Fred Plishkin
Director Regional Sales, Inktomi

• Arrives at the Grand Hotel in Pittsburgh at 11:37pm on June 25, 2000

• Breakfast meeting at 7:15am on June 26, 2000, with executives of Acme Department Stores

• Goal: Sell Inktomi services to Acme
Fred’s Morning: June 26, 2000

• 6:27-6:39am: Shower; brush teeth (and floss)
• 6:40-6:51am: Dress; put on lucky tie
• 6:52am: Get taxi for ride to Acme
• 6:52-7:10am: Review powerpoint presentation in taxi
Inktomi: The Solution for All Your Corporate Knowledge Management Needs

Fast!
Scalable!
Reliable!
Accurate!

The CHOICE of Yahoo! and Other Top Companies Worldwide
Yahoo! taps Google over Inktomi for searches

By Reuters
June 26, 2000 6:50 AM PT

Yahoo! Inc. (Nasdaq: YHOO) said on Monday that it will perform its Web searches, replacing Inktomi (Nasdaq: INKT), which counted Yahoo! as one of its best-known clients. Yahoo! said it will continue to use Inktomi's search services on corporate systems that use Yahoo! as a home page, as well as on Yahoo!'s own corporate system. -- Reuters

See also: Page One section
If You Had Known, What Could You Have Done?

• Change your talk to not play up Yahoo!
• Call your boss
• Get deal signed before word gets out
• ...
• But First You Had to Know About It!
Automated Information Triage for Mobile Alerting and Timely Decision Making

Foster Provost
Ramesh Sankaranarayanan

Haym Hirsh

Sofus Macskassy

Information Systems Department
Stern School of Business
New York University

WINLAB
Computer Science Department
Rutgers University
Who Needs Timely Information?

- Salespeople
- Executives
- Investment Professionals
- Reporters
- Attorneys
- …
Yahoo sheds Inktomi for new search technology

By Jim Hu
Staff Writer, CNET News.com
June 26, 2000, 1:25 p.m. PT

update Inktomi’s stock price and its reputation as the leading Internet search provider took major hits today when Yahoo said it will switch to a rival search service, but the company’s bottom line may not suffer the same fate.

Inktomi’s shares plunged as low as $113 this morning when Yahoo said it will begin using start-up search provider Google for its primary search engine. By the close of regular trading, Inktomi was down $25.31, or 18 percent, to $115.06. Yahoo fell $6 to $119.31.

Analysts agreed that the announcement may have hurt Inktomi’s pride, but they said the implications for its revenues and profitability are mild. While the company is well known for its search technology, that side of its business is a money looser that has increasingly played second fiddle to its exploding networking services division. The search market in general, meanwhile, remains a low-margin, commodity business even as it has been swarmed by hungry competitors like Google.

Dick Pierce, Inktomi’s chief operating officer, said Yahoo represents less than 2 percent of Inktomi’s

Dick Pierce, Inktomi’s chief operating officer, said Yahoo represents less than 2 percent of Inktomi’s...
What Were Possible Clues to this Story’s Importance?

- User-specified filtering profiles ("Give me any story that mentions Inktomi")
- Many similar stories follow immediately thereafter
- Inktomi’s stock price plummets
- Your calendar shows you’re on a business trip
- Similar articles in other industries have been important
- You’ve read similar articles in the past
- You received email about it
- A Combination of Such Information
GM Dumps FreeMarkets Auctions
Switch to Commerce One puts ousted auctioneers's stock into tailspin
By Mel Duvall, Internet Week
January 10, 2000 12:00 AM ET

General Motors confirmed that it will move its reverse auction purchasing activity over to Commerce One, which obtained an auctioning platform with the purchase of CommerceBid.com in fall 1999. The news caused investors to bail out of shares in FreeMarkets (www.freemarkets.com), which had provided reverse auction services to GM (www.gmr.com) since 1997.

Commercial One gained a few points in the Internet marketplace race last week, largely at the expense of online auction services provider FreeMarkets.
Automated Information Triage

Text Information
- News Stories
- Email
- Web Pages

Time Series Data
- Stock Data
- Weather Reports

State Data
- User Information
- Device Information

Selected Events with Assessments of Importance
Alerting
Other Help in Decision Making
Automated Information Triage: Examples

• Filtering and prioritizing email
  – Location information crucial
  – Current infrastructure support is insufficient for location-based services

• Notifications of important news stories and press releases
  – News is “open source”
  – Existence of “objective” evaluation criteria

• ...
A Testbed for Research: News

• Stories from March 1999 to August 1999
• Each about 400-500 words
• Labeled by which of ~8000 companies it is about
• 184,611 unique stories
• 47,909 during trading hours
• Reuters, Business Wire, PR Newswire, PrimeZone, CCN Disclosure, Canada NewsWire, Internet Wire
A Testbed for Research: Stock Data

- Intraday transactions data for all NYSE, AMEX, and NASDAQ securities (~8000 companies)
  - Every transaction from Jan 1993-May 2000
  - Aggregated into 5-minute intervals (opening and closing price, volume, etc.)
An Experiment

- Select 50 companies
- Select all (530) stories about these companies that appeared during trading hours Apr-Aug 99
- Label a news story as “interesting” if the return of a company mentioned in the story is more than 1 SD from the norm in the hour after the story appeared
- 28 interesting stories, 502 uninteresting
# Results

10-fold cross-validation:

<table>
<thead>
<tr>
<th>Method</th>
<th>Important</th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>10.0 (14.0)</td>
<td>99.6 (0.6)</td>
</tr>
<tr>
<td>Entropy</td>
<td>40.0 (16.0)</td>
<td>96.2 (1.4)</td>
</tr>
<tr>
<td>Prind</td>
<td>66.7 (13.3)</td>
<td>88.6 (4.9)</td>
</tr>
<tr>
<td>TFIDF</td>
<td>40.0 (28.0)</td>
<td>97.6 (1.0)</td>
</tr>
<tr>
<td>Naïve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bayes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Future

• Fielding on RIM, Palm VII, or other wireless platform

• Getting real user feedback from test study with NYU MBA students in “Information and Internet Technology” course

• More data!