THE ROAD TO PREDICTION

Use Cognitive Computing to gain a better understanding of unstructured content.

If we could predict the future, there would be no Vegas, or at minimum a much poorer version. Weather would cause fewer surprises and the World Series, the Davis Cup, the Stanley Cup, the World Cup, the Daytona 500 and the Super Bowl --despite the not so predictable commercials-- would not be nearly as interesting to watch.

In today's world, there are so many variables, nuisances and unknowns, it is impossible to see into the future and accurately predict a future outcome. If humans could accurately and reliably predict the future, it would be like gaining advanced access to tomorrow's stock prices. Those with access would retire rich the day after tomorrow.

What we have become very good at, is collecting information. It is well known that the best predictions come from the accurate, unbiased analysis of the past. Recognizing repeating events, identifying trends and interpreting what has occurred, helps us better consider the to predict an anticipated outcome in the future.

To continue moving toward accurate predictions, we must continue to increase our ability to not only collect information, but accurately and quickly interpret the vast volumes of unstructured data. Collecting information without being able to view it in a contextually correct way is not the answer. Key word and statistics only approaches are similar to going hunting and knowing little about what the animal looks like, other than the possibility that it is sometimes near water and is sometimes found near a tree. I ask, how precise can one be with a prediction, if we cannot be precise in how we interpret the information we are using to make the prediction. If we cannot accurately interpret information, how can we expect to understand what may or may not happen in the future?

I think we all can agree that it is a common practice to check the weather prior to heading out around town, preparing for an event or departing on a long-distance trip. When I was a teenager, predicting the weather seemed to be more about luck and superstition than science, based on personal observations, the Farmer's Almanac or the Magic 8 Ball. But even if the tools for weather prediction were not perfect, there were still many tools in place to enable monitoring and measuring and better understanding the future by a better understanding of the past.

As time has passed, the newest data monitoring and measuring tools now allow meteorologists to create complex models that enable very predictable weather forecasting. And while predicting the weather is still not perfect, we are much closer than was possible even 10 years ago. I can't help but see the similarities between this and the business world. Companies have been collecting data for years and most are quite good at explaining what happened in the past. We need to move away from legacy key word and statistics only technologies. We should step into the future and embrace the advanced Cognitive Computing tools that are available.

ACCURATELY INTERPRET UNSTRUCTURED DATA

Today, with advance of tools and technologies, such as the Expert System Cogito® semantic technology, companies can now understand the meaning of words in context by deploying their high-performance platform that was built for processing large quantities of text with the highest levels of precision. A platform that can capture, store and analyze what was once uncollectable. And through the in-depth analysis of content of all types, Cogito® transforms data into actionable intelligence that can be leveraged across the organization to benefit a variety of operations and processes. Here, I am obviously talking about the vast volumes of unstructured information.

Today's information can be collected partly due to the many data repositories now accessible and actively used within organizations, (i.e. the Internet, CRM systems, social media, market research narratives, etc.). And thanks to semantic technologies and cognitive computing, the unstructured data can now be structured in a format that can be used to support new and innovative ways to make better decisions based on the collection and precise analysis of the available data.

"COGNITIVE COMPUTING WILL HELP PEOPLE MAKE BETTER, FASTER AND CHEAPER DECISIONS. BUT ORGANIZATIONS MUST BE WILLING TO WORK WITH THE MACHINE, AND NOT TREAT IT AS A SERVANT OR EXPECT IT TO BE A FULLY AUTOMATED PROCESS WITH NO HUMAN INTERVENTION. MACHINES FORMULATE BASED ON HUMAN INPUT."

Using the example of Internet content, all the things embedded in text—topics, tone, style, relationships between concepts, etc.—when used as attributes, variables and facets— can be associated to each piece of text to describe context and meaning to better understand content. A predictive model can now take all this information into consideration across many dimensions and can have a huge bottom line impact. For example, understanding what is causing churn in your customer base, whether it is time to launch a new product and what the product should be, where to drill the next oil well, invest in research to better understand a specific company or industry trend or who is likely to be the next fatality within a city neighborhood. These are all complex matters to predict. For those organizations who investment in Cognitive Computing technology to better interpret information in the best ways will make the most progress in the shortest amount of time, realize huge benefits and lead their respective industries.

RETHINK HOW FINANCIAL RESEARCH IS CONDUCTED

The good thing is, organizations do not need a major capital or time investment to put Cognitive Computing systems in place. And, once deployed, these solutions will help pave the road for both short-term and long-term success.

As an example; rethinking how financial services research is conducted. Targeting and collecting information and looking for key words is no longer enough. Organizations must begin to deploy systems that are able to understand what information means and be able to discover how the content contained within disparate data stores are interconnected. Creation of quality research relies heavily on word context and recognizing topic relationships. It is what customers are beginning to expect.

COGNITIVE COMPUTING ALLOWS ORGANIZATIONS TO DIG DEEPER

The opportunity for organizations has never been better. Utilizing cognitive computing, organizations can now pan for the gold nuggets hidden in plain sight. Cognitive Computing allows organizations to dig deeper into the ever-growing pool of available content sources. By employing Cognitive Computing to OSINT, companies can now create customized content driven discovery and offer new trading insight that can be monetized.

Today, more than any time in history, businesses of all sizes can create a level playing field. And everyone can become the next member of the Dow or the next weather geek, perfecting the art of always knowing what to pack for the next trip.

NOW IS THE TIME TO ACT

■ **Invest in a platform that can address a broad set of business requirements.**

■ **Prove the AI RoI and value in your business using incremental change.**

■ **Expand and build to strategically significant deployments.**

Building and deploying an AI strategy now, is about developing a competitive advantage and preparing for the future. Soon, your organizations AI strategy will be about business sustainability.

"COGITO® MAKES COGNITIVE COMPUTING POSSIBLE."

About Expert System

Expert System (EXSY:MIL) is a leader in Artificial Intelligence applied to text. Its flagship Cogito® platform, based on a unique blend of semantic technology and machine learning, helps organizations deploy cognitive automation to accelerate business processes, improve information management and make smarter decisions. Expert System's solutions have been deployed in media, customer care, compliance, third party risk mitigation and intelligence applications by leading organizations.

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