering of information, along with the flexibility to change the scope and the objectives of the analysis in real time.

They must be able to get away from the ‘black box’ approach and begin to accurately identify and deliver relevant information in a contextually correct way. To achieve this, analysts are beginning to understand that being able to better analyze the meaning of words in context using cognitive computing solutions may indeed surpass relying on the more traditional methods of human interventions or machine learning.⁴

The intersection of human intelligence and cognitive computing has arrived

When applied to compliance management, cognitive computing combined with human intelligence can offer significant value. Enabling technology to organize and connect structured and unstructured content in such a way that is logically ordered, related and easily navigated and processed by the human brain is the cognitive computing goal. Delivering on this promise involves deploying electronic systems that are able to use a combination of keywords, pattern matching, deep linguistic analysis and semantics in just the right combination that when successful, will imitate the way humans read, relate and evaluate content in real time and go beyond human limitations. Inspired by the human ability to comprehend on a deep level, cognitive computing bases its cognitive abilities on a combination of artificial intelligence algorithms that resemble the human capacity for understanding.

Information overload

Banks are awash in information and regulation. One of the key areas for an intelligent system to deliver immediate value is in support of adhering to the regulatory requirements associated with the customer identification program (CIP) and know your customer (KYC).

CIP is a USA PATRIOT Act requirement, which can also be found in many international regulatory mandates, where financial institutions are required to verify the identity of individuals/entities wishing to conduct financial transactions with a financial institution.

In addition, according to FINRA's KYC rule, “Every member shall use reasonable diligence, in regard to the opening and maintenance of every account, to know (and retain) the essential facts concerning every customer and concerning the authority of each person acting on behalf of such customer.”⁵

One of the primary expectations of any compliance solution should be in its ability to quickly and accurately identify and flag financial transactions that involve individuals and/or entities included on watch lists or identify and flag suspicious transactions and all unknown parties. To achieve the best success in the shortest amount of time, the organizational focus should be to locate a purpose-built system that will deliver a specific solution in support of the most pressing business problems to quickly deliver real business value.

Conclusion

More than just software, cognitive computing systems offer a solution that will enable financial service organizations an avenue to discover insight, investigate questions and empower their decision-making processes. As its adoption continues to increase in this industry vertical, cognitive computing will begin to be used to support a variety of diverse business functions such as suspicious transactions associated with money laundering, social media monitoring and trend analysis, automated self-service solutions for customer support, brand and reputation management and it will become proven to provide support for many of the industries ongoing regulatory compliance challenges. 

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³ <https://cognitivecomputingconsortium.com/mission/>

⁴ http://www.kdnuggets.com/2016/07/machine-learning-hype-reality.html#.V6H_LNNk3To.linkedin

⁵ Rule 2090 (FINRA 2012); FINRA Rules, 2000., Duties & Conflicts, Rule 2090 Know Your Customer, SR-FINRA-2010-039 and amended by SR-FINRA-2011-01, July 9, 2012, http://finra.complinet.com/en/display/display_main.html?rbid=2403&element_id=9858