TRANSCRIPT

IBM Cognos Content Analytics:
Harnessing unstructured information for business-driven decision-making

Unstructured content is exploding. It can be found in the text of emails, in the written notes of a report, on Web sites and more. This demonstration shows how you can gain valuable business insights by accessing and analyzing unstructured content using IBM Cognos Content Analytics.

Content analytics is a new class of analytics applications that helps companies identify and highlight key correlations in unstructured data found inside or outside an organization. Using this analysis, companies can discover hidden market trends, critical product flaws and other key insights.

Content analytics can be used in a limitless range of organizations for a variety of business functions. For example, you can use content analytics to analyze customer service, product quality, compliance violations or supply chain efficiency to name just a few areas.

In this demo, we'll see how a medical device manufacturer can pinpoint product-specific issues through the use of IBM Cognos Content Analytics.

We'll use publicly available information from the FDA Web site through its "MedWatch" program, which gathers information from consumers, health professionals and manufacturers to report on issues related to medical devices. *Please note that for demonstration purposes, we have removed specific references to actual company or product names.*

Each submitted MedWatch form includes structured data, such as patient information, and unstructured content entered into comments boxes.

Through an automated discovery process, we have crawled and indexed more than 350,000 MedWatch forms and made this information available for analysis in IBM Cognos Content Analytics.

The number of forms changes as we refine our results using the "facets" along the left side of the page. Facets allow you to continually refine your view of information.

Many facets are derived from the structured "field-like" entries in MedWatch forms. Facets are also based on items such as "nouns and noun-verb phrases" in the unstructured comments sections.

In addition to the standard results view of each MedWatch form, we can view results by time series. Here we graphically see the number of forms submitted over time.

We can change the scale to view submissions by various date ranges.

Powerful visualizations allow us to see any anomalies and focus our discovery on just those dates.

The deviation view allows us to select a specific dimension from our facets and see how devices have been performing over time.

We can change this view by adjusting the level of detail for the time scale … and by adjusting the number of device charts we see at once.

By changing the way we visualize information we see an unusually high number of forms related to Infusion Pumps in April 2008.

By drilling into these incidents, we refine the results to 700 forms and can now focus on just these forms.

By switching to the facets view, we see that the most frequently occurring verb-noun phrases are "Report – Issue" and "Report – Condition." These are probably just popular terms.

By looking further, we see that "depleted – battery" or "damage – battery" have a high correlation, indicating they may be more interesting.

So we focus the investigation on "battery." Now we are working with just over 150 forms.

In this view we can see that all of the Infusion Pumps with the faulty batteries were manufactured by Leathe Healthcare.

By changing the facet to "brand," we see the problem was limited to the "Partner" brand of product.

So, in this instance, IBM Cognos Content Analytics was used as an early alert to the battery defect. The company could take immediate action to eliminate future issues with the Partner brand of Infusion Pump.

This information can also be delivered to other processes and applications – such as Enterprise Content Management repositories or Customer Relationship Management applications – and integrated with IBM Cognos 8 BI for additional reporting and analysis.

With IBM Cognos Content Analytics, businesses can gain fresh insight from massive volumes of unstructured text.

They can discover, refine, visualize and deliver these insights for a more complete and accurate view of business reality. This business-driven decision-making can help any organization identify problems, spot opportunities and anticipate future market trends with more speed and agility than ever before. Find out more at www.ibm.com/cognos.

Thank you.