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Evolving technology for web-based stock searches

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The evolution of stock search sites

Stock-search websites are evolving along with Japan's Net culture. Once simply a place to post messages, online bulletin boards and blogs are starting to go further and show viewers at a glance which stocks are in the news, why they are important, and whether they are buys or sells.

As one example, the "Stock Talk" section of the Yahoo Japan finance website (see Exhibit 1), launched in February 2007, is a bulletin board for posting information about individual stocks, but it also allows contributors to post links containing evidence for their conclusions. The site indicates the degree of interest shown in each article, making it possible to quickly see how popular the topic is.

Exhibit 1. "Stock Talk"

http://kabuneta.yahoo.co.jp/

A website called "Everyone's Equities" (Exhibit 2), launched in April 2007, allows contributors to choose a Buy or Sell rating for each stock discussed and enter comments. It also makes it possible to assign "analyst rankings" to individual contributors based on the accuracy of their recommendations in light of subsequent share prices.

Comments by top-ranked "analysts" are listed on the top page of the site along with popular stocks, making it possible to determine at a glance what is attracting the most interest at present.

Exhibit 2. "Everyone's Equities"
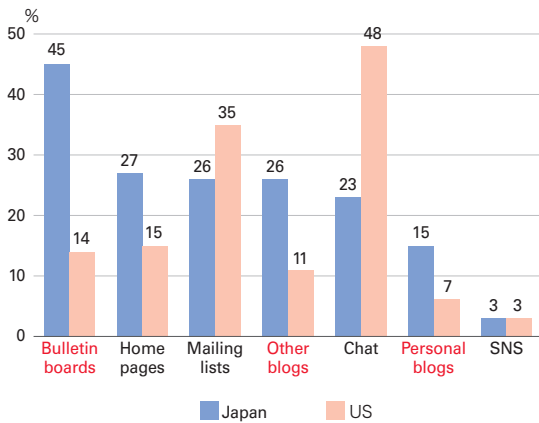

http://minkabu.jp/

Japan's Net culture

Active participation in these sites is one characteristic of Japan's Net culture. A comparison of Internet usage in the United States and Japan reveals that Japanese use bulletin boards and blogs more frequently. In fact, surveys estimate that usage of such sites is more than double that in the United States (Exhibit 3).

Given this characteristic of Net usage in Japan, extracting word-of-mouth information from the many blogs available may be one effective means of gathering data about stocks. The "Kizasi Channel," one site discussing popular blog topics, has a section for stocks. It allows users to search for specific stocks and determine the degree of interest shown in the stock on blogs over time (Exhibit 4). Eventually, it should be possible to tweak this feature to enable users to set alerts for stocks in the news.

Exhibit 3. **Net usage in Japan and the United States**

Source: Compiled by NRI from MIC's Survey on Networks and People's Lives

Exhibit 4. **Kizasi Channel**

http://kizasi.jp/channel/stock/

The new wave of search engines

Search engines have also evolved along with Net culture. For example, some of the next-generation engines that have followed Google actually try to understand the user's question and find an appropriate answer. These features require the incorporation of natural language processing, and in fact a number of websites in the United States are experimenting with this technology.[1]

Japan also has websites that use natural language processing to enable users to search word-of-mouth information contained in blogs. For example, BuzzTunes (Exhibit 5) uses a sophisticated technology called functional element analysis that is well-suited to the vagueness of Japanese grammar. A search on a given keyword at the site will quickly reveal whether individual blogs have taken a positive or negative stance towards the term. The search function also makes it possible to determine how positive or negative the blogs are on the whole.

Exhibit 5. **BuzzTunes**

http://www.bztunes.jp/

Combining individual technologies to create value-added

It should be possible to create new value-added by combining the individual technologies discussed above. For example, adding a positive/negative verdict function to a blog search engine would make the site more convenient to use. Because share prices can only go up or go down, it would be possible to set "directional" alerts— for example, positive content on a large number of blogs could be seen as an indicator of a rising stock price.

It may even be possible for institutional investors to take advantage of this kind of information. In the United States, algorithmic trading systems have begun to use real-time news.[2] One possibility for Japan would be to combine information from stock search sites and blogs with information that translates "issues in the news" into "buys" or "sells" to serve as reference for trades.

Note

1) One example is http://www.hakia.com/.

2) See "News Alert—Apama Algo Trading Integrated with Dow Jones' Electronic Feed," Securities Industry News Online, 12 June 2007.

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