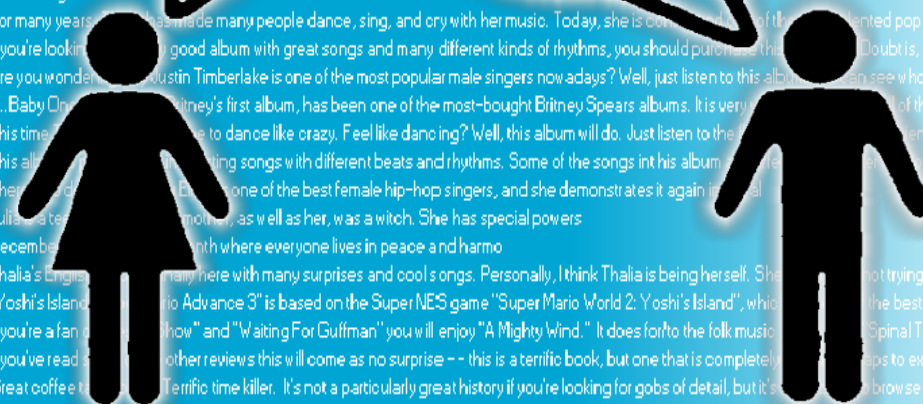


0471389226 Five stars for Ross Anderson's Security Engineering are just not enough - you have to read the book to und
0743467523 As Stephen King gets older, his books get bigger, as seems to happen to most authors. S
0596004788 Marilyn (as Randal Schwartz is known in Perl circles) is a fantastic author, and has written some of the most influential books on Perl available. For this book, he re
0735712573 I really enjoyed the work of Korry and Susan Douglas, opening the world of PostgreSQL to me. I'd not considered the database a viable contender for my needs. I
0596003722 What pleases me so much about th
0780021312 Any apparently negative judgements here are made in the context of a standard so far unequalled. There is little point in discussing Olivier's cuts or re-arrangeme
B00005T711 Not Dennis, but Edward Hopper, painter of lonely souls in harsh-lit diners. Well worth a watch, if only for its wall-to-wall ugliness. Beauty does a great impersonation
B0000B1A58 A magnificent summary of the fundamental issues, and their resolution, which made the British nation what it once used to be, and was for 300 years, right up un
B00000G3PA What's with that ultra-cynical, inaccurate, wrong-headed review from Mr Dave McCoy? There are two kinds of movies in this world: Type A, which leave you think
B00005JKCZ Must have seen this movie first in about 1944 or 45. I remember the Merry Men falling off the trees on top of the Normans thugs, and knocking them to the ground, an
0792833236 Some movies seem real and some seem phony. All Kubrick's films seem phony and detached. Spielberg seems infantile. This film is so totally engaging it seems re
B00004U8P9 Too weird for some. Not weird enough for others. The truth is that this is a totally unique, extraordinary amalgam of many different genres, melded together to make
B00005AUJT One star has to be docked for Rupert Everett as the Prince of Wales: he simply isn't fat enough. Couldn't they find someone fatter? If he wasn't so fat in 1788, who
B000059TFW Contrary to Horton's statement in his lack-lustre review of this film, one of the major factors that makes it one of the greatest and most satisfying Westerns is predom
B0001GH5SI The exquisite mood captured by this masterpiece is unique in my experience of motion pictures. The disc container description, partly
079284405X The setting for this film might be a small apartment in Quebec, but it's a big apartment in Scotland, though old. Probably Edinburgh. The
B000056BP0 Ayn Rand appears to have made a mark of sorts on 20th century America. I read The Fountainhead in about 1959. It made a strong impression on me at the t
B000003CXBH An exceptionally dense review by Roger Ebert gave this film 2 and a half stars. Apparently he couldn't understand what it was about or who the characters were.
6304071825 This is Olivier's finest performance, although Archie Rice runs it close. Anyone even minimally familiar with Shakespeare criticism knows that, as the play is written, th
6305701261 Frankly, I'd been a bit disappointed in the Buster films I'd seen before this one. Perhaps it was the scrappy condition they'd reached me in. Th
B000035Z5G This very fine movie, imho, is about the undying conflict between glory and p
0367240174 A group of old men gathers on an estate for a party. It's the early 1980s...the Warsaw Pact is still in existence, but cracks are starting to appear.
B0000BHJAI This is a wonderful CD, culled from some outstanding live performances in Japan during 1990. The sound quality is excellent, with nobody getting drowned out in th
B0000425VQ I bought this paper to use as a GPS sh
B00005Q6WC These were my FAVORITE when my children were babies! Easy on the eye, tucked in! They are... He and outer then heck. Buy these for any expecting m
B00006IR39 This is my first digital camera. I bought it because it came highly recommended from CNET.com. I would definitely recommend buying the rechargeable battery
1576737357 I wanted someth
B00000J7RZ Okay, so maybe Jennifer Lopez doesn't have the most powerful voice in the world, but that doesn't necessarily make this a bad album. There are several re
B0001ADALU The first time I listened to "Some Girls (Dance With Women)" the first single off this album, I thought that JC Chasez was following Justin Timberlake's footsteps.
B00000JBCE What can I say? This is a great live album from a great band. The band sounds great!
B000005TN5 It's been almost seven years since Maná released this album, but I still think it's a great album. This band, in my opinion, has been the most successful Spanish rock
B000068NW0 Wow! I decided to buy this album after listening to the first two songs, "Complicated" and "Sk8er Boi". Was I surprised? Definitely was. It's amazing how a teenage
B000066EZY The first time I heard "A Dios Pido", bass record, I thought it was a catchy song with very good lyrics, but I never imagined the Juanes' second album would be
B00005V9T1 It's been awhile since I bought this album. After first listening to the first 3 songs of "Ain't It Funny", I thought it was a pretty cool song, so I decided to buy this album.
B000066XLE Even though I would have
B00015YV68 For many years, I have had to be many people dance, sing, and cry with her music. Today, she is one of the most talented pop singers. Because of her
B0000DZYN If you're looking for a good album with great songs and many different kinds of rhythms, you should purchase this album. Doubt is, with no doubt, one of the
B00006JD4Q Are you wondering if Justin Timberlake is one of the most popular male singers now adays? Well, just listen to this album and you can see who Justin is through his
B00000G1IL "...Baby One More Time" Britney's first album, has been one of the most-bought Britney Spears albums. It is very... of the songs are very spec
B000088NUS This time... to dance like crazy. Feel like dancing? Well, this album will do. Just listen to the... when Le Imperial Club Voc
B00005QDW1 This album... songs with different beats and rhythms. Some of the songs in this album... dub songs. My favorite
B00006LLNT There's no doubt... one of the best female hip-hop singers, and she demonstrates it again in...
0671630558 Julia Roberts... as well as her, was a witch. She has special powers
0671738224 December... where everyone lives in peace and harm
B00009WHS8 Thalia's songs... many here with many surprises and cool songs. Personally, I think Thalia is being herself. She... not trying to be like J. Lo or any
B00006FWTW "Yoshi's Island... Advance 3" is based on the Super NES game "Super Mario World 2: Yoshi's Island", which... the best Super NES games. The
B0000ALFVD If you're a fan... "how" and "Waiting For Guffman" you will enjoy "A Mighty Wind." It does for to the folk music... "Spinal Tap" did for to heavy me
0394741013 If you've read... other reviews this will come as no surprise -- this is a terrific book, but one that is completely... to explain the strategic and
0883631024 Great coffee... Terrific time killer. It's not a particularly great history if you're looking for gobs of detail, but it's... to browse through and the photo
0743216385 In his afterw... the late Mr. Ambrose admits that this book, which brought him great acclaim before and after the HBO series, was basically a very easy side project
B00004WFVZ I was thrilled when news of CFS3's release came out, but then was... scored away by all of the horrible reviews about the game. CFS2 was such a huge improvement
B00005Y3ZL I accidentally came across Mr. Show in its 3d season on HBO during an insomniatic traverse over the entire cable TV dial. Two minutes into the "Titanica" sketch
B00005CFGS I bought this scope as a gift for my Mom. She caught the backyard astronomy bug after looking through my Nexstar 11 GPS a few times. I wanted to get her a scope
B000055Y0X This might be my favorite film of all time. Kubrick created a genuine masterpiece with this movie. The other glowing reviews here pretty much cover every comic
0793573742 This book is a one-trick pony, but it nails its subject matter cold. If you know anything about the vintage guitar market you already know that the Gibson Les Paul
B00006RCNW This box office bomb is one of Scorsese's best films. The performances are fantastic and in Rupert Pupkin, the movie's weird protagonist (if there is one), DeNiro
B00005T7HW This might be one of the best comedies of all time. I loved Diner and when I first saw Tin Men I couldn't believe that Barry Levinson had outdone himself. Danny De

Text Analytics Beginner's Guide

Extracting Meaning from Unstructured Data





Contents

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Text Analytics

Successful companies today both listen to and understand what customers are saying and are taking action in response to customer feedback by incorporating the voice of the customer (VOC) into business strategies for sales, marketing and customer service using text analytics.

Powerful trends in social media, e-discovery, customer services (call center transcriptions of voice calls, customer complaint emails and instant messaging) and customer-centric business strategies are driving IT leaders to consider text analytics as a powerful business tool.

Gartner

The transformed information from text analytics can be combined with structured data (e.g., sales and demographic data) and analyzed using various business intelligence or predictive and automated discovery techniques.





Text Analytics

What is Text Analytics?

Text analytics describes a set of **linguistic, statistical and machine learning** techniques that model and structure the information content of textual sources for **business intelligence, exploratory data analysis, research or investigation.**



WIKIPEDIA
The Free Encyclopedia

Text analytics is the process of **analyzing unstructured text, extracting relevant information, and transforming it into structured information** that can be leveraged in various ways.



HURWITZ
& ASSOCIATES
Insight to Action

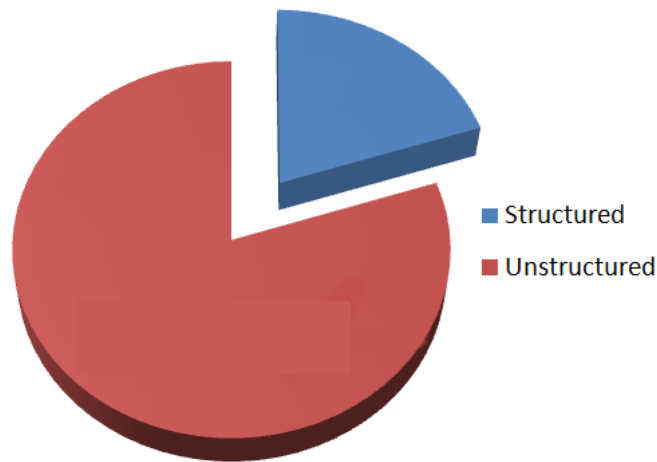


Text Analytics

Structured Data

Today, 80% of business information originates in unstructured data; primarily text with no identifiable structure.

...although structured data continues to be the primary source for business intelligence.



ivate	89814 HS-grad	9 Married-civ-spouse	Farming-fishing	Husband	Male
cal-gov	336951 Assoc-acdm	12 Married-civ-spouse	Protective-serv	Husband	Male
ivate	160323 Some-college	10 Married-civ-spouse	Machine-op-inspct	Husband	Male
	103497 Some-college	10 Never-married	?	Own-child	Female
ivate	198693 10th	6 Never-married	Other-service	Not-in-family	Male
	227026 HS-grad	9 Never-married	?	Unmarried	Male
lf-emp-not-inc	104626 Prof-school	15 Married-civ-spouse	Prof-specialty	Husband	Male
ivate	369667 Some-college	10 Never-married	Other-service	Unmarried	Female
ivate	104996 7th-8th	4 Married-civ-spouse	Craft-repair	Husband	Male
ivate	184454 HS-grad	9 Married-civ-spouse	Machine-op-inspct	Husband	Male
deral-gov	212465 Bachelors	13 Married-civ-spouse	Adm-clerical	Husband	Male
ivate	82091 HS-grad	9 Never-married	Adm-clerical	Not-in-family	Female
	299831 HS-grad	9 Married-civ-spouse	?	Husband	Male
ivate	279724 HS-grad	9 Married-civ-spouse	Machine-op-inspct	Husband	Male
ivate	346189 Masters	14 Married-civ-spouse	Exec-managerial	Husband	Male
ite-gov	444554 Some-college	10 Never-married	Other-service	Own-child	Male
ivate	128354 HS-grad	9 Married-civ-spouse	Adm-clerical	Wife	Female
ivate	60548 HS-grad	9 Widowed	Machine-op-inspct	Unmarried	Female
ivate	85019 Doctorate	16 Married-civ-spouse	Prof-specialty	Husband	Male
ivate	107914 Bachelors	13 Married-civ-spouse	Tech-support	Husband	Male
ivate	238588 Some-college	10 Never-married	Other-service	Own-child	Female
	132015 7th-8th	4 Divorced	?	Not-in-family	Female
ivate	220931 Bachelors	13 Never-married	Prof-specialty	Not-in-family	Male
ivate	205947 Bachelors	13 Married-civ-spouse	Prof-specialty	Husband	Male
lf-emp-not-inc	432824 HS-grad	9 Married-civ-spouse	Craft-repair	Husband	Male
ivate	236427 HS-grad	9 Never-married	Adm-clerical	Own-child	Male
ivate	134446 HS-grad	9 Separated	Machine-op-inspct	Unmarried	Male
ivate	60554 HS-grad	9 Married-civ-spouse	Craft-repair	Husband	Male



Text Analytics

Unstructured Data



INTERNAL

- Emails
- Customer Surveys
- Documents
- Call Center Notes
- Claims Records
- Customer Forms
- Customer Letters

EXTERNAL

- Blogs
- Social Media
- Tweets
- Online Forums
- Articles / Reports
- Web



Use Cases

Text Analytics transforms unstructured data into structured data for analysis to help...

- Monitor and analyze brand reputation
- Determine purchase behavior
- Identify product issues
- Summarize surveys, customer reviews
- Improve customer service and customer experience management
- Understand customer feedback
- Improve customer retention
- Predict and reduce churn
- Identify and reduce claims fraud
- Develop cross-sell, upsell strategies
- Design next best offer strategies



Use Cases

Marketing	Business	Industry-Specific
<ul style="list-style-type: none">• Voice of customer• Social media analysis• Churn analysis• Market research• Survey analysis	<ul style="list-style-type: none">• Competitive intelligence• Document categorization• Human resources• Records retention• Risk analysis• Website navigation• News feeds analysis	<ul style="list-style-type: none">• Fraud detection• E-discovery• Warranty analysis• Medical research



Terms

Or...given a collection of text, text analytics tells you **who, where, when, what, and how** so that you can figure out 'why'.



1. **Entity:** “Who, where, when” is being discussed?
2. **Theme:** “What” are the important words?
3. **Classification:** “What” are the important concepts?
4. **Sentiment :** “How” is the conversation going? Is it positive or negative?



Terms

Entity

“Who, where, when” is being discussed?

Yahoo wants to make its Web e-mail service a place you never want to – or more importantly – have to leave to get your social fix. The company on Wednesday is releasing an overhauled version of its **Yahoo Mail Beta** client that it says is twice as fast as the previous version, while managing to tack on new features like an integrated **Twitter** client, rich media previews and a more full-featured instant messaging client.

Yahoo says this speed boost should be especially noticeable to users outside the **U.S.** with latency issues, due mostly to the new version making use of the company's cloud computing technology. This means that if you're on a spotty connection, the app can adjust its behavior to keep pages from timing out, or becoming unresponsive. Besides the speed and performance increase, which **Yahoo** says were the top users requests, the company has added a very robust **Twitter** client, which joins the existing social-sharing tools for **Facebook** and **Yahoo**.

Entity	Type
Yahoo	Company
Twitter	Company
Facebook	Company
U.S.	Place



Terms

Theme

“What” are the important words being used?

Yahoo wants to make its Web **e-mail service** a place you never want to – or more importantly – have to leave to get your social fix.

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Theme	Score
Cloud computing technology	4.11
E-mail service	2.672
Top users requests	2.669



Terms

Classification/Concepts

“What” are the important, high-level concepts?

Yahoo wants to make its Web e-mail service a place you never want to – or more importantly – have to leave to get your social fix.

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Concept	Score
Software and Internet	.56
Social Media	.60
Technology	.49
Business	.72



Terms

Sentiment

“How” is the conversation going ? Positive or negative?

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Entity	Sentiment
Yahoo	.534
Twitter	.48
Facebook	.534
Concept	Sentiment
Software and Internet	0.0
Social Media	.48
Technology	.49
Theme	Sentiment
Cloud computing technology	1.3
Mail service	.16
Top user requests	.83



Trends

1. Social media analytics adoption drives text analytics.
2. Analytics moves beyond sentiment analysis.
3. The market begins to get the connection between text and Big Data.
4. Marrying structured and unstructured data becomes more popular.
5. The cloud becomes more popular for text analytics.



Text Analytics Victory Index Report, January, 2013



Scenario

Book Reviews: Customer Feedback

An online book retailer tracks customer feedback by analyzing reviews and comments from online forums and social media.

They use Angoss KnowledgeREADER™ to extract meaning from the text to discover what is being discussed and how – the sentiment (positive or negative), and answer:

- What are customers saying on a regional basis?
- How frequently do certain entities, themes and topics occur?
- Which themes and topics occur together, and are related?
- How is sentiment trending over time?
- What is the context of what is being discussed at the document level?





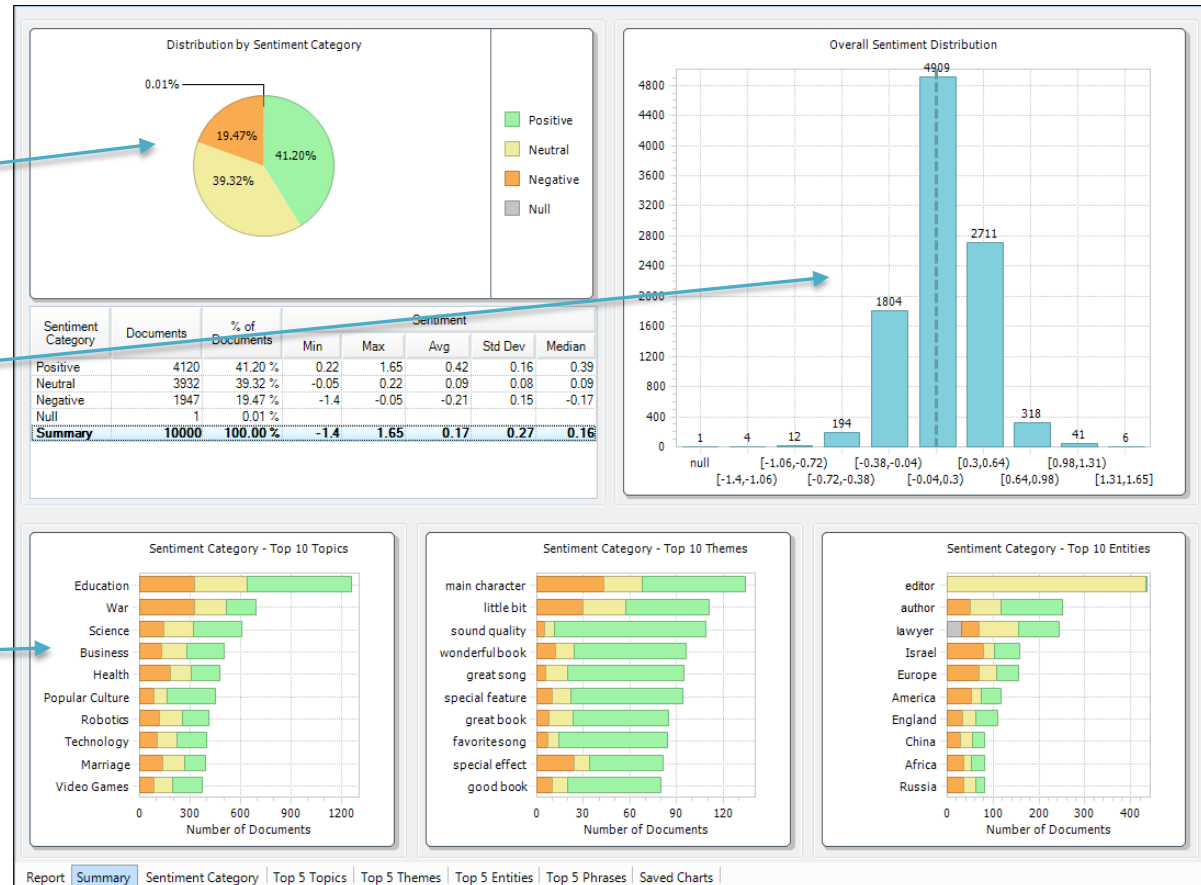
Scenario

Sentiment Dashboard

Sentiment breakdown across all reviews

Sentiment distribution across all documents

Sentiment distribution for Top 10 topics, themes and entities





Scenario

Comparison Analysis

The retailer can compare overall sentiment across stores, or isolate individual topics, themes, entities and phrases to determine how those items are discussed between various regions

For example, you can see that the topic “Technology” is viewed more negatively in Store 2, but it is also discussed more frequently as well.



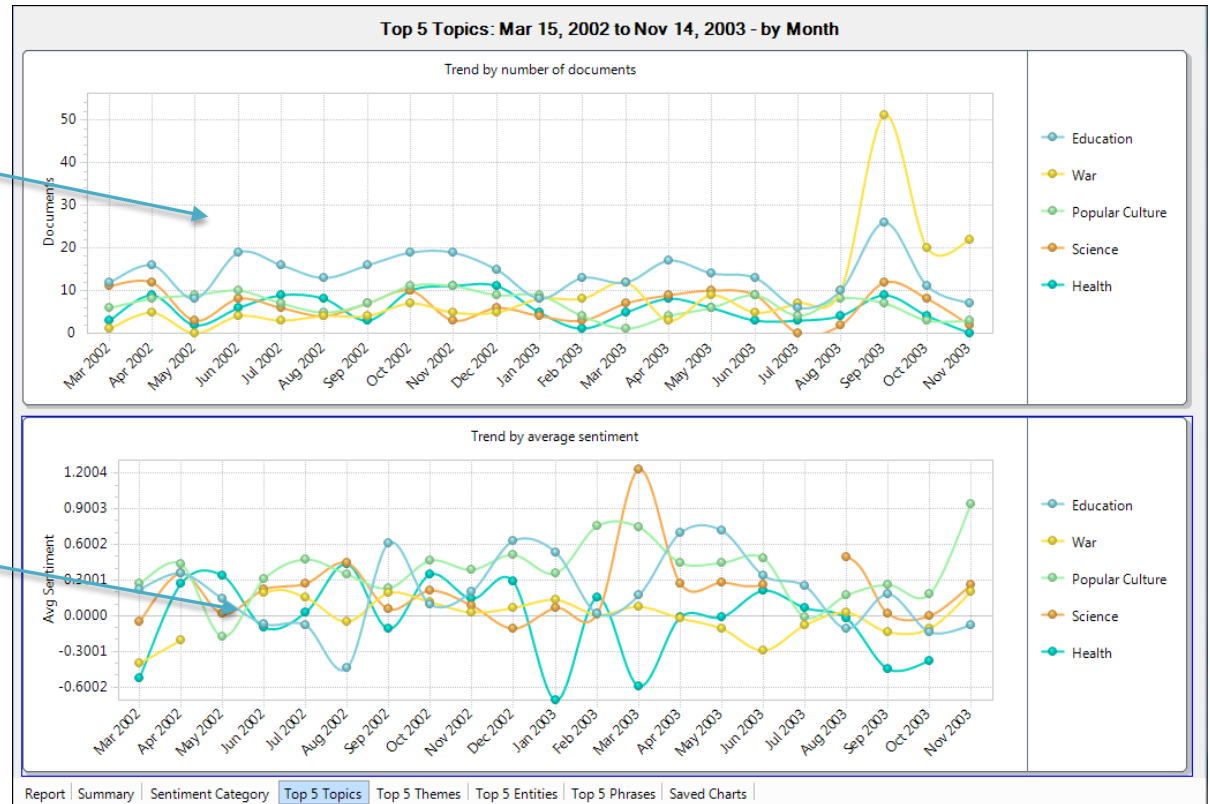


Scenario

Trend Analysis

By isolating topics, themes, entities or phrases, the retailer can examine how frequently they were mentioned.

They can also view how customer sentiment regarding these terms changed alongside the frequency of their occurrence.



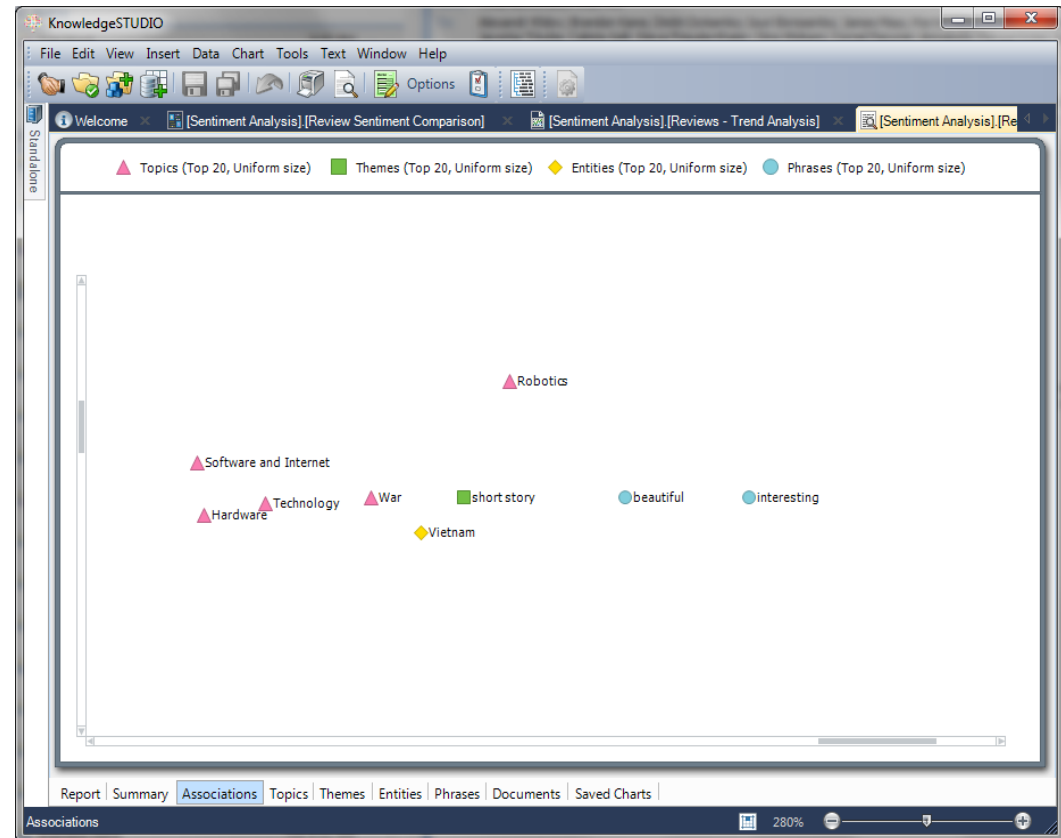


Scenario

Association Discovery

Using the Association Map, the retailer can visually determine the frequency with which certain terms occur, and how closely they relate to other terms used in customer reviews.

The retailer can quickly assess how well certain subjects are received, and how much relative interest their customers have in those subjects.





Scenario

Document Summary

Individual terms can be isolated, as well as the sentences and documents that reference them – giving you a detailed look at the context used in reviews.

Each text record can be completely isolated for a full examination of the content and sentiment contained within.

The screenshot displays the Angoss Text Analytics interface. At the top, there are tabs for Topics, Themes, Entities, and Phrases, each with a pencil icon for editing. Below these tabs are 'Apply' and 'Reset' buttons. A 'Legend' section shows sentiment labels: positive (green), negative (orange), stop (grey), possible (blue), invert (purple), and entity (green). The main area shows a list of 11 document records, each with a number and a snippet of text. Terms in the text are highlighted with colored boxes corresponding to the legend: 'readable', 'story', 'knowledge', 'win' (positive); 'current', 'introduction' (possible); 'Ross Anderson', 'Security Engineering' (entity); 'Stephen King', 'his' (entity); 'Sal Mangano' (entity); 'better' (positive); 'Ayn Rand', '20th century', 'America' (entity); 'damage', 'English', 'language' (entity); 'realistic', 'capable', 'highly probable', 'believable', 'very', 'likely', 'real' (positive). Each record has a 'More...' link. At the bottom, there are navigation links: Report, Summary, Associations, Topics, Themes, Entities, Phrases, Documents, and Saved Charts.

What pleases me so much about this book, and it really does please me, is that **Sal Mangano** writes **fantastic**, **well** thought out templates for use in your XSLT stylesheets, and tells you what makes them so **wonderful**. Even more importantly, **he's** **willing** to show you alternatives to the solution **he** provides and explain why they're not **optimal**. This book is like a computer science class taught in XLST, and while not the most **thrilling** subject in the world, it's certainly **well-planned**, well-executed, and **well** **worth** having on your bookshelf.



Scenario

Decision Tree



KnowledgeREADER can be used to analyze the output of your text analysis with structured data, and use data mining and predictive analytics techniques to expand customer insights.

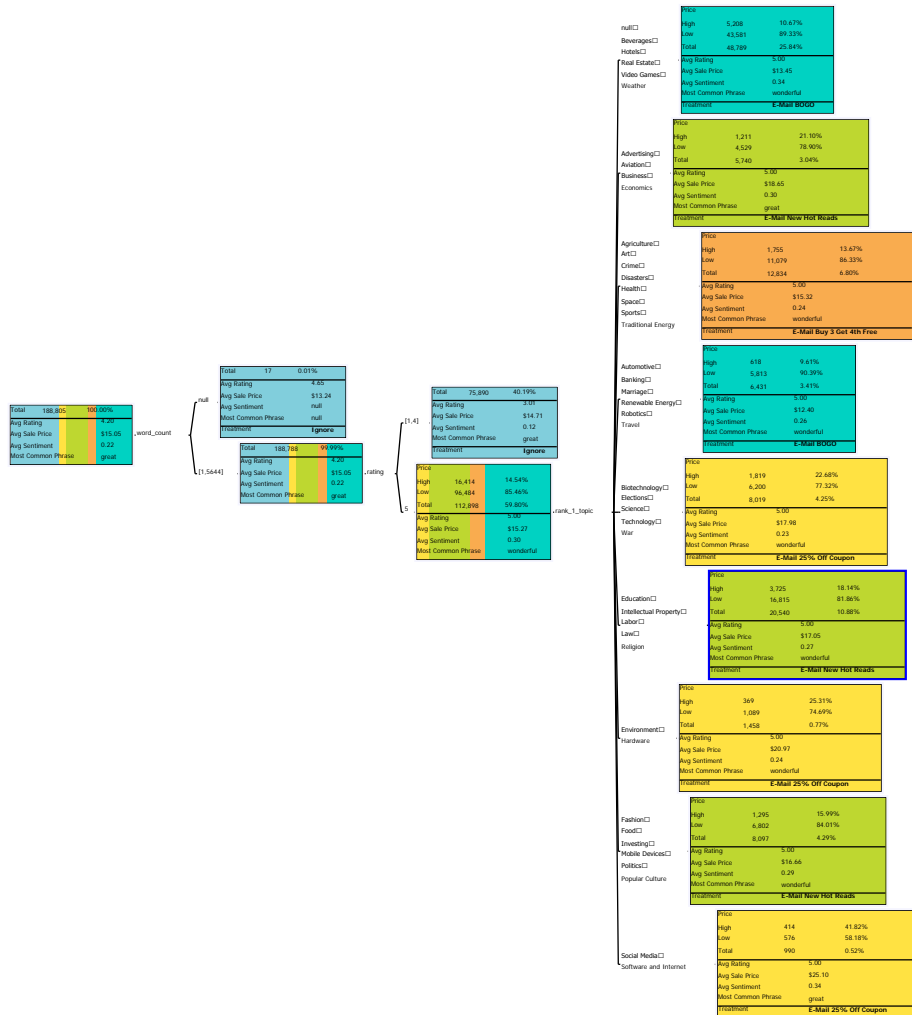
In this example, the retailer has created a Decision Tree that allows them to determine the price breakdown across book genres. The Decision Tree uses 'High' and 'Low' price brackets to segment genres.

The retailer can now determine if there is a correlation between price, genre and overall sentiment. They may use these insights to inform product inventory or pricing decisions.



Scenario

Strategy Tree



KnowledgeREADER can be used to build and deploy predictive strategies with Strategy Trees.

Here, the retailer has identified segments based on price and genre. In addition, they can track key metrics that drive store performance.

Combined with the text analysis output, this measures the average sentiment, rating, sale price and the most common themes discussed in each segment.

By associating a treatment with each segment, the retailer can automatically assign specific actions or activities to each segment.

Now, the book retailer can quickly turn insight into action.



Scenario

Angoss KnowledgeREADER

KnowledgeREADER is an industry-first software application that brings a new age of integrated customer intelligence by combining visual text discovery and sentiment analysis with the power of predictive analytics.

Now, customer intelligence professionals and marketers can easily understand and model customer feedback without relying on data analysts.

KnowledgeREADER delivers unparalleled customer intelligence and voice of the customer insights to support customer experience management—above and beyond what text analytics users have come to expect.

[Learn more about KnowledgeREADER](#)



Resources

Video

[Quick Tour of KnowledgeREADER](#)

Articles

[Voice of the Customer, How to Move Beyond Listening to Action](#)

[Text Analytics Categorization and Concept Topics](#)

[Text Analytics Phrase and Theme Extraction](#)

[Text Analytics Sentiment Extraction](#)

[Text Analytics Named Entity Extraction](#)

Brochure

[KnowledgeREADER](#)

Web

[KnowledgeREADER](#)



About Angoss

Angoss Software Corporation is a global leader in delivering business intelligence software and predictive analytics to businesses looking to improve performance across sales, marketing and risk. With a suite of desktop, client-server and big data software products and Cloud solutions, Angoss delivers powerful approaches to turn information into actionable business decisions and competitive advantage. Angoss software products and solutions are user-friendly and agile, making predictive analytics accessible and easy to use.

For more information visit www.angoss.com.